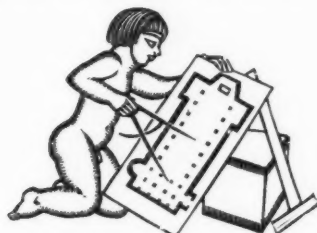


# THE ARCHITECTS'



## JOURNAL

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Hill will be dealt with next week.  
Mr. H. J. Birnstingl has written  
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CHRISTIAN BARMAN, Editor

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



#### RENDERINGS OF ARCHITECTURE

*Selected and annotated by Dr. Tancred Borenius.*

xxxii: Marco Ricci (1673-1729) and  
Sebastiano Ricci (1660-1734).  
Roman Ruins.

*The painters of this striking architectural composition are of particular interest in the history of the artistic relations between England and Venice. Walpole records how Marco Ricci, about 1696-99, accompanied another Venetian painter, Antonio Pellegrini, to this country, but eventually falling out with him persuaded his uncle, Sebastiano, to come over too. Either jointly or each on his own, the two Riccis produced a considerable number of works in England. Sebastiano was primarily a figure-painter, and important examples of his art can to this day be seen on the walls and ceilings of Burlington House and in the chapel of Chelsea Hospital. Marco Ricci, on the other hand, chiefly practised landscape painting. In the picture here reproduced the general affinity of style to the type of composition, usually associated with Pannini, is very clearly seen. Marco Ricci was, however, Pannini's senior by some twenty years, and both in the spirited method of painting and the bold handling of light and shade strikes an individual note. The figures show the characteristic style of Sebastiano Ricci.—[Vicenza, Municipal Gallery, No. 269.]*



Wednesday, August 25th, 1926

## THE UGLINESS OF MODERN LIFE

SIR LAWRENCE WEAVER, in his recent lecture to art teachers at the Victoria and Albert Museum, complained about the ugliness of modern life, but it is not quite clear whom he intended to blame for this unfortunate condition. He begins by stating that "bungalows, those pink, skinny-roofed abominations, are springing up all over this wonderful land and defiling it," and he goes on to say that "the beastliness of the world at present was remarkable, and the only remedy lay in the art schools, where young artists could be taught not to crystallize their ideas on those of their elders, but to express something of the general and social conditions of to-day. If Sir Christopher Wren had decided to keep to the old tradition of Inigo Jones no one would bother about his churches to-day." This seems an extraordinary statement. It is surely precisely because Sir Christopher Wren did carry on the Classic tradition of Inigo Jones that his work was so fruitful of result. The advice to the young artists not to crystallize their ideas on those of their elders is quite meaningless, unless we are allowed to discriminate between the elders in question. In periods of great artistic achievement when the "elders," as they are called, are men of discernment and distinction, the juniors can scarcely do better than pay a little deference to them. It is only when the greybeards are ignorant of the arts they presume to teach or practise that it is incumbent upon youth to resist their influence. Neither does the injunction to the young artist to express something of the general and social conditions of to-day help him very much to attain a high standard of achievement, for what are the builders of those offending bungalows doing but trying to express something of the general and social conditions of to-day?

No! the young artists will not necessarily achieve design by rebutting their elders, whether these are teachers or distinguished visiting lecturers, but through studying the art of design itself, which has its own standards by reference to which students can not only appraise the intellectual quality of their elders, but can also determine how far the general and social conditions of to-day are worthy of their support. It is the function of artists and philosophers occasionally to resist "the general and social conditions of their day," and they are altogether deprived of their intellectual status if it be assumed that they must merely express conditions which they accept without criticism.

Sir Lawrence Weaver tells us that if young artists could only be taught how much finer it is to design a beautiful matchbox than to draw a landscape of Loch Lomond, in

the end people would be so used to beautiful common things that ugliness would no longer pay. To design a poster or a teapot is in his opinion more honourable than to produce a picture which would hang on the walls of some well-to-do person's house because it gave pleasure to tens of thousands of people. Nobody will disagree with Sir Lawrence Weaver in his contention that the artist has no more important duty than that of beautifying the common utensils of our lives. Unfortunately, however, between the will to beautify and the ability to beautify a great gulf is fixed, and it is just here that our art teachers and the apostles of the crafts are apt to fail so lamentably. Can Sir Lawrence Weaver perhaps give them a clue to this secret of how to create beauty? He is quite sure that art is not "something spread on canvas put in a gold frame and hung on the walls of comfortable people's houses," but when he comes to tell us what art is he is somewhat disappointing, for he is obliged to fall back upon a definition first formulated by one of those "elders" whose collective authority he had previously invited the art teachers and students to repudiate. "Art," he quotes, "has been defined as the quality which brings pleasure to labour." That is quite the worst, most misleading, and the most mischievous definition of art which has ever been formulated, and it has been directly responsible for a very large part of what is most vulgar and incompetent in the work of artists and craftsmen to-day. To make the criterion of art a subjective one, to imply that what brings pleasure to the designer is therefore well designed, is an error of the first magnitude. It is notorious that the worst artists or musicians take an extraordinary pleasure in their work, but what brings joy to them gives pain to others. Let Sir Lawrence Weaver interrogate the authors of the "pink, skinny-roofed bungalows," of which he complains, and he will probably discover that they were one and all perfectly delighted with their work, and that they were in the seventh heaven when they conceived it and were happy as larks when they executed it.

With Sir Lawrence Weaver's indictment of modern "art criticism" most people would be in hearty agreement. It is, indeed, as he describes it, "a fungoid growth of modern civilization." He goes on to express the opinion that "because there was no art, we have to have art criticism to take its place." But there is something to be said for the contrary view; because we have no real art criticism, therefore the bad artists are permitted to flourish.

## NEWS AND TOPICS

THE question of wet time has been receiving considerable attention during the last year or two. The latest efforts at adjusting this matter have been made, I see, by a committee of the Employers' and Operatives' Federations in the north-western area, and a scheme of insurance has been drawn up. The scheme is arranged on a joint contributory basis to which operatives and employers contribute equal shares. The total contribution per operative is not to exceed 3d. per week for the first two years, and 5d. a week afterwards. If the question of wet time can be settled throughout the country it must have a far-reaching effect upon the whole building trade, for, as the committee points out, the present loss of wages due to wet time, "besides entailing hardship on the operatives, has a bad effect on the industry. It gives rise to discontent, and it deters men, especially those of the type most desirable, from entering the crafts affected. Both these results have a serious effect on efficiency, and consequently on output and costs." That is undoubtedly the way to view the matter. If the elimination of wet time is going to increase efficiency and output it is going to benefit the whole industry, and this is quite apart from all questions of fairness and justice. I hope other districts will follow the example of the north-west area.

\* \* \*

I did think that as Dignity receded before the continual advance of Vulgarity, Government departments would give her sanctuary. But this is not to be. The Post Office is selling its soul, or rather the surface of the public's envelopes which do not belong to it, to the highest bidder to plant thereon appeals to the public to waste its substance on the latest food substitute, quack medicine, or pornographic book. This in itself is monstrous enough; but it is, of course, but the thin edge of the wedge. Income tax demands will be embellished with appeals to dine at the "Folly-Folly"; Government buildings will sell their façades to the purveyors of whisky and cigarettes; from the Victoria Tower will blazon electric pictures of babies drinking milk, dogs eating biscuits, invalids sipping port. Then the municipalities will follow and sell the pavements, and we shall be told to "strike more matches," "chew more gum," or "eat more oysters," as we walk to church. It is, however, not a matter for jest, it is really a very sad and terrible thing that the P.M.G. cannot see that the suggestion is a most discreditable one. Such things just "are not done" by decent people. For my own part I intend to order black envelopes and write in white ink, thereby expressing my own sadness and foiling the Postmaster. If this practice were to become general the Post Office might find a difficulty in obtaining advertising contracts for postmarks.

\* \* \*

Londoners who on business or pleasure bent travel down the Thames from London Bridge must have noticed reposing on the quay of the Custom House two sheds which partly obscure the lower portion of this fine building. Inquiry as to their purpose would probably elicit the fact that they house the additional staff required to give effect to recent legislation, but whatever be their purpose, these

sheds erected during the war should have been removed long since. The remoteness of the Custom House from Whitehall is no excuse for permitting these eyesores any longer to offend the æsthetic sense of Londoners. Similar excrescences that disfigured the West End have been cleared away, and St. James's Park and the Embankment in London have resumed their mantle of loveliness. It is all the more necessary to protect the architectural beauties of East London, because the West End has suffered, and is still suffering, from so many acts of vandalism by which we are being deprived of our architectural heritage. Every time I take a walk into the City I am astonished at the revelation of new architectural beauties which were previously unfamiliar to me, and some of our modern painters might well do worse than pay a visit to this part of our metropolis in search of inspiration and material for their art.

\* \* \*

It is interesting to record that important extensions in the municipal areas at Brighton and Hove are now in contemplation, and that these two boroughs so long rivals to each other have now composed their differences and are acting in unison. The Hove Borough Council has decided to apply to the Ministry of Health for permission to extend the town's boundaries so as to include Preston Rural, a parish just outside, and a small part of the parish of Patcham. Brighton also is promoting a Bill to bring the whole of Rottingdean and Ovingdean within its boundaries. The proposed extensions are intended to meet a common danger to these two localities. The growing areas without the walls have begun to menace the towns. They grow as individual builders or landowners care to make them. There are practically no building regulations, and up to the present there has been no town planning. Those who are anxious to save Brighton from the effects of haphazard building point to Patcham whose heterogeneous collection of cheap modern "villas" is seen by everyone driving to Brighton by road. The advantages which are likely to result from the absorption of these places is obvious, and no serious objection to the proposal has yet arisen. Hove has actually obtained the consent of the East Sussex County Council, and Brighton hopes to receive similar treatment. Such urban areas constitute an awkward problem for a county council, for they need control and expenditure on developments which the County Council with its inelastic machinery and comparatively small resources cannot maintain. It is unfortunate that the municipalities of Brighton and Hove did not obtain possession of these additional areas before so much misdirection of development had already taken place in them. What is needed, of course, is a regional town-planning scheme for the whole area.

\* \* \*

Doncaster has five thousand million tons of coal beneath its surface. If it had exploded I could not have seen greater changes between the Doncaster, the "poor, proud, and pretty" town, that I knew twenty years ago and the Doncaster I saw last week. A town-planning scheme has just been completed by the Corporation, succeeding the regional survey of Professor Abercrombie and a local architect, Mr. T. H. Johnson. A great housing scheme is planned on the moor near the racecourse, the old country lanes down which I once walked are overbuilt. Cinemas have been erected upon the sites of fine old Regency houses,



big hotels have taken the places of little old coaching inns. Rossington, Edlington, Bentley have been ruined by the revolution; brand new mining houses with strange faces at the windows confronted me where I looked for quiet villages and country folk. But Doncaster, as I have said, has five thousand million tons of coal beneath it, and the regional survey was undertaken only in order that when Doncaster becomes a great coal centre it shall not repeat the mistakes made by the older large cities.

\* \* \*

Whatever regrets I may have expressed in not visiting the Sesquicentennial Exposition of Philadelphia are cancelled on seeing photographs of the architecture there. London had a "White City"; Philadelphia has evolved a "Rainbow City," deriving its name from the pastel shades of the buildings that house the sesquicentennial exhibits. Every effort, I am told, has been made to avoid bizarre, gimcrack, and rococo effects, in favour of dignity, solidity, and simplicity. There is much reliance on sculptural adornment and landscape decoration, and electric lights of unprecedented magnitude play an all-important rôle in the Exposition's decorative scheme. At the entrance to the grounds there are two pylons, 55 ft. high, surmounted by the colossal figures of Heralds of the New Dawn, emblems of the history and the prophecy of freedom. In the Court of Honour between the Liberal Arts and the Agriculture buildings stands the Tower of Liberty from which the Light of Independence casts its beam over the Exposition grounds. In the court beneath, known as the Forum of the Founders, are memorial shafts to the Signers of the Declaration of Independence which is the central thesis and the *raison d'être* of the entire exhibition.



All this may be very well. It is an exhibition, and an exhibition of anything is never in the most reserved taste. The Palace of Architecture is said to be composite of all the styles. I give a detail of its tower—as far as it is possible for any one photograph to detail such a tower. The Palace of Architecture is, indeed, everything—it is nothing.

\* \* \*

A German correspondent, whose letter I published last week, declared that buildings have souls. I have never doubted it. Since they are born, since they exist for a certain length of time, suffer old age, and ultimately die, they may be said to live. They must breathe, because when their various structural materials have lost their porosity they decay and are turned to dust. Old chimneys lean to the north-east, as if to offer up smoky incense to some Mecca there. This I have been assured again and again, but never was any explanation vouchsafed. And now I have found it, and here it is: The south-west face of a chimney becomes hotter during the day than the north-east face; then at nightfall the sudden marked drop in temperature develops greater shrinkage. This phenomenon may be regarded as being like the progressive lengthening of a bar of cast iron that is alternately heated and cooled. If brick or stone is alternately heated and cooled, it probably expands progressively up to a certain point, causing the south-west face of a chimney to increase in height. Old chimneys *should*, therefore, lean to the north-east.

\* \* \*

There is a settlement in Sussex where some revival of the crafts has been attempted by a small community of men and women. From time to time among those attracted by the life of the place have been many interesting and remarkable men. A grand-nephew of the great De Quincey was for long resident there, and I was drawn to him even before learning his name by reason of the marked likeness to the Opium Eater, and surely it was from the Opium Eater he inherited that effortless flow of conversation, that "silver tongue." His memory, I found, was equally surprising, and I recollect his telling me that when a student he had turned his attention to architecture, and after six weeks' study passed an examination at South Kensington which ordinarily was taken only after two years. Though he had not since applied himself to the subject, he assured me that he could still draw from memory the plans of the great European cathedrals. Choosing in his youth the professional life of the stage, he had now, in his later years, turned to modelling, and he produced in plasticine or clay portrait heads that were, perhaps, of more than ordinary worth. But with these he was always dissatisfied, and hard as I pressed him for a copy, whenever I saw him again, he would appear absent-minded about the request, and say that he was modelling the head anew. Situated at the foot of the Downs, and with a fine old Sussex cottage as its craftshop and guest-house, the settlement will remain in my memory as a place remote as a dream from the fret and fever of London life.

\* \* \*

The story goes of a famous architect getting out designs for a wonderful church to cost £50,000, after which the committee of the building fund wanted him to reduce the price to £10,000. "Say a couple of pounds more, gentlemen," he wrote, "and have a nice spire."

ASTRAGAL

## CLERKENWELL IN THE EARLY NINETEENTH CENTURY: i

[BY G. LL. MORRIS]

IN the beginning of the nineteenth century London might, with little exaggeration, be described as a city surrounded by villages and garden suburbs. A city man in those days was almost within a stone's throw of his suburban residence. If situated on the outer fringes he could step through his first floor windows on to the balcony, and from there he could look over the countryside. On a fine, still summer's evening the village in the distance showed up clearly, though over it there might hang the smoke from the local brick-kilns when the fires were being banked up. Near at hand he could see streets being laid out and houses in course of erection; the scaffolding surrounding the new terrace not far away, and the sound of hammer and saw which assailed his ears early and late, were portents of the big building operations which would link his quiet-looking home with the village, perhaps a mile away or even more. Hardly a week passed without the coming and going of carts, loaded with bricks or gravel, with joists and flooring-boards. And yet with all these preparations going forward beneath his windows it never occurred to him that the path where, coming from the village one misty evening, he had been attacked by footpads would soon be widened and flanked with houses not unlike the one he lived in, perhaps a little more formal, perhaps a little less human in character, but, nevertheless, houses not altogether unworthy of the suburb to and from which he had journeyed for many a year.

From the city the highways with fields on either side reached out in all directions passing through the suburbs towards the villages. To the north of London was one of these suburbs—Clerkenwell—the buildings covering a much smaller area than they do to-day. On the northern side it was bounded by an irregular line which roughly followed the existing roads, Elm Street, Mount Pleasant, Exmouth Street, across the top of the southern portion of

Rosoman Street into Goode Street. It then ran eastward along Corporation Road, dipped southwards along Northampton Street, and then followed Cyrus Street, until it stopped at Goswell Road. Houses had been built on one side only of most of these streets so that the tenants possessed an open view across the country. Those living in Corporation Road were able to look across the fields lying between the extreme northern fringe of Clerkenwell and the village of Pentonville on the heights. There still

survives in this street a small terrace of early Georgian houses with pedimented doorways, flush window-frames, and rubbed brick dressings. In the middle distance were the works of the New River Head. At the southern end of Exmouth Street, where it joined Farringdon Road, was a turnpike. From this point a footpath led to the upper pond of the New River Company, adjoining Pentonville Road, the path passing on the western side. When Amwell Street came to be built it followed closely the direction of this footpath, and was about the middle of all the meadowland bounded on the east by Goswell Road and on the west by Fleet Ditch. This area was the site and the scene of great building operations which started in the early years of last century and continued



Plan showing the area between the northern fringe of Clerkenwell and Pentonville, built over 1799 and about 1843. [Reproduced from Horwood's Map, dated 1799.]

almost uninterruptedly up to the beginning of Queen Victoria's reign. In addition to this large area some of the open spaces south of the irregular boundary described were laid out and flanked with the newer type of house. Amongst others were Sexforde and Woodbridge Streets, Northampton Road, and the congeries of alleys to the south-east of it. Other portions included parts of Compton Street and Compton Passage, with its terrace of houses called Caroline Buildings, and dated 1820. Parts also of St. James's Street, St. James's Walk, and Sans Walk were rebuilt. It was a period of surprising activity, and corresponded with the growth of the population in London

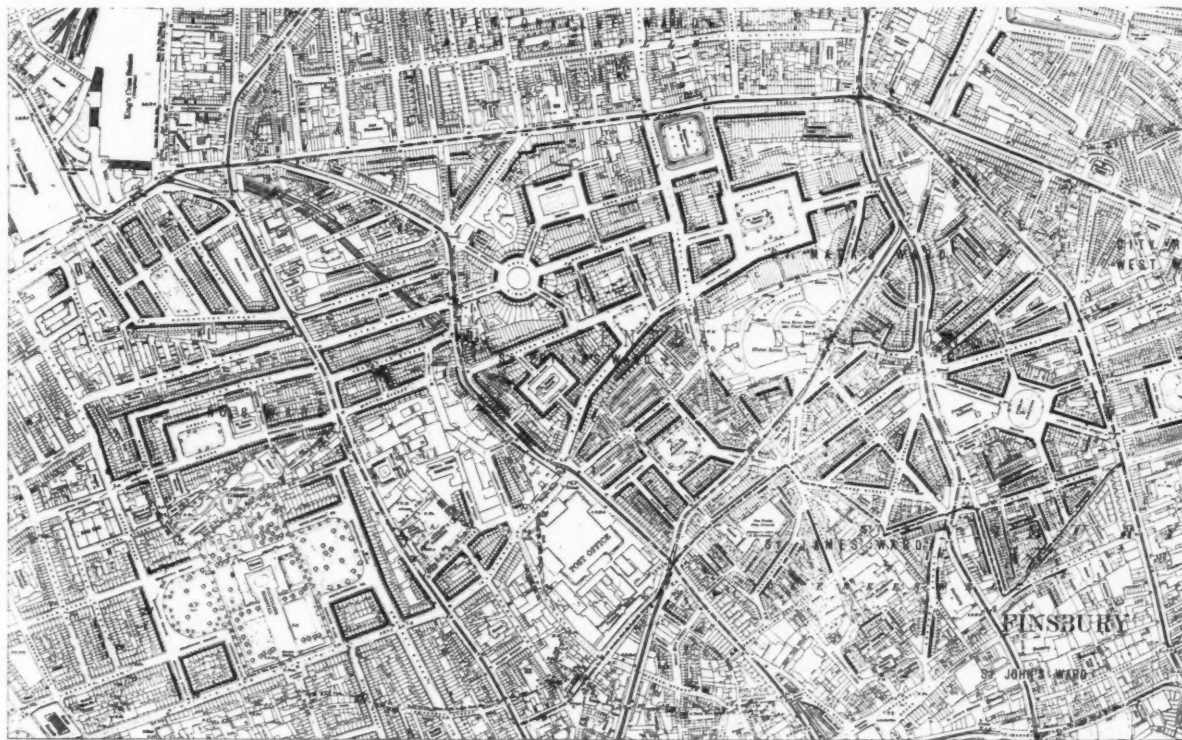
which, during these years, increased from a round million to about two millions and a half.

When it is remembered that similar undertakings were in progress at different points around London, some idea may be formed of the way it was being transformed from a comparatively small city to one which would include them. In the growth of a single district it is possible to realize the rapidity with which large areas were being laid out with squares and streets. North of the Clerkenwell of 1800 was one of these areas. Prior to the beginning of building operations Acts of Parliament had been passed imposing duties on clocks and watches. As this trade or craft constituted the staple industry of Clerkenwell these duties caused a great deal of unemployment. Owing to the general distress which followed they were soon withdrawn, and a few years later with returning prosperity, streets, terraces, and squares began to be built. In about forty years Clerkenwell grew to rather more than double the size it was in 1799.

Up to about 1810 there were only two squares in the parish: one of them was originally the courtyard of St. John's Priory, said to have been founded about 1110 by Lord Jordan Bristet in the reign of Henry I [Sir Walter Besant, in his history of London, states that the only reliable fact concerning the origin of this priory church was its consecration by Heraclius in 1185], and was called after the name of the priory; the other, Cold Bath Square, was actually the first to be laid out for residential purposes, and was formed about 1697, and so called from the Bath House which stood in the middle of the gardens. The site of this square appears to have been purchased with a view to building speculations, and the convenient discovery of a cold spring on the site caused it to be converted into a

Bath House. Seven years after this spring was considered the most noted and the first about London. It was supposed to cure scorbutic complaints, nervous affections, rheumatism, and chronic disorders, and the charge for a bath at the beginning of the eighteenth century was 2s for each person. Houses were soon erected on the north-east, south-west, and south-east sides, presumably for patients with much faith in the waters. There are still some of the original houses on the north-east side in a distressing condition, though the tenant of No. 4 makes a brave show with a fine brass knocker, which is kept as bright as the day it was first polished. The garden in the middle was originally enclosed by a brick wall with small towers at the corner. In Cromwell's *History of Clerkenwell* there is an interesting account of it, and an illustration of the Bath House as it appeared in 1811. Its site is now covered with high six or seven-storied dwellings built of brick and a harsh red terra-cotta.

As at first built, the square was kept open on the north-west side, and is shown so on John Rocques' map of London (1736 to 1746). More than a century elapsed after the completion of Cold Bath Square before any large area was laid out for building purposes. The portion now covered by Northampton Square and the adjacent streets appears to have been the first, and Smith, Ashby and Charles Streets, each of them divided by the square into upper or lower portions, formed the approaches. The houses here are five stories high, including the attics and basements; a few of them are built of red brick, others of yellow with rubbed red brick dressings, and the remainder entirely of yellow. As usual there are balconies at the level of the first-floor windows. When these houses were built the garden in the middle was planned on informal lines, and planted



Plan of Clerkenwell in 1799. Of the houses edged with black the majority were erected in the early nineteenth century. Some are a little earlier in date, and a very few mid-eighteenth century.





*Northampton Square, showing the north-east side of the square and a portion of the garden.*

with trees and shrubs, and laid with grass plots, but, like other private gardens in the London squares, it did not receive proper attention for a great number of years. In 1885 it was taken in hand by the Metropolitan Public Gardens Association.

At the present time the grass and the flowerbeds and shrubs are kept in good condition. Though the garden is open to the public it has a somewhat desolate air, except perhaps, on Saturdays, when the children come there to play. It is certainly very tidy, and has, at any rate, the saving grace of being free from the litter of dirty paper, old shoes, and badly-lettered notice-boards which disfigure most of the private gardens in the London squares. This square is said to be part of the garden of Northampton House, a former residence of a Marquess of Northampton. In the middle of the eighteenth century part of this site was occupied by a skin market, and the Polytechnic which has broken the uniformity of the square is situated where a madhouse at one time stood.

To the southward of this square is Percival Street, and to the north Spencer Street, which, together with the square and the approaches, were built on a regular plan between 1811 and 1814; Wynyatt Street, flanked with small and pleasant dwellings, was erected rather earlier. In Spencer Street the houses are more ambitious. Myddelton Street to the westward is one of a number of streets formed of very similar houses. Rawstorne Street and Owen's Row, two of several other streets which occupy the wedge-shaped piece of ground between John Street, Goswell Road, and the Angel, are late eighteenth century. They are shown on Horwood's map dated 1799. Between these two streets is Brewer Street North, one side flanked with quite an interesting terrace of houses and a shop

at either end, which seem to be built as early in the nineteenth century.

Soon—probably three or four years later—a further area to the westward was laid out and begun. In the middle of it is Wilmington Square, which takes its name from one of the titles of the Marquess of Northampton, who is Baron Wilmington. It was begun about 1821, at the time the Spa Fields were being covered with buildings. As originally planned the square was to extend as far as the north side of Margaret Street, and houses of a more lofty character than those which were subsequently built were arranged for. On three sides the houses are of five floors, including the basement, the remaining side on the higher ground being of four. The houses show signs of neglect. Two of them on the north-east side are empty and gradually falling to pieces, but in spite of this blot and the general air of neglect peculiar to London buildings, it is one of the pleasantest squares in this district. The garden in the middle in the summer time is powdered with bright spots of colour, pink, red, and purple, and the grass generally is maintained in fairly good trim. On Saturdays the broad asphalt paths teem with children from the dwellings of the surrounding neighbourhood, boys and girls of all sorts, sizes, and conditions, barefooted and booted, and sometimes spurred, careering up and down in their primitive carriages drawn by spotted horses on wheels. Scooters of strange form and many another weird contraption pass swiftly to and fro to the delight of the genial and elderly men sitting on the seats basking in the sunshine and living their youth over again in the scene before them. With some degree of truth this garden might be described as the Rotten Row of Clerkenwell.

*[To be continued]*



CURRENT  
ARCHITECTURE  
SECTION

## THE NEW BLOCK AT LADY MARGARET HALL

[ BY C. CAMPBELL CROWTHER ]

ACADEME is platonically distrustful of the arts. There seems to be a feeling that these are not the things which move the universe. One recalls the Dean who drove from his door the undergraduate who spoke of music. The fact is that the arts do not submit to the nice syllogization, which is what dons live by. Perhaps that is why the æsthetic record of Oxford in the last century is so deplorable. Had Ruskin systematized the arts less thoroughly, Oxford would not have avowed him so rapturously. Half of modern Oxford—a charitable estimate—is an exhaustive misprision of Gothic in every conceivable genre. These results might have been less awful had some other than Butterfield inaugurated the craze. Academic Oxford is so essentially a city of stone that in yielding to the economic attractions of brick far more tact was needed than his ruthless belief in the efficacy of any sort of colour-combination. Apart from the vogue of Gothic bathrooms, he fathered the vilest abuse of vari-coloured brickwork. And this in a city which knew and honoured Wren.

The building of Lady Margaret Hall from the designs of Sir Reginald Blomfield was therefore a welcome sign of returning reason. Begun as long ago as 1896, and added to at intervals since then, it is still the most dignified effort of its kind in Oxford. Particular interest attaches to the block opened recently on account of modifications in style which mark a certain change of attitude on the part of the architect towards his subject. There is in the whole of this work a certain Gallic flavour which one has long associated with Sir Reginald. In the earlier buildings it is the baroque pediment over the main entrance, the free use of the segmental pediment above the eaves, and in one block, the projection of the

upper windows through the eaves to form a dormer story, which suggest a French provenance. In this latest addition, however, these features have disappeared except for the pediment on the south side, which is retained in harmony with the pre-existing scheme. On the north side it is replaced by a triangular pediment over a recessed arch that is thoroughly consonant with the best of the English tradition. In fact, apart from the treatment of the roof, there is little matter here for a charge of undue Gallicism. Roofs have always been the weak point of English classicism; the eighteenth-century Palladians had a blind faith in the value of balustrades and copings as camouflage for the Alpine effects of a disorganized conglomerate of chimney stacks, despite the example set by Wren in such buildings as St. Benet's and Groombridge Place. With the latter, indeed, the present example has a noticeable affinity of detail, particularly in regard to the fenestration and the string-course of stone, at once punctuating the ground story and eliminating any feeling of top-heaviness. The rusti-

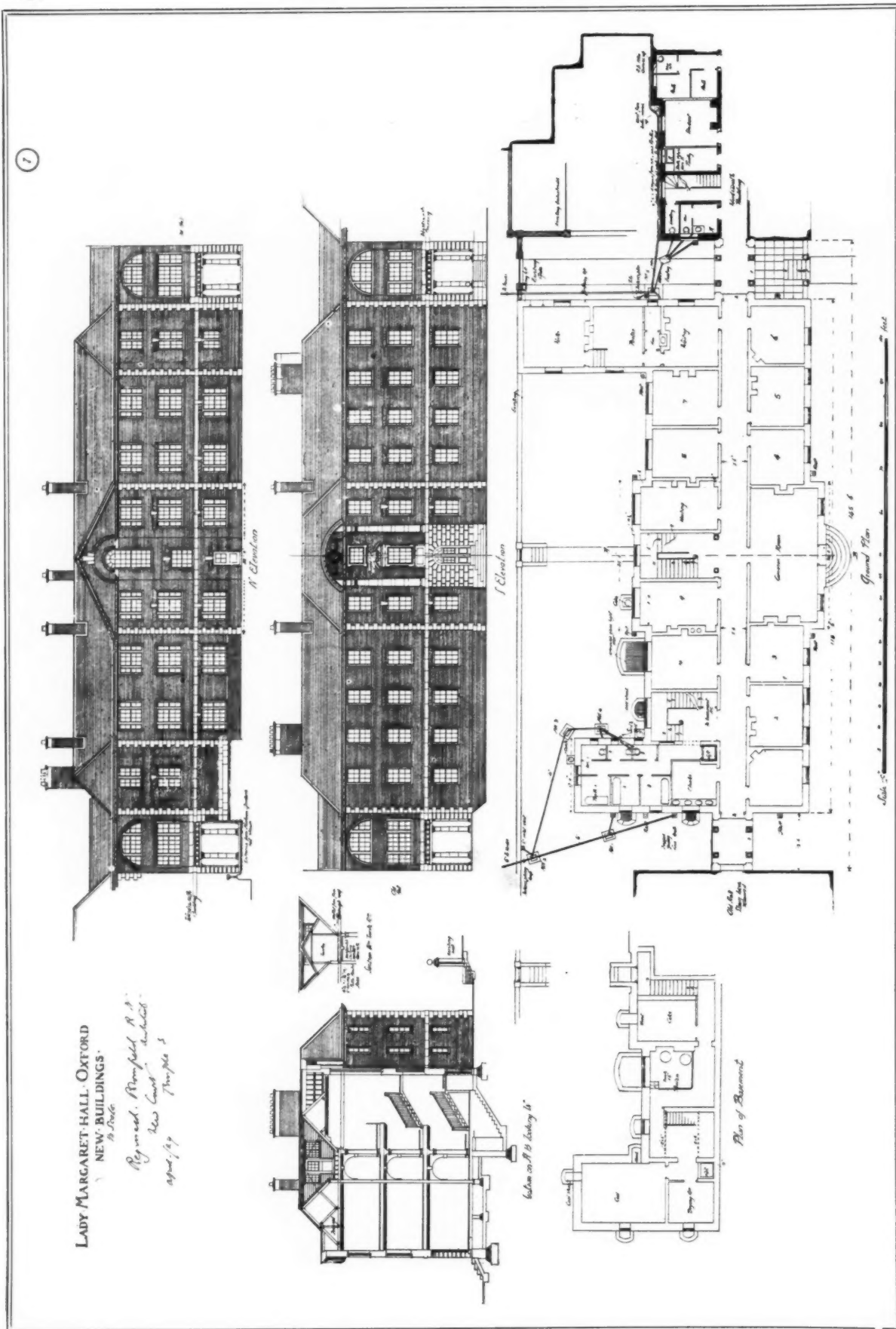
cated portico and the thin-jointed brickwork are equally typical of the school.

A last word about interior effects. Perspectives inside a building often fall short of a final touch of imagination. It was just such a touch which gives to the main corridor illustrated herewith a sense of height and space through the emphasis laid on the arches by the decorative keystones in relief. Economy of means like this is a real tribute to the vitality of classical motives to-day.

[For list of contractors and sub-contractors see page 249.]



*New buildings at Lady Margaret Hall, Oxford. By Sir Reginald Blomfield, R.A. The garden entrance, south front.*

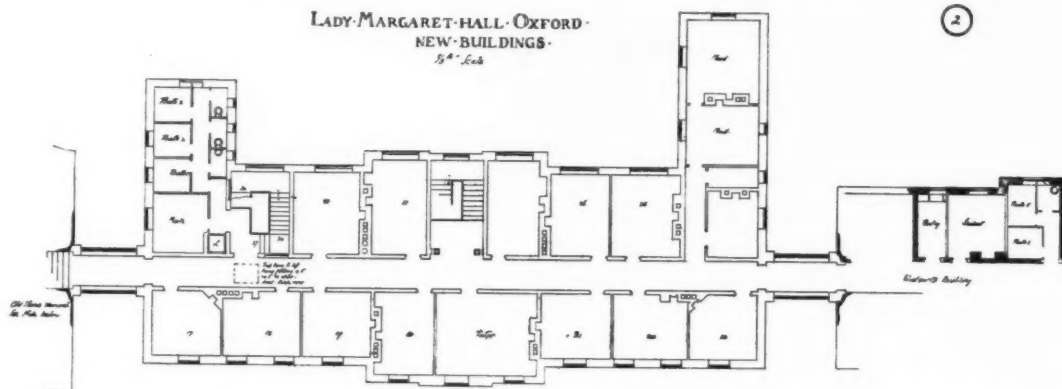


New buildings at Lady Margaret Hall, Oxford. By Sir Reginald Blomfield, R.A. Plans, elevations and section.

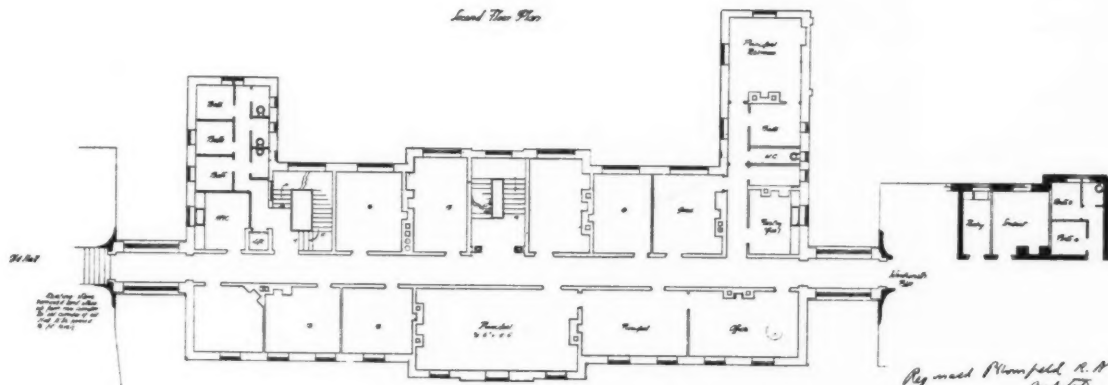


LADY MARGARET HALL, OXFORD.  
NEW BUILDINGS.  
54' x 60'

(2)



First Floor Plan



Second Floor Plan

New buildings at Lady Margaret Hall, Oxford. By Sir Reginald Blomfield, R.A. Above, the south front; below, first and second-floor plans.

Reginald Blomfield, R.A.  
Architect  
New Court  
Temple, S.E.  
April 24

New buildings at Lady Margaret Hall, Oxford. By Sir Reginald Blomfield, R.A. Plans, elevations and section.



*New buildings at  
Lady Margaret Hall,  
Oxford. By Sir  
Reginald Blomfield,  
R.A. Above, the  
north front. Below,  
the main corridor.*

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## AN AUSTRIAN INDUSTRIAL VILLAGE

[ BY A. S. LEVETUS ]

THIS industrial village, the Knappensiedlung of the Austrian Alpine Montangesellschaft, is situated on the slope of the Knappenberg (mountain) near Hüttenberg, in Carinthia. It lies in midst of wild scenery, where one mountain rises above the other in the background, and where large quantities of iron ore are quarried. That it was rich in minerals was already known to the Celts and the Romans, who, each in their turn, exploited the mines. In later times the miners were a corporation in themselves, and were known as Knappen, hence the name Knappensiedlung, the settlement of the Knappen. As a corporation they enjoyed certain privileges, the headman being always the oldest among the settlers. This office brought with it certain rights, such as freedom from military service and payment of taxes, and the right to preside over the village court, award punishment, and settle disputes. The headman was the autocrat of the village. Naturally these privileges and customs are long since of the past. For now, as everywhere, the miners are governed by the law of the land, and by the regulations of their own organizations. It is not easy to get to Knappensiedlung. When you have reached Hüttenberg, either direct from Vienna or by the devious way of the Tauern railway from Salzburg, you are still a long way from your destination. It is all uphill, a climb occupying a couple of hours. But it is not the highest of the village settlements, for a long way farther up there are scattered cottages and mountain farms which have weathered storms for ages untold.

For many years the Austrian Alpine Montangesellschaft (Mining Company) have owned the iron deposits in Styria and Carinthia. In the latter province the big dearth in housing accommodation for the miners and employees necessitated the company building a new village. The architects chosen to plan, engineer, and execute this task were Theiss and Jaksch, of Vienna, the former being a professor at the Technological University of that city.

The new village is situated at a height of about 3,400 ft. By railway it is connected to about half way. The site was chosen by reason of its being mountain meadowland, with but few trees around. Care was taken that these trees should be preserved, and no more were felled than was necessary for the requirements of building. In this way a delightful village, designed to conform to the surrounding scenery, has arisen, with the streets and transport roads as near as possible to the iron ore layers. Owing to the scarcity of water there was great difficulty in securing a

sufficient quantity for the supply of the village and the works. This was overcome by collecting water from distant sources and laying it on to the village.

The village consists of 108 single cottages and one shop. Other shops are to follow, as well as a school and baths, and these are allowed for on the plan. At present the children are instructed either by qualified teachers in rooms placed at their disposal, or they go every day to one or other of the schools a long distance away. The church, too, is very far off.

Each house contains on the ground floor, a living-room and kitchen combined, pantry, and scullery. Above are two bedrooms in the smaller dwellings, and three in the larger ones. The outbuildings comprise a wood-shed, a stall for animals, and a sunk well. The houses facing the street towards the north-east, where there is a sharp gradient,

have supporting walls of rough quarry rubble. Every means have been taken to provide for the comfort of the inhabitants, to secure immunity against fire and damp, and to obtain the best workmanship. Praise is due to the Austrian Alpine Montangesellschaft, who commissioned Messrs. Theiss and Jaksch, and to these architects for the manner in which they have carried out the work. The names of these architects are a guarantee of first-class work.

The accompanying illustrations show the masterly way in which they have planned the site, arranged and designed the houses, and used the materials, as far as is possible,



*Knappensiedlung, Hüttenberg, Carinthia. By Theiss and Jaksch. Drawing water from a sunk well.*



found in the locality. They have added considerably to the charm of the village by the manner in which the single shop has been treated. This has an arcade, with pointed arches formed of rough quarry-stone brought from near at hand.

When the school and baths are erected the architectural

character of the model village will be enhanced still more, especially when the church is added. The architects have considerable experience in church building, and it may be taken for granted that the building erected in the Knappensiedlung will harmonize with the surroundings and be a fine piece of architecture. Each house has its own garden,



*Knappensiedlung, Hüttenberg, Carinthia. By Theiss and Jaksch. Above, twin cottages. Below, a row of cottages.*



*Knappensiedlung, Hüttenberg, Carinthia. By Theiss and Jaksch. Above, a village street. Below, the pump.*



*Knappensiedlung, Hüttenberg, Carinthia. By Theiss and Jaksch. Above, the pump. Below, the village shop.*



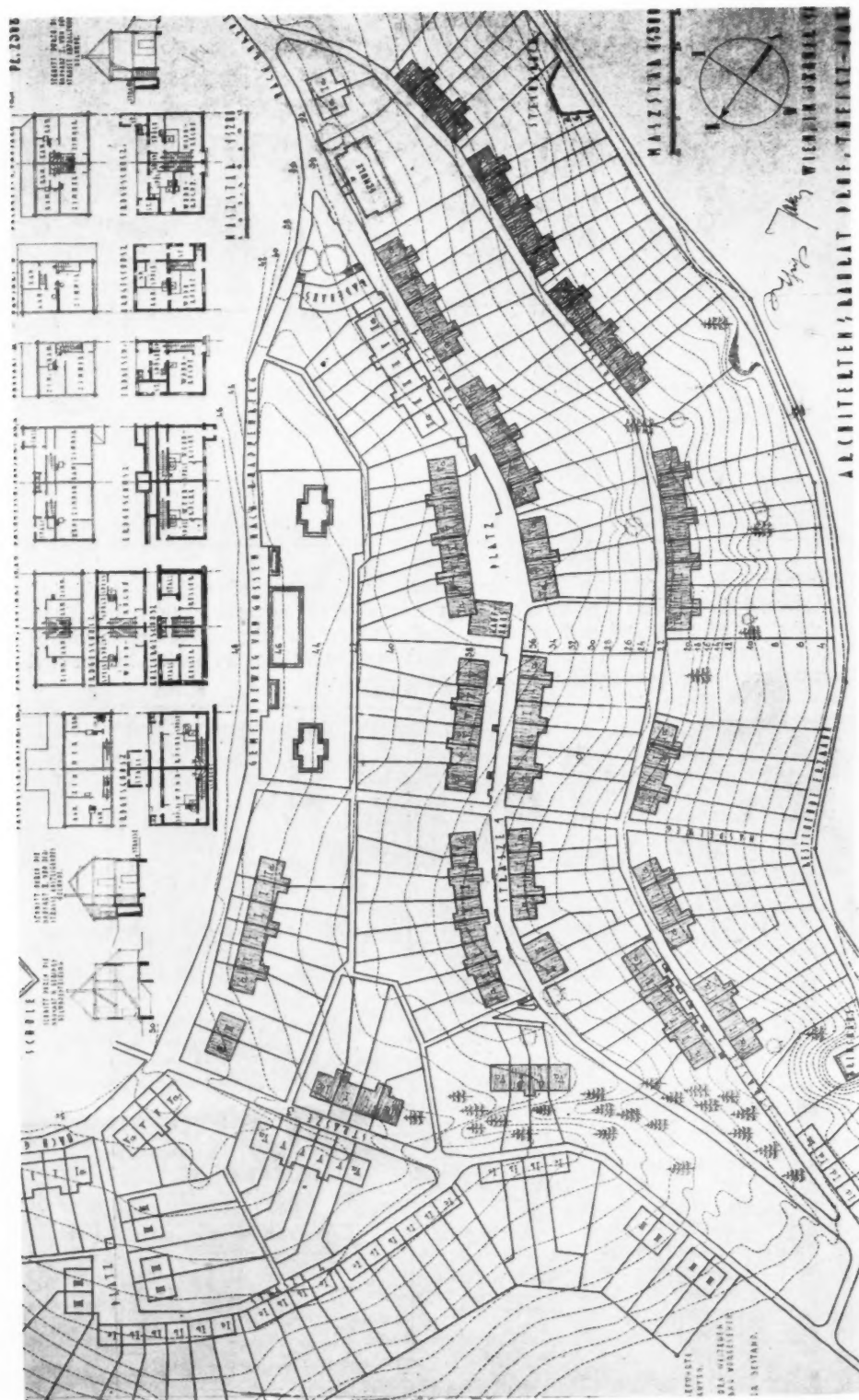


and there are allotment gardens. In course of time there will be a co-operative store, a village place of entertainment for lectures, dances, movies, and theatrical performances. There is room enough. The village proper was begun only three years ago; till then there were only a very few scattered

houses, with no sort of comfort. In this industrial village the architects have retained the spirit of the surroundings and the best qualities of Carinthian village architecture. Both from an artistic and practical point of view it is a fine achievement.



*Knappensiedlung, Hüttenberg, Carinthia. By Theiss and Jaksch. Above, another view of the village street. Below, entrance to the settlement.*



## TRIBULATIONS OF EARLY PRACTICE

[ BY KARSHISH ]

### VIII: THE NOSE ON THE GRINDSTONE

IT may be supposed that anyone who has accomplished all that has been here recommended will be the happy possessor of a client completely docile and ready, as the saying is, to feed out of his architect's hand. Let it so be supposed by all means; but let it also be remembered that the journey is scarcely begun: the bumpy parts of the road are ahead.

In point of fact, the way that lies between the settlement of refractory questions arising out of sketch designs and preliminary estimates, and the consideration of tenders, is usually smooth, level, and bathed in sunshine and song. Enthusiasm warms all parties; contentment and glowing anticipation reign. One small passing cloud only is to be expected—namely the gloom cast upon the scene when the client, having held up proceedings for three months unable to decide whether he will have a loggia or a lounge, learns that it will take his architect no less than two months to settle most other points, make contract drawings and specifications, and secure tenders. Our architect should reduce the shock to his client, and at the same time justify himself, by circumspection in communicating this gritty, unappetizing fact. In answer to the eager question: "When will the builders start?" he should *not* reply: "In about ten or twelve weeks, perhaps," but should say judicially: "Well, it will occupy me and my staff four or five weeks to make the contract drawings and get them traced, and write the specification and get it printed; the bills of quantities will take a fortnight to prepare and print, and the builders ought to have ten days to collect prices from merchants, price out the bills, and send in their tenders. It may take another week before the contract can be signed, and it would be only reasonable for the builder to wait a fortnight to make his arrangements and get his plant and his workpeople on to the site." As it is the pence that make the shillings and pounds, so it is the days that make the weeks and months. No one understands this principle better than he who is responsible for getting a house put up; no one is slower to realize it than the person for whom the house is being built. If that person is, in this way, invited to contemplate the squalid items one by one and tot up the sordid total, he will be in a fitter mood to reconcile himself to the "delays of building." Moreover, as he has probably received dark warnings of these delays, he will be relieved, by being thus early informed of the substance of them, to find that they are largely inevitable and not, as he expected, an affront offered by indolence and indifference to his long suffering. This is all to the good; disappointment breeds disappointment, and if one thing is wrong, many things seem so to be which would exhibit no imperfections in the warm light of a general satisfaction.

The preparation of the contract drawings calls for wariness. It is here that our architect is brought face to face with his inefficiency as a responsible designer. The making of sketch designs does not prepare him for this shock to his self-esteem, for their small scale and free rendering encourages him to push the obdurate facts of construction and a chitcheural contrivance into the background: a man soon grows weary of close and laborious thinking, the results of which may be wiped out like a wet sponge passing over a slate. The sketch design, in fact, is a visionary thing, and the process of evolving it is exhilarating. The old hand, however, is more widely aware to what he is committing himself with those deft pencil touches which give the wished-for, strong, horizontality to the elevation by a heavy line under the eaves, or correct a weak verticality in the composition by a couple of facile black rain-water down pipes, than is the novice. Our architect, revelling in the enthusiasm of his first commission, will probably lay up for himself future anguish in his free, dexterous sketch elevations, which would make a better man than he wilt when the time comes to

interpret the designs in terms of actual building in the working drawings.

In a previous number I described the perplexity and sense of incapacity which our architect must expect to experience when he thus sets about the rendering of his conception in the practical language of building operations. A friend, an architect, to whom I read the passage, confirmed the warning given in a startling manner. My friend, who had previously for some years been a senior assistant to an architect in large practice, told me that when he set up and first began to design as principal, he found himself continually turning in a spontaneous and automatic way, to look over his shoulder with a question on his lips. Alas! none was there to assuage his thirsty mind. He was up against an architect's job for the first time, as he then vividly realized.

Enough has been said on this matter, but the efforts of our architect to alleviate his distress will lead him to yet another surprising discovery of which he may well be warned; the discovery, namely, that reference books and drawings and photographs exhibiting details of construction and architectural features, will not only give him no help, but will actually obstruct him by dissociating his mind from the plane on which the operation of designing is carried on, and concentrating it on a very different plane. A man who seeks to relieve the perplexities and indecisions attendant on practical designing in this way, is like one who would quench his thirst with sea water. It is necessary, however, to state the case with precision, for textbooks and pictures of architecture serve a good purpose, although that purpose is not the rescue of a starved imagination by nourishing it on indigestible facts. We have to remember that our architect has before him his sketch design, which envisages an idea of a house comprising a number of effects and conveniences with which his mind is closely intimate. His difficulty as designer is to express the sense he has of the house in terms of actual building work. All design, however—all creative work—is evolved in a special state of concentration in which consciousness is submerged. The faculty cannot operate in a condition of conscious activity which selects, weighs, and pieces together. The knowledge which informs design is that assimilated knowledge which belongs to the subconscious, is related to instinct, and is the substance of individuality. Architectural conceptions originating in other minds and designed for other needs, times, and places have no relation to the solution our architect is in search of. To what extent it is possible to botch up an elevation by transplanting, piecing together, and adapting alien ideas, I do not know; but the process is not design; the result cannot in any right or worthy way be a work of architecture, nor can an architect who so exercises himself be other than a charlatan. Anyone who, wearying of the effort to hit on the forms by which his conception will express itself in actual building, turns aside to seek what he wants ready to hand in the back numbers of the building journals, or elsewhere, will only be baffled, thwarted, and discouraged, and thrust still further from the solution he is in search of. The only good purpose such a step serves is that the frustration and sense of boggled helplessness which results braces the victim with an energy of desperation, and drives him back to his designing with the sense that the solution he seeks is nowhere to be found except only by himself and within himself.

Our architect may, however, find relief by taking a lesson from his ancestry. Kholer, in his *Psychology of Apes*, describes how the chimpanzee, when beaten by the puzzle set him—how to reach a banana—will turn his back and squat despondent for half an hour before applying himself to the problem afresh. If the baffled designer turns down his drawing and forgets it for a day and then seizes on the first impression he receives on uncovering it, he will often be able to make clear decisions which previously were impossible, and solve difficulties which twenty-four hours before were insoluble. He will also find, for reasons which are well understood but need not occupy us here, that if he honestly buckles to his job with full concentration; clear images and the brightest ideas will flash to his mind when it is occupied by other things and he himself is walking, conversing, or shaving. Our architect will also find that if he leaves his drawing-board, and sits



relaxed, and allows his mind placidly and idly to envisage the aspects of the problem which engages him, he will often awaken a freshness of invention and a clearness of vision which the intractable realism of set-square and scale seems to inhibit. The way of inspirations, great and small, is to strike us unexpectedly like a bullet, and often in the back and from an unknown direction.

Textbooks and what I have summarized as "pictures" have, however, their right uses. Textbooks, in an astonishing way, very rarely tell us what we want to know, and very rarely leave an architect's bookshelf; but by thorough acquaintance with what they *do* tell us we are equipped with a sound judgment to inform our discretion on points of construction. "Pictures," though they supply no solution to the particular problems which the designer encounters, serve, nevertheless, to richly furnish the imagination. The idle, luxurious, introspective enjoyment of such things warms up our fancy and stores our minds with motives, of which the most valuable are those which are unconsciously absorbed. An architectural effect memorized for future use is less perfectly the property of the mind than the assimilated mass of sub-conscious impressions from which it has been singled out, and which form the very substance and colour of our individuality. The other useful purpose served by textbooks and pictures is to help in polishing up and giving a scholarly, workmanlike finish to conceptions which have been already reduced to practical terms of building.

[To be continued]

## CORRESPONDENCE

### TRIBULATIONS OF EARLY PRACTICE

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Your correspondent "Ponderivo" gives many good reasons why architects of conspicuous ability so often fail to establish themselves as successful practitioners—while "Karshish" is inclined to blame the architect himself. My opinion is that "Karshish" is right. There is nobody to blame and no excuses are of any value when a man fails, be he architect, pawnbroker, or house and estate agent. If he succeeds—well—it is his own fault, too, and he alone must take the consequences.

What, however, seems most important is to arrive at a true definition of success and failure in architecture. Whether a man reaches the state of earning his bread and butter entirely from the proceeds of his own brass plate depends absolutely on how much bread and butter the man needs. If he needs little or only bread without the butter, then much time and money can be spent in acquiring work. If, on the other hand, his needs are greater and his tastes are such that he can be happy only in pleasant and decent surroundings, then I think he may find difficulty in making his "one-man show" a success. Most of his time will be taken up in "doing for" or "taking in the washing" from other architects. This is one of the greatest tribulations not yet touched upon by "Karshish." It is some of these other architects that let you down. They snap you up, but let you down if you don't keep a weather eye on them.

But, provided always you get your own way with them, and provided always you do not let them interfere with your own domestic happiness by starvation rates of pay and long hours, I am inclined to think that the "ghost" is just as great a success and I am sure is often a great deal happier than the so-called man of eminence.

A LAUNDRYMAN

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—The acute discernment and apt presentation of facts shown in these articles led me to expect from "Karshish" a different handling of the question as to why, of architects with the same attainments, some are successful and others not, which called forth the letter of "Ponderivo," with whom, in the main, the experiences of close upon forty years of "tribulations" compel me to agree. I have known several architects who were completely "able to handle opportunities" but to whom opportunities in the shape of jobs really worthy of their handling seldom came—their well-known ability and integrity notwithstanding—

and whose ceaseless search for work within the bounds of honourable professional procedure was rewarded, on the average, by a mere bread-earning existence. In such cases, of which there are many more than "Karshish" would seem to imagine, his observations on men "whom we feel would have made a success of anything and others who were doomed to failure" seem to me inapplicable.

There are well-known instances of men conspicuously successful in other careers who were in their earlier days more or less unsuccessful members of our profession; and the number of others not in the public eye who were "failures" as architects and left the profession in time to become successful in unprofessional occupations is legion. While not arguing that exceptional brilliance will not find its way to the top without adventitious aid, I submit that the want of success in the case of a capable architect will commonly be found to be intimately connected with his lack of wealthy or influential acquaintance and with the absence of interest in the question of capability so much evidenced by the building public. If the latter would, in their choice of an architect, exercise a modicum of the discrimination they exhibit in selection of their tailor or barber I believe the situation would be considerably improved.

A. W. W.

### PRESENT-DAY BUILDING CONSTRUCTION

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—May I be allowed to draw attention to sundry errors in the article "On Present-day Building Construction," in your issue for July 28.

In Figure 1.—The craftsman is "shooting" the edge, not paring it, he is not holding his trying plane correctly. The thumb of the left hand should be on the top of the plane and all the fingers on the sole.

In Figure 2.—The architrave is not held in a mitre template but in a mitre shoot, a mitre template is entirely different and is held in place by the hand for the purpose of guiding a chisel. The craftsman is using an iron smoothing plane although generally a block plane is used for this purpose.

In Figure 3.—A dove-tailed key is being fitted and not a clamp.

G. N. KENT

[We have submitted a proof of Mr. Kent's letter to Mr. William Harvey, the author of the article, who has sent us the following reply.]

SIR,—My critic states that the craftsman shown in an illustration to my third article on joinery "is not holding his trying plane correctly." In this he is quite right.

Any careful reader of my articles on joinery will agree with him, for the "correct" way to hold a trying plane with "the thumb of the left hand on top of the plane and all the fingers on the sole," was illustrated in my first article. A London student's unorthodox use of the trying plane was also illustrated, and it was interesting to find that a practical joiner in Yorkshire adopted a similar method, using a trying plane for the final paring down of the work. My critic is wrong when he says "the craftsman is 'shooting' the edge, not paring it." How can the critic possibly know?

The facts of the matter were as I described them, the point being that a joiner engaged on high-class work will sometimes prefer to use a trying plane in a somewhat unorthodox manner if he feels he can get satisfactory results. Both the student and the practical man did, in fact, manage the trying plane satisfactorily for their own special purposes, and in photographing and describing present-day building construction I have included these examples as well as the "correct" usages taught to the apprentice since they are freely departed from in practice.

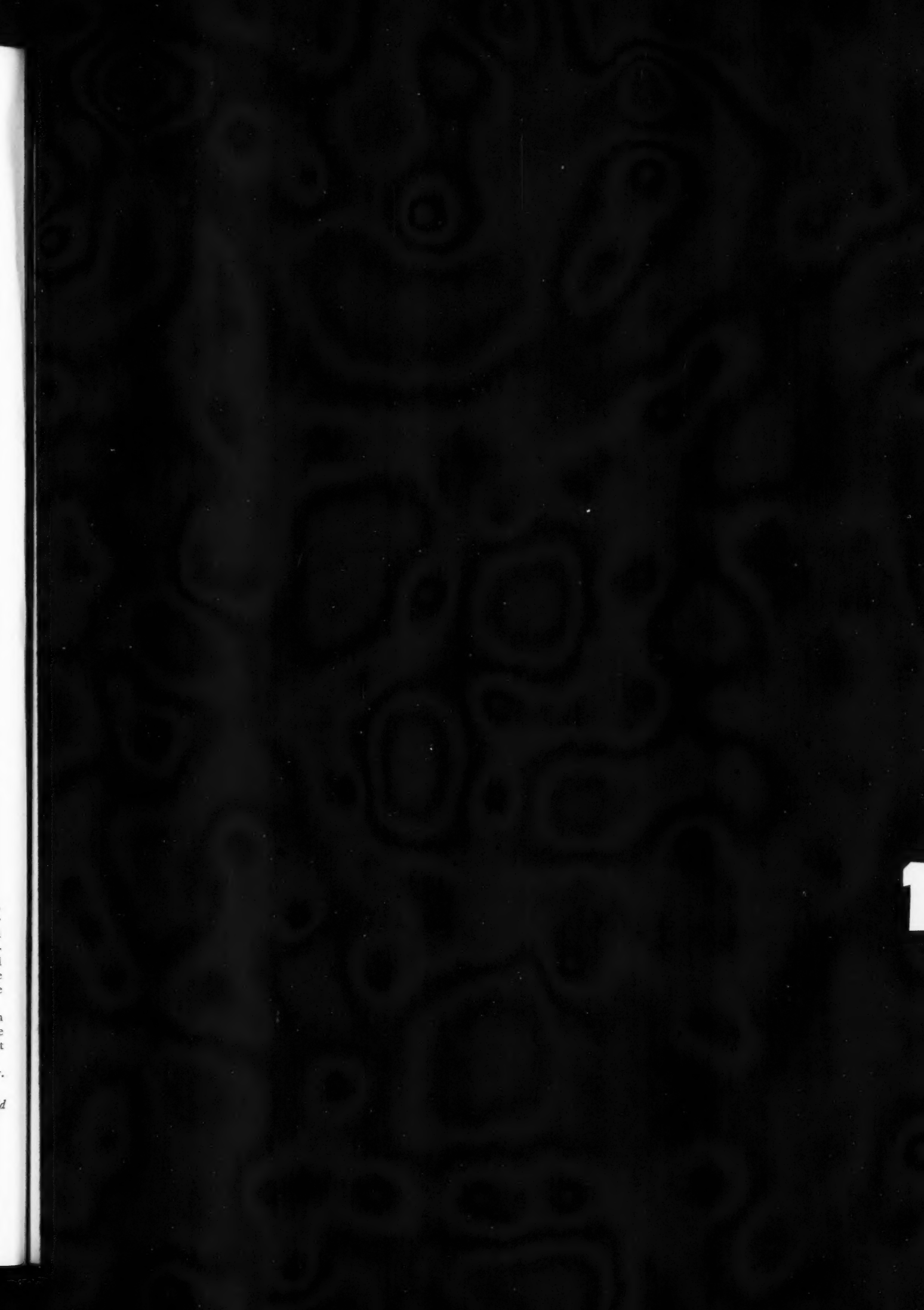
The local names of tools and operations have purposely been ascertained on the spot and, in the case of work at Gledstone Hall in Yorkshire, it is quite possible that the local name may not be that in use out of that district.

It is an error to suppose that the same names apply universally.

WILLIAM HARVEY

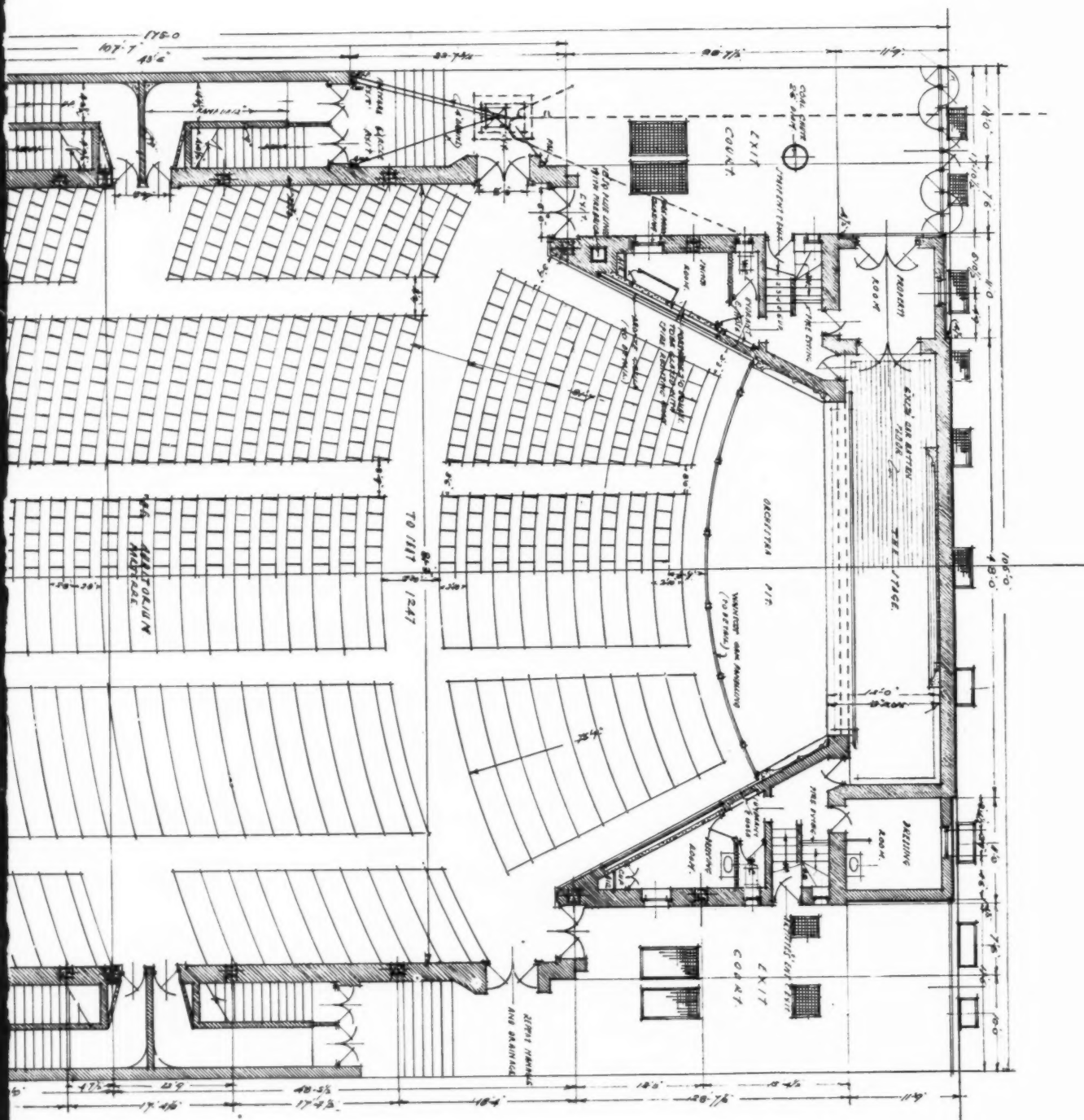
[Owing to pressure on our space several letters are unavoidably held over.—Ed., A.J.]













COMMISSION N°

A CINEMA THEATRE.

DRAWING N° 1

WORKING DRAWINGS SUPPLEMENT TO THE ARCHITECTS' JOURNAL FOR AUGUST 25, 1926



## BUILDING AND DECORATIVE TIMBERS

[ BY G. A. T. MIDDLETON ]

## I: GENERAL NOTES AND CLASSIFICATION\*

DURING the last twenty years, owing to circumstances which are fairly obvious and to which there is little need to refer, the forestry conditions of the world have changed to an almost revolutionary extent. The time has consequently arrived for reconsideration of the building and decorative timbers which are available for use in this country, if, indeed, such reconsideration is not overdue. Forty years ago, when the writer was a young man, it was customary to specify that pine timber for structural work should be from the ports of Memel, Danzig, or Riga, and that only heartwood was to be used. Before the beginning of this century (now over twenty years ago) these ports were no longer engaged in the timber trade, the forests from which they were supplied having become exhausted of timber-bearing trees. Considerable supplies, however, still reached this country from other parts of the Baltic, especially Sweden and Finland, and also from Archangel in Northern Russia, but smaller trees were being felled, and a certain proportion of sapwood had to be accepted as inevitable in all the larger scantlings. Still forest exhaustion went on, with insufficient reforestry of the denuded areas (both to an exaggerated extent during the war years); and now the European available reserves of sound structural pine timber are very small indeed. This, which is all well known and recognized, is said by way of introduction, as indicative of the need of this present investigation, which is already proving to the writer, even before he puts pen to paper, to be of absorbing interest, transcending that of anything previously undertaken by him; while it carries a solemn warning with it as to what must inevitably happen in other natural forest areas also if far-sighted measures are not taken in time by the Governments (many of them British) within whose territories these areas lie.

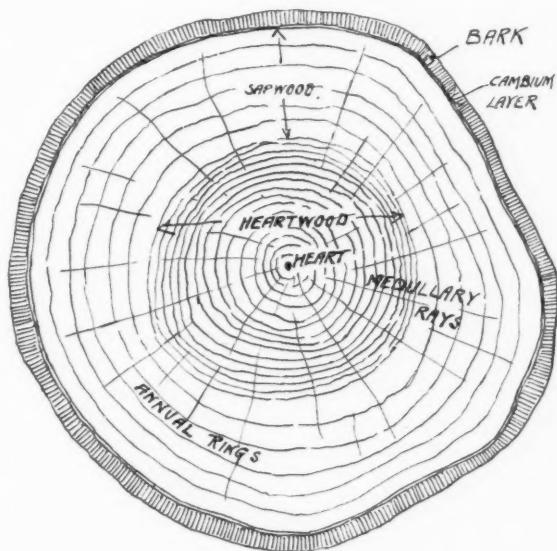
While economic conditions change, however, the method of growth of trees does not. Almost all—one may say "all" without much risk of contradiction—which produce timber large enough and strong enough for structural employment, or beautiful enough for decorative use, are *exogenous*, growing from the *heart* or centre outwards by the deposit of a new layer of wood each year just within the bark. This is accomplished by the ascent, during spring, of water carrying various minerals in solution, which the roots have gathered from the earth in which the tree grows, by way of the sapwood to the leaves. This sap is materially changed by exposure to light and air in the leaves, and in its new form of elaborated sap descends in autumn, by way of a ring of soft material lying just inside the bark and known as the *cambium layer*. As this descends it deposits various sugars, resins, gums, and oils, which it now contains, in the form of a new annual ring. This process is repeated year by year, and consequently

the age of a tree can usually be determined by counting the number of annual rings between heart and bark. Sometimes, however, owing to unusual weather conditions, two such rings may be formed in one year; and the warning may as well be given at once that many general statements in these articles, such as this, while made in good faith, are not to be taken as being universally applicable. Trees vary much from one another, not only in their natural characteristics, but according to climate, soil, and weather conditions—and even accidents. In the early years of a tree's life the heart is a soft pith and the annual rings are all of sapwood, the tree being known as a sapling. After a time (the time varying according to the kind of tree) the heart hardens, as do the rings nearer to it, ceasing thenceforward to carry sap, and being known as heartwood, and each year, as a new ring of sapwood is formed beneath the bark, so is the inner ring of sapwood converted into heartwood.

In most timbers the distinction between heartwood and sapwood is clearly marked by changed colour and a clearly seen closing-up of the multitudinous cells of which each ring consists, but in others it is scarcely discernible. In almost all cases the heartwood is considerably harder, stronger, and more durable than the sapwood, and it alone should be employed in high-class work—a counsel of perfection involving waste and rarely adhered to. In addition to the annual rings there are in all timbers (though much more easily recognized in some than in others) medullary rays, radiating from the heart to the bark, and serving to bind the rings to one another, and it is these which, in many cases, give the characteristic figure upon which the beauty of decorative timbers depend. The natural structure of a timber tree thus consists of a heart surrounded by concentric annual rings of heartwood, these being in turn surrounded by similar rings of sapwood, all bound together by medullary rays and enclosed by a strong skin of bark, attached to the inside of which is a soft cambium layer.

Owing to this structure every tree is liable to certain defects, and to these it is well that attention should here be drawn. The bark, valueless as timber, serves as a protective coating to the delicate cambium layer, injury to which is serious to the tree's health—so serious, that if a complete ring of bark be removed round the trunk, so that the cambium layer ceases to function, the tree will die, and timber cut from a tree thus killed will generally be brittle and comparatively valueless. Lesser injury to the cambium layer, however, heals as a rule without leaving more than a small weak spot in one or more of the annual rings, known as a *rhind gall*.

In the ordinary course, if a tree be left to grow to full maturity, and beyond, eventually few leaves appear, fresh layers of sapwood cease to be made, the whole section becomes heartwood, and the actual heart decays—and the tree becomes hollow. It is difficult to obtain merchantable timber from such a tree, and all trees should, therefore, be cut in their prime.



TYPICAL SECTION OF TIMBER TREE.

\* For the use of the photographic illustration the author is indebted to the American Pitch Pine Export Co. through the U.S.A. Consul General.





Cross section of Pitch Pine, showing slight shakes along medullary rays.

All timbers are liable to longitudinal splits, known as *shakes*, both radially along the medullary rays and (fortunately more rarely) along the annual rings. These often occur in the growing tree, but develop, or at least declare themselves, mainly shortly after felling. They rarely extend far from the butt ends, and so can be cut away without serious loss, while by careful cutting there need be scarcely any if the shakes be few and merely radial—unless, indeed, they be twisted longitudinally. Cup-shakes (along the annual rings) may, on the other hand, be very serious, and render timber valueless. *Knots*, or the roots of small branches, are also prevalent defects in many timbers, especially in the immature, and may be quite serious, especially if they be loose or dead, while in any case they inevitably break continuity of fibre.

So far as these articles are concerned, it is scarcely necessary to pursue further the consideration of common defects in timber, or to deal exhaustively with its scientific classification, especially as it is proposed to follow one of which geography is the basis, dealing in turn with timbers which grow in Europe, North America, tropical America, and the West Indies, Africa, India, and the Antipodes—though in what sequence it is difficult to decide yet. Still, it is impossible to avoid reference at the outset to the usual broad classification into two groups—the hardwoods and the softwoods, so called, though in actual hardness they overlap. More properly, they are the timbers from leaf-bearing and spike-bearing (coniferous) trees respectively.

The hardwoods grow mainly in sub-tropical districts and the warmer temperate districts of the globe. Those from the hotter districts, such as the eucalyptus of Australia in its many varieties, as well as teak and mahogany tend, in growth, to be “ever-greens,” without very strongly marked annual rings or medullary rays. These characteristics, on the other hand, are extremely pronounced in the oaks and other timbers of the temperate zone, which shed their leaves annually.

The softwoods grow almost wholly under arctic and cool temperate conditions, and their timber displays strongly-marked annual rings, each consisting of two parts, one of which is dark and hard, while the other is light coloured and soft. The medullary rays, though present, are scarcely discernible.

This is easy enough to write down and to comprehend, but in practice it is often extremely difficult to distinguish one timber from another, not only of the same but of wholly different species; and the reason is obscure. Not only do climate and soil have their influence, but pure “sport” also seems to play a sometimes quite conspicuous part.

[To be continued]

## LITERATURE

### ARTIFEX

BETWEEN the jeremiads of the die-hards and the hirsute iconoclasm of the new Bloomsbury one is sometimes tempted to regard art as a platonic mythus for the edification of the immature. Theory counterblasts theory, and their only point of contact is the anathema they hurl at a plain statement of likes and dislikes. Mr. Gloag's trenchant little thesis comes, therefore, not amiss in reminding the purists that good art is based on work and not on talk. The fault of our civilization, he says, is two-fold; machinery demands an idiom alien from that of individual production, while the would-be craftsman shirks the responsibility. Craftsmanship has become the prerogative of “frowsty, effeminate men in carefully careless garments, posing as master-craftsmen to a room full of girls in art jumpers.” Words that, one hopes, may shatter a few hot-houses.

But Mr. Gloag does not let pessimism stop there. Under his mordant pen dree a Tolstojan weird of dissolution and decay from the first Elizabethan who imported a console *à la* Henri II to the lazy facility of antique-faking. He is just as unkind to the craze for “period” as to the dilettante. What is needed is a stronger realization of the functional possibilities of machinery as a “super-tool.” If electric light bulbs and typewriters can be frank about their origins, why not a frankly metal furniture? Mr. Gloag's diagnosis of our ills seeks their root in the short cuts of mass-production and the physical inertia bred by the insistence of trade unionism on hours and wages to the exclusion of production. “In time, trade unions will perhaps realize that bad workmanship, bad workmen . . . are just as damaging and uncivilizing as an underpaid fourteen-hour day.” That is a badly-needed warning, but it fails to make our flesh creep. When all is said and done, it is unreasonable to expect the traditions of all human history to yield unconditionally to a revolution that is not two centuries old. It is perfectly true that vigorous crafts are the only basis of a virile art; it is no less true that art is a symptom of craftsmanship, and, as Mr. Gloag indicates, the ideal of modern craftsmanship should be machine-mastery. If he has any doubts as to the vitality of that ideal, let him consider some of our railway engines, bridges, and liners, and England's real artistic leadership will be manifest. What is really to be feared is slavery to a machine-made tradition; already a French contemporary has inveighed against the putting of funnels into oil-driven ships, and we have to hand a lament on the sacrifice of sincerity to romanticism in a travelling crane. *Eheu fugaces!* There is no time for bewailing the persistence of Chippendale.

C. CAMPBELL CROWTHER

*Artifex, or The Future of Craftsmanship.* By John Gloag. *To-day and To-morrow* series. London: Kegan Paul, Trench, Trubner & Co.

### OLD MASTER DRAWINGS

This quarterly is edited by Mr. K. T. Parker, of the British Museum, with the assistance of an imposing Executive and Consultative Committee of experts, including such well-known authorities as Messrs. Campbell Dodgson, Max Friedlander, Arthur M. Hind, and Charles Ricketts.

From the contents of its first number one gains the impression that it intends to appeal only to a very special section of the public, and, in fact, less to the collector than to the student of “Kunstgeschichte.” Nearly all its twenty plates illustrate drawings that can only be “attributed to” various masters with more or less certainty, and very few of them are of first-rate quality or interest. In point of fact, doubts remain in one's mind even when the genuineness seems to be accepted by authorities. It would, for example, need Rembrandt himself to authenticate the attribution of the pen and bistre drawing, “Rembrandt in his Studio,” and



even that would not make it any less poor in quality. Only very few of these illustrations are likely to claim special appreciation on purely æsthetic grounds. There is, however, a very beautiful "Study of Drapery" given to Lorenzo di Credi; a sound and workmanlike "Study of the Nude," attributed to a little-known contemporary of Rembrandt, Jacob Backer; and the only thrilling discovery here, a fantastic Alpine landscape ascribed by Mr. Parker to a pupil of Altdorfer—Wolfgang Huber. Of this he says: "To appreciate fully the merits of this drawing it is essential to see the colour effect of the original"—and comes to the conclusion that it is "one of the most surprising of its kind in the whole field of the Early German school."

Unless this magazine is able to provide more discoveries of this quality the circulation is likely to be limited to art-historians, especially as the price is none too moderate.

HERBERT FURST

*Old Master Drawings: A Quarterly Magazine for Students and Collectors.* No. 1. June, 1926. B. T. Batsford, Ltd. 5s. net.

#### THE STRESS ANALYSIS OF BOW GIRDERS

This is a pamphlet issued by the Department of Scientific and Industrial Research, and forms Technical Paper No. 1 in Building Research. A bow girder is a girder curved in plan and fixed at the ends, so that the load carried tends to twist the girder and involves some very special calculations. Ever since the Haymarket accident with a girder of this kind many years ago there has been a strong feeling of doubt and insecurity, while the necessity for such a girder at the rounded angle of a corner building made its use imperative. Many inquiries had been received on this subject from time to time, and the authors of the paper voluntarily undertook to look into the problem. They say that a girder of this type must be firmly fixed at each end, and the reactions then consist of a bending moment, a shear, and a torque; similarly the resultant action at every section consists of three corresponding terms. The paper is divided into two parts: the first gives the theoretical analysis, while the second is devoted to a description of the methods for solving the equations, with worked-out examples. As the analysis involves the use of the calculus, the theoretical part will be passed over by the majority of architects, and they will be disappointed that the practical part is equally beyond their ken. What they would like is an actual case worked out showing how to find the required section of the girder, the variation of section, if any, length of bearing surfaces, top weight on ends, and how to get it, etc.

*The Stress Analysis of Bow Girders.* By A. J. Sutton Pippard, M.B.E., D.Sc., and F. L. Burrow, M.Sc. London: H. M. Stationery Office. Price 1s. 3d. net.

#### STONE DECAY AND ITS PREVENTION

An authoritative book upon this subject is of the greatest possible service to architects, and upon the biological side of stone decay Mr. J. E. Marsh can speak with authority. His description of micro-organisms converting ammonia into nitrate below the surface of the stone and his advocacy of a process of sterilization based principally upon cleanliness are both admirable and practically useful. The decay which takes place in the sheltered portions of stone buildings under projecting cornices and string courses has hitherto been a puzzle, and the discovery of the combined effect of organic and inorganic chemical action in assisting disintegration in places where attrition is impracticable has certainly added to our knowledge of the subject. The fact that excessive alkalinity renders soil sterile has been instanced as a parallel to the possible effect of alkali in sterilizing the superficial particles of stone, and the age-old practice of lime-washing stone surfaces is referred to favourably, particularly where the lime contains alkalies of potash and soda which remain effective after the lime has lost its own alkalinity by carbonization. The author's advocacy of lime-wash is not, however, over stressed; he quotes against this time-honoured practice the opinions of Wordsworth and Sir Joshua Reynolds, who objected to it on artistic grounds,

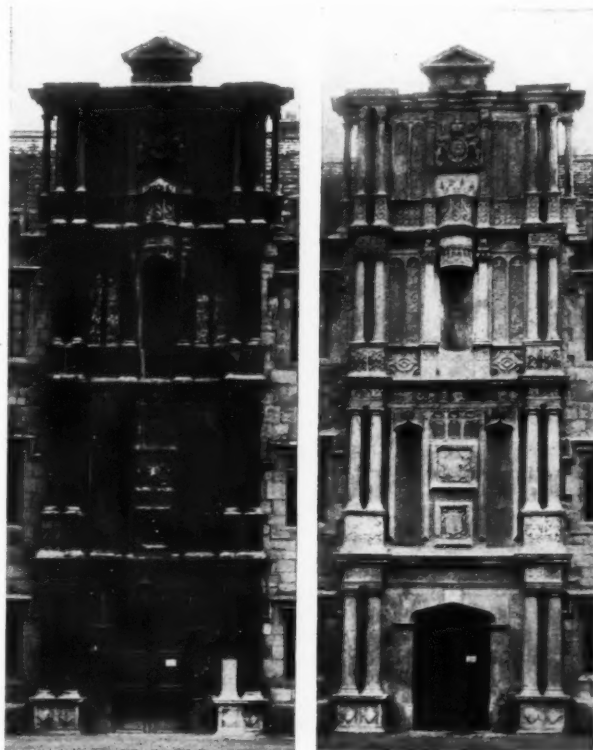
and adds that "Lime-wash to be effective has to be renewed." A defect which it shares with all other forms of treatment.

The least satisfactory part of the book is that in which the author appears to belittle the wisdom of the quarryman and the mason who insist that stone is more liable to endure when laid upon its quarry bed and is not face bedded with its laminations vertical and parallel with the face of the wall. Having found that some cylindrical specimens of stone exfoliate in cylindrical sheets he explains this exfoliation by nitrification. "The conversion of ammonia into nitrate at a uniform depth flakes off the stone in leaves of a uniform thickness whatever the conformation of the surface." Without doubting the correctness of this explanation in those cases where it applies, it must be remarked that in a great many cases the exfoliation is not concentric, but takes place far more freely on the side where the vertical laminae of the stone are exposed to the weather. Face bedding is certainly harmful. Some interesting figures are given for the effects of frost on stone, but here again the author minimizes the disintegrating effects of bursting pressure. The sentence, "But it is doubtful if good uniform stone, without cavities in which water can collect in some quantity, suffers any harm from frost" sets one wondering where, in this imperfect world, this admirable material is to be obtained in quantities larger than are needed for the tests of the laboratory and the microscope. Frost certainly plays a large part in the actual disintegration of stone buildings, whether laboratory tests confirm the fact or no.

The neglect of the practical side of the subject and of all reference to pressure and mechanical movements of buildings as causes of stone decay are grave defects in a volume which contains much instructive matter, and the author's sneer at the "self-styled practical man" is altogether uncalled for. Observation of the behaviour of large masses of material in practice is every whit as scientific as observation of small quantities of material in a laboratory. The two processes are complementary, not antagonistic.

WILLIAM HARVEY

*Stone Decay and its Prevention.* By J. E. Marsh. Oxford: Basil Blackwell. 1926.



Garden Gate, Merton College. Before and after treatment. [From *Stone Decay and its Prevention*.]

## SOCIETIES AND SCHOOLS

*The Garden Cities and Town-Planning Association*

The Tours which the Association have so successfully conducted during the past two years are being continued each spring and autumn. The tour this autumn will be to the Midlands, and will include the cities of Leicester, Nottingham, Sheffield, and Rotherham. The party will leave London on Friday evening, September 17, and after a visit to Leicester will spend the week-end in Nottingham. This is a city which has many attractions for such a visit. The tour will be continued to Sheffield and Rotherham, and visits will be made to several colliery villages for an inspection of the housing conditions both pre-war and post-war in those villages. The tours are arranged to meet the needs of architects, surveyors, officials, and members of local authorities, and persons who are interested in the subject of housing, town planning, and civic development. The Association's tours have the additional advantage of being arranged in conjunction with the technical officers and members of the various Corporations, and this means that detailed and expert information is obtained on the tours. A full programme, and particulars as to cost, etc., will be sent to any readers on application to the Secretary, 3 Gray's Inn Place, London, W.C.1.

*Cardiff Technical College*

The following awards have been made as a result of the sessional examinations at the School of Architecture at the Technical College, Cardiff. Professor A. C. Dickie, M.A., F.S.A., A.R.I.B.A., was the external examiner.

Fifth Examination: For the diploma awarded at the end of the five years full-time (day) course. Individual students who are awarded this diploma are exempted from the R.I.B.A. final examination with the exception of the subject of professional practice. B. W. R. Thomas, L. Monroe, and W. O. Oakley, diplomas awarded on interim reports, 1925-26; J. B. Wride, diploma with distinction; V. Banks, H. A. Barton, and F. W. Harper, diploma.

Fourth Examination: H. Bull.

Third Examination: For the certificate awarded at the end of the three years full-time (day) course, exempting from the R.I.B.A. intermediate examination. P. G. Budgen, certificate with distinction.

Second Examination: A. E. Jewell, F. W. Honeywell, Miss O. E. Price, C. J. Bartlett, and J. Lewis.

First Examination: F. W. Aitken, J. W. Bishop, and C. A. E. Thatcher.

## NEW INVENTIONS

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

## LATEST PATENT APPLICATIONS

- 19555.—Buchmann, E.—Decorating walls. August 7.  
19170.—Limple, W.—Collapsible trestle, etc. August 3.  
19448.—Simmonds, C. S.—Paint mixer. August 6.

## SPECIFICATIONS PUBLISHED

- 256017.—Green, F. M.—Chimney-pieces of enamelled slate.  
256071.—Law, J. A.—Gratings for flooring and like purposes.

## ABSTRACT PUBLISHED

- 253177.—Turner, Ltd., S. F., and Dainty, A. J.; Wellington Works, Dock Lane, Dudley, Worcestershire.—Stoves.

## AN ARCHITECTS' SWIMMING MATCH

A swimming race between teams representing the offices of Sir Edwin Lutyens and Sir Herbert Baker took place at Great Smith Street baths. It resulted in a win, after a very thrilling race, for Sir Herbert Baker's office by about a foot! There were several supporters from both offices to cheer the swimmers, but the interest was not confined to these alone, for total strangers who happened to be in the bath at the time were carried away by the excitement and cheered as lustily as those personally known to the teams! The respective teams, in order of swimming, were:

## SIR E. LUTYENS:

W. A. S. Lloyd  
C. T. Ayerst  
F. E. Bennett  
E. A. H. MacDonald  
F. Greenwood

## SIR H. BAKER:

T. Harley  
L. J. Bathurst  
E. Davies  
A. Slade  
H. B. L. Horner

A return match is being arranged.

## COMPETITION CALENDAR

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

September 30. Cenotaph for Liverpool. Assessor, Professor C. H. Reilly, O.B.E., M.A., F.R.I.B.A. Premiums, first, £200; second, £150, provided he is an ex-Service man; third, £100; fourth, £50. The author of the selected design will be paid a commission of 500 guineas, which will include the premium of £200 above-mentioned, and, in addition to preparing all the necessary working drawings and superintending the erection of the work, he will be required to superintend the erection of a full-size wood and plaster model of his design on the site. Particulars from the Town Clerk.

October 30. New Offices for Scottish Legal Life Assurance Society, Bothwell Street, Glasgow. Assessor, Mr. John Keppie, A.R.S.A., F.R.I.B.A. Particulars from Mr. William Watson, Secretary, 84 Wilson Street, Glasgow, before August 21. Deposit £1 1s.

*The conditions of the following competitions have not as yet been brought to the notice of the R.I.B.A.*

No date. Conference Hall, for League of Nations, Geneva. 100,000 Swiss francs to be divided among architects submitting best plans. Sir John Burnet, R.A., British representative on jury of assessors.

No date. Incorporated Architects in Scotland: (1) Rowand Anderson Medal and £100; City Art Gallery and Museum; (2) Rutland Prize (£50) for Study of Materials and Construction; (3) Prize (£10 to £15) for 3rd year Students in Scotland; (4) Maintenance Scholarship, £50 per annum for 3 years. Particulars from Secretary of the Incorporation, 15 Rutland Square, Edinburgh.

No date. Town Hall Extension and Public Library Building for the City of Manchester. Preliminary competition open to architects of British Nationality. Particulars from Mr. P. M. Heath, Town Clerk. Deposit £1 1s.

January 3, 1927. Academy, Perth. Open to Architects practising in Scotland. Assessor, Mr. James D. Cairns. Premiums: £100 and £50. Particulars from Mr. R. Martin Bates, Education Offices, Perth. Deposit £1 1s.

## ANNOUNCEMENTS

Mr. A. Seymour Reeves, L.R.I.B.A., quantity surveyor, has moved to 9 Lascelles Terrace, Eastbourne.

Mr. David Moed, architect, has moved to 132 Avenue de Belgique, Antwerp, Belgium.

Mr. N. A. Whitham, architect and surveyor, has moved to 10 Renent Street, Barnsley. Telephone: No. 488.

Mr. Thomas Graham Abercrombie, sixty-five, of Redholme, Castlehead, Paisley, architect, of Messrs. Abercrombie and Maitland, left personal estate in Great Britain to the gross value of £26,695.

## OBITUARY

Mr. C. J. Fox

The death has taken place at Halifax of Mr. Charles James Fox, a well-known local architect, who was formerly head of the firm of Messrs. Jackson and Fox, of Rawson Street. Mr. Fox had reached the age of eighty-six.

Mr. Fox was the son of Mr. W. Fox, joiner and builder, of Bolton Brow. The family originally came from Sowerby, where Mr. Fox's grandfather was a farmer and cow-doctor at Saltpie Farm. Mr. C. J. Fox was educated at Heath Grammar School (1849 to 1856), and served his articles as an architect and surveyor with Mr. Charles Child, Halifax, with whom he remained until Mr. Child's death in 1862. Afterwards Mr. Fox was managing clerk to the late Mr. B. W. Jackson until 1870, being then taken in partnership. Mr. Jackson retired in 1905, and Mr. Fox carried on the business with his son, Mr. C. E. Fox, until 1919, when the father retired. During the later years of his practice Mr. Fox devoted himself chiefly to the surveying side, more particularly for assessment and arbitration work. He was a Fellow of the Surveyors' Institute, and had been honoured by election to the chairmanship of the Yorkshire section in 1908. He was also a member of the Yorkshire and North of England Land Agents' Association, of which he was president in 1911. For thirty-five years he was rating surveyor to the Dewsbury Union, and from 1905 he was one of the surveyors in connection with dilapidations for the diocese of Wakefield. He was a valuer to the Halifax Corporation from 1865 to the taking over of the assessments by the Poor Law authorities.

## TRADE NOTES

The offices of Messrs. E. J. Parlanti & Co., Ltd., at 110 Victoria Street, have been closed, and all communications should be directed to their head office at Beaumont Works, Beaumont Road, West Kensington, where all future business will be transacted.

The British Reinforced Concrete Engineering Co., Ltd., having recently removed their head office and works from Manchester to Stafford, have now opened a branch office for Lancashire at their old Manchester address, No. 1 Dickinson Street. This will take the place of the Liverpool office, which was previously used as the branch office for Lancashire.

The Tilling-Stevens motor fire appliances will in future be marketed in association with the Pyrene Co., Ltd. A complete line of motor appliances has been developed by Messrs. Tilling-Stevens, including motor fire engines of capacities varying from 600 g.p.m. to 200 g.p.m., trailer pumps of 250 g.p.m. and 150 g.p.m., and all kinds of fire brigade utility vehicles. In addition there is the Tilling-Stevens all-power turnable ladder, operated by electric motors.

In order to meet the demand of a section of the public for a small boiler with a large open fire, Messrs. Wood, Russell & Co., Ltd., have placed upon the market a modification of their "Sentry Minor." This new boiler, called the "New Sentry Minor, No. 0," is similar in heating capacity to the "Sentry Minor," which has been on the market for some years. It also has the hot plate for cooking purposes, but instead of the fall-down door the new boiler is provided with double-hinged doors, which give a very much larger area of open fire. Another feature of the new design is a larger and heavier form of inner grate, the upper portion of which falls down to form a trivet. There is also an ashpan attached to the ash door. The latter is made in such a way that the action of closing the ash door scoops the ashes from the base into the pan. The new boiler is also adapted to take the Sentry Oven No. 0. A full range of boilers, ovens, and gas fires can be seen at the showrooms of the manufacturers, 34 Oxford Street, W.1.

The soundness of the design and construction of the "Janus" door springs and checks, made by Messrs. Smith, Major & Stevens, Ltd., of Northampton, has been proved by a user in an interesting

manner. A "Janus" spring was recently sent to the firm for repair, and from the number on the cover plate it was obvious that the spring was over 50 years old. Interest being aroused by this discovery, inquiries were made of the owner to learn whether any previous repair had been made. These inquiries elicited the fact that the spring had not been touched in any way throughout its half-a-century of service. Messrs. Smith, Major & Stevens have been manufacturing "Janus" springs for over a century.

Electric bells, indicators, contact pushes, wires, batteries, and sundries of every description are shown in a new catalogue just issued by Messrs. Gent & Co., Ltd. Among the most interesting of the firm's specialities are their second-call indicators. These are created to form a most effective system for controlling hotel or steamboat service. The outstanding feature of the system is that the management of the hotel is not disturbed every time a bell rings, but only when neglect occurs. The master indicator is placed in the office, and is only operated if any room has to ring twice for attention. This system is in use on the s.s. *Lusitania*, and in the Palace Hotel, Buxton, etc. The electric bells shown in the catalogue are provided with the firm's patent untwistable contact. With this fitting the usual side locking screw which locks the contact screw in position after adjustment also locks the contact pillar itself in the adjusted position so as effectively to prevent it from turning on its axis, or being forced out of position by the vibration of the bell, even if its axial or central fixing screw becomes loose. The catalogue contains every conceivable electrical installation and accessory for the office, institute, or industry.

The success achieved by the use of Cabot's Quilt for sound deadening, heat and cold insulation, and acoustical work in every type of building, ranging from the music studio and concert hall to the cottage, is at once apparent by a perusal of the many illustrations published in the new booklet just issued by Messrs. Huntley and Sparks, of the important buildings in which it has been installed. In this country the buildings include, among many others, Kemsley Village, Sittingbourne, Kent (Thomas Adams and Longstreth Thompson, architects); Barrington Court, Ilminster (Forbes and Tate); the hall of the National Institute for the Blind (Claude Ferrier); service flats in Mansfield Street (Wills and Kaula); Canford Cliff Hotel, Bournemouth (H. E. Hawker); Carshalton Hospital (Troup and Hooper); the Eleventh Church of Christ Scientist, London (Oswald P. Milne); London School of Economics (Trehearne and Norman); the showrooms of John Brinsmead and Sons, Ltd. (T. P. Bennett and Son); Russell School, Ballards, near Croydon (Sir Aston Webb and Son); Adelaide House, London (Sir John Burnet and Partners); and the lecture hall of the R.I.B.A. (Hope Bagenal, acoustical consultant). Cabot's Quilt was invented thirty years ago. It is a felt matting of eel grass stitched with strong, tough "Kraft" paper. The permanence of eel grass for insulation purposes is proved beyond question by the fact that it was used in seventeenth- and eighteenth-century houses, and has since been found to be in a perfect state of preservation. A case in point is the Old Pierce House, Dorchester, Mass., built in 1635. In 1893 the walls were opened for repairs, and they were found to be stuffed between the studding with eel grass, which was found to be perfect in every way after two and a-half centuries! The Babcock House, Milton, Mass. (built 1723), and other old houses in Connecticut, Nova Scotia, etc., have been found to be insulated in the same way.

## THE NEW BLOCK AT LADY MARGARET HALL

The general contractors for the new buildings at Lady Margaret Hall, Oxford, illustrated on pages 233 to 236, were Messrs. John Alfred Hunt (Hoddesdon), Ltd., and the clerk of works, Capt. W. H. Mercer. The contract price was £19,974. The subcontractors were as follows: Ames and Finnis, tiles; Matthew Hall & Co., central heating, plumbing, and sanitary fittings; Candy & Co., grates; Tredegars, Ltd., electric wiring and electric light fixtures; Charles Smith & Co., door furniture.



## READERS' QUERIES

## PRISON FITTINGS

*W. M. A. writes: "Please give me the names and addresses of firms specializing in fittings for modern police cells. The fittings required include special w.c. fittings, food hoppers in cell doors, inspection eyes in cell doors, bull's eye lights in cell walls, special locks to cell doors, sheet iron or steel covering for cell doors; and frames, steel windows, inlet and outlet ventilation etc."*

Messrs. Comyn, Ching & Co., deal extensively with the Office of Works with regard to this sort of material, and would probably be able to supply you with everything that you require with the exception of special w.c. fittings. These you would probably get from such firms as Doulton's or other big sanitary ware manufacturers. As regard locks, Messrs. Charles Smith & Co., of Birmingham specialize particularly in locks for this purpose, and we suggest that you get into communication with them.

## DRY-ROT AND ITS ELIMINATION

*A. L. writes: "What is dry-rot and how is it caused? Is there a timber which may be claimed to be free from infection? How can dry-rot be eliminated?"*

Dry-rot is a vegetable fungus of which there are many types, that most frequently met with being *Merulius lachrymans*, which generates its own moisture. All types need moisture, and a certain amount of heat to stimulate growth, and although lack of ventilation is frequently to blame, it is not always to this alone that dry-rot may be ascribed. They all feed upon the timber, and eventually reduce it to a friable and useless mass. The *Lachrymans* type may easily be distinguished by its fluffy, grey-white growth, which, however, differs according to the rate of growth: the quicker the growth, the stronger and heavier the fungus. This type, and some others which feed from the outside of the timber are frequently to be found travelling along pipes, enclosed girders, etc., in search of other feeding places, and they will also grow between the coats of plaster and

through the joints of masonry and brickwork.

Few timbers can be stated to be free from risk of infection; the belief that oak and similar hardwoods are free is a fallacy. Some timbers are only affected by a type which is an internal feeder, that is, a fungus which, once obtaining an entry to a piece of timber, will continue to feed from the inside until all is consumed.

Treatment must be drastic, whatever type of rot is encountered. First, all affected timber should be removed, and immediately burnt in the open. Secondly, careful search should be made for traces of the external feeding types—which are always visible by their fungus—in the surrounding joinery, brickwork, plaster, and masonry, every effort being made to find the limit of the growth. It is a good plan to continue the search for a distance of at least 5 ft. beyond the point at which traces of the fungus are, or were, visible.

Naturally, all other affected material which can be removed, such as plaster and timber, should be taken away, and the remaining surfaces carefully and thoroughly treated. Among the ways in which this can be done are the following:—

1: By close contact with a hot flame, preferably not less than 800° F., and from an oxy-acetylene jet if possible.

2: By washing with a strong solution of mercurial chloride. This is virulent poison, and should be used with great discretion. The solution may be made up in hot water or proof methylated spirit, and should be applied with a grass brush to every nook and cranny. The workers should wear gloves and overalls. When this has been done the sound timbers which remain should be given two coats of Carbolineum or Jodelite, or similar wood-preserved applied as hot as possible, but in these cases ascertain the flash-point of the material used, and keep the temperature below same.

New timbers should be treated similarly except where, on joinery, there is danger of the preservative penetrating to the face. In such instances, as, for example, framed and panelled linings or dadoes, the backs of the framed work should be given two coats of good red-lead paint. Plasterwork can be made good in the ordinary manner.

It is useful to note that internal feeding varieties of dry-rot cannot travel far from timber to timber, and that a space of 2 in. is sufficient "insulation." If, therefore, a timber which is thus far from an infected piece is struck with a hammer and rings true, it may be safely assumed to have escaped infection.

When making good, provision should be made for the free circulation of air about all timbers. Framed linings and dadoes, etc., should invariably be provided with small ventilating gratings, either to the open air, or to the apartment. Small square-mesh gratings, let in flush, can be obtained, and a useful and inconspicuous type and size is rectangular, about 2½ in.

by 1½ in., and with  $\frac{3}{16}$  in. square mesh. In bad cases, or where the architect is in doubt as to the type or treatment, it is wise to consult a specialist, as one small spore left intact, or a fault in making good, may mean a repetition of the trouble.

E. C. I.

## ANCIENT LIGHTS

*H. C. writes: "I am altering a building and from the plan [not reproduced] you will see that I have a line with ancient lights. Is it possible for me to move the line so as to include the passageway and still retain the right of light? The owner of the adjoining land will not sell."*

An owner of ancient lights may bring forward the wall in which the windows are (see Parry's *Easements*, page 101), without losing his rights, but he must take no more light than he did before. It would certainly appear that by moving your windows across the passage to the extreme boundary of your property, you are increasing the area over which you take light from your neighbour's property, but I am very doubtful whether this is sufficient to constitute a legal "enlargement of the easement" or not. It may save after-friction if you consult your neighbour before doing anything and take care you have accurate measurements taken of the present lights before they are moved.

F. S. I.

## THE ARCHITECTURAL TREATMENT OF STONE MULLIONS

*E. writes: "Where stone mullions are not all the same thickness, but flush inside, as at South Wraxall Manor, to cite an example, where they are all grooved, what other means are there of treating the broad flat of the wider mullions on the inside to take off the heaviness?"*

The apparent heaviness of the wider stone mullions is most effectively relieved by giving them a breadth in proportion to the other flat fillets and mouldings that will be seen in conjunction with them. The mullions, little and big, are really borders in half-tone to the high light of the window opening, and should form a pleasing network of dark on the light. The breadth of the mullions should be settled by experiment, by means of a full-size cartoon, very much in the same way as a mount and frame are selected to suit a picture. If the breadths of the mullions are already settled, the wider ones may be slightly modified in effect by chiselling a draughted margin on each of their edges or by ship carving a band up the centres of their faces. As the carving will be seen in the worst possible light by day it should be of a simple character, though effective bold projections and crude, deep sinkings are liable to become dust traps. Apart from this objection, the Byzantine dentil illustrated in Ruskin's *Stones of Venice*, or the billet mould of a Norman string-course might be used to break up the width of the wider mullions.

W. H.

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



## THE WEEK'S BUILDING NEWS

*Electricity Extensions at Hoxton*

The electricity sub-station at Evelyn Street, Hoxton, is to be extended.

*Housing at East Ham*

Thirty-eight municipal houses are to be built in High Street, East Ham.

*More Houses for Margate*

At Margate plans have been passed for the erection of twenty-six houses and bungalows in various parts of the town.

*Housing at Grantham*

It is proposed in Grantham to complete the Council housing scheme by building another thirty houses, making 120 in all.

*Enlargements at a Hampstead School*

The Henrietta Barnett School at Hampstead Garden Suburb is to be enlarged at a cost of £25,000.

*Housing at Eastbourne*

The Eastbourne Corporation proposes to build forty-four houses at Hampden Park Garden Suburb.

*A Concrete Jetty for Greenwich*

A new concrete jetty is to be constructed at Tunnel Avenue for the Greenwich Borough Council at a cost of £17,900.

*A New Coastal Road for Kent*

The Kent Council has approved the Ministry of Transport's scheme for a new coastal road from Faversham to Whitstable.

*A Cinema for Brechin*

A cinema is to be built at Brechin on a site having frontages on High Street and Braih's Close.

*A New Cinema for Bristol*

At an estimated cost of £55,000, a cinema is to be built in Castle Street, Bristol. The architect is Mr. W. H. Watkins, F.R.I.B.A., of Bristol.

*A Cinema for Manchester*

A cinema is to be erected in Higher Broughton, Manchester, at a cost of £30,000. Messrs. Gray and Evans, of Liverpool, are the architects.

*Another Epsom Housing Scheme*

The Epsom Rural District Council is considering the adoption of a further housing scheme in Ashstead. It is proposed to erect 100 houses there.

*The World's Largest Concrete Spans*

What are claimed to be the largest concrete roof spans in the world are to be incorporated in Glasgow's new Kelvin Hall, which is being built to replace the Kelvin Hall burned down a year ago. Each of the spans will measure 110 ft.

*Houses Approved at Wednesbury*

The Ministry of Health has approved of a proposal of the Wednesbury Town Council to erect sixty-four houses on the Churchfields estate at an estimated cost of £28,435.

*A Housing Scheme for Manton*

At Manton, near Worksop, the Wigan Coal and Iron Company has decided to proceed with the erection of 230 houses.

*Improvements at Harrow Weald*

Extensive main road improvement schemes are to be carried out at Harrow Weald at an estimated cost, including payments for land, of £36,187.

*A Housing Scheme at Edwinstowe*

At Edwinstowe, in the new Nottinghamshire coalfield, a housing scheme is projected comprising 956 houses, and including a school, a sports ground, and an institute.

*Housing at Foleshill*

The Foleshill Rural District Council has passed plans for eighteen houses in Longford Road, Foleshill. The Council has also decided to proceed with the reconstruction of Bulkington Road, Shilton.

*Housing at Thornliebank*

The District Committee of Upper Renfrewshire is about to proceed with the erection of forty-eight houses of two and three apartments, suitable for the working classes, in Main Street and Summerlea Road, Thornliebank.

*The New Clyde Bridge*

The Ministry of Transport has approved of the Motherwell Bridge and Engineering Co.'s offer and design for the new Clyde Bridge on the Hamilton-Motherwell road. It is to replace the present structure, an old stone arched bridge of five spans.

*Improvements at Mitcham*

The Minister of Health has directed that the public inquiry into the application of the Mitcham, Surrey, Council to borrow £44,500 to enlarge the Vestry Hall, to build a new fire station, and to lay out a new burial ground, shall be reopened.

*The Torquay Improvement Scheme*

The improvement scheme at Torquay which the Corporation proposes to carry out shortly, comprises one of the last few remaining bits of old Torquay. Plans have been prepared for the erection of a big hotel (or a picture theatre), a range of twenty-seven shops, a covered arcade, an extensive roofed-in motor park, an island site for an information bureau and motor-coach booking offices, and the widening and straightening of three streets. The preliminary estimate of the cost of the scheme is £120,000.

*The Building Trade in Prussia*

The Prussian Government has decided to grant mortgage credits to the amount of 60,000,000 m. (£3,000,000) as a protective relief measure for the alleviation of unemployment in the building trade and the improvement of the housing situation. This State assistance is expected to increase this year's building programme in Prussia by at least 12,000 dwellings.

*A Memorial Chapel in the Abbey*

The space beneath the south-west tower of Westminster Abbey, near the grave of the Unknown Warrior, has been set aside as a war memorial chapel. It will be called the Chapel of the Holy Cross. A tablet will be placed in the new chapel similar to the memorial tablets in many French cathedrals which commemorate the dead of the British Empire.

*A Big Lancashire Road Scheme*

It is understood that the Government has consented to the £3,000,000 Lancashire road scheme, and the Ministry of Transport will provide 75 per cent., or £2,250,000, the balance being found by Liverpool, Lancashire County Council, and other local authorities between Liverpool and East Lancashire. The road will be twenty-six miles long.

*Developments in the Midlands*

The Mansfield Woodhouse Urban District Council has purchased land at Forest Town sufficient for the lay-out of 220 houses. Forty of these are already being built by direct labour at Forest Town, and the other 180 will be built at a later date at Slant Lane. Owing to the colliery developments at New Ollerton 1,000 houses, apart from private buildings, are to be erected.

*Museum Proposals at Whitby*

Arrangements have just been completed for the removal of the Whitby Museum from its present position on the pier to the Chubb Hill estate. The question of amalgamating with the Pannett Trustees in the erection of a joint art gallery and museum in the Pannett Park is under consideration, and Messrs. Hays and Gray, architects for the art gallery, have prepared a scheme.

*An Edinburgh Roof Lifted*

A building operation of an unusual nature has been successfully carried out in Edinburgh. In the course of remodelling the church halls attached to the Dalry United Free Church, Dalry Road, it was necessary to gain additional interior height of between 5 ft. and 6 ft. To accomplish this the entire roof of the building, measuring about 75 ft. long by 40 ft. wide, was raised bodily with slating, skylights, ventilating turret, and even ceiling intact by means of an ingenious system of bracing and strutting, and the use of screw and hydraulic "jacks."

## RATES OF WAGES

		I		II				I		II				I		II	
		s. d.	s. d.	s. d.	s. d.			s. d.	s. d.	s. d.	s. d.			s. d.	s. d.	s. d.	s. d.
A	ABERDARE	S. Wales & M.	1 8	1 3		A	E Glamorgan	S. Wales & M.	1 8	1 3		A	NANTWICH	N.W. Counties	1 8	1 3	
A	Aberavenny	Do.	1 7	1 2		A	Glamorgan	S. Wales & M.	1 8	1 3		A	Neath	S. Wales & M.	1 8	1 3	
A	Abingdon	S. Counties	1 6	1 1		B	Exeter	S.W. Counties	1 7	1 2		A	Nelson	N.W. Counties	1 8	1 3	
A	Accrington	N.W. Counties	1 8	1 3		B	Exmouth	S.W. Counties	1 5	1 1		A	Newcastle	N.E. Coast	1 8	1 3	
A	Addlestone	S. Counties	1 6	1 2		B	FELIXSTOWE	E. Counties	1 6	1 1		A	Newport	S. Wales & M.	1 8	1 3	
A	Adlington	N.W. Counties	1 8	1 3		A	Filey	Yorks	1 6	1 2		A	Normanton	Yorkshire	1 8	1 3	
A	Airdrie	Scotland	1 8	1 3		A	Fleetwood	N.W. Counties	1 8	1 3		A	Northampton	Mid. Counties	1 7	1 2	
C	Aldeburgh	E. Counties	1 4	1 0		A	Folkestone	S. Counties	1 4	1 0		A	North Shields	N.E. Coast	1 8	1 3	
A	Altrincham	N.W. Counties	1 8	1 3		A	Frome	S.W. Counties	1 4	1 0		B	Norwich	E. Counties	1 6	1 1	
B	Appleby	N.W. Counties	1 8	1 3		A	GATESHEAD	N.E. Coast	1 8	1 3		A	Nottingham	Mid. Counties	1 8	1 3	
A	Ashton-under-Lyne	Mid. Counties	1 6	1 2		B	Gillingham	S. Counties	1 5	1 1		A	Nuneaton	Mid. Counties	1 8	1 3	
A	Atherstone	S. Counties	1 4	1 0		B	Gloucester	S.W. Counties	1 6	1 1		B	OAKHAM	Mid. Counties	1 5	1 1	
B	Aylesbury	S. Counties	1 4	1 0		A	Goole	Yorkshire	1 7	1 2		A	Oldham	N.W. Counties	1 8	1 3	
B	BATH	S.W. Counties	1 6	1 1		B	Gosport	S. Counties	1 5	1 1		A	Oswestry	Mid. Counties	1 6	1 2	
B	Banbury	S. Counties	1 4	1 0		A	Grantham	Mid. Counties	1 6	1 2		B	Oxford	S. Counties	1 6	1 1	
B	Bangor	N.E. Coast	1 8	1 3		A	Gravesend	S. Counties	1 7	1 2		A	PAISLEY	Scotland	1 8	1 3	
A	Barnard Castle	Yorkshire	1 8	1 3		A	Greenock	S. Counties	1 8	1 3		C	Pembroke	S. Wales & M.	1 4	1 0	
A	Barnsley	S.W. Counties	1 5	1 1		A	Grimsby	Yorkshire	1 8	1 3		A	Perth	Scotland	1 8	1 3	
A	Barnstaple	N.W. Counties	1 8	1 3		B	Guildford	S. Counties	1 5	1 1		A	Peterborough	Mid. Counties	1 6	1 2	
A	Barrow	S. Wales & M.	1 8	1 3		A	HALFAX	Yorkshire	1 8	1 3		A	Plymouth	S.W. Counties	1 8	1 3	
A	Barry	S. Wales & M.	1 8	1 3		A	Hanley	Mid. Counties	1 7	1 2		A	Pontefract	Yorkshire	1 8	1 3	
B	Basingstoke	S.W. Counties	1 4	1 0		A	Hartlepool	N.E. Coast	1 8	1 3		A	Pontypridd	S. Wales & M.	1 8	1 3	
A	Batley	E. Counties	1 6	1 1		B	Harwich	E. Counties	1 5	1 1		A	Portsmouth	S. Counties	1 6	1 1	
B	Bedford	N.E. Coast	1 7	1 2		A	Hastings	S. Counties	1 5	1 1		A	Preston	N.W. Counties	1 8	1 3	
A	Berwick-on-Tweed	Mid. Counties	1 6	1 2		B	Hatfield	S. Counties	1 5	1 1		A	QUEENS-FERRY	N.W. Counties	1 8	1 3	
A	Bewdley	Mid. Counties	1 4	1 0		B	Hereford	E. Counties	1 5	1 1		B	READING	S. Counties	1 6	1 1	
A	Bicester	N.W. Counties	1 9	1 3		A	Hertford	S.W. Counties	1 6	1 1		B	Reigate	S. Counties	1 5	1 1	
A	Birkenhead	Mid. Counties	1 8	1 3		B	Heysham	N.W. Counties	1 7	1 2		A	Retford	Mid. Counties	1 6	1 2	
A	Birmingham	N.E. Coast	1 8	1 3		A	Howden	N.E. Coast	1 8	1 3		A	Rhondda	S. Wales & M.	1 8	1 3	
A	Bishop Auckland	N.W. Counties	1 8	1 3		A	Huddersfield	Yorkshire	1 8	1 3		A	Ripon	Yorkshire	1 6	1 2	
A	Blackburn	N.W. Counties	1 8	1 3		A	Hull	Yorkshire	1 8	1 3		A	Rochdale	N.W. Counties	1 8	1 3	
A	Blackpool	N.E. Coast	1 8	1 3								B	Rochester	S. Counties	1 5	1 1	
A	Blyth	S. Counties	1 4	1 0								A	Ruabon	N.W. Counties	1 7	1 2	
B	Bognor	N.W. Counties	1 8	1 3								A	Rugby	Mid. Counties	1 8	1 3	
A	Bolton	S. Counties	1 6	1 2								A	Rugeley	Mid. Counties	1 6	1 2	
A	Boston	Yorkshire	1 8	1 3								A	Runcorn	N.W. Counties	1 8	1 3	
B	Bournemouth	E. Counties	1 6	1 2													
A	Bradford	S. Wales & M.	1 8	1 3													
A	Brentwood	S.W. Counties	1 5	1 1													
A	Bridgend	Yorkshire	1 7	1 2													
R	Bridgwater	Yorkshire	1 8	1 3													
A	Bridlington	S. Counties	1 6	1 2													
A	Brighouse	S.W. Counties	1 8	1 3													
B	Brighton	Mid. Counties	1 6	1 2													
A	Bristol	S. Counties	1 8	1 3													
B	Brixham	S.W. Counties	1 4	1 0													
A	Bromsgrove	Mid. Counties	1 6	1 2													
O	Bromyard	Mid. Counties	1 4	1 0													
A	Burnley	N.W. Counties	1 8	1 3													
A	Burslem	Mid. Counties	1 8	1 3													
A	Burton-on-Trent	Mid. Counties	1 7	1 2													
A	Bury	N.W. Counties	1 8	1 3													
A	Buxton	N.W. Counties	1 6	1 2													
B	CAMBRIDGE	E. Counties	1 6	1 1													
B	Canterbury	S. Counties	1 4	1 0													
A	Cardiff	S. Wales & M.	1 8	1 3													
A	Carlisle	N.W. Counties	1 8	1 3													
B	Carnarthen	S. Wales & M.	1 8	1 3													
B	Carnarvon	N.W. Counties	1 5	1 1													
A	Carnforth	N.W. Counties	1 7	1 2													
A	Castleford	Yorkshire	1 8	1 3													
B	Chatham	S. Counties	1 5	1 1													
B	Chelmsford	E. Counties	1 5	1 1													
B	Cheltenham	S.W. Counties	1 6	1 1													
A	Chester	N.W. Counties	1 8	1 3													
A	Chesterfield	Mid. Counties	1 8	1 3													
A	Chichester	S. Counties	1 4	1 0													
A	Chorley	N.W. Counties	1 8	1 3													
B	Cirencester	N.W. Counties	1 5	1 1													
A	Clitheroe	S. Counties	1 8	1 3													
A	Clydebank	N.W. Counties	1 8	1 3													
A	Coalville	Mid. Counties	1 8	1 3													
B	Colchester	Mid. Counties	1 8	1 3													
A	Colne	E. Counties	1 5	1 1													
B	Colwyn Bay	N.W. Counties	1 5	1 1													
A	Consett	N.E. Coast	1 8	1 3													
B	Conway	N.W. Counties	1 5	1 1													
A	Covey	Mid. Counties	1 8	1 3													
A	Crewe	N.W. Counties	1 6	1 2													
A	Cumberland	.....	1 6	1 2													
A	DARLINGTON	N.E. Coast	1 8	1 3													
A	Darwen	N.W. Counties	1 8	1 3													
B	Deal	S. Counties	1 4	1 0													
B	Denbigh	N.W. Counties	1 5	1 1													
A	Derby	Mid. Counties	1 8	1 3													
A	Dewsbury	Yorkshire	1 8	1 3													
B	Didcot	S. Counties	1 6	1 2													
A	Doncaster	Yorkshire	1 8	1 3													
C	Dorchester	S.W. Counties	1 4	1 0													
A	Driffield	Yorks	1 6	1 2													
A	Droitwich	Mid. Counties	1 6	1 2													
A	Dudley	Mid. Counties	1 7	1 2													
A	Dundee	Scotland	1 8	1 3													
A	Durham	N.E. Coast	1 8	1 3													
B	EAST-BOURNE	S. Counties	1 6	1 1													
A	Ebbw Vale	S. Wales & M.	1 8	1 3													
A	Edinburgh	Scotland	1 8	1 3													

\* Plasterers, 1s. 9d.

† Carpenters and Painters, 1s. 8d.

‡ Plumbers, 1s. 9d.

§ Painters, 1s. 6d.

¶ Carpenters and Plasterers, 1s. 8d.

‡ Painters, 1s. 7d.

## PRICES CURRENT

## EXCAVATOR AND CONCRETOR

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

Broken brick or stone, 2 in., per yd.	£0 11 6
Thames ballast, per yd.	0 13 0
Pit gravel, per yd.	0 14 6
Pit sand, per yd.	0 15 6
Washed sand	0 15 6
Screened ballast or gravel, add 10 per cent. per yd.	
Clunker, 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
3-ton motor lorry	3 15 0
Steam lorry, 5-ton	4 0 0
Trailer	£0 15 0
Steam roller	4 5 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 2 4
SPREAD and level, including wheeling, per yd.	0 2 4
PLANKING, per ft. sup.	0 0 5
DO. over 10 ft. deep, add for each 5 ft. depth 30 per cent.	
HARDWARE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	£0 2 1
DO. 6 in. thick, per yd. sup.	0 2 10
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 lintols, etc., per ft. cube	0 1 6

## DRAINER

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

Stoneware pipes, tested quality, 4 in., per yd.	£0 1 3
DO. 6 in., per yd.	0 2 8
DO. 9 in., per yd.	0 3 6
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0 6 9
DO. 6 in., per yd.	0 9 2
DO. 9 in., per yd.	0 11 0
Portland cement and sand, see "Excavator" above.	
Lead for caulking, per cwt.	£2 5 6
Gaskin, per lb.	0 0 5½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft.	0 4 3
DO. 6 in., per ft.	0 5 0
DO. 9 in., per ft.	0 7 9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0 9 0
DO. 6 in., per ft.	0 11 0

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

## BRICKLAYER

BRICKLAYER, 1s. 9½d. per hour; LABOURER, 1s. 4½d. per hour; SCAFFOLDER, 1s. 5½d. per hour.	
London stocks, per M.	£4 15 0
Flettons, per M.	2 18 0
Staffordshire blue, per M.	9 10 0
Frickricks, 2½ in., per M.	11 3 0
Glazed salt, white, and ivory stretchers, per M.	21 10 0
DO. headers, per M.	21 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 12 0
Mixed lime mortar, per yd.	1 6 0
Damp course, in rolls of 1½ 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.	
FACINGS, FAIR, per ft. sup. extra	£0 0 2
DO. Red Rubbers, gauged and set in putty, per ft. extra	0 4 6
DO. salt, white or ivory glazed, per ft. sup. extra	0 5 6
TUCK POINTING, per ft. sup. extra	0 0 10
WEATHER POINTING, per ft. sup. extra	0 0 3
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
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0 0 7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0 8 0
DO. vertical, per yd. sup.	0 11 0
SLATE DAMP COURSE, per ft. sup.	0 0 10
ASPHALT ROOFING (MASTIC) in two thicknesses, ½ in., per yd.	0 8 6
DO. SKIRTING, 6 in.	0 0 11
BREEZE PARTITION BLOCKS, set in Cement, 1½ in. per yd. sup.	0 5 3
DO. DO. 3 in.	0 6 6

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. flier, 1s. 10½d. per hour; LABOURER, 1s. 4½d. per hour; SCAFFOLDER, 1s. 5½d. per hour.

Portland Stone:	
Whitbed, per ft. cube	£0 4 7
Basebed, per ft. cube	0 4 8
Bath stone, per ft. cube	0 3 9
Usual trade extras for large blocks.	
York paving, av. 2½ in., per yd. super.	0 6 6
York templates, av. 1 in., per ft. cube	0 6 9
Slate shelves, rubbed, 1 in., per ft. sup.	0 2 6
Cement and sand, see "Excavator," etc., above.	

HOISTING and setting stone, per ft. cube	£0 2 2
DO. for every 10 ft. above 30 ft., add 15 per cent.	
PLAIN face Portland basis, per ft. sup.	£0 2 8
DO. circular, per ft. sup.	0 4 0
SUNK FACE, per ft. sup.	0 3 9
DO. circular, per ft. sup.	0 4 10
JOINTS, arch, per ft. sup.	0 2 6
DO. sunk, per ft. sup.	0 2 7
DO. DO. circular, per ft. sup.	0 4 6
CIRCULAR-CIRCULAR work, per ft. sup.	1 2 0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0 1 1
DO. circular, do. per ft. run	0 1 4

HALF SAWING, per ft. sup.	£0 1 0
Add to the foregoing prices if in York stone 35 per cent.	
DO. Mansfield, 12½ per cent.	
Deduct for Bath, 33½ per cent.	
DO. for Chilmark, 5 per cent.	
SETTING 1 in. slate shelving in cement, per ft. sup.	£0 0 6
RUBBED round nosing to do., per ft. lin.	0 0 6
YORK STEPS, rubbed T. & R., ft. cub. fixed.	1 9 0
YORK SILLS, W. & T., ft. cub. fixed.	1 13 0

## SLATER AND TILER

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

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

Slates, 1st quality, per M:	
Portmadoc Ladies	£14 0 0
Countess	27 0 0
Duchess	32 0 0
Clips, lead, per lb.	0 0 4
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. gauge, compo nails, Portmadoc or equal:	
Ladies, per square	£4 0 0
Countess, per square	4 5 0
Duchess, per square	4 10 0
WESTMORLAND, in diminishing courses, per square	6 5 0
CORNISH DO., per square	6 3 0
Add, if vertical, per square approx.	0 13 0
Add, if with copper nails, per square approx.	0 2 6
Double course at eaves, per ft. approx.	0 1 0
TLING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	5 6 0
DO., machine-made DO., per square	4 17 0
Vertical Tiling, including pointing, add 18s. 0d. per square.	
FIXING lead soakers, per dozen	£0 0 10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0 10 0
LABOUR only in laying slates, but including nails, per square	1 0 0
See "Sundries for Asbestos Tiling."	

## CARPENTER AND JOINER

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

Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds):	
7×3, per std.	£21 0 0
11×4, per std.	31 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 2 0
Mahogany, per ft. sup. of 1 in.	0 2 0
DO. Cuba, per ft. sup. of 1 in.	0 3 0
Teak, per ft. sup. of 1 in.	0 3 0
DO., ft. cube	0 15 0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0 5 9
DO. framed in floors, roofs, etc., per ft. cube	0 6 3
DO., framed in trusses, etc., including ironwork, per ft. cube	0 7 3
PITCH PINE, add 33½ per cent.	
FIXING only boarding in floors, roofs, etc., per sq.	0 13 6
SARKING FELT laid, 1-ply, per yd.	0 1 6
DO., 3-ply, per yd.	0 1 9
CENTERING for concrete, etc., including horsing and striking, per sq.	3 10 0
SLATE BATTENING, per sq.	0 18 6



## PRICES CURRENT; continued.

## CARPENTER AND JOINER; continued.

DEAL CUTTER BOARD, 1 in., on firing, per sq.	£3 5 0
MOULDED CASEMENTS, 1½ in., in 4 sqs., glazing beads and hung, per ft. sup.	0 3 0
DO., DO., 2 in., per ft. sup.	0 3 3
DEAL CASED FRAMES, oak sills, 2 in. d.h. sashes, brass-faced pulleys, etc., per ft. sup.	0 4 0
DOORS, 4 pan. sq. b.s., 2 in., per ft. sup.	0 3 6
DO., DO., DO., 1½ in., per ft. sup.	0 3 0
DO., DO., moulded b.s., 2 in., per ft. sup.	0 3 9
DO., DO., DO., 1½ in., per ft. sup.	0 3 3
If in oak multiply 3 times.	
If in mahogany multiply 3 times.	
If in teak multiply 3 times.	
WOOD BLOCK FLOORING, standard blocks, laid in mastic herringbone:	
Deal, 1 in., per yd. sup., average	0 10 0
DO., 1½ in., per yd. sup., average	0 12 0
DO., DO., 1½ in. maple blocks	0 15 0
STAIRCASE WORK, DEAL:	
1 in. riser, 1½ in. tread, fixed, per ft. sup.	0 3 6
2 in. deal strings, fixed, per ft. sup.	0 3 9

## PLUMBER

PLUMBER, 1s. 3½d. per hour; MATE OR LABOURER 1s. 4½d. per hour.

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

MILLED LEAD and labour in gutters, flashings, etc.

LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0 2 1
DO. ½ in., per ft.	0 2 5
DO. 1 in., per ft.	0 3 3
DO. 1½ in., per ft.	0 4 6

LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.

DO. 3 in., per ft.	0 6 0
DO. 4 in., per ft.	0 7 0
DO. 4 in., per ft.	0 9 9

CAST-IRON R.W. PIPE, at 24 lb. per length, jointed in red lead, 2½ in., per ft.

DO. 3 in., per ft.	0 2 5
DO. 3 in., per ft.	0 2 10
DO. 4 in., per ft.	0 3 3

CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.

DO. O.G., 4 in., per ft.	0 2 7
DO. O.G., 4 in., per ft.	0 2 10

CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.

DO. 3 in., per ft.	0 7 0
DO. 3 in., per ft.	0 6 0

Fixing only:

W.C. PANS and all joints, p. or s., and including joints to water waste preventers, each	2 5 0
BATHS only, with all joints	1 18 0
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.

Chalk lime, per ton	£2 11 0
Hair, per cwt.	0 18 0
Sand and cement see "Excavator," etc., above.	
Lime putty, per cwt.	£0 2 8
Hair mortar, per yd.	1 7 0
Fine stuff, per yd.	1 14 0
Sawn laths, per bd.	0 2 9
Keene's cement, per ton	5 15 0
Sirapite, per ton	3 10 0
DO. fine, per ton	3 18 0
Plaster, per ton	3 0 0
DO. per ton	3 12 6
DO. fine, per ton	5 12 0

Thistle plaster, per ton	£3 9 0
Lath nails per lb.	0 0 4
LATHING with sawn laths, per yd.	0 1 7
METAL LATHING, per yd.	0 2 3
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ½ 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 5
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 6
DO. 26 oz.	0 0 7½
Cathedral white, per ft.	0 0 6½
Polished plate, British ½ in., up to 2 ft. sup.	0 2 0
DO. 3 ft. sup.	0 2 6
DO. 7 ft. sup.	0 3 6
DO. 25 ft. sup.	0 4 0
DO. 100 ft. sup.	0 4 6
Rough plate, ½ in.	0 0 6
DO. ½ in., per ft.	0 0 6½
Linseed oil putty, per cwt.	0 16 0

GLAZING in putty, clear sheet, 21 oz.	0 0 11
DO. 26 oz.	0 1 0
GLAZING in beads, 21 oz., per ft.	0 1 1
DO. 26 oz., per ft.	0 1 4
Small sizes slightly less (under 3 ft. sup.).	
Patent glazing in rough plate, normal span 1s. 6d. to 2s. per ft.	
LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0 3 6
Glazing only, polished plate, 6½d. to 8d. per ft. according to size.	

## DECORATOR

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.	£3 11 0
Linseed oil, raw, per gall.	0 3 7
DO., boiled, per gall.	0 3 10
Turpentine, per gall.	0 6 2
Liquid driers, per gall.	0 9 6
Knotting, per gall.	1 4 0
Distemper, washable, in ordinary colours, per cwt., and up	2 0 0
Double size, per firkin	0 3 6
Pumice stone, per lb.	0 0 4
Single gold leaf (transferable), per book	0 1 11
Varnish copal, per gall. and up	0 18 0
DO., flat, per gall.	1 2 0
DO., paper, per gall.	1 0 0
French polish, per gall.	0 19 0
Ready mixed paints, per gall. and up	0 10 6

LIME WHITING, per yd. sup.	0 0 3
WASH, stop, and whiten, per yd. sup.	0 0 6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0 0 9
KNOT, stop, and prime, per yd. sup.	0 0 7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0 0 10
DO., subsequent coats, per yd. sup.	0 0 9
DO., enamel coat, per yd. sup.	0 1 2½
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0 3 8

FIGURED DO., DO., per yd. sup.	£0 5
FRENCH POLISHING, per ft. sup.	0
STRIPPING old paper and preparing, per piece	0
HANGING PAPER, ordinary, per piece	0
DO., fine, per piece, and upwards	0 2
VARNISHING PAPER, 1 coat, per piece	0 9
CANVAS, strained and fixed, per yd. sup.	0 3
VARNISHING, hard oak, 1st coat, yd. sup.	0 1
DO., each subsequent coat, per yd. sup.	0 0 11

## 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.

Mild steel in British standard sections, per ton	£12 10 0
Sheet steel:	
Flat sheets, black, per ton	19 0 0
DO., Galv., per ton	23 0 0
Corrugated sheets, galv., per ton	23 0 0
Drying screws, galv., per grs.	0 1 10
Washers, galv., per grs.	0 1 1
Bolts and nuts, per cwt. and up	1 18 0

MILD STEEL in trusses, etc., erected, per ton	25 10 0
DO., in small sections as reinforcement, per ton	16 10 0
DO., in compounds, per ton	17 0
DO., in bar or rod reinforcement, per ton	20 0 0
WROT. IRON ¼ 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

## SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.

The measured work price is on the same basis . . . per ft. sup.

FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup.	£0 0 2½
ASBESTOS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup.	0 0 6
Plaster board, per yd. sup.	0 1 7
PLASTER BOARD, fixed as last, per yd. sup.	0 2 8
Asbestos sheeting, ⅜ in., grey flat, per yd. sup.	0 2 3
DO., corrugated, per yd. sup.	0 3 3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup.	0 4 0
DO., corrugated, per yd. sup.	0 5 0
ASBESTOS slating or tiling on, but not including battens or boards, plain "diamond" per square, grey	2 15 0
DO., red	3 0 0
Asbestos cement slates or tiles, ⅜ in. punched per M. grey	17 0 0
DO., red	19 0 0

ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ½ 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	
3 m/m alder, per ft. sup.	0 0 2
4½ m/m amer. white, per ft. sup.	0 0 3½
½ m/m figured ash, per ft. sup.	0 0 5
4½ m/m 3rd quality composite birch, per ft. sup.	0 0 1½



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