THE ARCHITECTS' JOURNAL

Wednesday, February 15, 1928

THE CHURCHES OF ENGLAND

In a recent issue of the *Times* the Archbishop of Canterbury made an urgent appeal for funds for the provision of churches in the new industrial areas in the Kent coalfields. This is only one of many appeals by all denominations on behalf of Greater London, new dormitory towns, and new centres of population generally. The churches will be built. Will the provision of them keep pace with the growth of population, and what will the churches be like?

There is no kind of building which follows tradition so closely as church building; and it is natural that an historic faith should express itself in a certain continuity of shape and arrangement, particularly in the presence of glorious examples of the past. Looking over the history of church building in this country we see the borrowed Norman style merged into Gothic, and Gothic soaring to its culmination, and then itself becoming merged into Renaissance forms, which were at once new and at the same time historically even more venerable. At first there was a gradual combination of the two styles, as in Inigo Jones's masterly chapel at Lincoln's Inn; there was a fusion of Gothic forms and simple classic spirit, which is not unusual at the present day. The Great Fire of London brought a crisis and an opportunity. While the glory of its medieval churches lay in smoking ruin, Wren produced his great plan for a new London after the classic manner. Had not this plan been defeated, to our irreparable loss, the City churches would have supported the cathedral in an ordered arrangement, on minor axial lines, and in positions to show them with the fullest effect. Their re-erection on the original sites, now cramped and overshadowed by tall buildings, has robbed them of a due amount of appreciation. The conditions under which the London churches were rebuilt have certain points of resemblance to the conditions of today. Wren's instructions were to provide something like sixty or more churches on allotted sites, with speed, and at a reasonable cost, to meet the needs of a large business and residential population, which was already there, or crowding back into the City, and which was temporarily deprived of places of worship. He was to confine himself to the bare structure, including only such furnishings as were strictly necessary for the carrying on of the services. All other fittings and embellishments were to be provided by the parish, under its own authorities. With all this simultaneous activity, every church was separately designed in accordance with its own problems, as an individual contribution to the whole, and there was no repetition. The entire work was carried out in a co-ordinated manner. From Wren's time onwards, until the Gothic revival, wherever the population moved or increased, classical churches were built. A new national style had been developed, stamped with peculiarly English characteristics. It is hardly realized what a large percentage of churches in England are classical churches. They are everywhere. They help to make up the architectural character of London. Almost as dominant as Nelson's column is St. Martin's-in-the-Fields, perhaps the best-known church in London. (How many other churches contain a portrait-bust of the architect?) Classical churches dominate the Strand, no less than the City. They stand all round London—Kew and Chatham and Gravesend, Pentonville and Clapham and Bermondsey and Rotherhithe, to mention only a few. They are found in all large towns which either sprang up or increased their borders in the eighteenth century. They are as English as the stately Georgian houses which dignify our country towns. Definitely eighteenth-century towns like Bath and Tunbridge Wells, and parts of Brighton, make a fine setting for them. There are monumental churches, such as St. Alphege, Greenwich, or Blandford, which dominate the market place and there are smaller and homelier ones.

We would suggest that these churches should be considered and studied, as providing solutions to modern problems. Here is a type at once simple and dignified, and specially suited to our method of construction, and from the artistic point of view closely related to our present manner of house building. It has been consecrated by the usage of three hundred years and more for religious purposes. In plan and arrangement it follows tradition from the earliest times to the present day. In form it is spacious, with unobstructed space, good lighting and ventilation, good for hearing and seeing, and, in virtue of its very shapes, inducing dignity and reverence. It admits of endless variation and skill in design, and it is easily and quickly constructed. In form it contributes to unity of effect in worship, and sets off the finest craftsmanship.

Another matter suggests itself in connection with churches in new areas. Any newly-developed district, however well laid out, must start as an aggregation of people rather than as a township with a character of its own. A church, considered only as a definite form of building, must form an important point in its own area, even in the presence of other public buildings, and it may give character to a whole town. It cannot be overlooked. Here is an opportunity for a masterly and sympathetic contribution to the future of a new neighbourhood.

If we are to deal adequately, from an architectural point of view, with the problems before us--and deal with them we must—we seem to need the development of a vital and modern style, definite counsels, and intelligent co-ordination of work.

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

NEWS AND TOPICS

THE TRACK OF THE STORM—THE "FOUR SWANS"—FROM AN ARCHITECT'S WINDOW—HYPODERMICS FOR WOOD

THE storm which swept across the southern portion of the British Isles last week has tested several buildings more severely than they could bear. Windows broken, roofs blown off, and walls blown down, with consequent injury to persons in the neighbourhood, show how near the limit of safety our constructional practice runs. Gusts of wind travelling at sixty miles an hour were measured at Kew, and wind speeds of seventy-six and seventy-eight miles per hour were registered at more westerly parts of England. Molesworth tabulates winds travelling at between sixty and seventy miles an hour as "great storms," with a pressure of 17·712 to 24·108 lbs. per square foot, and winds above eighty miles an hour as being of "hurricane" force. Winds at 100 miles per hour are represented as equivalent to pressure of 49·2 lbs. per foot. Chimneys are particularly liable to overturn under wind pressure, not only on account of their height and exposure, but because, being generally somewhat inaccessible, their mortar joints are not always repointed when other parts of the building receive attention, and they become progressively weaker until a more than usually severe storm carries them away. Garden and boundary walls, too, have been responsible for several accidents involving the death or injury of persons upon whom their débris has fallen within the last few months, and adequate buttressing against lateral pressure should be put in hand forthwith wherever a wall is known to be too thin or too feeble to meet a wind of such violence as has been revealed in former records. The fact that any given wall has weathered one severe storm is a poor argument that it is in good condition to resist the next. The first blow of the battering ram does not create the breach that will be brought about by the last.

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I am glad to see that Dr. R. E. Stradling, the Director of Building Research under the Department of Scientific and Industrial Research, is to give the second Bossom Gift Lecture in the Lecture Hall of the R.I.B.A. at the end of next month. His subject is "Balbus built a wall," and no doubt he will deal with the recent advance that has been made in investigation into both the materials and methods employed in the building industry today. But Dr. Stradling, who is an enthusiast on the creation of a science of building, makes no secret of his fear that the public, who are paying to the Treasury towards the expense of the Research Station, may demand spectacular results before there has been sufficient time for careful and patient investigations. Nevertheless, a good deal has been learnt within the past three years which will help to make the buildings of the future more economically constructed and more durable. Architects will be especially interested in the report on the question of the stone to be used for the repair of the Houses of Parliament, should this document ever be published.

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An unfortunate deadlock has interfered with the building of small houses by private builders in Manchester for over a year past. The trouble is of interest as indicating the difficulties of the housing problem. When arrangements were made to give a subsidy under Mr. Chamberlain's Act of 1923, the condition was then made that, if the road to which the new house had a frontage was not a public highway, the builder was to allow from the purchased price a sum of £30 towards the cost of the final paving of the road required to be done. About a year ago the paving committee found that the cost would be very much more than £30, and a lively discussion arose. The solution suggested was that the purchaser should receive an allowance equal to the cost of sewering, draining, forming and paving the road. The allowance, however, for a road of full by-law width, and average frontage of 30 ft., amounts to nearly £60, and the magnitude of this sum has prevented many builders from carrying out schemes. But the Manchester City Council on its own estates has made roads of considerably less than the regulation width of 42 ft., and insists upon an extravagant method of road-making on private estates. These houses are built, of course, without any cost to the local rates, and the City Council are now being asked not to insist that the cost of the final paving of a road should be allowed to a purchaser, and should be content to see a fair private road made by the builder.

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Few thoroughfares in London can have changed in their architectural features so much as Bishopsgate Street has done. At one time it possessed Crosby Hall and a number of taverns of great importance. For instance, there was the "Green Dragon" at No. 61, and the "Bull" close by, where pre-Shakespearian plays used to be performed in the galleried yard, and where the famous jests of Richard Tarlton were heard often enough, and on whose site Palmerston House now rises in its massiveness. Then there

The "Four Swans."

was the "Flower Pot" at No. 15, which is mentioned by Lamb in one of his essays, and the London Tavern, existing down to 1876, at No. 5. But what was generally allowed to be one of the finest examples of the old galleried inns of the past was the "Four Swans," which occupied No. 67 Bishopsgate Street Within, and of which I here give a little photograph taken not long before its demolition. It possessed three galleries on one side and two on the other, and these formed an almost perfect example of those old inn-yards which, now that they are gone, we begin to appreciate and use as pictorially picturesque properties. Here, during the Civil Wars, frequent encounters took place between the patrons who held opposite opinions, and sometimes no little blood was shed as a clinch to argument. It is a curious fact that practically no data exists concerning the exact age of this structure, the picturesqueness of which (as may here be seen) is, however, its sufficient passport to interest.

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Parliament will once again have an opportunity of considering the Architects' Registration Bill, which went before a Select Committee of the House of Commons last year. Sir W. Raine, a Unionist member, who has been fortunate enough to secure third place in the ballot for private members' Bills, is bringing the measure before the House of Commons for second reading on March 2.

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The appeal of the *Daily Telegraph* for the preservation of the old shop in Cheyne Walk, Chelsea, will receive the support of every architect. It was at this shop that Carlyle bought his groceries, and probably it furnished George Eliot with her tea and sugar and the Rossetti fraternity with whatever supernal spiceries they required, for the lady and the Pre-Raphaelites were almost next-door neighbours. But the writer of the leading article in our contemporary shows why the shop has a larger claim on our interest. He says: It has an air, it is the oldest house in Chelsea, it serves for a memorial of great days and strange folk. Built into it is part of what was once Shrewsbury House. Three hundred and fifty years ago Chelsea was a favourite village for the suburban homes of the Court. The last wife of Henry VIII had the manor house for her jointure. Where the old shop in Cheyne Walk stands was a rather shapeless brick building about three sides of a quadrangle, which belonged to the sixth Earl of Shrewsbury. This Lord Shrewsbury was a notable fellow. He was bold enough to be the fourth husband of the indomitable Bess of Hardwick, marrying her when she was fifty, and had half a dozen living children to set off an income of (in modern value) some hundred thousand pounds. He was also the gaoler of Mary Queen of Scots during her long captivity in England. Queen Elizabeth assured him that the appointment showed she "dyd so trust him as she dyd few," and she showed further trust by leaving him to pay many of the expenses. His wife complained to the Queen that she was jealous of Mary with my Lord, "they are so great together." That scandal did not take; and when at last Mary was executed, his lordship thanked Elizabeth "for having delivered him from two devils, that is, his wife and the Queen of Scots."

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The picture is of the Thames at Chiswick, seen from the front windows of an architect's house. Mr. Pickwick, and only Mr. Pickwick, could have done justice to it, as when one morning in the country he looked out upon the countryside: "'Pleasant, pleasant country,'" sighed the enthusiastic

An architect's house on the Upper Mall, Chiswick. A view from the front windows.

gentleman, as he opened his lattice window. "'Who could live to gaze from day to day on bricks and slates, who had once felt the influence of a scene like this?'"

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Topography is nicely welded with the art of painting in the work of David Bomberg, seen to the extent of over fifty canvases at the Leicester Galleries. The general subject is the Holy Land, but has no reference as such, for topography outweighs the claims of holiness, while architecture, in at least half the pictures, is the first interest. The rendering of the buildings in Jerusalem are not detailed, nor are they pictorial; they are vivid expressions of things seen with the searching glance. General views of the city, particular transcriptions of churches and houses are supplemented by clever studies of local types of men which give the human touch to an otherwise silent country. Lifeless, yet full of vigour, and strangely impressive, the white "Mount of Olives" is the finest piece of painting in the show. At the same galleries there is also some good, strong painting, with glowing colour of a definitely decorative character, by Leon de Smet.

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The practice of giving logs a "hypodermic injection" to preserve them, invented in Germany not long ago, has spread to England, and a new tool has been invented to do the work. The new scientific method is being used to inject into telegraph poles a spreading paste that is said to keep fungi at bay. Many years are said to be added to the pole's life. This treatment of wood is a step that may lead eventually to complete arrest of decay. If that ideal is accomplished, buildings of wood can be erected that will be as imperishable as structures of stone, brick, or steel, while the cost will be much less. The effect will be that of transmuting wood into rock.

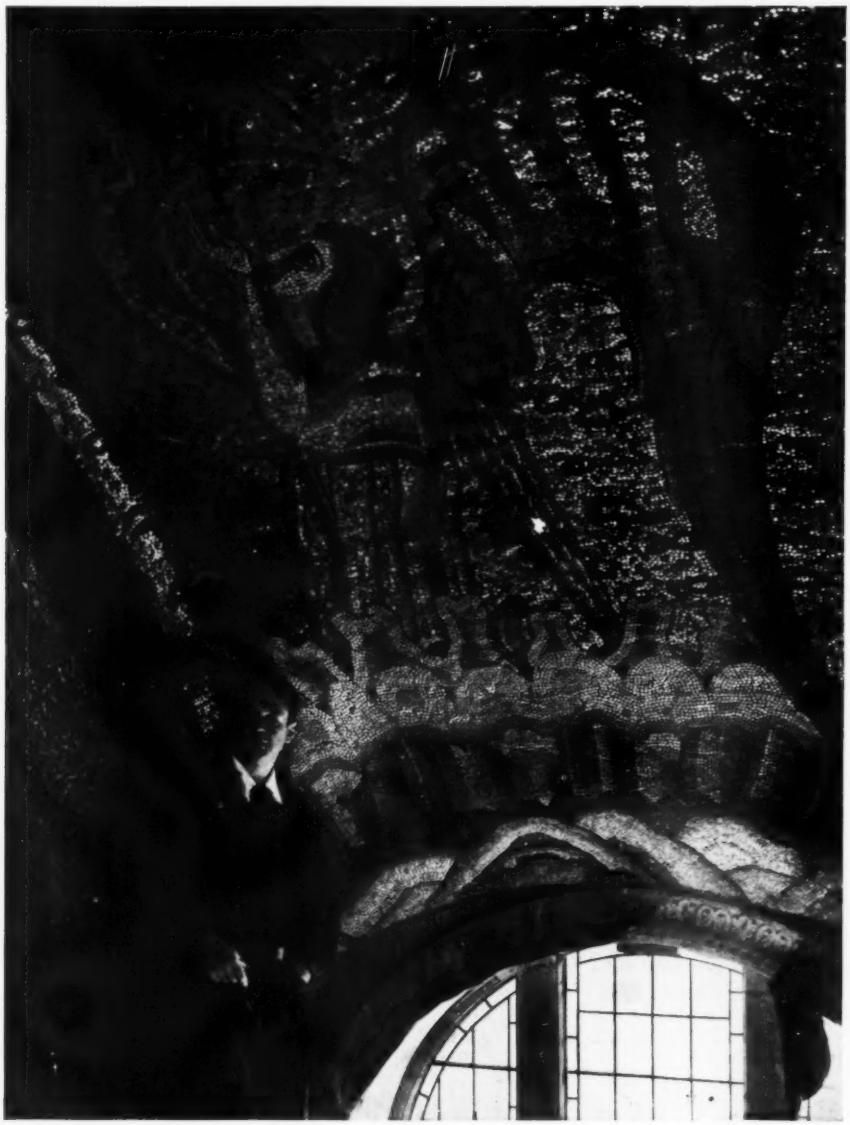
ASTRAGAL

A NEW MOSAIC DECORATION

[BY CHRISTIAN BARMAN]

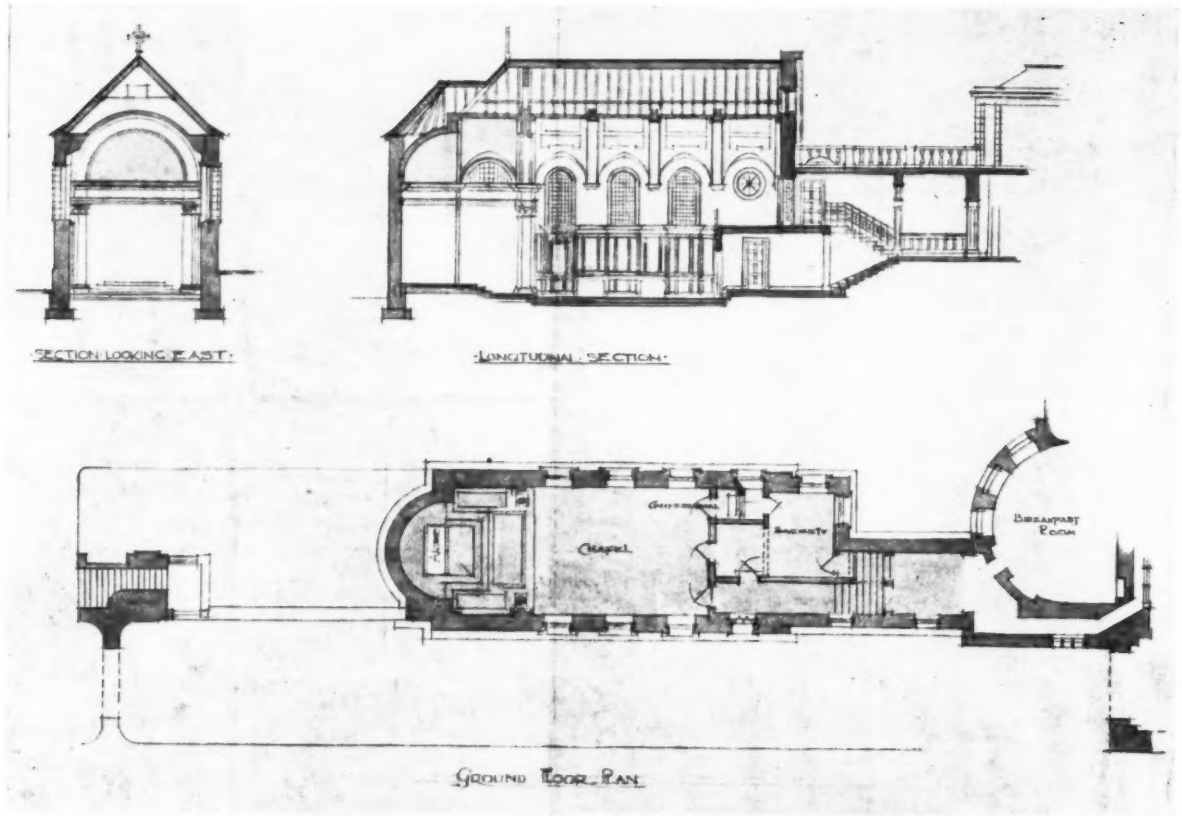
KEIR, Dunblane, is one of those fascinating houses which, like the old bridges of England, are made up of the work of many successive centuries juxtaposed in a natural order of growth. The earliest part of the house is a gabled block by William Adam, now visible only from one or two little windows giving upon the courtyard of which it fills one side. The newest is the chapel, built by Messrs. Rowand Anderson and Paul. In this chapel are to be seen the most recent examples of Mr. Boris Anrep's work in mosaic.

Mosaic is a medium in which colour counts for almost everything; unfortunately, this is the only thing the accompanying illustrations do not show. The angels supporting the Christ are clad in garments of light sea-green, with shadows of the same green in a deeper hue. The worshipping angels in the barrel-vault, too, wear green, but a much lighter green, in which the shadows kindle to a subdued pink. The pink and silver in the centre of their great wings give them a curious, cloud-like buoyancy. In the intricate combination of earthly forms from which these worshipping angels rise up, the artist's colour invention has yet found fuller scope. At the bottom are a series of hillocks or mounds in various earth colours; above these



Chapel at Keir, Dunblane, Scotland.
Decorations by Boris Anrep.

Chapel at Keir, Dunblane, Scotland. Decorations by Boris Anrep. Above, a detail of the apse. Below, the artist's cartoon drawn on the walls.



stretches a sky of dusky blue, from which pink and purple crystal-like shapes rear themselves. These in their turn are topped with waves or zigzag patches as of sea-foam, in which mother-of-pearl colours and a very pale sea-green are predominant. It is from this fringe of foam that the angels emerge. Amidst all this rainbow gaiety the figure of Christ stands out with an almost terrifying harshness of tragedy. His garment is dull rose colour, with grey cobalt in the shadows; His face is sickeningly ashen, with shadows of deep, dull crimson that contrast sharply with the warmer, lighter hues in the faces of the angels. His wide-open eyes are the eyes of a person who has awakened into a world other than this, to Him unreal as a ghost. The awkward angle at which the Christ comes out of the sepulchre also betrays unconsciousness of His material surroundings; it is an interesting fact that in the original design the sepulchre was, like the figure, placed at right angles to the picture plane.

Chapel at Keir, Dunblane, Scotland. Above, plan and sections. By Rowand Anderson and Paul. Below, the apse, showing decorations by Boris Anrep.

RECENT BUILDINGS IN MANCHESTER

[BY JOHN SWARBRICK]

SLOWLY, but without abatement, the general character of Manchester continues to change. Without, in the suburbs, the new arterial roads are assisting the Corporation in dealing with the difficulties of transport, and are at the same time opening up agricultural land and making it available for development for building purposes. Unfortunately, the absence of Parliamentary powers, extending the operation of the Town Planning Acts to built-up areas, prevents the new roads from assisting the public to the extent that would otherwise be possible. At present, owing to the want of a few radial roads and one or two good ring roads in the built-up area, a large proportion of the traffic cannot move freely and get rapid access to the main outlets. This is probably most noticeable in Princess Road, the approach to which is at present irregular and through narrow, inconvenient streets.

Within the city the old four- and five-story offices and warehouses, often of fussy and provincial character, are giving place to simpler and more dignified buildings, which endeavour to express their respective functions in an appropriate manner. One of the most striking of the new buildings in the centre of the city is Ship Canal House, in King Street, designed by Mr. H. S. Fairhurst, the President of the Manchester Society of Architects. This building has been already described in the JOURNAL, and it is, therefore, not necessary to add detailed particulars. Nevertheless, one cannot overlook the fact that this structure, probably more than any other recent erection in the central area, has served to impress the public with the fact that advances are now being made in the design and equipment of modern business premises, and that these will in the end transform the nineteenth-century Manchester, with which we are all so familiar, into a new city that would differ widely from its predecessor. Owing to the width of King Street opposite Ship Canal House, it was possible to carry up the façade over seven stories in height without breaking back into a receding plane. Most Manchester streets are by no means so wide, and other recent buildings have in most cases not risen in unbroken height above 80 ft. from the street, as in London. In this way, six stories instead of four or five can be provided on the plane of the frontage.

Under the shade of Ship Canal House, a new home for the Atlas Assurance Company is now about to rise on the site of their former building. This is being carried out in accordance with the designs of Mr. Michael Waterhouse, M.C., of London, in a manner that differs considerably in

The Royal Mail Steam Packet Company's Building, Cross Street, Manchester. By Grace and Farmer. The Cross Street and South King Street frontages.

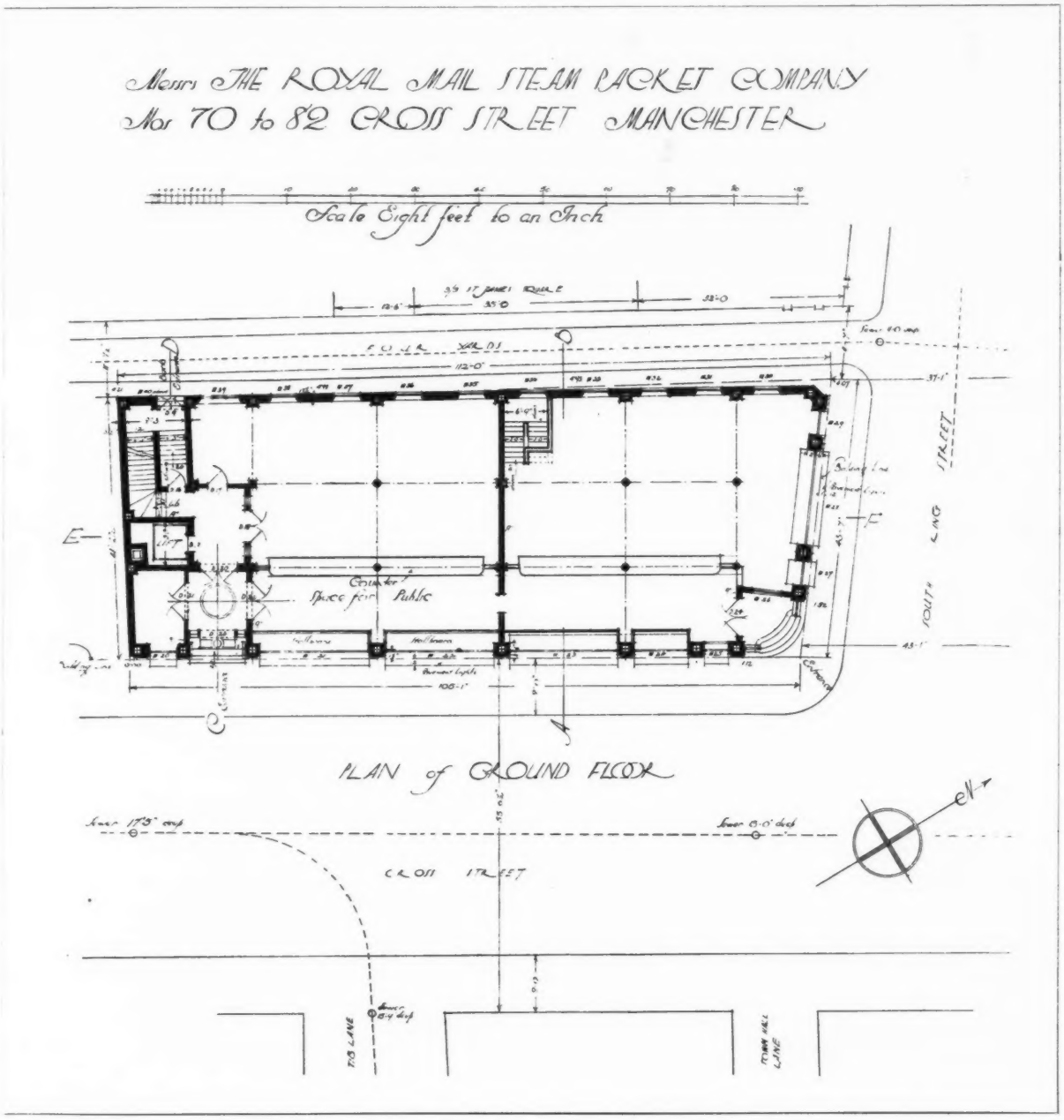
The Royal Mail Steam Packet Company's Building, Cross Street, Manchester. By Grace and Farmer. A detail of the entrance.

architectural treatment from that adopted in the case of its taller neighbour. Owing to the limited area of the site, which has been still further reduced by street improvements, it is understood that some accommodation has been provided for the company within the premises of the Manchester Ship Canal Company. It is understood that the design of this building has been affected by right-of-light agreements limiting the heights to which new buildings shall be carried. If this be the case, Mr. Waterhouse is certainly to be congratulated on the manner in which he has succeeded in adapting his new building to the limits prescribed. The building has a frontage to both King Street and Brown Street. On the latter side it will rise to a height of about 85 ft. above the street without interruption. Above that height the remainder of the structure will be recessed back. In the centre of the King Street façade, the building will rise immediately to its full height of over 106 ft., measured from the pavement to the apex of the pediment. The central feature of both façades up to second-floor level will be formed by a metal filling in the large voids formed by the stonework. The masonry throughout will be executed in Portland stone. The building will contain seven floors above the street, in addition to a mezzanine above the ground floor. A further mezzanine is also formed over a portion of the third floor, in order to provide sufficient lavatory accommodation. The basement is to contain both a strong room and lavatories. On the ground floor there will be a board-room, in addition to the large open space for the public and staff. The mezzanine over is apparently for the use of the staff. The remainder of the building appears to be available for office accommodation, and it is understood that at fourth-floor level and upwards the floors will be continuous with those in Ship Canal House and that doorways for intercommunication will be provided.

From King Street, one would naturally pass into Cross Street, and there the new building for the Royal Mail Steam Packet Company is sure to attract attention. This building has now been opened, and it is accommodating the staffs of the Royal Mail Steam Packet Company, the White Star Line, and the Union Castle Line, on the ground floor and in the basement. The remainder of the floors are being let as private offices. The architects, in this case, are Messrs. Grace and Farmer, of Wardrobe Place, London, who acted with Messrs. Frank P. Oakley and Gerald Sanville, of Manchester, as local consultants. This is one of the very few buildings in Manchester erected on a reinforced concrete raft, as the hard clay which overlies the new red sandstone is so firm, in most cases, as to render rafts unnecessary. In fact, there are cases in which the sandstone rises so near to the surface that it has been possible to lay the foundations directly on the rock. The difficulties arising from the existence of considerable areas of quicksand and water-bearing alluvium, such as are found in a considerable part of London, are very rarely encountered in Manchester. Both the raft and the steel framework of this building were designed by Messrs. Bloxham and Scuffles, consulting engineers, of London. The building is faced externally, up to the cornice level, with Portland stone. Above that level, Empire stone has been used. The plans of the building throughout have been very simply arranged in a manner that has made it possible for every available part of the floor surface to be used to the fullest extent.

Opposite to the building of the Royal Mail Steam Packet

Company, on the opposite side of Cross Street, stands Yorkshire House. A striking building now almost completed, faced entirely with Portland stone, and rising, like its more massive neighbour across the way, to a height of 80 ft. from the pavement to the top of the parapet. This building is now approaching completion; and, since the steel scaffolding has been removed, we can observe a structure that will be an ornament to the important street in which it stands. The design has been carried out on strictly traditional lines, but with reserve and judgment. This building, fortunately, will be fit to look on from all points of view, as it does not leave any ugly part exposed, in the hope that some kind neighbour will eventually conceal it. What a pity it is that the Manchester Corporation does not control the external treatment of buildings, as seen from all points of view ! Tall buildings will be seen from other tall buildings, and their skylines ought even then to be just as pleasing as when seen from the streets. Too often we see a pleasing skyline from the street; but, from a higher level, an irregular jumble of structures containing the caretaker's dwelling, lift wells, and other excrescences thrust up into the air without any sense of order. What a terrible effect a tall building like Ship Canal House might have presented in less skilled hands ! Imagine a building of that kind, with, say, one fine front and three ugly sides, towering into the heavens and exposed to the gaze of all



The Royal Mail Steam Packet Company's Building, Cross Street, Manchester. By Grace and Farmer. Ground floor plan.

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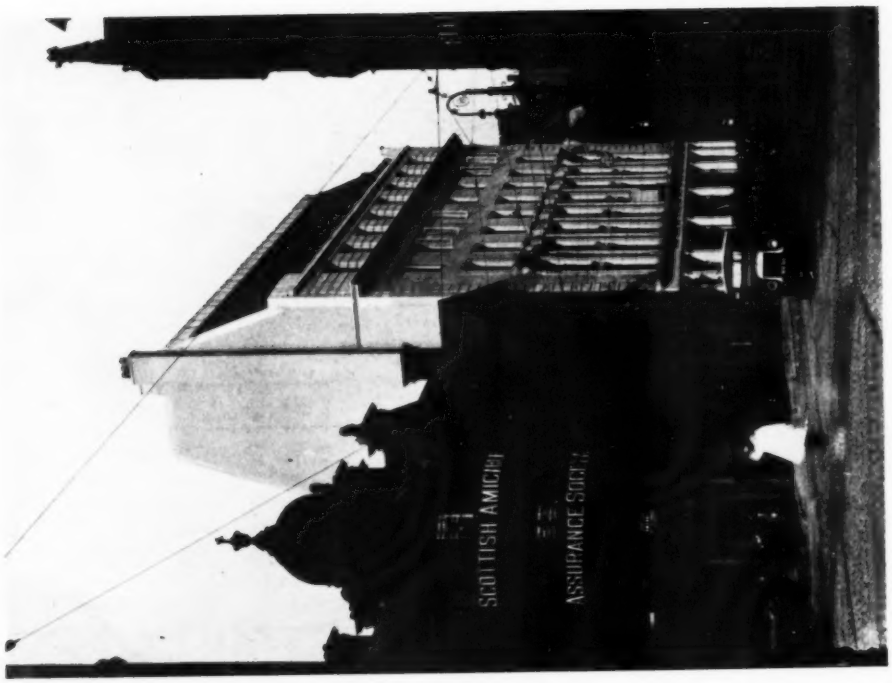


The Royal Mail Steam Packet Company's Building, Manchester. By Grace and Farmer. Left, view of Cross Street front from Albert Square. Right, a view of the South King Street frontage.

The Royal Mail Steam Packet Company's Building, Cross Street, Manchester. By Grace and Farmer. Detail of carved cast stonework over corner entrance.

humanity. Until we have committees of experts to advise our municipal authorities it is to be feared that there is little hope of really fine civic architecture that will be a credit to all concerned. Each architect must not be a law unto himself. Of course, we know in practice that he can seldom be that. He is, however, not infrequently to a large extent the instrument of his clients, and that is often a great deal worse. If they should be impecunious or parsimonious, then he might be compelled to leave a good front flanked by sides that would not bear examination and which might be a blot on the landscape for the rest of time. Unfortunately, however, lack of funds is not always the cause of the ugly prospects to which we are obliged to submit. Even when individual architects can have a free hand, we know how little many care whether their own works help to produce the most desirable effects in the streets in which they happen to stand. Both architects and clients are often perfectly satisfied when the street looks like an exhibition of competing specialities. Too often the competitive spirit tends to induce both the architects and their clients actually to strive to make their own buildings in some way more obtrusive than the rest; and yet we all know perfectly well that this competition of designs is bound to be destructive of that general sense of breadth which is essential if the best effects are to be obtained. No one wishes to see monotonous uniformity, but we surely have a right to expect that a certain amount of orderliness and a sense of propriety will be preserved. Fortunately, Yorkshire House is not one of the buildings that seeks to make itself unduly obtrusive. It is quiet and dignified in design, and a building by which its architects will be remembered. It was erected for the Yorkshire Insurance Company, founded in 1824, of which the head office is at York. This structure, unlike the Royal Mail building, does not stand on a concrete raft, but it, nevertheless, contains some costly foundation work, as the Manchester Corporation insisted upon special cantilever foundations to carry the party wall.

Reference should also be made to the new building for the Manchester and County Bank in course of erection at Piccadilly. This bank is being designed by Messrs. Mills and Murgatroyd, of Manchester, and is to occupy a site of considerable area with a frontage of about 56 ft. and a depth of 114 ft. At present the building is largely concealed by scaffolding, but the drawing, which is reproduced on page 262, indicates a treatment that should prove very effective on this fine site. Other buildings have also recently been erected facing Piccadilly, but owing to the absence of any kind of control, no unified scheme of effect has so far been contemplated. It is a pity that such a magnificent opportunity should be lost; but, in the absence of such control, we must at least be thankful that buildings like the one now in course of erection for the County Bank are taking the place of the uninteresting structures previously fronting this large open space. This bank, like the other admirable additions to our city buildings, is being faced with Portland stone up to the level of the frieze and cornice, where Empire stone has been used. It will be observed that at the front the building will rise to a height of six stories above the street. The ground floor and the basement are to be occupied by the County Bank, but the upper floors are to be let as offices. The ground floor will contain the banking hall, and the basement the treasuries. The upper floors will be subdivided by screens to suit the convenience of prospective tenants.

Amongst the largest buildings now in course of erection in the city, are the new Manchester telephone exchange in Salford, by the side of the Irwell, designed by Mr. C. P. Wilkinson, of H.M. Office of Works, and the vast structure in the Parsonage now being built for the English

Sewing Cotton Company. Of the latter building, Mr. H. S. Fairhurst is the architect. It stands with a frontage of about 224 ft., facing St. Mary's Churchyard, on an island site, with an area of about 2,000 sq. yds. The thoroughfare at the front is known as South Parade. At the sides, the building has frontages to Southgate and to St. Mary's Parsonage. The roadway at the back is known as Back South Parade. This building is to rise to a height of seven stories above the street, but even facing the Parsonage it will only have a height on the principal frontage of 80 ft. to the top of the parapet. At that height it is recessed back about 8 ft., and then rises again to a height of about 18 or 20 ft. above the lower parapet. The public are already familiar with the end view of this building, facing Southgate, from the water-colour drawing by Mr. Edward Adams, which was shown at the Summer Exhibition at the Royal Academy. It should be explained that some old buildings still stand on the portion of this site fronting St. Mary's Parsonage; but it is understood that they will be removed at an early date, and that the remainder of the structure will then be

The Royal Mail Steam Packet Company's Building, Cross Street, Manchester. By Grace and Farmer. Left, electric lantern in entrance vestibule. Right, a detail of metalwork.

The Royal Mail Steam Packet Company's Building, Cross Street, Manchester. By Grace and Farmer. Above, interior of ground-floor offices. Below, entrance vestibule.

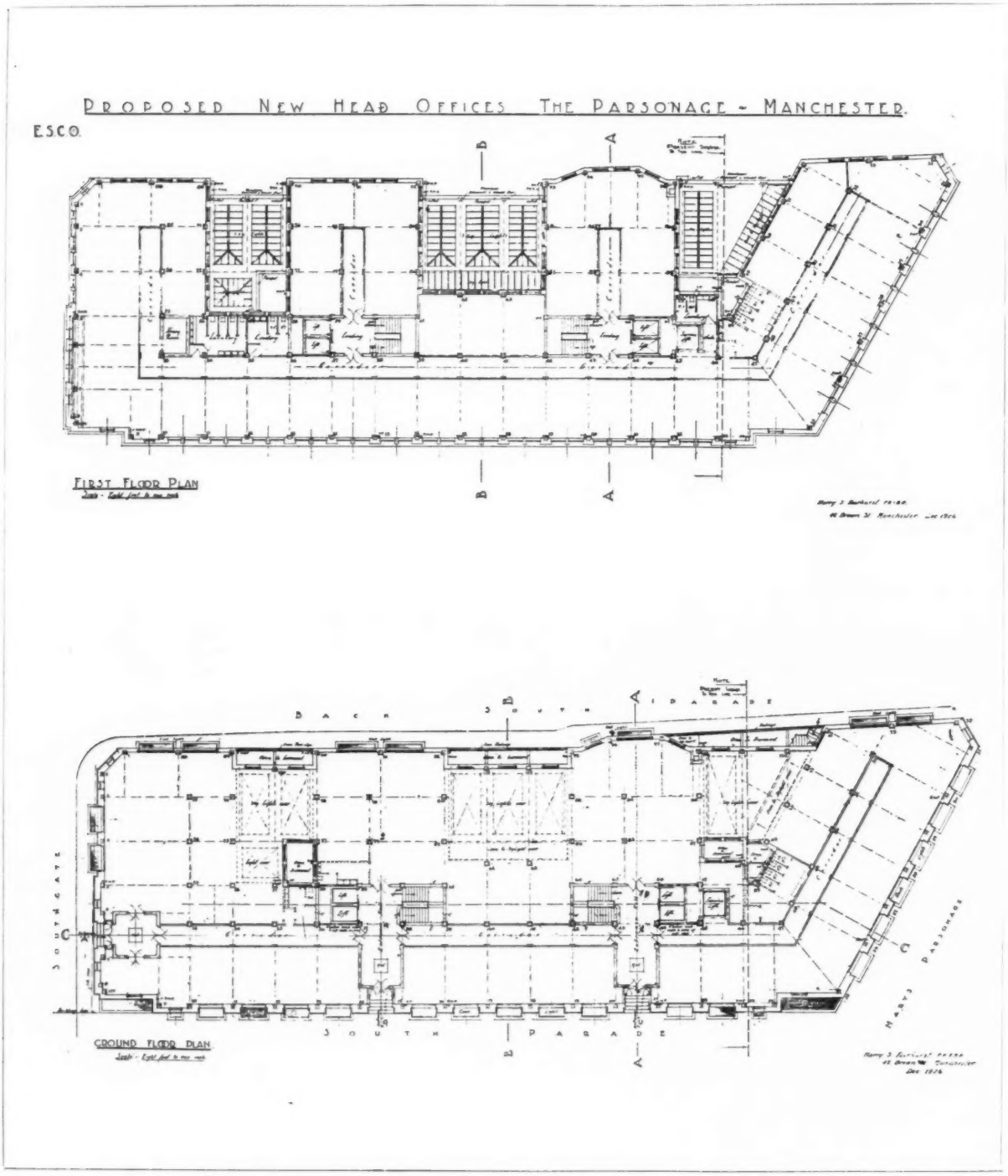
completed. The two top floors are to be reserved for the English Sewing Cotton Company, but the basement and the other five floors above the street are to be let as private offices. In addition to the basement, there is a sub-basement containing the boiler-house, etc., and this is connected with the meter room by means of a pipe duct which runs the entire length of the building under the longitudinal corridor. This duct will serve to pick up the lift wells and will be available for heating pipes, electric conduits, telephone wires, and vacuum cleaning tubes, if required. Quarters for the caretaker have been provided on the roof, but care has been taken to carry up the parapet sufficiently high to prevent any unseemly excrescences from spoiling the skyline.

It will be observed from the plans that three principal entrances have been arranged—two on the Parsonage façade and one in Southgate. These entrances lie upon

The Manchester and County Bank, Ltd., Manchester. By Mills and Murgatroyd.

Yorkshire House, Cross Street, Manchester, for the Yorkshire Insurance Co., Ltd. By F. P. Oakley and G. Sanville.

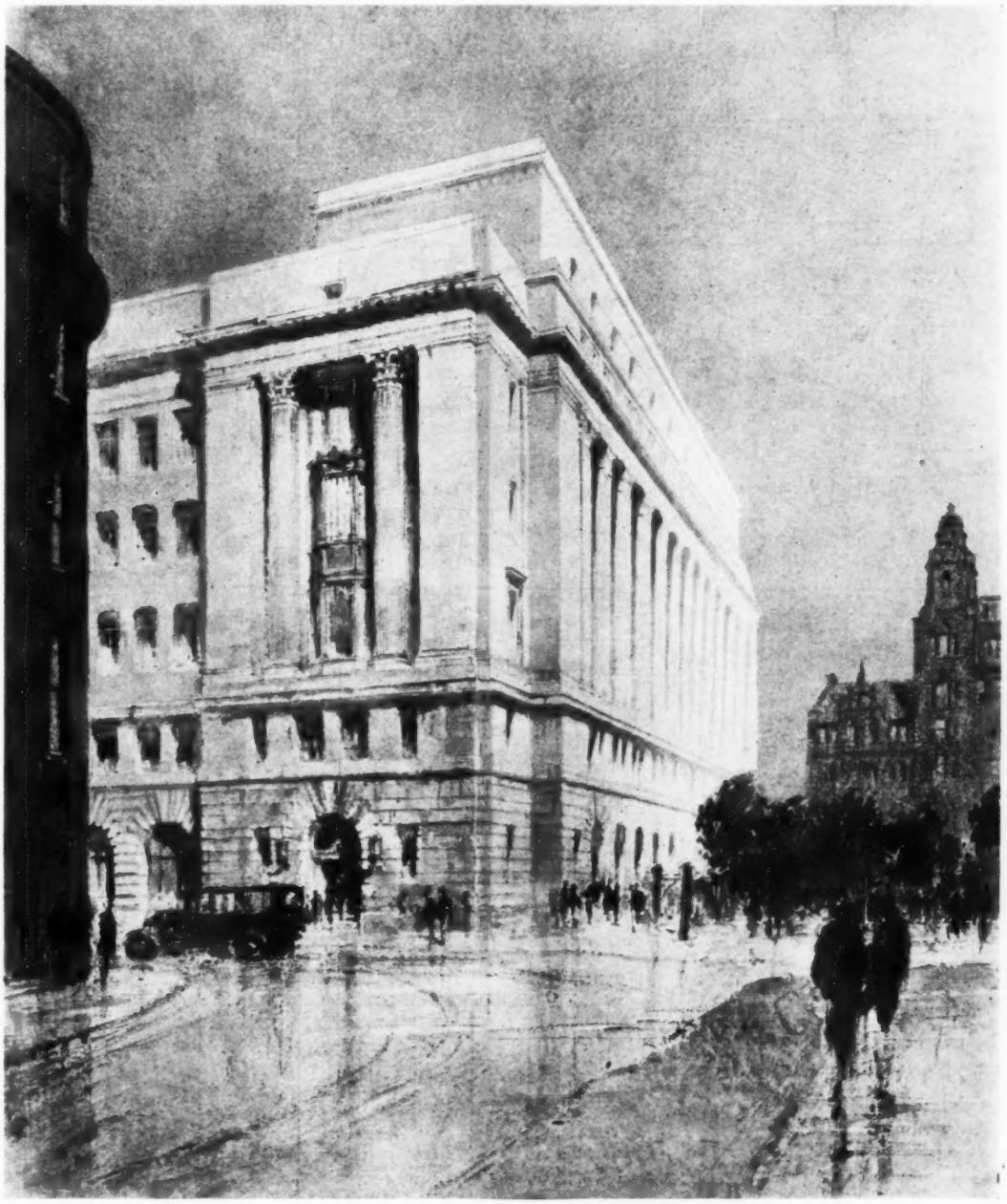
the main axes of the building, and have been arranged in a very convenient manner, in conjunction with the entrance halls and passenger lifts. In addition to four elevators for passengers, one service lift has been provided; but it should be pointed out that the building has been designed purely for office accommodation and not as a warehouse. There is, therefore, no loading way into which carts can be backed, as in the principal warehouse buildings. This structure does not stand on a raft, and the weight has been distributed by grillages over the hard clay foundations available. The effect of the Southgate façade has been greatly improved by means of a concession obtained from the Manchester Corporation. The former frontage of Southgate was inclined to the main façade in



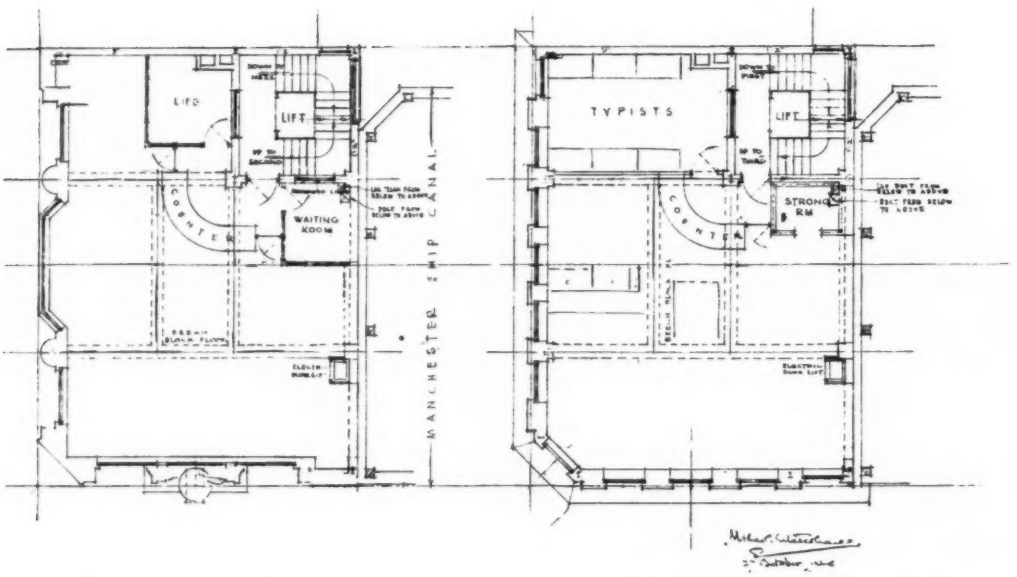
The English Sewing Cotton Company, Ltd., Head Offices. The Parsonage, Manchester. By Harry S. Fairhurst. Ground- and first-floor plan.

such a manner as to prevent the effect that is now about to be obtained from being realized, without loss of valuable land. It was, however, observed that the difficulties caused by this splay on the plan might be overcome by granting to the Manchester Corporation a portion of the site in exchange for a corresponding area in the roadway. This arrangement eventually met with the approval of all concerned, and the result is that this façade would present a much more pleasing effect than would otherwise have been possible. In this matter the public are very much indebted to the members of the Manchester Corporation for the broadminded way in which they realized the difficulties of the architect and his clients and appreciated their desire to produce a building that would be permanently satisfactory. By introducing large lighting wells at the Back South Parade side of the building, which extend down to first-floor level, it will be possible to admit a volume of bright south light into the whole of the offices on that side of the building. These light wells leave projecting masses which possess architectural qualities that can be made particularly effective, and there can be little doubt that the architect will endeavour to utilize these huge blocks of building to the greatest possible effect.

Although the three principal sides of the building are to be faced with Portland stone, it was naturally not desirable, in view of the expense, to continue the use of stonework



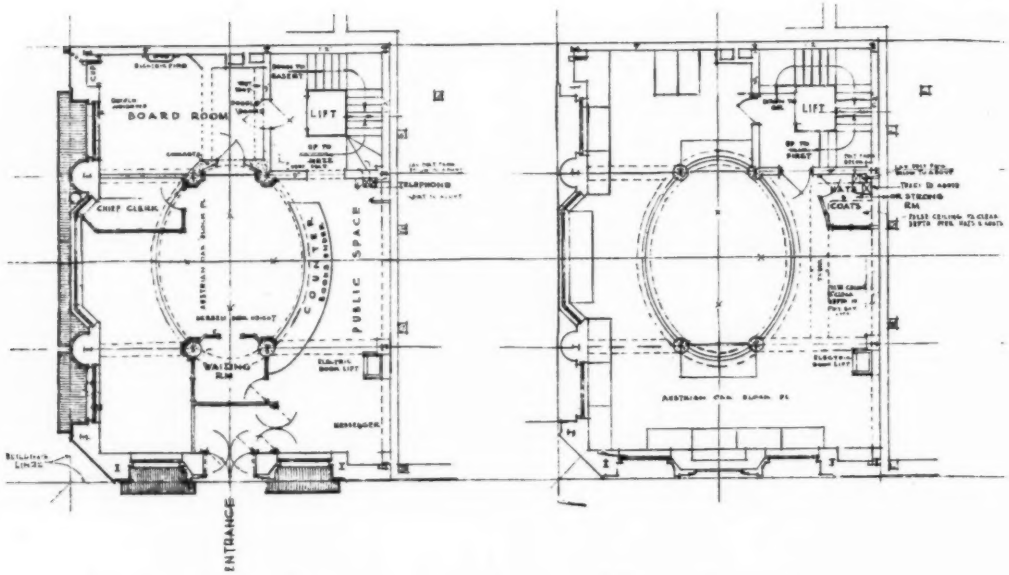
The English Sewing Cotton Company, Ltd., Head Offices, Manchester. By Harry S. Fairhurst.



FIRST FLOOR PLAN
ACCIDENT & LIFE DEPARTMENTS

SECOND FLOOR PLAN
ACCOUNTS DEPARTMENT & TYPISTS

MICHAEL WATERHOUSE A.R.I.B.A.
ARCHITECT
STAPLE INN BUILDINGS HIGH HOLBORN W.C.



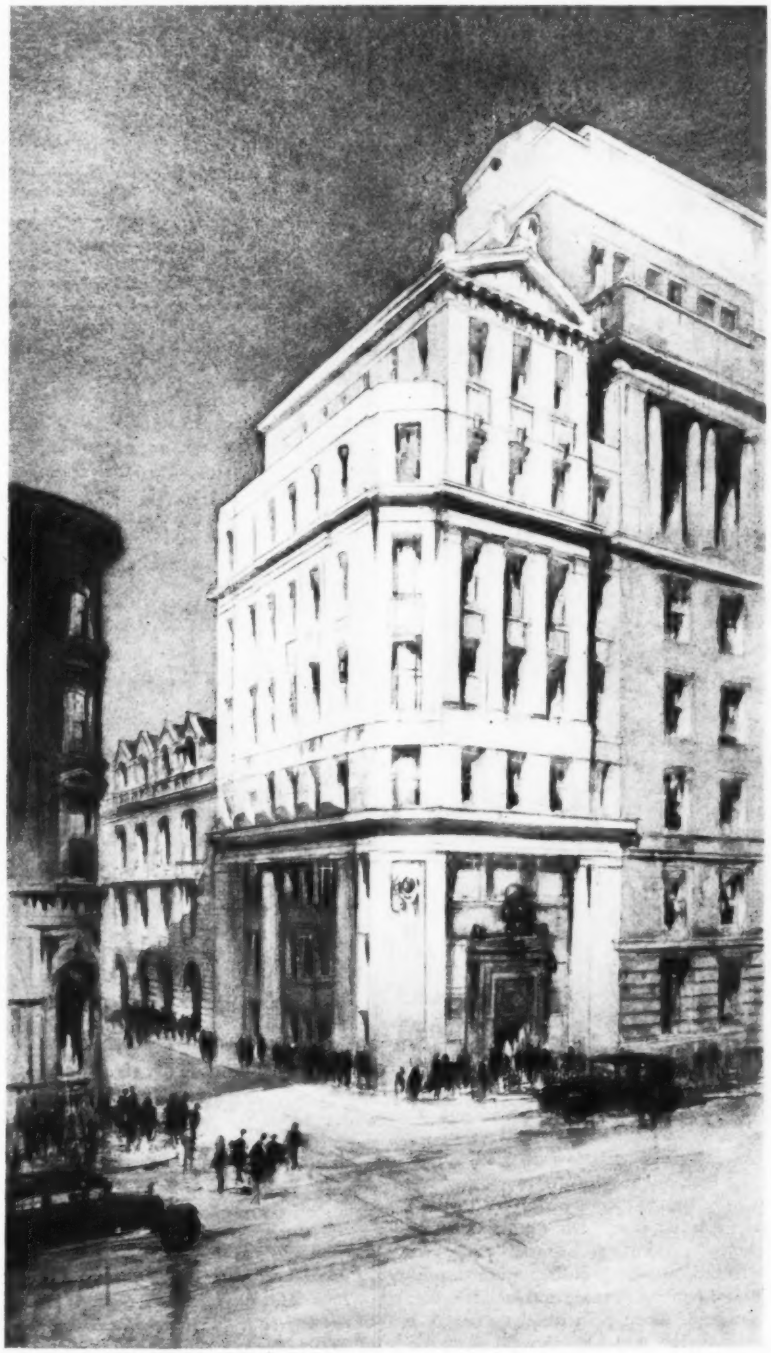
GROUND FLOOR PLAN

MEZZ FLOOR PLAN

Atlas House, Manchester. By Michael Waterhouse. Plans.

at the back. A simple treatment in buff bricks is therefore to be adopted. From the elevation of the South Parade side of the building, it will be observed that the second, third, and fourth floors come behind the cast-iron treatments which fill in the space behind the unfluted Corinthian pilasters. Detached fluted Corinthian columns are apparently only to be introduced on the Southgate façade. It is unnecessary to refer to the thoughtful manner in which these designs have been prepared. The drawings which are reproduced are quite sufficient to explain this to architects without any further description.

From the particulars that have been given it should be possible for readers to form some idea of the extent to which the old order in Manchester is now changing. Similar changes may be observed in most large centres throughout the whole of the country, but in Manchester and Liverpool the transformation is apparently taking place even more rapidly than in other parts of the provinces. Slow as these movements may appear in relation to those that we may observe in London, they are, nevertheless, not without some interest to architects and others interested in civic development.



Atlas House, Manchester. By Michael Waterhouse.

IS KARSHISH WRONG?

[BY MR. AND MRS. SELEENO (in consultation)]

KARSHISH stands in relation to architecture much as G.B.S. stands to the drama. Karshish pokes, provokes, stimulates; with his giant's foot he kicks hard, but, unlike G.B.S., he does not always succeed in placing his foot on his victim's most tender spot. The Irishman is intensely serious, but he often laughs with us; his inversions apply to himself. Karshish selects his arguments much as one might select spanners to throw at a howling cat—in the emergency there is no time to make sure that they travel head first. The indignation engendered by his natural kindness of heart has led him into building a vast structure of criticism upside down. This need not prejudice us against his conclusions, since one can imagine a structure that would be as admirably serviceable one way up as the other. We only state this as a fact.

Let us examine his claim: "I look at the matter from a detached standpoint as a visitor from another planet might." If we look into this we find that he is doing nothing of the kind. Supposing a being from another planet were to pay us a visit, butting in on Mr. Wells's Dimension F, what would he see and do and what viewpoint would he adopt concerning us and our ways? If he looked respectable, and arrived with creditable introductions, he would stay with Mr. Winston Churchill, occupying a bedroom pleasantly designed by Mr. Tilden. A dinner would be given in his honour; he would be shown Westminster Abbey and St. Paul's, be taken to lunch at Letchworth and tea at Welwyn, and he would receive a good idea of the *outsides* of some 10^5 houses (in dealing with such a being we must talk mathematically). If, on the other hand, our visitor's appearance were homely, he might sleep in a workhouse or be driven to rest in ditches and disused barns, and in his wanderings he would still see the *outsides* of some 10^5 houses, but the insides would remain as unknown as they were to Mr. Churchill's guest. The same applies to any other visitor who travels about England; for every 100,000 houses of which he sees the outsides he may see the interior of one. Can we, therefore, say that the one is 100,000 times as important as the other?

From the point of view of the visitor we may certainly say Yes, that in architectural importance the outside is to the inside as 100,000 is to 1. We do not pretend that this is a true estimate of relative value for all observers, but it would be true of Karshish if we were to accept his definition of himself. His views do not embody the impressions that could be formed by an outsider.

Actually, Karshish is far too human to take a detached view. His planetary observer is but a spearhead of argument—a scented herring in digression. His architectural perception is dominated by his heart. He speaks, not as an architect, but as a householder, an uncle, a ratepayer, a churchwarden. What should it matter to Karshish the architect, to us Seleenos, or to the very sensible reader, whether or no our neighbours skin their knees, tumble down stairs, fall into the bath, strike their innocent heads, or tread on the cat's tail? It may touch our humanity—it may bark our shins—but it surely cannot concern our architecturality.

If other people are so stupid as to want inconvenient houses, let them have them. Karshish, the reader, and we Seleenos are sensible people. We live comfortably ourselves, and when we visit our friends our self-protective instincts save us from serious injury because we are on the look out for traps and pitfalls. It happens that the same attitude that disposes people to tolerate mantraps inside often allows them to desire "Oh, my!" exteriors and other such idiocies. The two need not go together. One can picture a world where, inside and out, the buildings were exquisitely architectural, but ferociously uncomfortable and inconvenient at the same time. Swift, indeed, when he wished to depict a country of pure abstract knowledge and art, showed it to be impossibly awkward from the practical point of view. Karshish's notion suggests that if we could make people live in really sensible houses, perfectly convenient and labour-saving, we should arrive at a reasonable standard of architectural design; but we can imagine a world where everything was perfectly comfortable, convenient, and labour-saving, but where all architectural quality was absent, and what evidence have we that our neighbours would not like such a world? Many of the jerry-built houses which are most comfortable within, but "crikey" without, indicate that such a world would, to our neighbours, constitute a most desirable residence.

Karshish tells us that the various fashion-fads and follies, such as period houses and the like, "bear no relation to the realities of life." How unfortunate is it that they do the reverse! "Life," when applied to a creation of the mind, must mean mind. A tomato, a sponge, a bat, a dog, are as alive as we are, but no architectural expression could be identified with the life of any one of them. We must reverse Karshish's statement and say that our exteriors—platitudes and eccentricities alike—are the direct reflection of contemporary life. Karshish's assertion would indicate that, to amend our architecture, we need only improve the public taste after having inculcated common sense. If, however, as we suppose, the trouble lies deeper, this suggests that we must first alter the public's outlook on life. Karshish's way is too easy; he adds undue optimism to his softness of heart.

His main indictment is possibly directed against those architects who build syrupy outsides and quaintly sweet interiors, which are not adapted to human habitation. We have just examined the pictures of two worlds: world "A," where everything is architectural but inconvenient, and world "B," where everything is comfortable but unarchitectural. Of these two, the qualities of world "A" are in the hands of architects, and in deploring its inconvenience we should remember that the fascination of romantic discomfort is deep-seated and fundamental. Mrs. Seleeno confesses that her dream is to retire for odd (very odd) week-ends to a living-room in a disused windmill; she pictures Seleeno contriving a refrigerator excited by the power of the somewhat decrepit sails. If Karshish is unconvinced let him watch a picnic party or observe how any child will pass comfortable seats on a tram in order to perch itself on the wobbly mushroom, and how apparently sober men in their sixties will revive their youth in a third-hand hired cutter. The abolition of discomfort might easily land us in the dreary and monotonous efficiency of world "B." As to that world, its advantages are ever before the public; it is the pet domain of a vast horde of thoughtful ladies, social reformers, daily newspapers, "Aunt Agathas," and humanitarians. Might it not be well for architects, led by the redoubtable Karshish, if he would consent to lead, to concentrate entirely on world "A," adopting literally the point of view of the gentleman from Dimension F, and letting clients, in the privacy of their homes, hurt themselves, walk unnecessary distances, stoop to their sinks, and fall about to their heart's content?

Perhaps Karshish will refuse to lead, in which event the quest for the reverent and functional home may create confusion among his followers. In his later chapters he writes as a husband, but not as a father. He defines didactically the needs of a self-contained couple "doing" for themselves. With a family there are incessant rows, irregular meals, jubilation, rehearsing, discord, broadcasting, callers, and love-making. Would Karshish like to be continually exposed to frontal attacks from his daughters' admirers, to sharing his hall-sit with their wet mackintoshes and all the hideous impedimenta of a young social life? Would he not rather copy the Seleenos—those experienced parents—and build a remote snug-hole, inconvenient of access, and force his younger daughters to carry his meals to the greatest possible distance from the kitchen?

ENGLISH PRECEDENT

5 *The date, 1666, of the foundation by John Warner, Bishop of Rochester, of Bromley College, Kent, appears in the detail of the fine ironwork of the entrance gates. The little belfry is placed over the principal entrance, just where it opens into the quadrangle. It is an interesting instance of rustications worked in wood ; a treatment applied also during the eighteenth century to boarded elevations, gate posts, doorways, etc. The present is perhaps the most usual way of using cupolas, but they have also been adapted to other purposes, of which further examples will be illustrated on this page.*—[NATHANIEL LLOYD.]

WORKING UP A BILL OF QUANTITIES: V

[BY ARTHUR J. WILLIS]

APPENDIX I

CHIEF SECTIONS INTO WHICH EACH TRADE CAN BE DIVIDED AND THE ORDER IN WHICH THESE SECTIONS SHOULD BE BILLED

EXCAVATOR AND CONCRETOR:

Excavation.
Planking and strutting.
Hardcore.
Concrete (if of more than one kind, under headings according to composition).
Cast concrete (e.g. lintols).
Artificial stone (though more usually in mason).
Granolithic (alternatively in bricklayer or plasterer).
Reinforced concrete (if sufficient to justify a separate section, followed by its form work and steel, otherwise these would be put in their respective trades).
Piling.

DRAINS:

Stoneware drains.
Iron drains.
Ventilating pipes.
Manholes.
Connection to sewer.

BRICKLAYER:

General brickwork (if sufficient blue brickwork or firebrick work to justify it, separate sections should be made).
Facings (each variety under a separate heading in order of cost, cheapest first).
Tile dressings (if sufficient to justify a special section, otherwise with general brickwork).
Slab partitions (patent plaster slabs often in plasterer).
Asphalt.
Underpinning (a complete bill with its excavation, concrete, asphalt, etc.).

MASON:

Each kind of stone forming a separate section arranged in order of cost, cheapest first.
Granite.
Marble.
Carving.
Artificial stone.
Terra-cotta or faience work.
Slate mason.

SLATER OR TILER:

Each variety of slating or tiling under a separate section, the cheapest first.

CARPENTER:

Centering and shuttering.
General carpenter's work.
Felt or similar materials.
Any special work to be kept under a separate heading, e.g. lantern lights, turret.

JOINER:

Floors in deal, *a*: batten.
b: block.
Do. in hardwood, *a*: batten.
b: block.
c: parquet.
(each variety of hardwood in a separate section).
Linoleum or similar floor covering.
Skirtings in deal.
Do. in hardwood.
General deal joinery under separate headings in the following order:
a: Windows.
b: Doors.
c: Window and door finishings.
d: Frames.
e: Sundries.
Hardwood joinery according to the above-mentioned subdivisions, each kind of hardwood being kept together.
Fittings (all similar fittings being grouped together under a separate sub-heading).
Stairs, *a*: deal.
b: hardwood.
Ironmongery and fixing to deal.
Do. to hardwood.
Ironmongery sundries (e.g. water bar, dowels, etc.).

FOUNDER AND SMITH:

Cast iron.
Wrought iron.
Steel.
Sundry provisions (e.g. electric light, heating, lifts, etc., or a separate bill headed Engineering may be made for some of these).
Builder's work in connection with engineering.

PLASTERER:

Lime plaster.
Keene's or Parian cement.
Fine plaster (cornices, etc.).
Portland cement.
Roughcast or other external plaster finish.
Fibrous plaster.
Plaster slab partitions (if not in bricklayer).
Jointless floors.
Terrazzo.
Quarry tiling.
Glazed tiling.

PLUMBER:

External plumbing.
Internal plumbing and water supply—
a: lead pipes
b: wrought-iron pipes } or copper pipes.
c: brasswork.
d: cast-iron soil and ventilating pipes.
e: cistern and sanitary fittings.
f: connection to company's main.
g: hot water supply (if not a provisional sum in Founder and Smith).

ZINCWORKER.

COPPERSMITH.

GAS FITTER (if not a provisional sum in Founder and Smith).

GLAZIER:

Each kind of glass forming a separate section arranged in order of cost, cheapest first.

PAINTER:

Limewhite (if not in bricklayer).
Distemper on plaster.
Paint on plaster.
Blacking stoves, etc.
Paint on ironwork (where more than one specification, each specification to form a separate heading).
Paint on woodwork (arranged as above-mentioned for paint on iron).
Stain woodwork (and varnish).
Stain and wax polish woodwork.
Stain and French polish do.
Writing.
Gilding.
Paperhanging.

APPENDIX II

SPECIMEN CLAUSES IN CONNECTION WITH P.C. ITEMS, PROVISIONAL SUMS, AND PROVISIONAL QUANTITIES

PRELIMINARIES

The word " Provisional " in this Bill of Quantities is to be taken as signifying that the quantity or quantities of the item to which it refers shall be used as directed by the Architects and adjusted or omitted as the case may be at the settlement of accounts.

Wherever the initials " P.C." or the word " Provide " are used, the items so designated are to be taken as provisional both in quantity and value. The sums provided for such items are to be considered as strictly net prime cost as defined by Clauses 27 and 28 respectively of the Conditions of Contract and are to be paid to such Specialists or Merchants as the Architects may direct, or they may be deducted in whole or in part together with profit, etc., added by the Contractor *pro rata*. The Contractor is reminded that he must make separate contracts with the Specialists and Merchants, as the responsibility for the execution of their work (including completion within the specified time) rests with the Contractor. The receipted accounts will be required for the adjustment of the items covered by this clause.

In the case of sums provided for work to be executed by Specialists the Contractor must add for profit, use of water, plant, scaffolding, and general facilities. If he dismantles any scaffolding before Sub-Contractors have completed their work he will be required to re-erect it without charge.

In the case of p.c. sums for goods to be obtained from Merchants, carriage to nearest station (*delivery to the site*) is included, but the Contractor must add for profit (*unloading, cartage from station to site*), unpacking, and returning empties.

The Contractor is to obtain from all Sub-Contractors full particulars as to their requirements with regard to chases, recesses, and other details, and is to supply them with all necessary dimensions and other information so that their work may be correctly executed and subsequent alterations obviated. If the Contractor fails to do this he is to effect all such alterations at his own expense, or pay the Sub-Contractor's charges therefor.

P.C. ITEMS

No. 6. Cast-iron manhole covers p.c. 30s. each and setting frame in cement and bedding cover in grease.

Allow the p.c. sum of £250 0 0 for sanitary fittings and add profit.

Unload, cart from station, and fix only the following:

No. 6. Lavatory basins with waste, union, plug and chain, two ½ in. bib valves and cantilever brackets,

etc. etc.

(End of fixing only.)

PROVISIONAL SUMS

Provide the sum of £500 0 0 for heating and hot water installation and add profit.

Attend on Engineers and allow them use of water, plant, scaffolding and general facilities for carrying out their work.

PROVISIONAL QUANTITIES

Feet.		
250.	Run.	7 in. × 1 in. deal angle pipe-casing fixed with brass cups and screws to and including 1½ in. × 1 in. wrot rebated splayed and beaded grounds plugged. (Provisional.)

[*To be concluded*]

LAW REPORTS

STATUTORY TENANT'S RIGHT TO SUBLET: IMPORTANT DECISION

Roe v. *Russell. Court of Appeal. Before Lords Justices Scrutton and Sargant and Mr. Justice Eve*

The court held in this appeal that a statutory tenant had the right to sublet. The matter came before the court on an appeal from a decision of Justices Shearman and Finlay, sitting in a King's Bench Divisional Court, and the point raised was whether a statutory tenant, under the Rent Restriction Acts, had the right to sublet part of the premises occupied by him.

Mr. Doughty, K.C., and Mr. Schultess Young argued the case for the appellant, and Mr. Sidney Isaacs for the respondent.

It appeared that in September 1917 Mr. Jamieson became the tenant of certain premises within the Rent Restriction Acts, of which the rooms which were the subject of the present proceedings formed part. The landlord of the whole premises was then a Mrs. Alders, and under his tenancy agreement Mr. Jamieson was not forbidden to sublet. In November 1919, Mrs. Alders assigned her interest in the premises to the plaintiff, Mr. Percy Davis Roe. In 1921 Mr. Roe served a notice to quit on Mr. Jamieson, who thereupon became a statutory tenant of the premises. In November 1925, Mr. Jamieson sublet to the defendant, Mr. William Russell, an omnibus inspector, the rooms which were the subject of the present proceedings. In July 1926, Mr. Roe obtained an order for possession of the whole of the premises against Mr. Jamieson on the ground of non-payment of rent, and Mr. Jamieson left the premises in May 1927, leaving the defendant in possession of the rooms which had been sublet to him. Mr. Jamieson had never agreed that a term should be added to his tenancy prohibiting him from subletting.

The defendant was requested by the plaintiff to vacate those rooms, but he refused to do so. Mr. Roe accordingly took proceedings in the Brentford County Court for the ejectment of the defendant from the rooms which he occupied. The County Court Judge (his Honour Judge Hargreaves) decided in his favour, holding that Jamieson had no right to sublet part of the premises to a subtenant, and that the defendant was, therefore, a trespasser.

By section 15 (1) of the Increase of Rent and Mortgage Interest (Restrictions) Act, 1920:

> A tenant who by virtue of the provisions of this Act retains possession of any dwelling house to which this Act applies shall, so long as he retains possession, observe and be entitled to the benefit of all the terms and conditions of the original contract of tenancy, so far as the same are consistent with the provisions of this Act . . .

The Divisional Court upheld the decision of the County Court Judge, holding that a statutory tenant possessed no interest which entitled him to sublet.

The defendant appealed.

Lord Justice Scrutton, in giving judgment, said the appeal raised a question of great importance to a number of persons in occupation of a few rooms in houses of low rental and rateable value. The question was whether, when their title to be in those rooms depended on a subletting by a person who himself had only a tenancy under the Rent Restriction Acts—a man not in by the consent of his landlord, but because his landlord could only turn him out under conditions limited by those Acts—they had a good title. In other words, could a statutory tenant sublet part of the premises of which he was a statutory tenant? In his view the continued references throughout the Acts to partial subletting and subtenancies must be treated as a recognition that in the opinion of Parliament a statutory tenant remaining in possession might sublet part of his demised premises. The references were sometimes to subtenants; sometimes to tenants to whom the premises were lawfully let. He found it impossible to explain them by limiting them to subtenants created by a contractual and not by a statutory tenant. It was impossible to ignore the fact that there

were a very large number of the latter class, for every landlord who had raised his rent by virtue of the Acts, and every tenant who had done the same to a subtenant, had only done so because of statutory tenancy. Section 7 of the Act of 1923 empowered the tenant to increase the rent of his subtenant by a certain percentage, and section 3 (1) of the Act of 1920 showed that this increase could not apply to a contractual tenancy lawfully made by the tenant. It would seem to follow that section 7 must relate to and recognize subtenancies created by statutory tenants. Taking into review all the provisions of the Acts, he had come to the conclusion that the Rent Restriction Acts contemplated that the statutory tenant remaining in possession might sublet part of his premises, subject to apportionment of the standard rent of the tenant's premises, so as to prevent the subtenant from paying an extortionate rent. He could not, however, assign his tenancy of the whole of the premises, whether for value or not. Nor could he, by a series of subletting, part with the whole of the premises which he held as statutory tenant, though if he did so he desired to reserve the question of the position of the subtenants.

For these reasons he was of opinion that an order for ejectment should not have been made against the subtenant in this case, and this appeal must, therefore, be allowed and judgment entered for appellant, with costs. He regretted that he could not order the costs to be paid by the draughtsmen of the Rent Restriction Acts, and the members of the Legislature who passed them and were responsible for the obscurity of the Acts and their failure clearly to provide for such obvious incidents of tenancy as death with or without a will, bankruptcy, power to assign, and power to sublet in whole or part demised premises.

Lord Justice Sargant and Mr. Justice Eve concurred.

CORRESPONDENCE

TOWARDS A BETTER BRICK

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—The reconsideration by the R.I.B.A. of the standard size of bricks is a hopeful sign that the old conventions are to give place to the modern desire for greater freedom in the use and application of bricks. If a standard must embrace both backing and facing bricks, then let it be confined to their length and width only; or, alternatively, for general walling bricks only to the exclusion of facing bricks.

With the improved conditions for which Mr. Nathaniel Lloyd so eloquently pleads, could not the Bricklayers' Union be persuaded to encourage the development amongst its more ambitious members of a real craft of bricklaying? Hitherto not only has the brick been standardized, but no effort seems to have been spared to standardize the bricklayer also.

Until good craftsmanship is encouraged by grading the bricklayer, so that the man who can handle and appreciate the value of the thin hand-made brick and the $\frac{3}{4}$ in. joint is paid more than the youngster who builds the $4\frac{1}{2}$ in. partition walls of Flettons, all the standards in brick sizes will not advance matters. As you, sir, clearly set out in your editorial, the whole field of brickmaking and bricklaying should be explored. In this connection I venture to suggest that from the point of view of an architect it would be most helpful if, instead of confining their deliberations to determine the size of a brick, the R.I.B.A. would extend their researches to embrace the more important factor of quality.

It is doubtful whether the average architect is competent to judge of the quality of a brick. Colour, form, texture, and cost can readily be decided by him; but it requires the scientific knowledge and instruments of the physicist to determine the quality of a brick as well as its suitability in a given situation, having regard to atmospheric and other conditions.

With the considerable responsibilities which today encompass an architect's work, collaboration with the physicist is, in my opinion, of increasing importance, not merely with regard to bricks, but to all building materials. At the present time a most serious case of defective brickwork is engaging my attention, in which, had laboratory tests been made before the final selection, much anxiety and endless expense would have been avoided.

I therefore suggest that panels might be formed of architects, brickmakers, and operatives in each county, having for their object the collection of data and the production of a graded and classified list of bricks for the guidance of the Standard Committee who, doubtless, would call to their aid a competent physicist for laboratory experiments and tests. Following this a central advisory body should be formed with, if necessary, a representative from each county panel to collect and codify the results and create an information bureau for the use of architects and contractors throughout the country.

SYDNEY TATCHELL

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—The appointment of the R.I.B.A. Committee on the above is opportune; Mr. Nathaniel Lloyd's articles also. He does not suggest improvements so much as state the matters that are exercising architects who desire to build beautifully. I very much hope that the R.I.B.A. Committee will not be hasty in reporting. The subject of bricks and brickwork is of the deepest interest to architects and to the well-being of the community.

There are the practical matters relative to the stability of the brickwork, the brick, and the mortar; the question of beauty of texture and colour; and there are also not to be forgotten the qualities in bricks and brickwork desirable from the aspect of health of the inhabitants of buildings.

As to the stability of the materials, you have recently published an interesting paper by Professor Van der Kloes, and there are other investigations proceeding on this branch. As to the stability of walls, it is high time the bad bond resulting from use of facings incompatible with backings was investigated. Bricks rising five courses to the foot cannot well be bonded, except one course in ten, into backings rising four courses to the foot, and the combination of the two kinds of brick at jambs of openings leaves much to be desired.

As to beauty of the work, a too slavish adherence to "kept perpends" and the like, though it may be deprecated as productive of machine-like walling, yet is probably necessary to stability in walls 9 in. to $13\frac{1}{2}$ in. thick; but has been absent from walls of Tudor work only with impunity—probably owing to the walls being 2, 3, 4, or $4\frac{1}{2}$ bricks thick, i.e. 18 in. to 3 ft. $4\frac{1}{2}$ in., as e.g. at Raynham (not Tudor, I know).

Another point in the matter of texture and colour is that of the $\frac{3}{4}$ in. joints, rightly appreciated by Mr. Lloyd. I think that, even given these bricks, this sort of joint is unattainable without radical alteration in the coarseness of sand used in mortar and the difficulty in training bricklayers to do the thing well. You cannot make a $\frac{3}{4}$ in. thick joint in ordinary sand, I believe. It would squeeze out, would it not?

In referring to health I meant to draw attention to the often expressed opinion of sanitarians that walls should be *pervious*. For the last thirty or forty years this quality has been mentioned, but as far as I know not thoroughly investigated or authoritatively pronounced upon. The ideal wall apparently is one which is pervious to air, but impervious to water. The only satisfactory wall in this matter, as far as I know, is one that is covered with tile (or slate) hanging or well-kept ivy of a broad-leaved kind, which will turn any amount of driving rain.

These are, in brief, points which should not be lost sight of by the R.I.B.A. Committee, and may they very thoroughly sift them.

W. B. HOPKINS

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Whatever Mr. Nathaniel Lloyd writes about brickwork bears the impress of authority, and I am, therefore, the more sorry that he should seem to regard a few extraordinary feats of bricklaying [*sic*] as serious standards by which the output of the average good bricklayer can be judged. As records of physical endurance, they are remarkable; but they have no more real bearing upon the craft of bricklaying than would the achievement

of a man who played a flute without intermission for twenty-four hours upon the art of music.

In comparing the present output with the number of bricks laid by the craftsmen of other days, it must be remembered that walls used to be less complex in form and substantially thicker. When a brick wall is 18 in. thick or over, the men working on opposite sides can both turn to and fill in the centre, after they have run out their facing courses; but when, for instance, the wall is only one and a half bricks thick, and built in old English bond, the man on each side of the wall has, in alternate courses, to lay twice as many bricks as his opposite mate. The American system of laying six courses of stretchers and then one course of headers, permits a speeding up, but it is a deliberate sacrifice of the principles of good workmanship.

The small photograph of Tudor brickwork in your issue for January 25 shows a desirable texture in the bricks, but the work would have been no less beautiful had these been laid with a greater regard to what the bricklayer calls "quarter bond." The slight variations in the lengths and widths of many of the facing bricks of a similar type that are made today prevent the keeping of the perpends with the accuracy that architects find so irritating; but it is mere slovenliness that permits the cross joints to overrun until they are almost straight with those in the preceding course.

It must be remembered that machine-made bricks of uniform size and shape, which produce the mechanical effect that is deplored, are the easiest to lay, and by making the bricks of irregular sizes and shapes a great deal of extra work is thrown upon the bricklayer in using them. The bricklayer has to pick each brick up, and look it over, to see whether it is suitable for a header or a stretcher. If a header has a bevelled end, the tail of the brick must be grubbed down, or else bedded up, in which case it becomes an embarrassment when the next course is laid over it. A small matter it might be thought, but nevertheless one that, many times repeated in a day's work, considerably diminishes the output.

It often strikes me as paradoxical that architects should endeavour to stimulate the pride of craft amongst bricklayers, and at the same time give active support to those who regard a high minimum output as the chief criterion of attainment.

L. E. WALKER

WORKING-UP A BILL OF QUANTITIES

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—There is one point I would suggest to the writer of the articles on "Working-up a Bill of Quantities," that is, the position of insurance items in the bill.

These items are usually priced on a percentage basis and, therefore, I always place them after the total of all the trades in the summary. I also place the water item in this position, and any other items calculated on a basis of the total cost.

The articles are easily the best I have ever seen, and I have strongly recommended the study of them to my quantity students at the Oxford City Technical School.

GILBERT T. GARDNER

PLYWOOD

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—With regard to the suggestion to adopt the expedient of butt-jointing and papering plywood, it is the writer's experience that any material of a timber character is best fixed with cover strips over joins.

According to the figures quoted, there is a movement of one-fifth of 1 per cent., which is $\frac{1}{10}$ in. approximately on a 4 ft. width and $\frac{1}{5}$ in. on 8 ft.; more than enough to cause the lining to crack. This apparently only refers to contraction on the reduction of the atmospheric humidity from 100 per cent. to 50 per cent. Now, although this may represent dry outdoor conditions in this country, it by no means represents the lowest humidity which will be found in certain parts of a house. Near fireplaces, and on ceilings, and in the upper floors of houses, after a day of hot sunshine in the summer, the heat is intense enough to reduce the effective humidity to 10 per cent. or 5 per cent., and it is more than likely that under these conditions the movement above referred to might be increased. It is not normal conditions that test a board, but abnormal conditions.

Two or three cases have recently come under the writer's notice where a board has been butt-jointed and papered, and in the course of time the paper has cracked, whereas if this had been fixed in the manner in which experience has shown to be the right method for all materials of this class, satisfaction would have been assured.

IOTA

THE MODERNIST ARCHITECT

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Having read the eulogy of the principles evinced by the modernist architect and shown in houses erected on the Continent, and particularly the statement that "The room itself, exchanging a masonry wall for one of glass, passes into the street or garden through its ample casements. The walls vanish into space," etc., etc., I am moved to inquire whether there is, after all, anything so frightfully wicked about a wall. As I write, the rain, wind driven by that "full south-west" celebrated by the reactionary poet Kipling, is beating on the limited surface of my normal window, and a feeling of enclosure is not unwelcome.

E. G.

IN PARLIAMENT

[BY OUR SPECIAL REPRESENTATIVE]

Slum Clearance

Regret was expressed in many quarters of the House of Commons that no mention of any legislation in relation to slum clearance was made in the speech with which the King opened Parliament.

Mr. Montague, a Labour member, said that he felt considerable dissatisfaction with the attitude of the Ministers immediately concerned in dealing with the problem. At present, the Government seemed perfectly satisfied with the development of the housing situation. Ministers had recently expressed the opinion that the question was practically solved. Yet, in order to meet normal requirements since 1919, no fewer than 1,600,000 houses should have been built, without taking into consideration the important question of the slums. The real tragedy of the Westminster floods was not the neglect of the embankments, but the existence of cellar homes for the people. Everyone who had studied the subject knew that the building trade workers did not stand in the way, and, if there had been a decent plan for housing in this country, more would have been accomplished.

Mr. Groves complained of the overcrowding which existed in the East End of London, and appealed to the Government to take some action to remedy it.

Mr. Snell said that whatever credit the Government might take to themselves for the improvement that had taken place in recent years in regard to housing, the problem could not be regarded as solved. There was still the very greatest need for houses for the wage-earning classes.

A number of Unionist members have tabled an amendment regretting the omission of any reference to slum clearance legislation from the King's Speech.

The Battersea Generating Station

At question time, Sir W. Davison raised the question of the permission given by the Electricity Commissioners to the London Power Company, Ltd., to erect a super electricity generating station at Battersea. This station, he alleged, would have sixteen

tall chimneys in connection with furnaces estimated to burn approximately 800,000 tons of coal per annum. He asked if the Minister of Health was aware of the alarm that was felt in the West End of London at the large amount of smoke and sulphur fumes which were likely to be discharged into the atmosphere in connection with this vast consumption of coal, and whether, having regard to the urgent need of keeping the atmosphere of London as pure as possible, he would make representations to the Electricity Commissioners?

Colonel Ashley, the Minister of Transport, who replied, said that the formal consent of the Electricity Commissioners to the establishment of the generating station was given last October, after careful consideration of the evidence given at a public inquiry last June. The company had also obtained the approval of the Commissioners of Works, and there was no ground for apprehension. One of the conditions of the erection of the station was that all the best known apparatus for consuming smoke should be used there.

Building Materials, Slums and Floods

Mr. R. Morrison asked the Minister of Health what action he intended to take with reference to the November report of the inter-departmental committee upon prices of building materials, with particular regard to the large increases shown in the prices of bricks as compared with those of January 1924?

Mr. Chamberlain said that although the report revealed that the prices of common bricks in eight of the areas which reported to the committee were in excess of the prices ruling in January 1924, in five of the districts the prices were, in fact, lower than the January 1924 prices. He understood that the prices of bricks continued to show a downward tendency, and in view of that he proposed to await the next report of the inter-departmental committee.

Mr. Chamberlain informed Mr. Wellock that three slum clearance schemes had been confirmed in Worcestershire, two at Oldbury, and one in the City of Worcester. The annual Exchequer contributions in aid of the schemes had not yet been fixed, but on provisional figures they were estimated at £500 in respect of the three schemes, representing 50 per cent. of the estimated annual loss.

Asked as to the extent to which the National Collection in the Tate Gallery had suffered during the recent floods, Mr. A. M. Samuel said that, fortunately, the extent of the damage was not as great as might have been anticipated. Of the 190 oil paintings involved only 100 suffered material damage, and of these not more than about twenty were thought to be past repair. These belonged, almost without exception, to the mid-Victorian period, and none of them could be regarded as of primary importance. The Turner collection of drawings and watercolours was partially immersed, but the prompt measures taken by the authorities would, it was believed, enable the collection to be restored almost to its recent condition. All the most important pictures in the gallery, being hung on the ground floor, remained unaffected by the flood.

SOCIETIES AND INSTITUTIONS

R.I.B.A. Council Meeting

Following are notes from the minutes of the last meeting of the Council of the R.I.B.A.

London Squares. On the recommendation of the Town Planning and Housing Committee it was agreed to approach the Royal Commission on London Squares with a request that the R.I.B.A. should be allowed to submit evidence to them.

St. Olave's Church, Tooley Street, Southwark. The Town Planning and Housing Committee were empowered to act on behalf of the Institute in the matter of the threatened demolition of the tower of St. Olave's Church, Tooley Street.

Acoustics Research. On the recommendation of the Science Standing Committee the following resolution was approved and forwarded to the Department of Scientific and Industrial Research: "The Science Standing Committee of the R.I.B.A. understand that the Department of Scientific and Industrial Research are considering further acoustic experiments following the programme of research work proposed by the R.I.B.A. in 1917. They wish to express their opinion that such further experiments are most desirable, especially experiments upon the new wall, ceiling, and partition materials placed on the market in the last few years. The data from such experiments would be of immediate use to architects."

British Architects' Conferences, 1928 and 1929. On the recommendation of the Allied Societies' Conference it was decided that the British Architects' Conferences in 1928 and 1929 should be held at Bath and York respectively.

R.I.B.A. Lectures on Architecture for Workers in the Building Trades. The Board reported that they were making arrangements for a series of six lectures to be held during the Session.

Examinations. The following results were reported to the Council:

a: The R.I.B.A. Summer Examinations.

Intermediate, Final and Special Examinations, June and July, 1927.

	Examined.	Passed.	Relegated.
Intermediate Examination ..	85	30	55
Final Examination	41 (and 4 Pt. I only, and 2 Pt. II only)	14 (and 2 Pt. I only, and 2 Pt. II only)	29
Special Examination ..	17 (and 3 Pt. I only, and 1 Pt. II only)	5 (and 1 Pt. I only, and 1 Pt. II only)	14
Special Examination in Design for former members of the Society of Architects ..	1	1	0
Professional Practice Examination	42	38	4
	196	94	102

b: R.I.B.A. Examination in Professional Practice, McGill University, Montreal, Canada.

Examined	Passed
5	5

c: Special Examination in Design (for former members of the Society of Architects), Durban, South Africa.

Examined	Passed
1	1

Distinction for Theses. The Board of Architectural Education reported that marks of distinction for Theses had been awarded to Mr. J. G. Laskie and Mr. B. S. Tempest.

Probationership R.I.B.A. Examinations Recognized. List of Subjects Required. On the recommendation of the Board it was agreed that the joint subject, "Physics and Chemistry," should be included in the list of subjects as one of the alternative subjects required.

Registration as Probationer R.I.B.A. Drawings Required. On the recommendation of the Board it was decided that candidates for the Probationership should be required to submit drawings from the solid in addition to freehand drawings in future.

Libraries of Schools of Architecture. The Board reported that the R.I.B.A. Visiting Board had administered the grant of £50 made by the Council for one year for the provision of textbooks for use by students of Recognized Schools as follows:

School of Architecture, R.W.A., Bristol £20
School of Architecture, University of Sheffield .. £20
School of Architecture, Southend £10

Examination in Professional Practice for Students of Recognized Schools exempted from the R.I.B.A. Final Examination. On the recommendation of the Board it was decided that Students of Schools recognized for exemption from the R.I.B.A. Final Examination should be permitted to take the R.I.B.A. Examination in Professional Practice any time in the fifth year of their

course or after, provided they complied with the regulation to the effect that they must come up for election as Associates R.I.B.A. within two years of completing their school course qualifying for exemption from the Final Examination.

The R.I.B.A. Maintenance Scholarships. The Board reported the award of R.I.B.A. Maintenance Scholarships as follows:

(i) The A.G.B.I. Maintenance Scholarship (£100) to J. F. D. Wylson, of Whitstable.

(ii) The R.I.B.A. Fourth and Fifth Year Maintenance Scholarship (£100) to C. J. Bartlett, Cardiff School of Architecture.

The Board reported that the following had been granted renewals of their R.I.B.A. Maintenance Scholarships for the year 1927-28:

(i) B. I. Day, R.W.A., School of Architecture, Bristol (£100).

(ii) E. L. W. Davies, Bartlett School of Architecture, University of London (£100).

(iii) E. J. White, Bartlett School of Architecture, University of London (£100).

(iv) Herbert Jackson, Birmingham School of Architecture (£60).

(v) A. K. Brown, Armstrong College, Newcastle-upon-Tyne (£50).

The Constitution of the Board of Architectural Education. On the recommendation of the Board it was agreed to invite the National Society of Art Masters to nominate one representative to serve on the Board, the Association of Principals of Technical Institutions to nominate one representative, and the Association of Teachers in Technical Institutions to nominate one.

Centenary of the Incorporation of the Institution of Civil Engineers. The president was appointed to represent the R.I.B.A. at the celebration of the Centenary of the Incorporation of the Institution of Civil Engineers by Royal Charter to be held in June 1928.

Jubilee Celebration of the Institute of Chemistry. The president was appointed to represent the R.I.B.A. at the celebration of the Jubilee of the Institute of Chemistry to be held on December 14 and 15.

University College, Hull. Mr. John Bilson, F.R.I.B.A., was appointed to represent the R.I.B.A. on the Court of Governors of University College, Hull.

Architects' Benevolent Society. The usual annual grant of £100 was made to the Architects' Benevolent Society for the year 1927.

Presentation to the R.I.B.A. The Council passed a cordial vote of thanks to Mr. Percy B. Tubbs, F.R.I.B.A., for his kindness in presenting an oil painting, "Interior of Cathedral," to be hung at 28 Bedford Square.

Membership. Applications for membership were approved as follows: As Fellows, nine applications; as Associates, four applications; as Hon. Associates, four applications. The following ex-member was reinstated: As Associate, Wilfrid Gould Pidsley.

Retired Fellowship. The following member was transferred to the retired Fellowship: James Osborne Smith, elected Associate 1881, Fellow 1891.

Applications for election as Licentiates under Section III (*f*) of the Supplemental Charter of 1925. Four applications were approved.

Northern Architects at Dinner

"If you had to attend churches as often as I do, I think you would find it difficult to speak with civility," said the Bishop of Durham (Dr. Hensley Henson), when alluding at the annual dinner of the Northern Architectural Association, held at Newcastle, to the ventilation of churches. After appealing to architects to see that it was adequate in any future buildings they planned, he added, amid laughter: "How often have I crawled from the pulpit after a long sermon, almost asphyxiated by the deplorable atmosphere!"

Dr. Henson, in toasting "The Royal Institute of British Architects and Allied Societies," said their Institute was an eminently practical body. They were the "Father Confessors" to the State on all questions of architecture. A new demand was now being made in all directions upon the architects that they should help in preserving all our great historic buildings. One building that needed preservation was that magnificent structure, Durham Castle, which was at present in a position of grave and imminent risk. No doubt the people of the North would realize the heavy task involved in saving that great building, and also that man could render no greater service in this modern community than by seeing that the great gifts of the past were secure and did not suffer. By so doing they were preserving great benefits for the community. A great new sphere in which the architect was called upon to render social service of the highest quality was in the direction of town planning, said Dr. Henson. For the health and dignity of the people the architect's ministry was indispensable.

Referring to the Bishop's remarks with regard to Durham Castle, Mr. Walter Tapper, A.R.A. (president of the Royal Institute of British Architects), who replied to the toast, said that it was the imperative duty of the whole nation to see that this building was preserved for future generations. Those who had been deputed to report on the condition of the castle had stated that it was in a perilous state, and he was surprised that nothing had been done with regard to its preservation. He believed that if a further public appeal was made for money in order to put the building in proper repair, that money would be forthcoming.

"The Municipal Authorities of the Provinces" was proposed by the chairman, Mr. J. H. Martindale, F.S.A. (president of the Northern Architectural Association), and the Lord Mayor (Alderman Stephen Easten), replying, said there was undoubtedly a big responsibility resting upon both builders and architects in municipal work that would be for the public welfare. He was sure, however, that all were doing their best in this respect. Mr. T. R. Milburn, F.R.I.B.A. (past-president of the Northern Architectural Association and Allied Societies' Conference), also responded. "Our Guests" was proposed by Mr. R. Burns Dick, F.R.I.B.A., and the toast was responded to by Sir Joseph Reed (chairman of the Newcastle-upon-Tyne Society).

The Master Carvers' Association

The president, Mr. William Aumonier, occupied the chair at the annual dinner of the Master Carvers' Association, held at the Connaught Rooms, London; 100 people sat down to dinner, and amongst the guests were Sir Reginald Blomfield, R.A., Mr. Walter Tapper (president R.I.B.A.), Mr. Alfred C. Bossom, F.R.I.B.A., and of the Architectural League of New York, and many other distinguished architects.

Sir Reginald Blomfield, R.A., proposing the toast of the Master Carvers' Association, said had he not wrestled with architecture for what was now the greater part of his life, he would like to have been a sculptor. The failure of most modern art nowadays was the vice of over-specialization. The painter did not look beyond the limits of his frames, and the sculptor buried himself in his studio instead of coming out into the open where he could wed his work to architecture, instead of "investing it with artistic merit"—if he might apply a famous phrase. We did not want to lose our skilful modellers, but they should widen their outlook, and devote some of their ability to the cutting and carving of actual materials; and while there should be no lowering of the standard of technique in the various arts, there should be a breaking down of barriers, and the arts should be brought into close touch: architecture with painting and sculpture—sculpture with cutting and carving.

Mr. Aumonier, in replying to the toast, alluded to his long association with Sir Reginald Blomfield and his pleasure in having Sir Reginald present on that occasion. He said that the carvers today realized that over-elaboration and extravagant ornamentation were detrimental to the best interests of carving. The tendency today was for less carving on buildings, but the carving was of a much higher standard and showed greater artistic individuality and less commercialism. He said that the design and construction of a building was one of the grandest and greatest outlets for man's activities. The creative genius of the architect and the constructive genius of the craftsman were the keystones of all great architecture; the closer the bond, therefore, between the architect and

craftsman the better the results. The architect depended just as much on the loyalty of his craftsmen as the craftsmen depended on the moral support of the architect. Mr. Aumonier referred to his travels abroad, and said that no other country was producing such fine work abroad either in architecture or craftsmanship as could be found in England today. The traditions of English building could be safely left in the hands of the R.I.B.A., and, incidentally, of the M.C.A.

The toast of the Visitors was proposed by the President and replied to by Mr. Bossom, who alluded to the great esteem in which Sir Reginald Blomfield was held. Mr. Laurence A. Turner, F.S.A., Hon. A.R.I.B.A., proposed the President, and Mr. Yerbury seconded the toast. After a short entertainment dancing continued till midnight.

COMPETITION CALENDAR

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

February 29. Municipal offices, shops, private offices, and other buildings proposed to be built on a site in Narrow Street, for the Corporation of the City and Borough of Peterborough. Total cost not to exceed £200,000. Assessor, Sir Reginald Blomfield, R.A., F.R.I.B.A. Premiums, 500 guineas, 250 guineas, and 150 guineas. Particulars from Town Clerk, Town Hall, Peterborough. Deposit £1 1s.

March 10. Senior school at Birkdale, Southport. Assessor, Professor S. D. Adshead. Premiums, £100, £75, and £50. Particulars from Director of Education, Municipal Buildings, Southport. Deposit 10s. 6d.

March 30. Extension of the College of Technology proposed to be erected on a site adjoining the present College of Technology building in Sackville Street and Whitworth Street, Manchester. Assessors, Messrs. Alan E. Munby, M.A., F.R.I.B.A., Henry M. Fletcher, M.A., F.R.I.B.A., and Francis Jones, F.R.I.B.A. Premiums, £500, £400, and £300. Particulars from Town Clerk, Town Hall, Manchester. Depcsit £1 1s.

No date. The Lewisham Borough Council invite architects of British birth and nationality to submit designs in competition for the Town Hall, shops, and offices on the site adjoining the existing Town Hall Buildings at the junction of Catford Road and Rushey Green, Catford. Assessor: Mr. Winton Newman, F.R.I.B.A. Premiums: £350, £250, and £150. Particulars, together with a plan of the site, can be obtained from the Town Clerk, Town Hall, Catford, S.E.6, on and after March 1, 1928. Deposit two guineas.

COMPETITION NEWS

Birmingham Civic Centre Competition

The premiated and commended designs submitted by competitors in the above competition will be on exhibition in the R.I.B.A. Galleries until Saturday, February 18, inclusive, between the hours of 10 a.m. and 8 p.m. (Saturday 5 p.m.)

RECENT BUILDINGS IN MANCHESTER

Following are the names of the contractors and some of the subcontractors for the buildings illustrated on pages 255 to 267.

Atlas Assurance Buildings, Manchester. General contractors, Messrs. J. Gerrard and Sons, Ltd., Swinton, Manchester; Redpath, Brown & Co., Ltd., steelwork; Richard Crittall & Co., Ltd., heating and hot-water supply; British Reinforced Concrete Co., Ltd., reinforcement; Etchells, Congdon and Muir, Ltd., lifts. These are the only contracts at present accepted owing to the work being in its early stages. Among other work carried out in Manchester by Messrs. J. Gerrard and Sons, Ltd., the general contractors, are the following: Blackfriars House, for the Bleachers' Association: Mr. Harry S. Fairhurst, F.R.I.B.A., architect. Midland Bank House, Cross Street: Messrs. J. C. Prestwich and Sons, architects. Regent House, Cannon Street: Mr. Charles Swain, architect. Ship Canal House, King Street: Mr. Harry S. Fairhurst, F.R.I.B.A., architect. The Manchester Automatic Telephone Exchange, Chapel Street: Mr. C. P. Wilkinson, architect.

The Royal Mail Steam Packet Company's Building. General contractors, Messrs. Tinker and Young, Ltd., who also carried out the mahogany panelling and fittings; Siegwart, Ltd., fireproof floors and roof; Smith, Major and Stevens, Ltd., lift; Stuart's Granolithic Co., Ltd., granolithic staircases, landings, etc.; Empire Stone Co., Ltd., artificial stone; Luxfer Prism Co., pavement lights; Carter & Co., Ltd., terrazzo to walls, tiling to lavatories, and staircase treads and risers; Bellman, Ivey and Carter, Ltd., Scagliola columns; J. and H. Patteson, marble work to entrance; Starkie Gardner, Ltd., silver bronze lift cage, bronze nameplates, and corner entrance ironwork; Edison Swan Co., electric fittings throughout.

English Sewing Cotton Company's Building. General contractors, Messrs. Robt. Carlyle & Co., Ltd.; Banister, Walton & Co., Ltd., steelwork; Wm. Wadsworth and Sons, lifts; Fenning & Co., granite; W. Macfarlane & Co., cast-iron breasts; Trussed Concrete Steel Co., Ltd., floors; Earp, Hobbs and Miller, stone carvers.

Yorkshire House. General contractors, George Macfarlane and Sons; Redpath, Brown & Co., Ltd., steelwork; Kleine Fire-Resisting Flooring Co., Ltd., fireproof floors and roof; A. and P. Steven, Ltd., lifts; Mellowes & Co., Ltd., Sheffield, bronze window frames; Stuart's Granolithic Co., Ltd., fireproof staircase and granolithic work; The Morris Singer Co., Ltd., bronze grilles; Newton, Chambers & Co., Ltd., heating; Anselm Odling & Co., London, and J. and H. Patteson, Manchester, marble work; Messrs. Patteson are also carrying out the terrazzo dadoes; Doulton & Co., Ltd., sanitary fittings; Grey Delabole slates; C. Macintosh & Co., Ltd., Manchester, rubber flooring.

County Bank Building. General contractors, J. T. Hollingworth and Son, Patricroft, Manchester; Empire Stone Co., Ltd., cornice and frieze; Haywards, Ltd., pavement lights; Luxfer Co., ceiling light; T. B. Colman and Sons, circular doors; G. Wragge, Ltd., wrought-steel casements; Mallinson and Sons, special veneer work; John Tann, Ltd., strong-room doors; Shanks & Co., Ltd., sanitary fittings.

NEW INVENTIONS

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

LATEST PATENT APPLICATIONS

798. Barr, I. E. Building construction. January 10.
1294. Cartland and Son, Ltd., J. Fastening for windows. January 14.
1062. Donaldson Manufacturing Co., Ltd. Windows. January 12.
662. Grant, C. R. A. Thermostatic control for hot-water supply apparatus. January 9.
805. Hunt, T. W. W. Concrete-shuttering system. January 10.

SPECIFICATIONS PUBLISHED

283345. Steel Nut and J. Hampton, Ltd., and Taylor, E. G. W. Flooring-cramps and the like.
268317. Berliner, E. Walls.
272466. Porcherot, R. Bricks and the method of interlocking the same for constructing the roofs or walls of industrial furnaces or similar purpose.
283414. Layer, E. Hollow wall.
280190. Badel, J. L. Framing-device for building walls, roofs, and like constructions.

ABSTRACT PUBLISHED

281226. Hacker, A., 60 Bismarck Street, Dortmund, Germany. Sheet piling.

THE WEEK'S BUILDING NEWS

The STOKE-ON-TRENT Corporation has approved the plans of Mr. A. E. Williams, architect, Hanley, for the layout of streets at Sneyd Green for Messrs. Shenton Bros.

*

The STOKE-ON-TRENT Corporation has agreed to the proposals of the Sutton Trustees for the development of the Trent Vale estate and the erection of 198 houses.

*

The STOKE-ON-TRENT Corporation has acquired land for a housing scheme in Back Lane, Hanford.

*

The city engineer of STOKE-ON-TRENT is to prepare a layout of land for housing on the Carmountside estate, Abbey Hulton.

*

Messrs. Hitchcock and Pearce, Ltd., are to erect offices and shops on a site at the corner of High Street and West Street, CROYDON.

*

The Croydon Corporation has agreed to grant loans to the Surrey Garden Village Trust, Ltd., for the erection of houses at ADDINGTON.

*

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

*

The NORTHAMPTON Corporation has acquired a housing site in St. Andrew's Road, and prepared plans for the erection of tenements thereon, and for which tenders are to be invited.

*

The NORTHAMPTON Education Committee is to prepare plans for the erection of new offices in St. Giles's Street.

*

Plans passed by the NORTHAMPTON Corporation: Additions to works, St. James Park Road, for Messrs. Dover, Ltd.; offices, etc., Rivoli Dance Hall, St. James Park, for Mr. H. W. Dover; two shops, Victoria Road, for Mr. H. Wood; eight houses, Gipsy Lane, for Messrs. A. L. and H. W. Chown; warehouse factory and offices, Chaucer Street, for Goodliff Manufacturing Co., Ltd.; alterations and additions, "Harborough Arms," St. James Road, for Northampton Brewery Co., Ltd.; four houses, Delapre Crescent Road, for Messrs. S. G. Sale & Co.; two houses, The Drive, for Messrs. A. P. Hawtin and Sons, Ltd.; showroom, 12-14 Wood Street, for Messrs. A. R. and W. Cleaver, Ltd.; alterations, "Spotted Dog," Kingsthorpe Road, "Woolpack," Bridge Street, and "Rose and Crown," Main Road, for Messrs. Phipps & Co., Ltd.

*

The MANCHESTER Corporation is to erect a disinfecting station and motor garage at Monsall Hospital at an estimated cost of £19,000.

The MANCHESTER Corporation Housing Committee has agreed to the layout of the Green End estate, and erection of 380 houses at a cost of £194,550.

*

The MANCHESTER Corporation Housing Committee is acquiring an estate at Fallowfield for the erection of 276 houses at a cost of £153,000.

*

The MANCHESTER Corporation Rivers Committee is to construct an intercepting sewer in BLACKLEY at a cost of £60,000.

*

The LANCASTER Corporation is to proceed with a scheme for the provision of an isolation hospital.

*

The Lancashire Education Committee has acquired premises in Park Road, WALKDEN, for purposes of a school clinic and welfare centre.

*

The Lancashire Education Committee has purchased a site at HUYTON for the erection of an elementary school.

*

The Lancashire Education Committee has purchased premises in County Square, ULVERSTON, for purposes of a branch library.

*

The city engineer of STOKE-ON-TRENT is to prepare plans and estimates for dealing with the unhealthy area of John Street, Longton.

*

The STOKE-ON-TRENT Corporation is to raise a loan of £150,000 for the erection of further houses.

*

The MERTHYR Corporation is ascertaining if the Ministry of Health will sanction a loan for the erection of twenty houses for tenants to be displaced at Gillifaelog.

*

The borough engineer of CHORLEY has prepared plans for the erection of fifty houses on the Marlborough estate, and tenders are to be invited.

*

Plans passed by the CHELMSFORD Corporation: Alterations, offices, Springfield Road, for Messrs. Wray and Fuller; covered yards, Friars Place, for Messrs. Holland and Day; shop, Duke Street, for Chelmsford Brewery; two houses, Lady Lane, for Mr. Langley; two houses, Lady Lane, for Mr. J. W. Steele; two houses, Vicarage Road, for Mr. R. H. Currie.

*

Essex Education Committee is purchasing the library premises in Market Road from the CHELMSFORD Corporation for £9,000, and it is the intention of the Corporation to provide new buildings for library purposes.

The Ministry of Health has approved the scheme of the CHELMSFORD Corporation for the erection of fifty-six houses in Tennyson Road, and tenders are to be invited for their erection.

*

The BRIGHTON Corporation has called for the preparation of plans and estimates for the clearance of the Sun Street area of about 3 acres and involving 188 houses.

*

The GLOSSOP Corporation is in negotiation with the owners of the Theatre Royal with regard to proposals for the reconstruction of the premises.

*

Mr. Herbert W. Cash, architect, has prepared plans for rebuilding 63 Cleveland Street, KING'S CROSS.

*

The TYNEMOUTH Corporation has obtained power to grant another fifty housing subsidies.

*

The Middlesex Education Committee is purchasing a site at The Hyde, HENDON, for the erection of a trade and technical school.

*

The Middlesex Education Committee has purchased a site in Carlton Avenue, WEMBLEY, for the erection of a secondary school.

*

The Middlesex C.C. is now to proceed with the widening of the main road at EDGWARE at a cost of £97,500.

*

The STAINES R.D.C. has purchased a housing site at Twickenham Road.

*

The Hampshire Education Committee is to erect an elementary school at PURBROOK for about 250 children.

*

The Hampshire Education Committee is to erect an elementary school for 120 children at WORTING.

*

The CHORLEY Corporation has prepared a scheme for the extension of the gasworks at a cost of £62,555.

*

The CHORLEY Corporation is considering proposals for the establishment of a motor-bus station in the vicinity of the Cattle Market, by arrangement with the Ribble Motor Services, Ltd.

*

The MIDDLESEX C.C. is seeking sanction to borrow £100,000 for further housing advances.

*

The Church of England authorities have acquired a site for the erection of a church in Schroffold Road, DAGENHAM.

A cinema is to be erected on the site of 603-613 Old Kent Road, CAMBERWELL.

*

Larkhall Estates, Ltd., is to erect 308 flats on the Whidborne estate, BATTERSEA.

*

The Salvation Army has acquired a site in York Road, WANDSWORTH, for the erection of buildings.

*

Technical representatives of the L.C.C., the Lord Chamberlain, and the Grand Opera Syndicate, Ltd., are to discuss a scheme of improvements at the Royal Opera House, COVENT GARDEN.

*

Mr. Daunton has acquired land from the CROYDON Corporation in Mitcham Road for building purposes.

*

Plans passed by the CROYDON Corporation: Alterations and additions, 44 George Street, for Messrs. Fuller, Ltd.; motor showroom, Blunt Road, for Mr. A. M. Scott; workshop, Aurelia Road, for Messrs. Everitt & Co.; seven houses, Warminster Road, for Mr. J. Maclaren Ross; two houses, Norbury Hill, for Mr. E. W. Wallis; alterations and additions, 76 London Road, for Messrs. Unger & Co.; alterations and additions, 75-77 Church Street, for Messrs. Robertson and Cameron; alterations and additions, 82-84 North End, for Messrs. Arnold and Son, Ltd.; additions, Waddon Mission Hall, Purley Way, for Messrs. Chart, Son and Reading; seven shops and flats, corner London Road and Pollard's Hill, for Messrs. D. Morris and Sons, Ltd.; public-house, corner Whitehorse Lane and Canham Road, for Messrs. Berney and Son; extensions, slipper baths, Scarbrook Road, for the Corporation; alterations and additions, "Freemasons'" public-house, Penge Road, for Mr. W. F. Foster.

*

The HAMPTON U.D.C. is in negotiation for further housing sites.

*

Plans passed by the MANCHESTER Corporation: Alterations, "Rowsley Arms," Edensor Street, Beswick; alterations, Albion Inn, Ashton Old Road, Openshaw; additions, dance hall, Rochdale Road, Harpurhey; mission hall, Oldham Road, Newton Heath; bank and offices, Corporation Street and Hanover Street; twelve houses, Barlow Moor Road.

*

Premises for Lloyds Bank, Ltd., are to be erected at MORETON, Cheshire.

*

The Cheshire Education Committee has purchased a site at WHITBY for the erection of an elementary school.

*

The Board of Education has approved the plans of the managers for the conversion of the Church of England School, MERTON, into a central school.

The Birkenhead Brewery Company is to erect a hotel at MORETON.

*

The EPSOM R.D.C. has made arrangements in the town planning scheme for the construction of a new road from Cheam to Ewell, and another from Carshalton to Epsom.

*

The HARWICH Corporation has purchased 4 acres at Oakley Road, Dovercourt, for the erection of fifty houses.

*

The DOUGLAS (I. o. M.) Corporation is being asked to get a report as to the provision of open-air baths somewhere between Derby Castle and the Victoria Pier.

*

The city architect of BRADFORD has prepared plans for shops and houses on the Shirley Manor estate and the Swain House estate, and tenders for their erection are to be invited.

*

Plans passed by the LEAMINGTON Corporation: Alterations, Brunswick Inn, Brunswick Street, for Messrs. Flower and Sons, Ltd.; alterations, Leamington Tavern, Tavistock Street, for Messrs. Hunt, Edmunds & Co., Ltd.; extensions, boiler-house, Warneford Hospital, for governors; alterations, 211-217 Rugby Road, for Mr. A. Humpage; alterations, St. Michael's Home, Charlotte Street, for trustees.

*

The LEAMINGTON Corporation is to erect sixty houses on the Rushmore Farm estate.

*

The LEAMINGTON Corporation has agreed to plans submitted by Mr. E. McGregor for the layout of an estate off Cubbington Road.

*

Plans passed by the GRAVESEND Corporation: Convenience, "Town Arms" public-house, Queen Street, for Messrs. Hoare & Co., Ltd.; six houses, Ridgeway Avenue, for Messrs. Bridgland and Clay; alterations, "Ship" public-house, Bath Street, for Messrs. Bridgland and Clay; alterations, West Street Brewery, for Russell's Gravesend Brewery, Ltd.; conversion of Parrock Hall, Milton Avenue, to six flats and two houses, for Messrs. Robert Hopkins and Sons.

*

The ROTHERHAM Corporation is to acquire land for housing purposes at Herringthorpe.

*

Plans passed by the ROTHERHAM Corporation: Alterations, Grafton Hotel, for Messrs. William Stones, Ltd.; new public-house, Masbrough Street, for Bentley Trustees; seven garages, St. Leonards Road, for Messrs. Jennison Bros.; two houses, Treherne Road, for Mr. G. Lancaster.

*

The Southern Railway Company is considering proposals for the reconstruction of HAYWARDS HEATH railway station.

Plans passed by the BRIGHTON Corporation: Alterations, 12 Norfolk Street, for Mr. J. R. Pace; twelve houses, Hollingbury Rise, for Mrs. A. E. Munday; office, Hanover Crescent, for Brighton Equitable Co-operative Society; workshop and store, Bloomsbury Street, for Kemp Town Brewery; improvements and additions, "Clyde Arms," Bristol Gardens, for Kemp Town Brewery; stables, Racecourse, for race stand lessees; shops, Beaconsfield Road, for Mr. C. C. Parsons; reconstruction, 98 St. George's Road, for Mr. E. Tully; alterations and additions, 33-34 East Street, for Messrs. Tamplin and Sons' Brewery (Brighton), Ltd.

*

The STOKE-ON-TRENT Corporation is to borrow £177,000 for sewerage and sewage disposal works.

*

The STOKE-ON-TRENT Corporation is to raise a loan of £383,000 for housing purposes.

*

The Surrey C.C. has appointed a special committee to consider plans prepared by Mr. E. Vincent Harris, architect, for extensions at the County Hall, KINGSTON.

*

The Southern Railway is to erect a new joint station at Waterloo Road, EPSOM.

*

The Postmaster-General has purchased a site at THAKEHAM for the erection of a post office and telephone exchange.

*

The Surrey Education Committee has prepared plans for the erection of a mixed secondary school at GODALMING.

*

The governors of the secondary school for boys, WORTHING, have approved plans for the erection of an assembly hall, etc., at a cost of £10,000.

*

The EAST GRINSTEAD R.D.C. is seeking sanction for a loan of £15,000 for a housing scheme at Three Bridges.

*

Further land has been purchased by the West Riding Education Committee for the proposed middle school at FEATHERSTONE.

*

A middle school is being erected by the West Riding Education Committee at RAWMARSH at a cost of £23,750.

*

The West Riding Education Committee has acquired 15 acres at KEIGHLEY for the erection of new buildings for the Drake and Tonson's secondary school.

*

The BINGLEY U.D.C. is seeking powers to acquire the St. Ives estate of 825 acres in connection with their water supply.

*

The MEXBOROUGH U.D.C. is seeking a provisional order for the acquisition of lands for the extension of the waterworks.

RATES OF WAGES

			I	II
			s. d.	s. d.
A	ABERDARE	S. Wales & M.	1 7½	1 2¼
A₁	Abergavenny	S. Wales & M.	1 7	1 2¼
B	Abingdon ..	S. Counties	1 5½	1 1½
A	Accrington	N.W. Counties	1 7½	1 2¼
A₂	Addlestone	S. Counties	1 6	1 1½
A	Adlington ..	N.W. Counties	1 7½	1 2¼
A	Airdrie ..	Scotland	*1 7½	1 2¼
G	Aldeburgh	E. Counties	1 3	11½
A	Altrincham	N.W. Counties	1 7½	1 2¼
B₂	Appleby ..	N.W. Counties	1 4	1 0
A	Ashton-under-Lyne	N.W. Counties	1 7½	1 2¼
A₂	Atherstone	Mid. Counties	1 6	1 1½
B₂	Aylesbury ..	S. Counties	1 4	1 0
B₂	BANBURY	S. Counties	1 4	1 0
B₂	Bangor ..	N.W. Counties	1 4½	1 0½
A	BarnardCastle	N.E. Coast	1 7½	1 2¼
A	Barnsley ..	Yorkshire	1 7½	1 2¼
B₁	Barnstaple	S.W. Counties	1 5	1 0½
A	Barrow ..	N.W. Counties	1 7½	1 2¼
A	Barry ..	S. Wales & M.	1 7½	1 2¼
B₂	Basingstoke	S.W. Counties	1 4	1 0
B	Bath ..	S.W. Counties	1 5½	1 1½
A	Batley ..	Yorkshire	1 7½	1 2¼
B	Bedford ..	E. Counties	1 5½	1 1½
A₂	Berwick-on-Tweed	N.E. Coast	1 6½	1 2
A₂	Bewdley ..	Mid. Counties	1 6½	1 2
B₂	Bicester ..	Mid. Counties	1 4	1 0
A	Birkenhead	N.W. Counties	*1 7½	1 2¼
A	Birmingham	Mid. Counties	1 7½	1 2¼
A	Bishop Auckland	N.E. Coast	1 7½	1 2¼
A	Blackburn	N.W. Counties	1 7½	1 2¼
A	Blackpool	N.W. Counties	1 7½	1 2¼
A	Blyth ..	N.E. Coast	1 7½	1 2¼
B₂	Bognor ..	S. Counties	1 4	1 0
A	Bolton ..	N.W. Counties	1 7½	1 2¼
A₂	Boston ..	Mid. Counties	1 6	1 1½
B₁	Bournemouth	S. Counties	1 5	1 0½
B₂	Bovey Tracey	S.W. Counties	1 4½	1 0½
A	Bradford ..	Yorkshire	1 7½	1 2¼
A₂	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 7½	1 2¼
B₂	Bridgwater	S.W. Counties	1 4½	1 0½
A₁	Bridlington	Yorkshire	1 7	1 2¼
A	Brighouse	Yorkshire	1 7½	1 2¼
B₁	Brighton ..	S. Counties	1 5	1 0½
A	Bristol ..	S.W. Counties	1 7½	1 2¼
B₂	Brixham ..	S.W. Counties	1 4	1 0
A₂	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 3½	11½
A	Burnley ..	N.W. Counties	1 7½	1 2¼
A	Burslem ..	Mid. Counties	1 7½	1 2¼
A₂	Burton-on-Trent	Mid. Counties	1 6½	1 2
A	Bury ..	N.W. Counties	1 7½	1 2¼
A₁	Buxton ..	N.W. Counties	1 7	1 2¼
B	CAMBRIDGE	E. Counties	1 5½	1 1½
B₂	Canterbury	S. Counties	1 4	1 0
A	Cardiff ..	S. Wales & M.	1 7½	1 2¼
A	Carlisle ..	N.W. Counties	1 7½	1 2¼
B	Carmarthen	S. Wales & M.	1 5½	1 1½
B₂	Carnarvon	N.W. Counties	1 4½	1 0½
A₁	Carnforth ..	N.W. Counties	1 7	1 2¼
A	Castleford	Yorkshire	1 7½	1 2¼
B₁	Chatham ..	S. Counties	1 5	1 0½
B₁	Chelmsford	E. Counties	1 5	1 0½
A₂	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W. Counties	1 7½	1 2¼
A	Chesterfield	Mid. Counties	*1 7½	1 2¼
B₂	Chichester	S. Counties	1 4	1 0
A	Chorley ..	N.W. Counties	1 7½	1 2¼
B₂	Cirencester	S. Counties	1 4½	1 0½
A	Clitheroe ..	N.W. Counties	1 7½	1 2¼
A	Clydebank	Scotland	1 7½	1 2¼
A	Coalville ..	Mid. Counties	1 7½	1 2¼
B₁	Colchester ..	E. Counties	1 5	1 0½
A	Colne ..	N.W. Counties	1 7½	1 2¼
A₂	Colwyn Bay	N.W. Counties	1 6	1 1½
A	Consett ..	N.E. Coast	1 7½	1 2¼
A₂	Conway ..	N.W. Counties	1 6	1 1½
A	Coventry ..	Mid. Counties	1 7½	1 2¼
A₂	Crewe ..	N.W. Counties	1 6	1 1½
A₂	Cumberland	.....	1 6	1 1½
A	DARLINGTON	N.E. Coast	1 7½	1 2¼
A	Darwen ..	N.W. Counties	1 7½	1 2¼
B₂	Deal ..	S. Counties	1 4	1 0
A₂	Denbigh ..	N.W. Counties	1 6	1 1½
A	Derby ..	Mid. Counties	1 7½	1 2¼
A	Dewsbury ..	Yorkshire	1 7½	1 2¼
B	Didcot ..	S. Counties	1 5½	1 1½
A	Doncaster	Yorkshire	1 7½	1 2¼
C₁	Dorchester	S.W. Counties	1 3	11½
A₂	Driffield ..	Yorks	1 6	1 1½
A₂	Droitwich ..	Mid. Counties	1 6	1 1½
A₁	Dudley ..	Mid. Counties	1 7	1 2¼
A	Dundee ..	Scotland	1 7½	1 2¼
A	Durham ..	N.E. Coast	1 7½	1 2¼
B₁	EASTBOURNE	S. Counties	1 5	1 0½
A	Ebbw Vale	S. Wales & M.	1 7½	1 2¼
A	Edinburgh	Scotland	1 7½	1 2¼
A	E. Glamorganshire & Monmouthshire	S. Wales & M.	1 7½	1 2¼
B	Exeter ..	S.W. Counties	*1 5½	1 1½
B₂	Exmouth ..	S.W. Counties	1 4½	1 0½
B	FELIXSTOWE	E. Counties	1 5½	1 1½
A₂	Filey ..	Yorks	1 6	1 1½
A	Fleetwood ..	N.W. Counties	1 7½	1 2¼
B₂	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W. Counties	1 7½	1 2¼
B₂	Frome ..	S.W. Counties	1 4	1 0
A	GATESHEAD	N.E. Coast	1 7½	1 2¼
B₁	Gillingham	S. Counties	1 5	1 0½
A₂	Gloucester	S.W. Counties	1 6	1 1½
A₂	Goole ..	Yorkshire	1 6½	1 2
B	Gosport ..	S. Counties	1 5½	1 1½
A₂	Grantham	Mid. Counties	1 6	1 1½
A₁	Gravesend	S. Counties	1 7	1 2¼
A	Greenock ..	Scotland	*1 7½	1 2¼
A	Grimsby ..	Yorkshire	1 7½	1 2¼
B₁	Guildford ..	S. Counties	1 5	1 0½
A	HALIFAX ..	Yorkshire	1 7½	1 2¼
A	Hanley ..	Mid. Counties	1 7½	1 2¼
A	Harrogate	Yorkshire	1 7½	1 2¼
A	Hartlepools	N.E. Coast	1 7½	1 2¼
B₂	Harwich ..	E. Counties	1 4½	1 0½
B₂	Hastings ..	S. Counties	1 4	1 0
B₁	Hatfield ..	S. Counties	1 5	1 0½
B	Hereford ..	S. W. Counties	1 5½	1 1½
B	Hertford ..	E. Counties	1 5½	1 1½
A₁	Heysham ..	N.W. Counties	1 7	1 2¼
A	Howden ..	N.E. Coast	1 7½	1 2¼
A	Huddersfield	Yorkshire	1 7½	1 2¼
A	Hull ..	Yorkshire	1 7½	1 2¼

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

			I	II
			s. d.	s. d.
A	ILKLEY ..	Yorkshire	1 7½	1 2¼
A	Immingham	Mid. Counties	1 7½	1 2¼
B	Ipswich ..	E. Counties	1 5½	1 1½
C₁	Isle of Wight	S. Counties	1 3	11½
A	JARROW ..	N.E. Coast	1 7½	1 2¼
A	KEIGHLEY	Yorkshire	1 7½	1 2¼
B₁	Kendal ..	N.W. Counties	1 5	1 0½
B₁	Keswick ..	N.W. Counties	1 5	1 0½
B	Kettering ..	Mid. Counties	1 5½	1 1½
A₂	Kidderminster	Mid. Counties	1 6½	1 2
B₂	King's Lynn	E. Counties	1 4½	1 0½
A	LANCASTER	N.W. Counties	1 7½	1 2¼
A₂	Leamington	Mid. Counties	1 6½	1 2
A	Leeds ..	Yorkshire	1 7½	1 2¼
A	Leek ..	Mid. Counties	1 7½	1 2¼
A	Leicester ..	Mid. Counties	1 7½	1 2¼
A	Leigh ..	N.W. Counties	1 7½	1 2¼
B₂	Lewes ..	S. Counties	1 4	1 0
A₂	Lichfield ..	Mid. Counties	1 6	1 1½
A	Lincoln ..	Mid. Counties	1 7½	1 2¼
A	Liverpool ..	N.W. Counties	*1 10	1 4½
A₂	Llandudno	N.W. Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 7½	1 2¼
	London (12 miles radius)		1 9	1 4
	Do. (12-15 miles radius)		1 8½	1 3½
A	Long Eaton	Mid. Counties	1 7½	1 2¼
A	Loughborough	Mid. Counties	1 7½	1 2¼
B	Luton ..	E. Counties	1 5½	1 1½
A	Lytham ..	N.W. Counties	1 7½	1 2¼
A₁	MACCLESFIELD	N.W. Counties	1 7	1 2¼
B	Maidstone	S. Counties	1 5½	1 1½
A₂	Malvern ..	Mid. Counties	1 6	1 1½
A	Manchester	N.W. Counties	1 7½	1 2¼
A	Mansfield ..	Mid. Counties	1 7½	1 2¼
B₂	Margate ..	S. Counties	1 4	1 0
A₂	Matlock ..	Mid. Counties	1 6	1 1½
A	Merthyr ..	S. Wales & M.	1 7½	1 2¼
A	Middlesbrough	N.E. Coast	1 7½	1 2¼
A₂	Middlewich	N.W. Counties	1 6	1 1½
B₂	Minehead ..	S.W. Counties	1 4½	1 0½
A	Monmouth and S. E. Glamorganshire	S. Wales & M.	1 7½	1 2¼
A₁	Morecambe	N.W. Counties	1 7	1 2¼
A₂	NANTWICH	N.W. Counties	1 6	1 1½
A	Neath ..	S. Wales & M.	1 7½	1 2¼
A	Nelson ..	N.W. Counties	1 7½	1 2¼
A	Newcastle ..	N.E. Coast	1 7½	1 2¼
A	Newport ..	S. Wales & M.	1 7½	1 2¼
A	Normanton	Yorkshire	1 7½	1 2¼
A₂	Northampton	Mid. Counties	1 6½	1 2
A	North Staffs.	Mid. Counties	1 7½	1 2¼
A	North Shields	N.E. Coast	1 7½	1 2¼
A₂	Norwich ..	E. Counties	1 6	1 1½
A	Nottingham	Mid. Counties	1 7½	1 2¼
A	Nuneaton ..	Mid. Counties	1 7½	1 2¼
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W. Counties	1 7½	1 2¼
A₂	Oswestry ..	Mid. Counties	1 6	1 1½
B	Oxford ..	S. Counties	1 5½	1 1½
A	PAISLEY ..	Scotland	*1 7½	1 2¼
C	Pembroke	S. Wales & M.	1 3½	11½
A	Perth ..	Scotland	*1 7½	1 2¼
A₂	Peterborough	Mid. Counties	1 6	1 1½
A	Plymouth	S.W. Counties	*1 7½	1 2¼
A	Pontefract	Yorkshire	1 7½	1 2¼
A	Pontypridd	S. Wales & M.	1 7½	1 2¼
B	Portsmouth	S. Counties	1 5½	1 1½
A	Preston ..	N.W. Counties	1 7½	1 2¼
A	QUEENSFERRY	N.W. Counties	1 7½	1 2¼
B	READING ..	S. Counties	1 5½	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A₂	Retford ..	Mid. Counties	1 6	1 1½
A	Rhondda Valley	S. Wales & M.	1 7½	1 2¼
A₂	Ripon ..	Yorkshire	1 6	1 1½
A	Rochdale ..	N.W. Counties	1 7½	1 2¼
B	Rochester	S. Counties	1 5½	1 1½
A₁	Ruabon ..	N.W. Counties	1 7	1 2¼
A₂	Rugby ..	Mid. Counties	1 6½	1 2
A₂	Rugeley ..	Mid. Counties	1 6	1 1½
A	Runcorn ..	N.W. Counties	1 7½	1 2¼
A₂	ST. ALBANS	E. Counties	1 6	1 1½
A	St. Helens	N.W. Counties	1 7½	1 2¼
B₂	Salisbury	S.W. Counties	1 4	1 0
A₁	Scarborough	Yorkshire	1 7	1 2¼
A	Scunthorpe	Mid. Counties	1 7½	1 2¼
A	Sheffield ..	Yorkshire	1 7½	1 2¼
A	Shipley ..	Yorkshire	1 7½	1 2¼
A₂	Shrewsbury	Mid. Counties	1 6	1 1½
A₂	Skipton ..	Yorkshire	1 6½	1 2
B	Slough ..	S. Counties	1 5½	1 1½
A₂	Solihull ..	Mid. Counties	1 6½	1 2
A₂	South'pton	S. Counties	1 6	1 1½
B₁	Southend-on-Sea	E. Counties	1 5	1 0½
A	Southport ..	N.W. Counties	1 7½	1 2¼
A	S. Shields ..	N.E. Coast	1 7½	1 2¼
A	Stafford ..	Mid. Counties	1 6½	1 2
A	Stockport ..	N.W. Counties	1 7½	1 2¼
A	Stockton-on-Tees	N.E. Coast	1 7½	1 2¼
A	Stoke-on-Trent	Mid. Counties	1 7½	1 2¼
B	Stroud ..	S.W. Counties	1 5½	1 1½
A	Sunderland	N.E. Coast	1 7½	1 2¼
A	Swadlincote	Mid. Counties	1 7½	1 2¼
A	Swansea ..	S. Wales & M.	1 7½	1 2¼
B	Swindon ..	S.W. Counties	1 5½	1 1½
A₁	TAMWORTH	N.W. Counties	1 7	1 2¼
B₁	Taunton ..	S.W. Counties	1 5	1 0½
A	Teeside Dist.	N.E. Counties	1 7½	1 2¼
B	Teignmouth	S.W. Coast	1 5½	1 1½
A	Todmorden	Yorkshire	1 7½	1 2¼
A₂	Torquay ..	S.W. Counties	1 6½	1 2
C	Truro ..	S.W. Counties	1 3½	11½
B₁	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ..	Mid. Counties	1 7½	1 2¼
A	Tyne District	N.E. Coast	1 7½	1 2¼
A	WAKEFIELD	Yorkshire	1 7½	1 2¼
A₁	Walsall ..	Mid. Counties	1 7	1 2¼
A	Warrington	N.W. Counties	1 7½	1 2¼
A₂	Warwick ..	Mid. Counties	1 6½	1 2
B	Wellingborough	Mid. Counties	1 5½	1 1½
A	West Bromwich	Mid. Counties	1 7½	1 2¼
B	Weston-s-Mare	S.W. Counties	1 5½	1 1½
A₂	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W. Counties	1 7½	1 2¼
A	Wigan ..	N.W. Counties	1 7½	1 2¼
B₂	Winchester	S. Counties	1 4½	1 0½
B	Windsor ..	S. Counties	1 5½	1 1½
A	Wolverhampton	Mid. Counties	1 7½	1 2¼
A₂	Worcester ..	Mid. Counties	1 6	1 1½
A₂	Worksop ..	Yorkshire	1 6	1 1½
A₁	Wrexham ..	N.W. Counties	1 7	1 2¼
B	Wycombe ..	S. Counties	1 5½	1 1½
B₁	YARMOUTH	E. Counties	1 5	1 0½
B₂	Yeovil ..	S.W. Counties	1 4½	1 0½
A	York ..	Yorkshire	1 7½	1 2¼

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

PRICES CURRENT

EXCAVATOR AND CONCRETOR

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

	£	s.	d.
Broken brick or stone, 2 in., per yd.	0	11	6
Thames ballast, per yd.	0	11	0
Pit gravel, per yd.	0	18	0
Pit sand, per yd.	0	14	6
Washed sand	0	15	0
Screened ballast or gravel, add 10 per cent. per yd.			
Clinker, breeze, etc., prices according to locality.			
Portland cement, per ton	£2	19	0
Lias lime, per ton	2	10	0
Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.			
Transport hire per day:			
Cart and horse £1 3 0 *Trailer*	£0	15	0
3-ton motor lorry 3 15 0 *Steam roller*	4	5	0
Steam lorry, 5-ton 4 0 0 *Water cart*	1	5	0
EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube	0	3	0
Exceeding 6 ft., but under 12 ft., add 30 per cent.			
In stiff clay, add 30 per cent.			
In underpinning, add 100 per cent.			
In rock, including blasting, add 225 per cent.			
If basketed out, add 80 per cent. to 150 per cent.			
Headings, including timbering, add 400 per cent.			
RETURN, fill, and ram, ordinary earth, per yd.	£0	1	6
SPREAD and level, including wheeling, per yd.	0	1	6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0	10	6
TRIMMING earth to slopes, per yd. sup.	0	0	6
HACKING up old grano. or similar paving, per yd. sup.	0	1	3
PLANKING to excavations, per ft. sup.	0	0	5
DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.			
IF left in, add to above prices, per ft. cube	0	2	0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	2	3	0
DO 6-2-1, per yd. cube	1	18	0
DO. in upper floors, add 15 per cent.			
DO. in reinforced-concrete work, add 20 per cent.			
DO. in underpinning, add 60 per cent.			
LIAS-LIME CONCRETE, per yd. cube	£1	16	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in lintels, etc., per ft. cube	0	1	6
CEMENT concrete 4–2–1 in lintels packed around reinforcement, per ft. cube	0	3	9
FINE concrete benching to bottom of manholes, per ft. cube	0	2	6
FINISHING surface of concrete spade face, per yd. sup.	0	0	9

DRAINER

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

	£	s.	d.
Stoneware pipes, tested quality, 4 in., per ft.	£0	0	10
DO. 6 in., per ft.	0	1	3
DO. 9 in., per ft.	0	2	3
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0	5	6
DO. 6 in., per yd.	0	8	6
Portland cement and sand, see "Excavator" above.			
Lead for caulking, per cwt.	£2	5	6
Gaskin, per lb.	0	0	4½
STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft.	0	4	3
DO. 6 in., per ft.	0	5	0
DO. 9 in., per ft.	0	7	9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0	8	0
DO. 6 in., per ft.	0	10	0

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

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

BRICKLAYER

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

	£	s.	d.
London stocks, per M.	£4	15	0
Flettons, per M.	2	18	0
Staffordshire blue, per M.	9	10	0
Firebricks, 2½ in., per M.	11	3	0
Glazed salt, white, and ivory stretchers, per M.	24	10	0
DO. *headers, per M.*	24	0	0
Colours, extra, per M.	5	10	0
Seconds, less, per M.	1	0	0
Cement and sand, see "Excavator" above.			
Lime, grey stone, per ton	2	17	0
Mixed lime mortar, per yd.	1	6	0
Damp course, in rolls of 4½ in., per roll	0	2	6
DO. *9 in. per roll*	0	4	9
DO. *14 in. per roll*	0	7	6
DO. *18 in. per roll*	0	9	6
BRICKWORK in stone lime mortar, Flettons or equal, per rod	£33	0	0
DO. in cement do., per rod	36	0	0
DO. in stocks, add 25 per cent. per rod.			
DO. in blues, add 100 per cent. per rod.			
DO. circular on plan, add 12½ per cent. per rod.			
DO. in backing to masonry, add 12½ per cent. per rod.			
DO. in raising on old walls, etc., add 12½ per cent. per rod.			
DO. in underpinning, add 20 per cent. per rod.			
HALF-BRICK walls in stocks in cement mortar (1–3), per ft. sup.	£0	1	0
BEDDING plates in cement mortar, per ft. run	0	0	3
BEDDING window or door frames, per ft. run	0	0	3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0	0	2
CUTTING do. in old walls in cement, per ft. run	0	0	4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0	0	7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0	3	6
DO. 14 ft. by 9 in. do., per ft. run	0	6	0
FLAUNCHING chimney pots, each	0	2	0
CUTTING and pinning ends of timbers, etc., in cement	0	1	0
FACINGS fair, per ft. sup. extra	0	0	3
DO. picked stocks, per ft. sup. extra	0	0	7
DO. red rubbers gauged and set in putty, per ft. sup. extra	0	4	9
DO. in salt white or ivory glazed, per ft. sup. extra	0	5	6
TUCK pointing, per ft. sup. extra	0	0	10
WEATHER pointing, do. do.	0	0	3
TILE creasing with cement fillet each side per ft. run	0	0	6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0	5	0
DO. 1½ in., per yd. sup.	0	6	0
DO. 2 in., per yd. sup.	0	7	0
If coloured with red oxide, per yd. sup.	0	1	0
If finished with carborundum, per yd. sup.	0	0	6
If in small quantities in finishing to steps, etc., per ft. sup.	0	1	4
Jointing new grano, paving to old, per ft. run	0	0	4
Extra for dishing grano, or cement paving around gullies, each	0	1	6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0	0	7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0	8	0
DO. vertical, per yd. sup.	0	11	0
SLATE DAMP COURSE, per ft. sup.	0	0	10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd.	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6
BREEZE fixing bricks, extra for each	0	0	3

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

MASON

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

	£	s.	d.
Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	7
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. super	0	6	6
York templates sawn, per ft. cube	0	6	9
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6
Cement and sand, see "Excavator," etc., above.			
HOISTING and setting stone, per ft. cube	£0	2	2
DO. for every 10 ft. above 30 ft. add 15 per cent.			
PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do., per ft. run	0	1	4
HALF SAWING, per ft. sup.	£0	1	0
Add to the foregoing prices, if in York stone, 35 per cent.			
DO. Mansfield, 12½ per cent.			
Deduct for Bath, 33⅓ per cent.			
DO. for Chilmark, 5 per cent.			
SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	9	0
YORK SILLS, W. & T., ft. cub. fixed	1	13	0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	6
DO. 2½ in. thick, per ft. sup.	0	1	9

SLATER AND TILER

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

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

	£	s.	d.
Slates, 1st quality, per 1,200:			
Portmadoc Ladies	£14	0	0
Countess	27	0	0
Duchess	32	0	0
Old Delabole *Med. Grey*	*Med. Green*		
24 in. × 12 in. £42 11 3	£45	1	0
20 in. × 10 in. 31 4 3	33	0	6
16 in. × 10 in. 20 18 0	22	4	9
14 in. × 8 in. 12 1 0	12	16	3
Green Randoms per ton	8	3	9
Grey-green do., per ton	7	3	9
Green peggies, 12 in. to 8 in. long, per ton	6	3	9
In 4-ton truck loads, delivered Nine Elms station.			
Clips, lead, per lb.	£0	0	6
Clips, copper, per lb.	0	2	0
Nails, compo, per cwt.	1	6	0
Nails, copper, per lb.	0	1	10
Cement and sand, see "Excavator," etc., above.			
Hand-made tiles, per M.	£5	18	0
Machine-made tiles, per M.	5	8	0
Westmorland slates, large, per ton	9	0	0
DO. *Peggies, per ton*	7	5	0

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

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

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

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

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

See "Sundries for Asbestos Tiling."

CARPENTER AND JOINER

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

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

	£	s.	d.
7×3, per std.	£20	0	0
11×4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	5	0
DO. *T. and G., 1 in., per sq.*	1	5	0
Planed boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	1	6
Mahogany, Honduras, per ft. sup. of 1 in.	0	1	4
DO. *Cuba, per ft. sup. of 1 in.*	0	2	6
DO., *African, per ft. sup.*	0	1	3
Teak, per ft. sup. of 1 in.	0	1	6
DO., *ft. cube*	0	15	0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0	5	6
DO. framed in floors, roofs, etc., per ft. cube	0	6	6
DO. framed in trusses, etc., including ironwork, per ft. cube	0	7	6
PITCH PINE, add 33⅓ per cent.			
FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO. 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	2	10	0
TURNING pieces to flat or segmental soffits, 4½ in. wide, per ft. run	0	0	4½
DO. 9 in. wide and over per ft. sup.	0	1	2

continued overleaf

CARPENTER AND JOINER: *continued.*

SHUTTERING to face of concrete, per square	£1	10	0
DO. in narrow widths to beams, etc., per ft. sup.	0	0	6
USE and waste of timbers, allow 25 per cent. of above prices.			
SLATE BATTENING, per sq.	£0	12	6
DEAL boarding to flats, 1 in. thick and firrings to falls, per square	2	10	0
STOUT feather-edged tilting fillet to eaves, per ft. run	0	0	6
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6
SOUND boarding, ¾ in. thick and fillets nailed to sides of joists (joists measured over), per square	2	0	0
RUBEROID or similar quality roofing, one-ply, per yd. sup.	0	2	3
DO., two-ply, per yd. sup.	0	2	6
DO., three-ply, per yd. sup.	0	3	0
TONGUED and grooved flooring, 1¼ in. thick, laid complete with splayed headings, per square	2	5	0
DEAL skirting torus, moulded 1¼ in. thick, including grounds and backings, per ft. sup.	0	1	0
TONGUED and mitred angles to do.	0	0	6
WOOD block flooring standard blocks laid herringbone in mastic :			
Deal 1 in. thick, per yd. sup.	0	10	0
DO. 1¼ in. thick, per yd. sup.	0	12	0
Maple 1¼ in. thick, per yd. sup.	0	15	0
DEAL moulded sashes, 1¼ in. with moulded bars in small squares, per ft. sup.	0	2	6
DO. 2 in. do., per ft. sup.	0	2	9
DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and iron weights, per ft. sup.	0	4	6
MOULDED horns, extra each	0	0	3
DOORS, 4-panel square both sides, 1¾ in. thick, per ft. sup.	0	2	6
DO. moulded both sides, per ft. sup.	0	2	9
DO. 2 in. thick, square both sides, per ft. sup.	0	2	9
DO. moulded both sides, per ft. sup.	0	3	0
DO. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft. sup.	0	3	6
If in oak, mahogany or teak, multiply 3 times.			
DEAL frames, 4 in. × 3 in., rebated and beaded per ft. cube	£0	15	0
Add for extra labours, per ft. run	0	0	1
STAIRCASE work :			
DEAL treads 1¼ in. and risers 1 in., tongued and grooved including fir carriages, per ft. sup.	0	2	6
DEAL wall strings, 1¼ in. thick, moulded, per ft. run	0	2	6
If ramped, per ft. run	0	5	0
SHORT ramps, extra each	0	7	6
ENDS of treads and risers housed to strings, each	0	1	0
2 in. deal mopstick handrail fixed to brackets, per ft. run	0	1	6
4½ in. × 3 in. oak fully moulded handrail, per ft. run	0	5	6
1¼ in. square deal bar balusters, framed in, per ft. run	0	0	6
FITTINGS :			
SHELVES and bearers, 1 in., cross-tongued, per ft. sup.	0	1	6
1¼ in. beaded cupboard fronts, moulded and square, per ft. sup.	0	2	9
TEAK grooved draining boards, 1¼ in. thick and bedding, per ft. sup.	0	4	6
IRONMONGERY :			
Fixing only (including providing screws) :			
TO DEAL—			
Hinges to sashes, per pair	0	1	2
Do. to doors, per pair	0	1	7
Barrel bolts, 9 in., iron, each	0	1	0
Sash fasteners, each	0	1	0
Rim locks, each	0	1	9
Mortice locks, each	0	4	0

SMITH

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

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

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

PLUMBER

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

*

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

*

MILLED LEAD and labour in gutters, flashings, etc.	3	2	6
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	0
DO. ¾ in., per ft.	0	2	3
DO. 1 in., per ft.	0	3	0
DO. 1¼ in., per ft.	0	4	0
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	0
DO. 3 in., per ft.	0	7	0
DO. 4 in., per ft.	0	9	9
WIPED soldered joint, ½ in., each	0	2	6
DO. ¾ in., each	0	3	2
DO. 1 in., each	0	3	8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0	11	0
DO. ¾ in., each	0	13	6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run	0	1	7
DO. 3 in., per ft. run	0	2	0
DO. 4 in., per ft. run	0	2	10
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	2	0
DO. O.G., 4 in., per ft.	0	2	3
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	4	6
DO. 3 in., per ft.	0	3	6
Fixing only :			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS, with all joints	1	3	6
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

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

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

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LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	3
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¼ 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. 8½d. *per hour.*

*

Glass : 4ths in crates :			
Clear, 21 oz.	£0	0	4½
DO. 26 oz.	0	0	5
Cathedral white, per ft.	0	0	7
Polished plate, British ¼ in., up to 2 ft. sup., per ft.	0	1	6
DO. *4 ft. sup.* „	0	2	9
DO. *6 ft. sup.* „	0	3	0
DO. *20 ft. sup.* „	0	3	7
DO. *45 ft. sup.* „	0	3	9
DO. *65 ft. sup.* „	0	3	11
DO. *100 ft. sup.* „	0	4	4
Rough plate, 1/16 in., per ft.	0	0	6½
DO. *¼ in. per ft.*	0	0	6¾
Linseed oil putty, per cwt.	0	15	0

*

GLAZING in putty, clear sheet, 21 oz.	0	0	11
DO. 2 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, 6½d. to 8d. per ft. according to size.

PAINTER AND PAPERHANGER

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

*

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

*

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

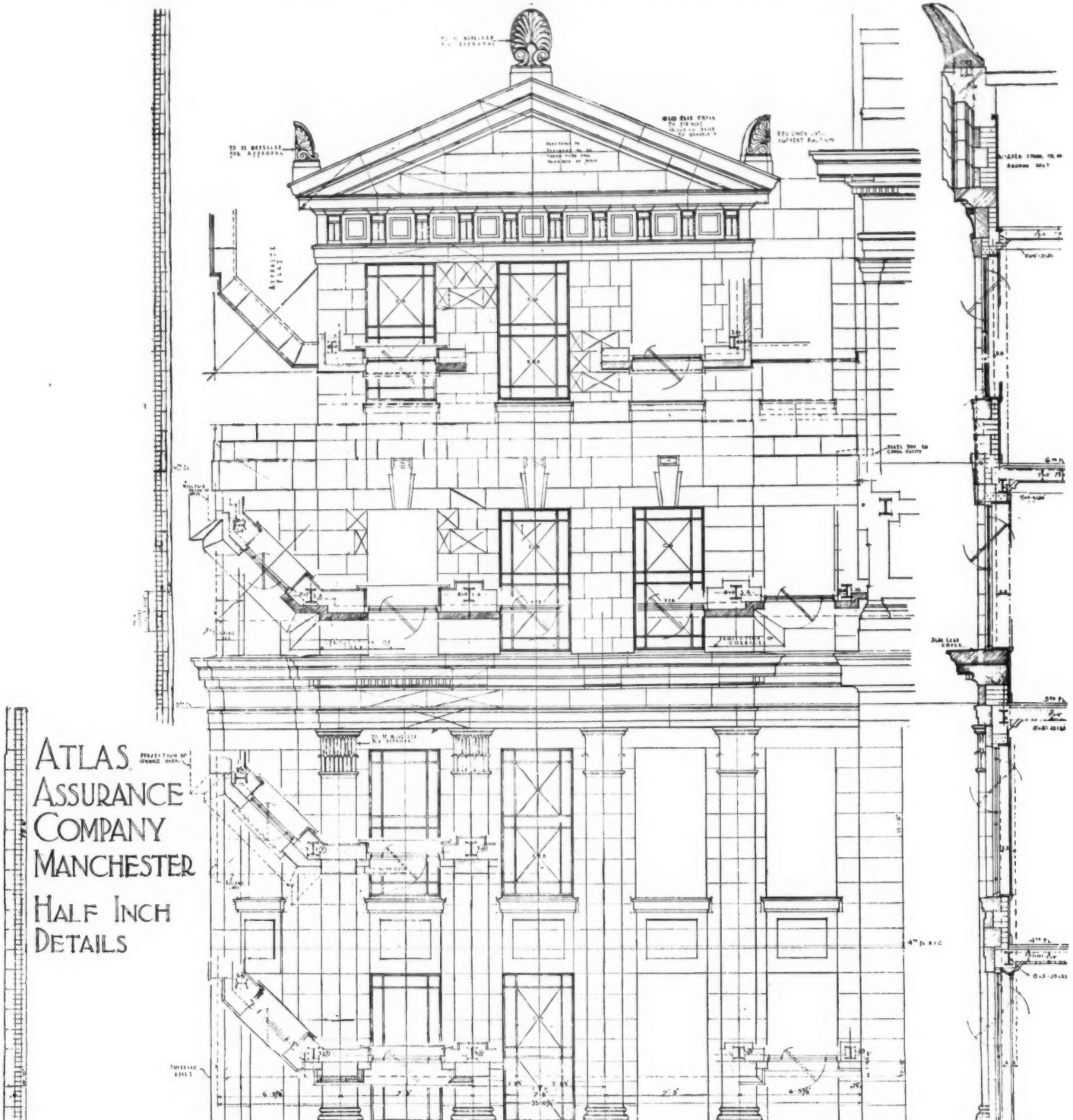
SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity. The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds per ft. sup. . . . from 3d. to	0	0	6
Plaster board, per yd. sup. . from	0	1	7
PLASTER BOARD, fixed as last, per yd. sup. . . . . from	0	2	8
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup.	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 3/16 in. punched per M. grey	16	0	0
DO., *red*	18	0	0
ASBESTOS COMPOSITION FLOORING : Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casement in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

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

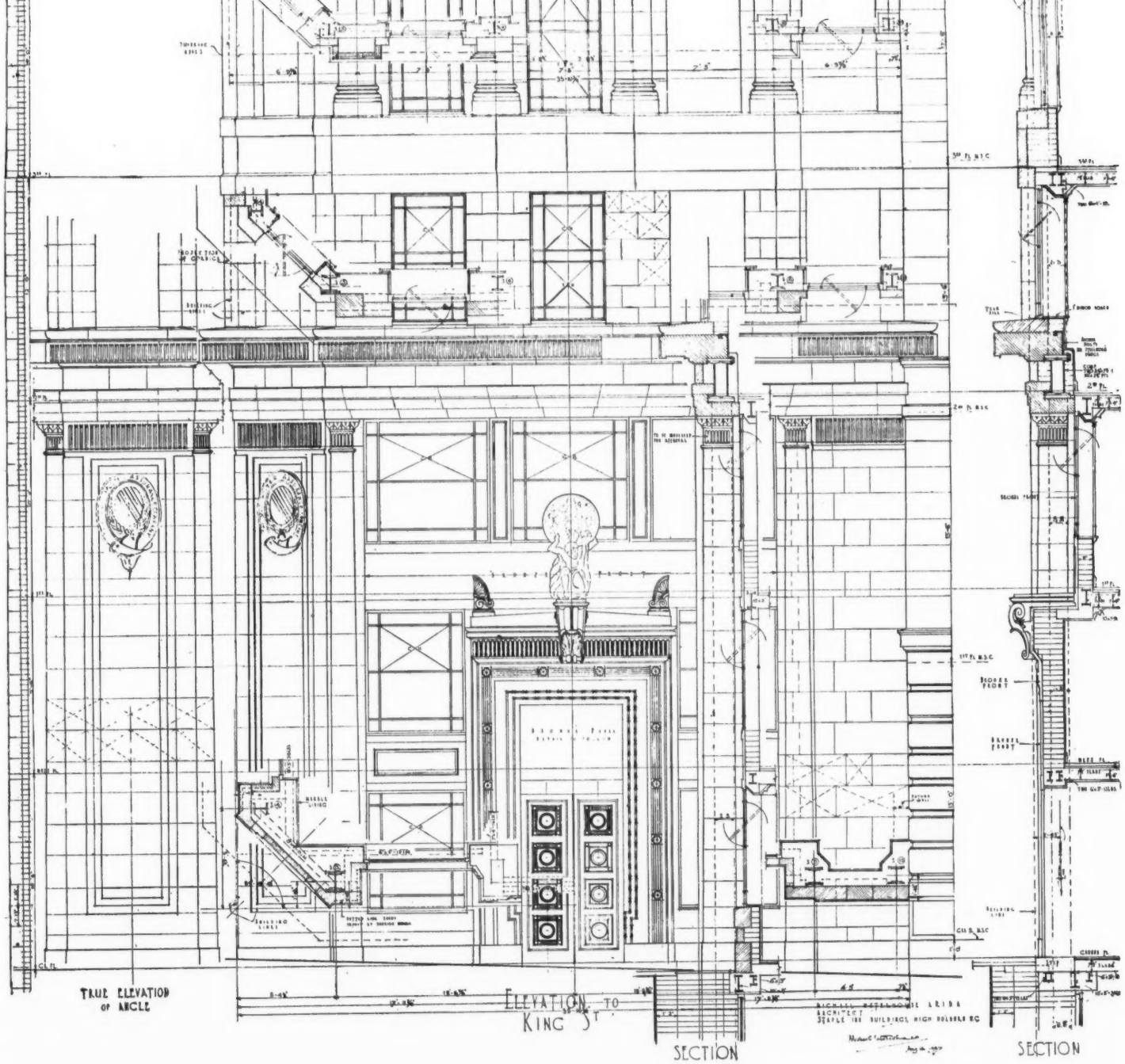
PLYWOOD, per ft. sup.

Thickness	5/16 in.			½ in.			⅝ in.			½ in.		
Qualities ..	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.	AA. d.	A. d.	B. d.
Birch	4	3	2	5	4	3	7½	6	4½	8½	7	6
Alder	3½	3	2	5	4	3	6½	5½	4½	8	7	6
Gaboon Mahogany	4	3	3	6½	5½	4	9½	7½	—	1 0½	10	—
Figured Oak 1 side	8½	7	—	10	8	—	11½	—	—	1 6	—	—
Plain Oak 1 side	6½	6	—	7½	7	—	9½	—	—	1 0	—	—
Oregon Pine	5	4	—	5½	5	—	6	—	—	—	—	—



ATLAS ASSURANCE COMPANY MANCHESTER

HALF INCH DETAILS



NEW BUILDING FOR THE ATLAS ASSURANCE COMPANY, MANCHESTER. BY MICHAEL WATERHOUSE. DETAILS OF THE MAIN FRONT.