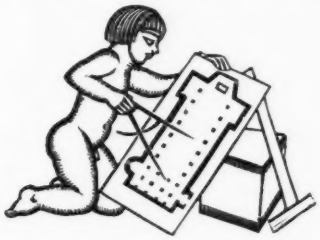
THE ARCHITECTS' JOURNAL



THE ARCHITECTS' JOURNAL

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NEXT WEEK THE *CURRENT ARCHITECTURE SECTION* will be devoted to a selection of the most important work of Mr. H. S. Goodhart-Rendel. Mr. Howard Robertson has undertaken the writing of an appreciative estimate of his work.

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9 Queen Anne's Gate, Westminster, London, S.W.1
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PRINCIPAL CONTENTS

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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.

viii. A Dutch City.

Dr. von Bode and Dr. Hofstede de Groot are unanimous in assigning this striking painting to an artist whose charming scenes from everyday life are among the most popular works of the whole seventeenth-century Dutch school, but who, as a rule, does not attempt any strictly topographical subjects—namely, Pieter de Hooch. The city which is seen through the arcade in the foreground introduces some conspicuous features of the town of Delft, the tower on the left being that of the Nieuwe Kerk, and the tower on the right that of the Oude Kerk, at Delft. The distance between these two buildings is, however, much bigger in reality than it is in this picture; and it seems questionable whether the spacious portico, with its chequered floor, which occupies the foreground, ever existed outside the artist's imagination. It is in any case an element of great value in the composition, and somewhat suggestive of the devices employed by the Italian designers of architectural subjects.—[Amsterdam, Messrs. Goudstikker.]

THE ARCHITECTS' JOURNAL

Wednesday, February 24, 1926

HOUSES OR COUGH-DROPS?

"EVEN if elsewhere the rent was more we should save the difference in cough mixture." Now, this is just the sort of long-sighted view of housing and town planning affairs that we have always advocated. "How am I to benefit," asks the business man, "from all this expenditure on town planning which the Corporation contemplates?" Well, the amount to be spent on town improvements will soon be saved in cough mixture, using the phrase generically to cover all those manifold remedies which are paid for out of the public purse to counteract the ills of living under bad conditions. This particular quotation, however, was used in connection with Glasgow's housing affairs, where the panacea seems to be steel houses. What is the position of Glasgow? Briefly it is this. Glasgow is an engineering city—a city of steel workers, a great number of whom are, at the moment, without employment, and consequently are living at the expense of the employed community; it is a city in which also the housing conditions are worse than those in any other town in the kingdom. Sixty-four per cent. of the Glasgow houses are of only one or of two apartments. One hundred and forty thousand people exist in tenements of one room, and more than half a million in homes of only two rooms, we are told. Certainly these are appalling figures, and it is now suggested that to ameliorate these conditions the idle steel workers should be employed in building—no we must not use that word—in erecting steel houses.

There are those who are constantly lamenting the breaking down of local building traditions. The erstwhile traditional methods of the Cotswolds, of Sussex, of Cornwall are well-nigh obsolete, and brick and concrete, tile and slate, not to mention all the substitutes made of compressed anything, are becoming ubiquitous. Modern conditions, particularly facilities of transport and travel, are, for the most part, responsible for this change. Yet those who lament the past may, perhaps, find cause for rejoicing in the prospects at Glasgow, for what is about to take place is surely the creation of a new local building (the banned word creeps in again) erection tradition. The steel house is to become as indigenous to Glasgow as the stone house once was to the Cotswolds, or the flint and brick to parts of Buckinghamshire. But it is absolutely essential that this new tradition be strictly circumscribed, a line must be set around Glasgow beyond which it must on no account be allowed to spread.

But with the introduction of this new erection tradition there will, we fancy, grow up certain peculiar living conditions, and necessity may force upon the land lubbers something of the naval zest for the paint pot. On a man-o'-war there is no cessation of painting operations, and although some of this activity may be due to an insatiable love of the spick and span, its origin lies in the necessity for thoroughly protecting the steel against rust, and so painting parties are called out almost daily. We know, too, that a gang of painters is for ever at work upon the Forth Bridge, and we believe that recently it became necessary to augment a similar gang employed upon the Eiffel Tower so that it might complete its round more speedily. For in the race of paint against rust, the rust had begun to gain, and so we may expect to find that in the steel house colony the fire brigade will be replaced by a paint brigade, for with the steel house surely the risk of fire is negligible, and on the first signs of rust the alarm will be sounded and the brigade will turn out at the double, in smock or apron and with paint and brush! Or, maybe, the larger colonies will vaunt their affluence with a vast spraying machine mounted on a mighty horse-power motor the quicker to reach the scene of disaster and to cope with the outbreak. And in the Glasgow papers who knows but that ere long we shall read some such account as this: "A serious outbreak of rust occurred in Weir Street at nine o'clock last night. Thanks to the promptness of the local paint brigade it was soon got under control, and at 10.30 p.m. the brigades—for the call had been circulated to all the surrounding stations—were able to withdraw. It is reported that five hundred gallons of paint were used. The outbreak is supposed to have been due to a faulty r.w. pipe."

Joking apart, however, it would certainly seem that our economics have become sadly entangled, since it is apparently thought necessary to advocate the building of houses with any material rather than with those generally acknowledged to be the best for the purpose, and England is a country particularly rich in brick-making earth. It has been stated that the inability to build brick houses to-day is not so much due to a shortage of bricks or bricklayers as of plasterers. Well, if that be so, let us build houses without plaster. Let us fair-face the inside of our brickwork and lime-whiten it. By this means, and by the use of wall-boarding, the plasterer may be altogether dispensed with. An insistence on a plastered covering to brickwork either arises from ignorance, or is a species of snobbery, and we are inclined to think that a plasterless brick house would be preferable to a plasterless steel house. And then, "even if the rent was more" (and the probability is that it would be less) "we should save the difference in paint."

D

NEWS AND TOPICS

By the passing, at the age of fifty-four, of Francis Derwent Wood, humanity, no less than art, suffers a grievous loss. For he was eminent not merely as a sculptor who could also paint uncommonly well: he was even greater as a lover of humankind—an Abou-ben-Adhem among his fellow-men. Impecunious artists testify to his large-hearted and delicately tactful generosity in the lean times, and soldiers bear witness to the success with which his skill in modelling was adapted to the terrible needs of plastic surgery. It is an ironic fate that he, who had devoted—one may almost say consecrated—his magnificent skill to the remodelling of living faces cruelly disfigured in the war, should himself have died in a nursing home after a desperate attempt to save his life by a surgical operation. It is certain, I have always thought, that the fount and well-spring of what is best in Derwent Wood's beautiful art is his no less beautiful love of humanity. That is the dominant note of most of his work, and I take it to be the clue to his artistic success. From his sympathetic insight into life and character it naturally follows that in portrait-modelling he was unexcelled for fidelity to his models. What wonder, then, if it occasionally seems that his innate love of truthful representation rather tends to confuse and confound his sense of the subtleties of esoteric symbolism? Nevertheless, he was much more than an inspired craftsman. He seldom failed to impart to his work a poetic touch. True, his was the poetry not of preciousness, but of humanity. Love, charity, self-abnegation, informed his work and moulded it to fine issues. There is sympathetic imagination even in his minor decorative designs, such as marble mantelpieces and silver firedogs; while his statuettes and figurines, but a bare six inches tall, are simply exquisite. Truly a craftsman with a conscience was Derwent Wood.

* * *

It really looks as if East Kent is to become completely industrialized. The Government has now guaranteed, under the Trade Facilities Act, two million pounds for the development of the Kent coalfields. I don't pretend altogether to understand the complex economics of these things, but, judging by recent events and disclosures, it would appear that, for the present, there is no shortage of coal elsewhere, but the difficulty is to produce it sufficiently cheaply and to find markets. Perhaps the Kent coalfields will be able to produce coal at a lower figure, in which case it will be interesting to see what effect this may have upon the rest of the industry. We ought assuredly to expect some great national advantage from the enterprise, to compensate us for sacrificing a large part of one of the Home Counties to industrialism. It will certainly be a test for town planning, and particularly for the East Kent Regional Town Planning Committee. But I see that Messrs. Dorman Long & Co. are interested in the venture, and, remembering the excellent work which they have already done in their own district by the creation of Dormanstown, for which, it will be remembered, Messrs. Adshead and Ramsey were the architects, I do not feel so apprehensive for the future of East Kent as I otherwise might.

The preliminary surveys and communal work of a large group of local authorities mean that the Isle of Thanet, the valleys of the Stour, and the towns on the chalk hills will be adequately protected, partly by the happy accident of their geography. The greatest danger to the scenery is by Deal and Sandwich, and over the country behind them, in which many beautiful old villages are situated. The villages and some of the fields in East Kent can easily be "zoned" out of the immediate neighbourhood of the factories, and as far as possible of pitheads. A wholly admirable "recreational" zone lies between Deal and the lower Stour; and with residential zones the addition of promiscuous houses to such villages as Barham or Littlebourne or Wingham or Barfreston might well be strictly limited. It must be remembered that gardens and fields in this particular district supply dividends in food as well as in beauty. The farmer of grain and Romney sheep flourishes side by side with the exploiter of tourists and holiday-makers. The preservation of parks, gardens, villages, and productive fields will mean also the preservation of the health of the extra 350,000 persons who, it is estimated, will be added to East Kent in the next thirty years.

* * *

It is right, of course, that the area occupied by pits and factories should be carefully prescribed, but an architect may be pardoned if he regards with a certain melancholy and even annoyance the assumption that the art which he practises is not competent to endow with beauty even the most utilitarian of modern structures. The *Observer* of last Sunday gave prominence to a photograph of one of the model pitheads, showing a pair of shafts with their associated buildings. We are informed that the miners, on coming from their work, go straight into baths, and are thus able to remove all traces of coal-dust before going home. It is not doubted that the hygienic arrangements of the pit are admirable, but a mere glance at the picture formed by the shaft and the low, barn-like structures in their vicinity is enough to make us aware that, as far as beauty is concerned, we are here in "a devastated area." Whether it is possible, while retaining all the utilitarian advantages of the present combination of structures, to re-design and group them so that they might attain to a measure of dignity and harmony is a fascinating problem to which I do not here propose a solution, but what depresses one is the consciousness that in this instance the mere existence of the æsthetic problem does not appear to have been recognized at all.

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It is incumbent upon the coal-owners not only to obtain the most beautiful designs possible (which need not necessarily be so much more costly to execute than are the ugly designs) for all the buildings at the pitheads, but also to ensure that refuse is decently disposed of and not allowed, as was unfortunately the case in the South Wales coalfield, to extend over the countryside in the form of huge "tips" of dark-blue slag, which take many years before they are covered with vegetation.

* * *

During the present week the bicentenary of the church of St. Botolph, Bishopsgate, will be commemorated by a series of special services. The church was designed by James Gold, and is one of the most interesting of the Renaissance churches. The building has the advantage of an excellent site, for its front is directly on the street, and

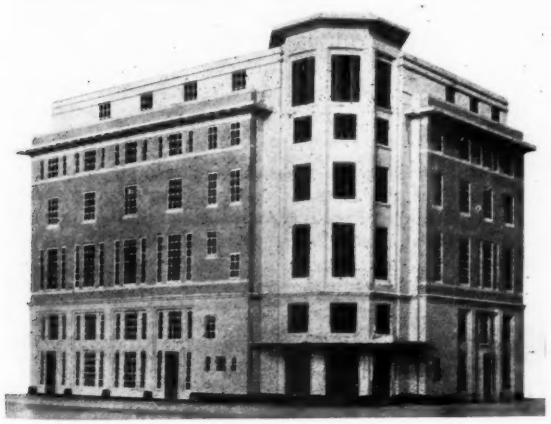
its neighbours are fortunately not too tall, so the spire stands out magnificently. This latter feature surmounts a small pediment and has four stages, the first with cornice, the second plain with clocks on its four sides, and the third with full Ionic order, the pilasters being coupled at the corners, and enclosing on each front a round-topped, shuttered window. Above this is an elegant circular lantern, with small dome and a cross, the transitional spaces between the circle and square top of the third stage being occupied by urns. The spire makes a delightful silhouette against the sky, and long may it remain to adorn Bishopsgate.

* * *

Fortunately this church is not immediately threatened, for a very real and active parochial life centres round it. The first mention of the church and parish occurs in a will bearing the date 1274. Stowe refers to the church as standing " in a fair churchyard adjoining the City's ditch, upon the very bank thereof, but of old time enclosed with a comely wall of brick." St. Botolph's did not suffer destruction in the Great Fire, and is still known as one of the churches of Henry VII. In 1615 the City gave to the parish an additional ground for burial because the existing churchyard could accommodate no other bodies. The present structure, the foundation-stone of which was laid by Edmund Gibson in 1725, cost £10,400. Many men of mark have been associated with the church and parish, and among them I may mention Alleyn, the actor who founded Dulwich College; and Keats, who was baptized there in 1795. For many years St. Botolph's has been the parish church of the Honourable Artillery Company. The rector is the chaplain, and each year a church parade is held by the regiment at St. Botolph's.

* * *

I have just seen the model of a hotel it is proposed to erect at Westcliff-on-Sea. The site has a frontage of 60 ft. to the London Road, and 85 ft. to Eastwood Lane. Now, the architecture of the seaside is usually so bad, and the architecture of Westcliff-on-Sea so utterly bad, that anything good in such a place is worth illustrating. The accommodation on the ground floor consists of public and private bars and a public restaurant, which may be entered from either the entrance vestibule or direct from the London Road. Cloak-rooms and a tea lounge are provided on the mezzanine floor. On the first floor are the residents' dining-room, a banqueting room to seat 100 people, and a masonic temple. The second and third floors are devoted to bedrooms and private suites, while the kitchens, manager's and staff rooms are on the top floor. The elevations are to be executed in reconstructed stone and silver-grey bricks. It is, indeed, one of the large modern hotels which usually have such aggressive elevations. Mr. Owen H. Cockerill is the architect, and the model from which my illustration is taken is the work of Mr. James Walker.



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Dr. Cyril Norwood, the new headmaster of Harrow, in a recent interview made some noteworthy remarks about public schoolboys of to-day. He tells us that the present generation has quite definitely a far greater interest in art, drama, and musical appreciation, which is reflected, indeed, in the curricula of our public schools and in the life of educational institutions throughout the country. These new interests were the latent possession of his predecessor in the 'nineties, but were allowed to remain undeveloped as no appeal was made to them. That architecture is also the gainer by this cultural revival there can be no doubt whatever. A few weeks ago, while visiting the library of one of our public schools, I discovered several shelves of architectural books, including not only histories and standard works, but the very newest books of all, and was told that they were in great demand among the boys. An important point to notice is that this interest in architecture is stimulated by this means, not only among those youths who are destined to swell the ranks of what is called " academic " society, but among our future men of commerce, for nowadays the social character of the public schools is changing, a greater proportion of the boys being the sons of men who have made fortunes in trade. It will be a splendid thing for architecture when all our leaders in industry and commerce have acquired in their youth a respect for " the mistress art," and a sense of obligation to further its interests.

* * *

It is distressing to read of great architectural projects which come to nought. Among such must be numbered the great reclamation scheme begun five years ago by the City of Bombay, which is now face to face with the certainty that the scheme will prove a gigantic failure, never likely to return more than a fraction of the £3,750,000 already expended on it. Instead of providing a bigger Bombay with more houses for the homeless inhabitants, the chief effect of the scheme has been to provide a lake area of six million square yards. The result of building is that the expensive sea wall is at present useless, and will merely be a receptacle for the filth brought in by the tide. The chief causes of failure revealed in the report of the special committee appointed by the Bombay Government are the underestimating of the cost of the scheme, the failure of the dredgers to work at more than 25 per cent. of the estimated capacity, and the difficulty of finding suitable material to fill the huge area intended for reclamation. It is noteworthy that the project owes its origin to the inflation of land values in Bombay, where land was being sold at the rate of £10 a square yard. Thus a scheme which would give the city another eleven hundred acres of land at a cost of fifteen rupees a square yard seemed a highly attractive one. The blame for its failure is placed on the shoulders of the consulting engineers

who did not adequately realize the amount of labour which the reclamation of the land would entail. The immediate problem is how to make the best of an unfortunate plan. Eight members of the special committee advocate suspension of the work on the sea wall, and concentration on the completion of three blocks of an area of two million square yards, believing that by this means a substantial reduction of the debt is possible, especially as half the area is purchasable by the Government of India for military purposes. Thus a grandiose scheme of city improvement has, unfortunately, been frustrated, and other means must be found for relieving the congestion of Bombay.

* * *

Those appalling country-house fires! The one which destroyed Oulton Park, Cheshire, was in every way incomparably the worst of the half-dozen that have occurred since the beginning of the present year. A fire-insurance expert, writing in the *Times* on the general question of fires in country houses, is in effect but a sort of Job's comforter on it. Confirming the common knowledge that such fires are to be expected in the winter season, when rooms have to be heated, he reiterates the further notorious fact that, generally speaking, the means adopted for preventing and for subduing outbreaks of fire are alike inefficient. Anticipating long ago a suggestion made by the *Times* expert, I have often wondered why in country houses one does not find a more complete and up-to-date equipment of fire-buckets, extinguishers, hose-pipes, and all the accessory apparatus that very properly obtrudes itself on one's notice in public buildings. Why not, as the expert suggests, keep a motor fire-engine on the premises, and, I may add, drill the servants in its effectual use? And why not have country houses periodically and systematically inspected by a competent architect? He could detect and supply the remedy for dangerous defects in the heating and lighting apparatus, and his fee for this invaluable service would hardly exceed that paid as a matter of routine to the clock-winder or to the piano-tuner; and an astute bailiff might get it deducted from the insurance premiums! But something more drastic than mere inspection is clearly necessary, and I submit that any country house, or any other house, worth preserving is worth fire protection throughout by efficient modern methods.

* * *

During the last seven years a great deal of work has been done towards the preparation of a comprehensive town-planning scheme for the Holy City under the auspices of the Pro-Jerusalem Society, the civic advisor to which is Mr. A. C. Holliday. The planning presented the difficulty so often encountered to-day, of preserving historical sites while yet developing Jerusalem as a modern city with a possible population of two hundred thousand people. A preliminary zoning scheme has been adopted which comprises industrial, commercial, residential, suburban, and an antiquities zone. A ring road has been planned which is to be laid out as a boulevard, with parks and gardens. Radial roads from the centre of the city will join this new road at intervals. The position of various public buildings, too, has been determined. Meanwhile, one of the first tasks to be undertaken is the provision of a constant and adequate water-supply. At present, in the dry season, the water has to be brought by rail from the Plain of Sharon, and no town can achieve modern prosperity under such conditions. It would certainly appear that serious efforts for the creation of "a new Jerusalem," albeit on the site of the old one, are being made.

* * *

A month ago the R.I.B.A. published a very excellent booklet dealing with the duties of the architect. It was obviously not printed for architects, for they are sufficiently acquainted with their duties, so it is presumably for the general public. But how the general public are to become aware of its existence is a mystery to me. I see that copies may be bought at two-and-sixpence a dozen, but price alone will hardly make it a best-seller.

* * *

From the photographs I have seen of the floods in England and on the Continent, I find that water in the streets is not enough to make a city look like Venice.

* * *

PERVERTED PILFERINGS

Men may rise on stepping-stones,
(But preferably on higher things).
TENNYSON: *In Memoriam.*

A man he seems of cheerful estimates.
WORDSWORTH: *The Excursion.*

Jobs must be sought as if you sought them not.
POPE: *Essay on Criticism.*

ASTRAGAL

ARRANGEMENTS

WEDNESDAY, FEBRUARY 24.

At the Royal Society of Arts. 8.0 p.m. Mrs. Mary Fishenden (Fuel Research Board) on Domestic Heating.

At the London School of Economics. 6.0 p.m. R. Borlase Matthews on Technical Libraries and Information Bureaux.

FRIDAY, FEBRUARY 26.

At the Institution of Civil Engineers. 8.0 p.m. Dr. H. T. Calvert on The Activated Sludge Process of Sewage Treatment.

MONDAY, MARCH 1.

At the Royal Institute of British Architects. 8.0 p.m. Lieut.-Col. H. W. G. Cole, C.S.I., O.B.E., on The Paris Exhibition of 1925.

The Institution of Electrical Engineers. 7.30 p.m. Carnival Dance at Australia House.

WEDNESDAY, MARCH 3.

At the Institution of Heating and Ventilating Engineers. 7.0 p.m. Joseph Meech, A.M.I.E.E., on The Design and Application of Electric Motors Relating to Heating and Ventilating Installations.

WEDNESDAY, MARCH 10.

At the Edinburgh Architectural Association. 8.0 p.m. C. D. Carus Wilson, F.R.I.B.A., on Principles of Design.

THE MODERN STREET

BY J. D. BERESFORD

No consideration of the difficult problem of street planning can have any practical value unless we reconcile ourselves to accept the unwelcome premise that the determining factor is economic rather than æsthetic. Old Regent Street has had to give way, not because our taste has so far changed that we wish to express our feeling for building in new terms, but because its rental value could be raised. The centre of London is, in effect, as constricted as the City of New York, though it be confined by parks and residential quarters instead of by the Hudson River. And when we talk of streets we must never forget the sacred associations of such words as property, ground rent, leaseholder, and commercial possibilities. Streets have, no doubt, their uses as a means of access to one part of a town from another. We are allowed, even encouraged, to walk in them, and a few people here and there consciously prefer a beautiful street to an ugly one. But when the architect has to plan one of its buildings, he is compelled in the first place to consider the requirements of the public in relation, not to its æsthetic, but to its commercial tendencies. A shop is a trap, and the same is true with certain differences of a suite of offices. We may bait them with dignity or with display, but in the present state of our evolution we cannot bait them with architectural fitness to the design of the city.

Mr. J. D. Beresford.

Nevertheless, though this prime handicap remains, we can detect strong indications of movement towards another mode. The evolution of the idea of democracy tends continually to increase the size of the unit. We are moving from the planning of single commercial buildings to consider the planning of the larger unit of the street; and, even when the opportunity offers, the planning of a town. The drag on this movement is obviously provided by the size of another unit, that of the parcel of property leased by the intending builder. And if we wanted to rebuild London as a whole, by the end of the century our energies would be confined to the conversion of the comparatively few individuals forming the select body of London's ground landlords.

I make no apology for thus allowing the shadow of social theory to fall upon a disquisition on street planning, inasmuch as the two subjects are inseparable if we regard them in their larger aspects. The story of social changes, tending always to an increase in the size of the social unit, is built into our London streets, as easily to be read there by the expert as is the history of the growth and decline of a religio-æsthetic movement in a Gothic cathedral. The underlying forces of change are not to be concealed in this form of expression by the idiosyncrasies of individual taste, even though it be the taste, so often reactionary, of the architect. In the past thirty-five years—a period chosen arbitrarily as representing my own personal experience—central London has largely changed its character, and one of the more important factors in the change has been the supersession of the individual trader by the limited liability company.

This prevailing handicap instantly confronted me when I let my fancy play on what seemed to me the ideal development for a London thoroughfare, inasmuch as the first essential, the maximum of light and sunshine, is definitely excluded by commercial considerations. Even as things are the 45° angle is too steep to admit, during the three darkest months, more than a glimpse of midday sunshine to streets running east to west, and the whole tendency is towards raising this angle rather than towards lowering it. In any city north of latitude 50° this is regrettable, but in London, with its damp, hazy atmosphere, affording as it does an ideal carrier for the unconsumed carbon of our coal-fires, it simply means that in winter such thoroughfares as Oxford Street, the Strand, or, worst of all, Victoria Street, are canyons of gloom. I say nothing of the City. That is, I fear, past praying for. The footing is too valuable. And if we are to turn the Bank of England into a "sky-scraper" we can only shrug our shoulders, and console ourselves with the reflections, first, that the capital expended will pay a sufficient interest, and, secondly, that as the Bank is on the north side of the City's most important open space, it will make no difference to the exclusion of sunshine.

Outside the City, however, every widening of the streets is an advantage gained. It is true that in streets running east and west you may widen to any extent and get no more sunshine so long as you maintain the 45° angle. But you do get more light, and if the tributary streets on the south side are widened, too, a little more sunlight. And something has been done for central London in that direction in the course of the past thirty-five years. In that time we have had Shaftesbury Avenue given us (something better than the slums it was driven through, though a depressing street even now), and Kingsway quite a hopeful thoroughfare, besides the clearances of the Strand and Whitehall.

I have dwelt on these practical aspects because I do not wish to be considered as a vague dreamer and idealist when I come to the more theoretical side of my subject, which I may perhaps introduce with the perfectly reasonable question: "What is a street for?" I find three uses for it. It is a route, a shopping centre, and a promenade. I will take the middle use first, since the difference between the other two uses is mainly one of the speed with which we make the traverse.

Now, regarding the street as a shopping centre, we can forget its æsthetic value. The kind of advertisement demanded by the shopkeeper is a matter of plate-glass and window display rather than architectural fitness. In the case of a big "store," what is required commercially is something "striking," something different from the other shops or stores round about it, something that shall fix the building in our memories and make it easy to find. But having found it, we are begged not to raise our eyes above the level of the shop-front. The Rue d'Antibes at Cannes,

surely one of the worst main streets in any show town in Europe, may be instanced in this connection. It is narrow, it is not straight, its architecture is entirely haphazard, and when two-thirds of the shops are shut, as they are from the middle of May until the middle of November, it has no single attraction. In the season you go to the Rue d'Antibes to look at the people and the shop windows; at other times you avoid it as far as possible. In short, regarded as a shopping centre, the street may be planned with no thought beyond its commercial uses. Even sunlight is a disadvantage. The purveyors of women's apparel, the trade we have chiefly to consider, cannot permit sunlight to fall upon their goods, which is why all the principal shops in Oxford Street are on the north side. [*To be continued*]

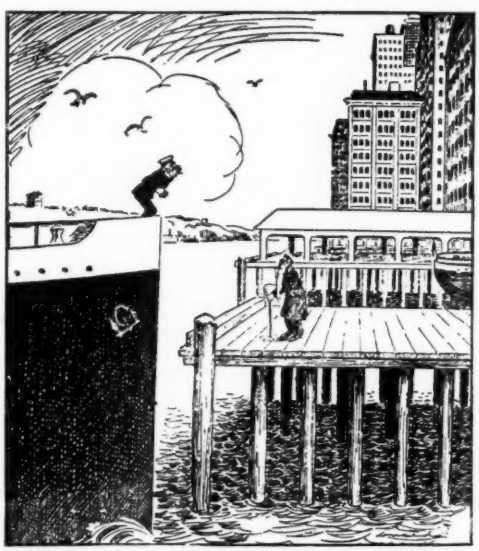
THE FLORIDA ENCHANTMENT

BY CHARLES HARRIS WHITAKER

iii. THE ARCHITECT'S PARADISE

Rio and Vista, Persian and Maryland, Gables and Gardens, Boca and Bella, Bel and Beau, Harbour and Acres, Treasure Island, Indian Rocks, Venice, Riviera, Pine, Palm, Oak—just as though the man who names the Pullman cars had mixed up a thousand names, hardly one of which has any application, and then having spiced them with bits of glamorous laudations, had put them in a hat and let the Floridan land promoters draw them out as names with which to conjure the farmers away from their farms, the clerks away from their offices, the staid and the restless, the old and the young, the shopkeepers, the garage men, the mechanics—in fact, every kind and description of being that could drive an automobile, or sleep in a sleeping-car, until Florida had them within her confines. What an assembly! Blackpool and Ostend and Cannes rolled into one, with a hundred and fifty thousand automobiles bearing the licence plates of every State in the union, moving slowly up and down crowded streets, or parked in endless lines against the curbstones.

No sociologist has ever known or heard of anything like the Florida migration. It is one of the astounding episodes in the life of a nation that is justly reputed for its abilities to move quickly. I passed Persian Gardens yesterday. From a stand raised a few feet above ground and draped with many yards of bunting the music of a band blared its way through the dust and the heat. The players wore uniforms of red and yellow—good bright reds and brighter yellows. Perhaps three hundred automobiles were drawn up at all sorts of angles all over the place reserved for them, and outside along the half-finished streets. At least a thousand men and women were drifting about the huge tent which, I suppose, was set aside as the main office of what is known as the "ground-selling force." A queue of another fifty or sixty people stood awaiting entrance to another small pavilion. What was happening? Why the barrels of orange juice and the band? Persian Gardens was being sold in building lots, and the same spectacle is being repeated daily in many a town all over the State of Florida. The prices are mostly fantastic, absurd, ridiculous. Who pays them? The people who wish to come here and live? Perhaps, but mostly the land is bought by those who, if they do build, will merely do so in order to add an attraction such as may enable them the quicker to get rid of their investment.



Florida Real Estate Boom. Skipper (winter of 1930): "New York, ahoy! Where's the population?" "I'm the caretaker. Everyone else has gone to Florida." (From "Judge," New York.)

Yet never have architects had such a romp as in Florida. From what I have seen and heard there must be at least a thousand practitioners with offices, or partnerships, scattered up and down this flat peninsula. Something like two hundred men were licensed at the last meeting of the Board of Registration for Architects. Every office seems busy. I have yet to find an architect who was not loaded down with work. The rush of buildings has caused an embargo to be put upon building materials by the railroads, and steamers are plying into ports that have never before known the blast of a whistle or the rattle of a gangplank, all in a prodigious effort to bring in the thousands upon thousands of tons of cement and brick, lime and lumber, steel and hardware, for the need of which the air rings with an all-pervading cry. The embargo even extends to many another product—to automobile parts, tyres, furniture—in fact, to almost everything save food, for here on a strip of land something like thirty or forty thousand miles in area, growing little food save oranges and the citrus varieties, there are piled several hundred thousand people who have to be fed from outside the State. The daily food supply tasks the railroads and steamers to their limit, and more and ever more people are piling in, to live from tin cans and be housed heaven alone knows where.

But it is an architect's paradise for the moment. Freedom is in the air. The styles, so to speak, are having a vacation, although the savour of Spain and Italy, Morocco and Arabia, is all over the land. Buildings are generally low. There are neither cellars nor foundations for anything save an office building or a hotel. Houses are truly set upon the sand, with the water-level but a few feet below the lower floor. Yet the soil is dry and the footing good, although one shudders a little at the thought of what will happen if a hearty West Indian hurricane rambles up the Gulf of Mexico and passes along the

Florida coast. The construction is light, for there are no heavy roofs to be carried. The sunshine pours down almost every day in the year. But I have seen hollow tile walls that appeared to be propped in position while waiting for the roof framing to tie them together, and the timbering mostly used for that purpose astonishes one trained to the rigours of a northern climate, even though he make due allowance for the languorous land of Florida.

While the larger towns have sewage disposal, such as it is, great areas depend for this purpose upon flimsy septic tanks sunk in the ground. No one supposes that they will last more than five years, and in the same yard there is also sunk a well. Truly the question of water supply will be a problem for those who come after the present speculators, and this problem with that of sewage will take a heavy toll in taxation ere they are solved. But at present there is great liberty. Building codes do not exist in many places, and if they do they are likely to allow greater freedom than is usually considered safe, even though many of our northern codes have been made fantastically safe, so great have been the political influences brought to bear in their preparation.

legislature remained.

New Town Shows Spanish Motif In Full Detail

Coral Gables, Fla., Nov. 27—(AP)—Coral Gables is to be partially typically Spanish by December 15. George E. Merrick, owner and developer, announced that reproduction of the Spanish community appearance is being rapidly placed upon the Miami district, at a cost of approximately $2,000,000.

A broad market place, crumbled fountain supplying water, watch-tower roofed with mottled tiles, sidewalks, cafes, Andalusian gardens and tiny shops nestled between massive masonry is the motif. Arrangements have been concluded with some of the best designers of New York to complete the project.

A cutting from a Florida newspaper.

Architecture! It is everywhere, and what a relief after the dull and the drab of most of the United States. There is no colour timidity here. There is, of course, a riot of colour. Tiles and paint provide it, and it has been used in endless combinations of every hue known to the palette. But however bad some of it may be—however naïve or amateurish the combinations of purple and red—it is encouraging to see a people at such play. The rest of the United States is so prim and precise in its architecture, so timid and so shrinking, so afraid to let go, so conservative in its adherence to pedagogy and academicism, so patterned and modelled after other architecture with which we have all been familiar for a century or more, that in spite of the garishness and the crudity of much of Florida, it is truly refreshing to come upon a land where colour reigns. Out of it there may come such a sense of colour-value as the Dutch have acquired. At any rate, architects have let go and clients have egged them on.

The range is almost beyond belief. It is nothing to spend millions upon preparing a land development. Gardens, streets, pavilions, bathing-pools may be laid out and finished to the last item ere an investor is permitted to do more than look at the plan of the manor or the island, although, as I have said, hardly a single name has any significance or local relationship. There are small houses, mammoth hotels, gorgeous estates where the hardware will be silver and gold, and the bath-tubs cut from a single block of marble. Where does all the money come from? Outside of Florida, of course, and it must be drawn and attracted and magnetized and taken in exchange for land and buildings. As to the duration of the stream, who can say? What will be the end of it? No one knows. There is more solidarity to the movement than seems possible, and yet it is scarcely to be believed that the weird speculation will not subside and flatten out to a considerable degree, leaving behind it such a problem as one cannot wholly envisage at this moment. But the elasticity and power and driving force of the people of the United States is a tremendous thing to be reckoned with. Progress, it is too true, is more often looked upon as movement rather than direction, and in this respect there is nothing planned far ahead in Florida, in the large social sense. The possibilities of food production are very limited. It is no place for industry, since the natural resources lend themselves little in that sense, although there are deposits of kaolin, clay, and some timber.

Thus the architecture of Florida can hardly be an indigenous one, nor can it be of the true vernacular. Almost everything must be brought from outside. There is no land use such as has provided the roots of almost every other architecture in the world. The spectacle is what the botanists would call a "sport," for it has no roots, no leaves, no fruit. It is a transplantation pure and simple, an adaptation of the wholesale kind. But the architects are having an orgy. Anything goes if it looks like Spanish, although there are murmurs here and there over the monotony that seems to be piling up in certain localities. Perhaps the situation may be explained in the few words contained in a telegram recently sent to a book-shop in New York: "Will pay any price for good plans and elevations of Swiss chalets, we are sick of Spanish stuff."

The highest hill in Florida is 250 ft., I believe, but the Swiss chalet development is on its way to achievement where the terrain is hardly 20 ft. above sea-level. There never was anything like Florida!

THE CIVIC HIERARCHY

BY THE EDITOR

A RECENT issue of *Wasmuth's Monatshefte für Baukunst* contains a note which is of peculiar interest to us in this country, and especially to those readers of THE ARCHITECTS' JOURNAL who have followed Mr. Trystan Edwards's exposition of the cardinal virtues of urban building. In this profound and witty author's *Good and Bad Manners in Architecture* there is a full-page diagram showing the residential and business quarters of a town extended on all sides of a domed edifice, unmistakably a church, whose supremacy they are in no way inclined to challenge. On the next page the church is shown ringed round with a heterogeneous multitude of high commercial buildings, some domed, some turretted, some *à la* Halicarnassus. Not that the picture is by any means an unfamiliar one. London is full of churches whose relation to the surrounding buildings is an inversion of what, by every token, it should have (and usually has) been. In America churches have even been known to endow themselves—and very handsomely, too—by leasing every inch of surrounding space to the insatiable proprietors of chain cigar stores and hosiery establishments. It is doubtful, however, whether an apter, a more precise, example than that adduced in *Wasmuth's*, and reproduced on this page, may anywhere be found. It might have been specially prepared, like a coloured microscopic slide, to illustrate one of Mr. Edwards's most important contentions. This contention cannot here be more than recalled. It is that "a few important buildings presiding over a number of lesser ones" is the outward sign of a healthy civic organism. And what buildings can be more important than those devoted to religious ceremony? It is these therefore (I am sorry for Mr. Woolworth, but it really cannot be helped) that ought, in a healthy society, to preside over the rest. When this balance is overthrown we get a condition of things which is intolerable, and which reflects (as most disagreeable symptoms usually reflect) an inward condition that is worse still. This latter has not been more succinctly described than it is in Mr. Osbert Burdett's remarkable survey, *The Beardsley Period* (which I have just been re-reading). "A religion and a society that contradict each other," says Mr. Burdett, "reduce the first to absurdity and the second to chaos."

Now the Berlin Opernplatz, one side of which is here illustrated, is an integral part of the Unter den Linden scheme, and in this scheme the Hedwigskirche occupies, as, indeed, it is only right that it should occupy, a conspicuous position. The relation of this church and of the Opernplatz to the civic axis of Berlin can only be compared to that which unites the Ministère de la Marine and the Place de la Concorde in Paris to the chief axial feature of that city. The upper illustration shows the Hedwigskirche together with the adjoining block of buildings as it appeared in 1881. The principal cornice of this block, occupied by the Dresdener Bank, observes the level of the cornice of the church, while above this level the flat, unbroken roof of the bank can nowise be compared to the sculptured pediment and swelling dome of the church. The lower illustration is from a photograph taken last year. Here a tall order lifts the cornice of the reconstructed Dresdener Bank to a height far in excess of that of the church cornice; to this, moreover, must be added the height of the three extra stories which surmount the great entablature. The contributor to *Wasmuth's* is sanguine enough to hope that these stories will one day be doffed in obedience to the civic law. "Are these upper stories to disappear, or must we resign ourselves to the loss of the Hedwigskirche? The joint survival of the two is not to be imagined." Now *Wasmuth's* is not, as this extract might lead one to suppose, the *Morning Post* of German architecture. It would be far more correct to liken it to the *Daily Herald*. It is uncompromisingly radical, it is modernist from cover to cover, it is, in fact, absolutely *le dernier cri*. This makes its attitude the more interesting. A scheme is, I see, on foot whereby the eighteenth-century Opera House is to be restored to its original condition, and the hope is expressed that the Dresdener Bank may be stimulated by this example into decapitating itself. Let us wish the Hedwigskirche the best of luck.

Above, the Hedwigskirche and Dresdener Bank in 1881. Below, the same buildings in 1925. The cupola assumed by the church in its attempt to keep pace with the rising structure at its side is pathetic.

CURRENT
ARCHITECTURE
SECTION

SOME VIENNA APARTMENT HOUSES

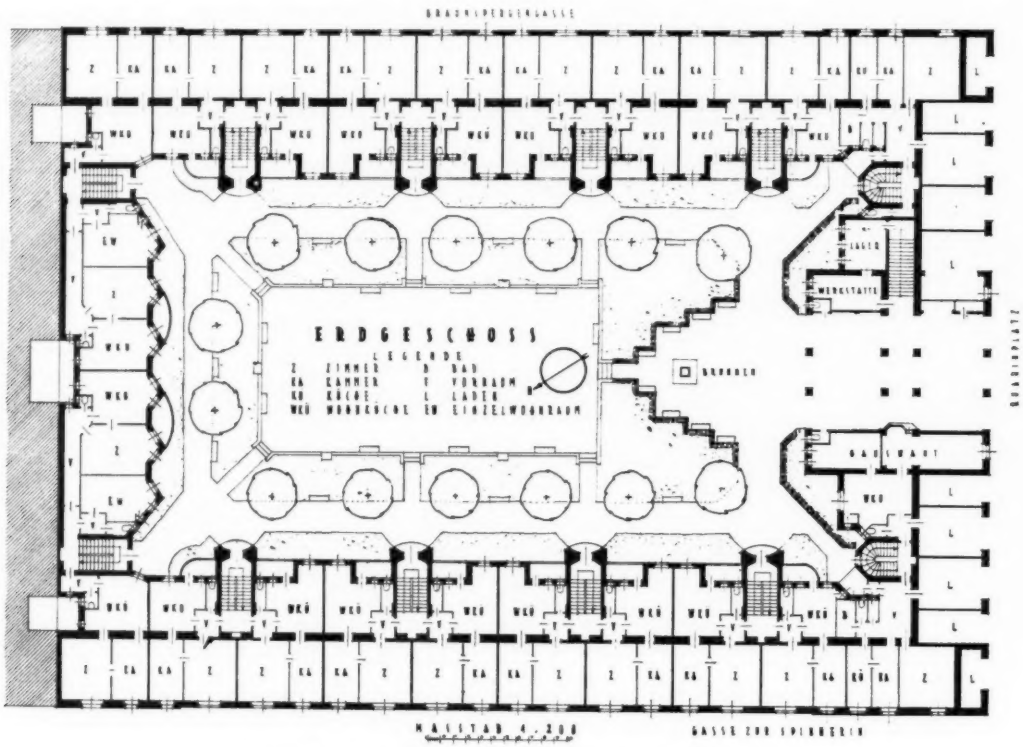
BY A. S. LEVETUS

THE times are not favourable in Vienna, nor in fact anywhere, least of all in Austria, for investing private capital in the building of apartment houses, semi-detached villas, or other domestic dwellings. There are, of course, a few persons who commission architects to build for them, but usually the finished building is purchased direct from speculators. Although many apartment houses have changed hands, no new ones have been built with private capital, either for brain or hand workers, since 1914. The Rent Restriction Act forms a formidable bar to speculative building of any sort for the use of these workers, with the result that the Municipality stepped in. Vienna was a walled city until 1859, and tall houses were necessary, owing to the lack of space for small or lower ones. For this reason "one town was clapped on the top of another, most of the houses being of five, some of them of six, stories." So wrote Lady Mary Wortley Montague from Vienna in 1718, and this description holds good to-day. Though many of the old houses have given place to new ones, enough of the older ones remain to show how accurate she was in her observations. Some of the narrow streets, of which she writes, have been broadened during the past thirty years, but it is chiefly outside the limits of what were once the city walls that modern buildings have been erected. These buildings are of all kinds and styles, and the majority of them have been erected by builders who have resorted more often than not to pattern-books for their ideas. One has only to walk through the beautiful broad Ringstrasse to learn this truth. A few of the buildings, however, have been built by architects, and these, by their simplicity and dignity, may be easily distinguished. But even these buildings have faults, which are due more to ancient building laws than to their planners : the inordinately high rooms, the immense reception rooms obtained at the expense of the bedrooms, which sometimes open on to small dark yards, are great drawbacks, and are among the disadvantages allowed by the authorities.

Apartment house for the middle classes (X district). Details in the kindergarten. Above, a fresco. By Fritz Zerritsch. Below, a sculptured panel in burnt glazed plaster. By Ferdinand Opitz.

In the nineties a number of apartment houses were built on the Ringstrasse itself, on the site of the old barracks, but these have little opportunity for thorough ventilation except in the front rooms, where the windows face the streets. The back rooms are dark; in the higher flats they have more light, but they are rarely quite light and airy. Before these buildings were erected, Vienna's great

architect, Otto Wagner, tried to improve the planning and design of such houses, but he had to fight against the building laws, and those responsible for their enforcement. He built at his own expense several apartment houses in different parts of the city to show that something better could be done, among the outstanding examples being those he built on the Wienzeile, about the end of the nineties, and in the Neustiftgasse, early in this century. The former, three in number, are regarded as the first modern residential flats in Vienna. A stranger might disapprove of the exterior decoration, but after all this is expressive of the early days of the Secession, when the buildings were erected. But whatever may be one's opinion of the ornament, there can be no two opinions as to the architectural beauty of the structure. This house in the Neustiftgasse is a veritable stronghold planted for all time. One is as secure in its flats as in a fireproof safe. The construction is above criticism, the planning of the single dwellings excellent, and everything conceivable is there for the well-being of the tenants, except one thing,

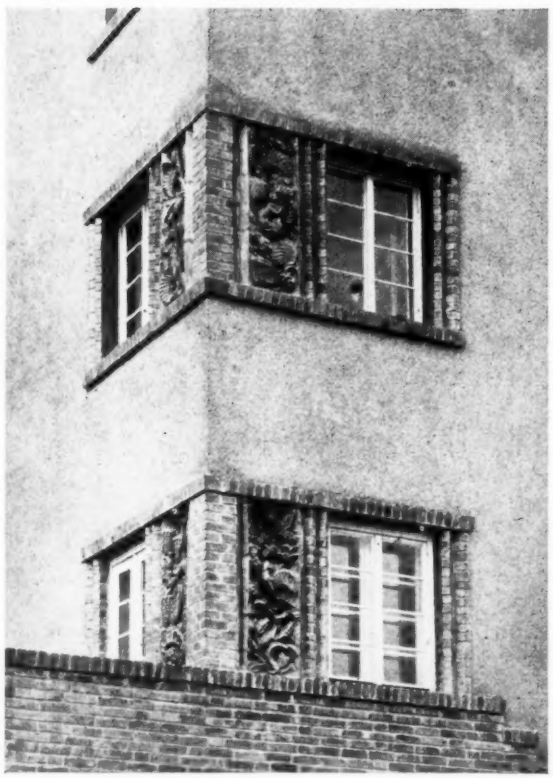


Apartment house for the middle classes, Vienna (X district), built by the Municipality. By Baurat, Professor Theiss, and Jaksch. Above, the main and side elevations. Below, the ground-floor plan.

Apartment house for the middle classes (X district). By Oskar Thiede. Above, the main front, showing the entrances, with kindergarten and terraces over. Below, the fountain in the enclosure.

that "Gemütlichkeit" feeling of comfort and dwellableness, without which there can be no real home. The building is now used chiefly for business purposes.

Though many houses were erected from the early part of this century until the summer of 1914, they chiefly owed their existence to the building speculator. An exception is the delightful apartment house, Dobling Cottage, for which Robert Orley was the architect. This marked a new era in the life of residential flats in Vienna. It was erected in 1906. Another calls for particular mention because it was built by a young modern architect, Hugo Gorge, in 1913. The house is in the Laimgruberstrasse. Its exterior is modest, and it has fine architectural proportions, and is well constructed. Here warmth and comfort seem to spring forth to welcome you. It is true architecture as distinct from building. Everything pertaining to elaborateness has been avoided, and ornament is conspicuous by its absence.



Apartment house for the middle classes (X district). Above, the entrance gates. The sculptured figures are by Ferdinand Opitz. Below, detail of the corner windows. The decorative sculpture is by Professor Schimkovitz.

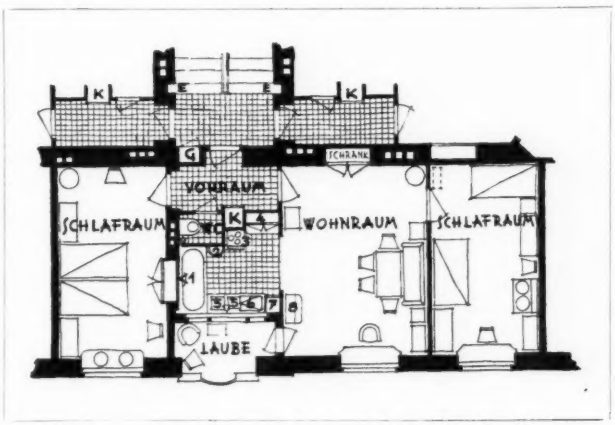
The interior proportions of the building have been equally well kept in view.

There are two dwellings on each floor, so planned as to provide the best hygienic conditions, the largest amount of sun, the greatest possible amount of space and light, and there are no places in which dust can accumulate. This apartment house, the first effort of a young architect building at his own cost, may be regarded as a right step towards modern development. It proved the last, for during the years following the outbreak of hostilities, no true building was done in Vienna, and it was left to the Municipality to take up the thread.

The want of sufficient housing accommodation was beginning to make itself felt during the war, but early in 1919 it became intensely acute, and State servants, workers, and others, who were returned from the new States because they refused to co-opt with them, were forced to live in disused railway carriages and like makeshift dwellings.

The Municipality then stepped in, and in the autumn of the same year began building on its own account. Since then work has continued steadily with the help of all the chief modern architects in Vienna. In the beginning the Municipality saw that financially it would be impossible to continue the work; so it devised a scheme, called the "Wohnbausteuer," by which all persons residing in flats or private houses were required to pay a tax towards the expense of building for their less fortunate fellow-citizens. The tax was apportioned according to the amount paid in rent, or, if they lived in villas, the rent value fixed by commune. Another method of raising funds was to restrict the number of rooms for each tenant of a flat or owner of a villa and by forcing the tenants to take in anybody whom the Municipality chose to inflict upon them. This could be avoided by paying a lump sum into the "Wohnbaufund," every penny of which has gone to the purpose for which it was intended. In this way sufficient funds were obtained, and building has proceeded uninterruptedly. One may read on the finished apartment houses that "this building was erected by the Municipality from the funds raised by the Wohnbausteuer." This scheme has been in operation twice. The Vienna Municipality has its own brick kilns and carpenters' shops, and only good materials are used for constructing the buildings. For its other requirements the Municipality accepts tenders.

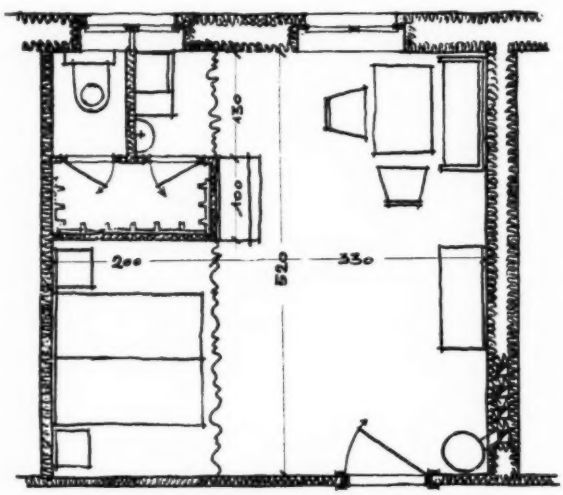
The first apartment house for the middle class is known as the one-kitchen house, and was erected from the plans of Otto Polak-Hellwig. The twenty-six flats which form the original nucleus were erected in 1922 by the Heimhof Building Society. A large number of flats is being added by the Municipality, so that when the building is finished it will form a large complex, with roof terraces, where sun-baths may be enjoyed or the air taken. One central kitchen provides the food, the bills of fare being made by a committee chosen among the tenants, who run the concern for themselves. The kitchen has been working with excellent results for the last three years. Meals may be



Apartment house for the middle classes, with shops, Vienna (XVII district), built by the Municipality. By Otto Polak-Hellwig. Above, a general view. Below, a plan of a typical flat.

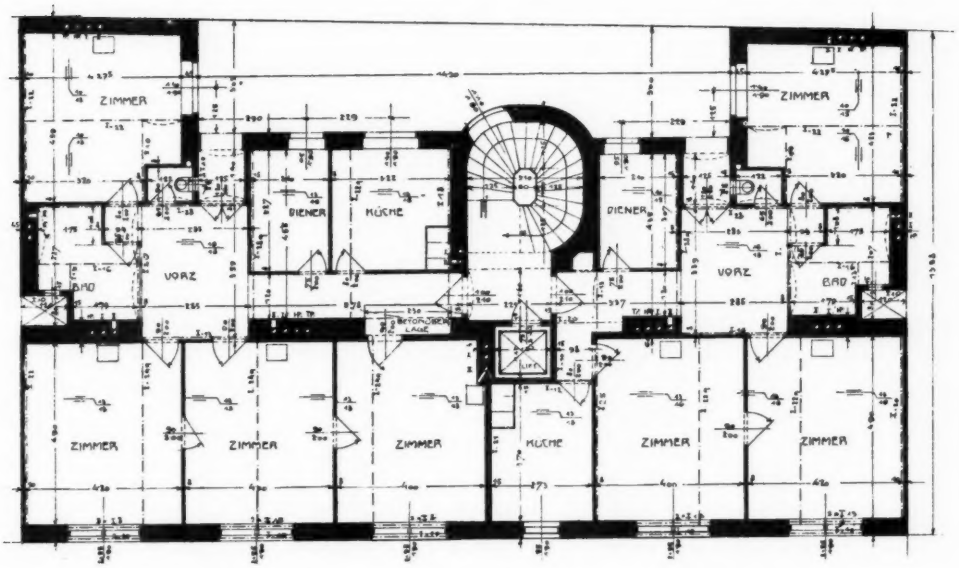
taken in the pleasant dining-room or in the residents' own homes. The additional flats now being built by the Municipality consist of 110 dwellings with two rooms, and 110 with a single room. Each, as in the nucleus house, is provided with central heating, and a kitchen known as a niche kitchen, containing a table, gas-cooker, water tap, etc. The wash kitchens have every modern appliance to reduce labour and costs. There are douche-baths, with hot and cold water, a number of separate bath-rooms for males and females, a garage, and a kindergarten, where the small children are looked after by a trained person paid by the Municipality. This house is for clerks and others of the middle class who are in receipt of small earnings. All the above features are common to Municipality apartment houses, whether they are built for the middle or working classes. The rents are nominal, the Municipality being under the Rent Restriction Act for all it builds, whether settlements or apartment houses. This particular house is in the XV district of Vienna.

The apartment house in the XVII district, also designed and planned by Otto Polak-Hellwig, stands on a corner site and faces the street. The ground floor is divided off into shops of a good class. The house contains thirty-seven flats, each one complete in itself, and so planned that dust cannot collect. Each dwelling occupies a space of 38 square metres, and contains three rooms : two bedrooms and a living-room. The latter is screened off by a curtain from the recess kitchen, which contains a gas-cooker, a built-in cupboard, a bath with a lid which serves as a table, a sink with two basins to which hot and cold water are led by pipes heated by the same boilers which provide for the bath. The boilers act automatically, and thus save time and labour. Each flat has a loggia overlooking what will in time be a garden, and this can be seen from the kitchen window. Here the children can play or sleep while their mother is busy, but at the same time she can always keep an eye on them. The small entrance hall contains a w.c., and there is a boxed-in dustbin, connected with the one in the kitchen, which is also boxed-in, and this can be emptied from the outside. Everything in the flats is arranged to secure the greatest economy of labour and the greatest amount of comfort. The gas and electric meters are boxed-in in the stairways, so that the officials can inspect them without disturbing the tenants.

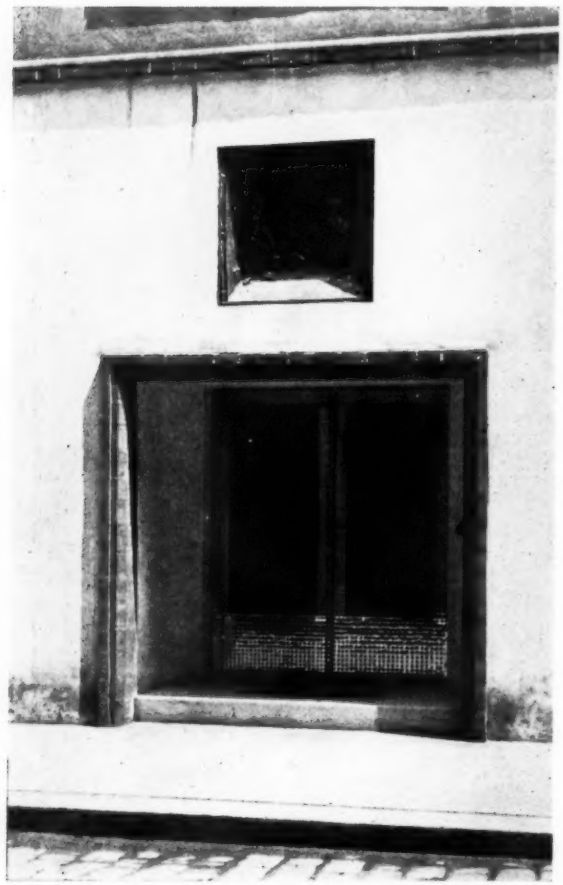


A one-kitchen house, Vienna (XV district). By Otto Polak-Hellwig. Above, a model of the new building to the nucleus house. Below, plan of a one-room kitchen niche.

Another apartment house shows how the Municipality performs its duty to the middle class as well as to the working class, for whom it promised to build within a given time 25,000 dwellings. This house was designed by Theiss and Jaksch, and is situated in the X district of the city, a high-lying part, with fresh winds



Apartment house for the middle classes, Laimgruberstrasse, Vienna. By Hugo Gorge. Above, the principal elevation. Below, a typical floor plan.



coming from the Little Carpathians, which can be seen from all sides of the building. The building faces south, and in front of it are allotment gardens, which it is intended to transform into a park. The building is a long, horizontal one, with a wing on either side. The back of it, with its three light shafts, forms a kind of bulwark against the neighbouring houses. The building covers a space of 3,954·05 square metres. Only 2,306·68 square metres, that is, 58·3 per cent., are built upon, and the remaining 41 per cent. is reserved for a garden, which has yet to be laid out. The building contains eight large flats, eighty-eight medium-sized, and thirty-five small ones, nineteen shops, five workshops, eight storing-rooms, a kindergarten, with workshops attached for the children to learn the use of tools while following their own fancies, a library, and baths. The baths—there are separate ones for men and women—and the douche-baths are in the basement, and these are provided with hot and cold water. Each of the large flats has two large rooms, two smaller ones, a bath-room, small hall, pantry, w.c., and a loggia; the medium-sized ones, one large and one small room, a hall, a living-room with recess kitchen, pantry, w.c., and loggia; and each of the small flats has a bedroom, a living-room, small hall, w.c., and loggia. Special flats for single persons contain one room, with a recess kitchen, w.c., and loggia. The whole building is planned to secure economy of labour, and the well-being of the tenants. The kindergarten, where the children are cared for by the trained teacher provided by the Municipality, faces south. It is a delightful place. On its terrace above the children can run about at will, and there is a tea-room where they can partake of their afternoon meal. The kindergarten has a separate entrance, and contains a large room, where cinema productions and lectures may be given to men and women; an office, lavatories, etc.

The front of the building, the kindergarten, has only a single floor, the adjoining parts have three floors, and the longitudinal side has four stories. In this way a large garden court has been formed. The façade of the building is lined to the level of the window sills of the first floor with dark brown violet-tinted clinker bricks, and that of the kindergarten is ornamented with sculpture executed in dark-toned terra-cotta by Professor Schimkovitz. The corner windows of that part of the building, containing four stories are framed with clinker bricks and sculpture fillings, by Ferdinand Opitz, of the same colour as those mentioned above. The playground in the middle of the garden is sunk deep so that in winter it can be flooded and used for skating.

Entrance to the building is obtained by way of three gates, the centre one being used for vehicles. Twelve staircases lead from the court to the flats. The latter are heated with stoves provided by the tenants, for the Viennese have their own ideas as to how rooms should be warmed, but there are gas stoves in all the kitchen recesses. Lighting is by electricity, and each tenant has a cellar. The wash-houses and drying grounds are in the roof, and they are installed with modern machinery, including washers, wringers, mangles, etc., run by electricity, and furnished by the Municipality.

These model flats are very popular with the people, and every care is taken by the Municipality to secure careful and desirable tenants. Technically the flats are perfect, and architecturally they are inspiring and suggestive.

Apartment house for the middle classes, Laimgruberstrasse. Above, the entrance. Below, a staircase landing.

THE COMPETITORS' CLUB

INTERNATIONAL COMPETITIONS

INTERNATIONAL competitions present features that render it more difficult to arrive at an equitable decision than in the case of the more usual types, where promoters, assessors, and competitors are of one nationality, as added to the inevitable variations in the views of an assessor, or assessors, there is superadded the differences between the attitude of the different nations towards architecture and its problems.

Before considering these differences it may be well to point out that there are two main types of international competition: one in which, while competitors of all nationalities are invited, the assessing is undertaken by an architect or jury from one country only, usually that where the building is to be erected; the other where the jury also is international, and, consequently, representative of various points of view which are likely to differ very widely.

In the first case it is probable that the competitors belonging to other countries will rarely be successful, not on account of any conscious preferences on the part of the assessors, but solely because their line of approach and their ideal solution display the differences of ideal referred to in our first paragraph. Taking the two most strongly contrasted schools as an example, that of France is expressionist, and demands in a design an emphatic indication of the purpose for which the building is intended, while that of England attaches less importance to this, and competition awards are usually made on the merits of the scheme in providing conveniently and economically for the destined use of the structure, without insisting strongly on an architectural differentiation between one purpose and another.

But it is easier for the architect to qualify his method in order to improve his chances with a foreign assessor than it is to decide how to frame his scheme with an international jury, for in the latter case much will depend on the relative mental vigour of the various adjudicators, and on the degree to which they are able to appreciate each other's arguments. As a rule, in European competitions the standards of the French school will dominate, as they have to be customarily expressed in a logical manner, but at the present time this school of design is itself in a state of flux, endeavouring to assimilate certain new conceptions that appear to be gaining ground in continental centres, but which have made but little way in England.

Thus the English competitor submitting a design to an international jury will find it uphill work to produce a design likely to be acceptable. His national representative on the jury may understand and like his work, but will not find it easy to substantiate its good points as against the merits of other designs quite different in character. Then, again, even if the assessors are known, our architects are generally less informed as to their characteristics, being more detached from the continental schools than these latter are from each other.

Of late years it is true we have been more closely observant of the trend of architecture in France, Northern Europe, and America, while as Middle and Southern Europe draws most of its inspiration from this source, a just reciprocation of the gifts of the Renaissance, we have not felt it necessary to look so intently towards the south. It is, however, incumbent on us to make a more comprehensive study of continental ideas and methods of design if we are to hold our own in international competitions on this side of the Atlantic. We need not belittle our capacities; we are, in some respects, quite able to hold our own with the architects of other lands, but the point at issue is not this, but that we must be able to express ourselves in the more general idiom if our designs are to be understood, and this expression is not merely a matter of technique and rendering, but more essentially one of the basic principles on which the design is conceived.

This sounds rather indefinite, but while it is difficult to explain the matter clearly, the differences would soon become obvious by comparing designs for similar types of buildings produced in the countries in question. There is a wide range between those of Scandinavia and Paris, but right through the series, stretching from the one to the other, we see how specific characterization is aimed at, an aim that is too apt to be ignored in our own country owing to the close study of economic planning here demanded. The point is that it is hardly worth while to submit a design to an international jury unless this aspect of architecture is clearly appreciated, and accepted as the guiding principle.

America may be regarded as midway between the Continent and ourselves in its architectural standards. Æsthetically it looks towards the former, but it has never fully accepted the fundamental position of expression in design, and puts some value on the British basic factor of convenience and economy. Therefore, it would be easier to conform to the American standards in the case of an international competition there, but these are not frequent in the United States, and those in South America should be looked at with caution, as it is difficult for competitors to satisfy themselves in some cases that the adjudication is competent and conducted on regular lines. In one or two cases in the past the decisions have suggested a strong bias in favour of local competitors.

SENESCHAL

[*For the benefit of new readers it may be pointed out that* SENESCHAL, *whose contribution appears weekly on this page, is a well-known architect with many competition successes to his credit. His discussions on current topics in the competition world have, since their inauguration in our issue of January 13, become a feature to which our readers look forward with a special interest.—Editor,* A. J.]

COMPETITION CALENDAR

The following competitions are announced with the full approval of the R.I.B.A.

Wednesday, March 31. New offices for the West Bromwich Permanent Benefit Building Society. Open to practitioners within fifteen miles of Birmingham. Assessor, Mr. W. A. Harvey, F.R.I.B.A. Premiums, £100, £75, and £50. Particulars from Mr. J. Garbett, Secretary, 301 High Street, West Bromwich. Deposit £2 2s.

Thursday, April 1. Public Hall, Topsham. Premiums £50, £40, and £30 respectively. Assessor, Mr. Walter Cave, F.R.I.B.A.

Friday, April 30. Australian National War Memorial. Villers Bretonneux, France. Open to Australians. Particulars from High Commissioner's Office, Australia House, Strand. Deposit £2 2s.

No date. Conference Hall, for League of Nations, Geneva. 100,000 Swiss francs to be divided among architects submitting best plans.

No date. Manchester Town Hall Extension. Assessors, Mr. T. R. Milburn, F.R.I.B.A., Mr. Robert Atkinson, F.R.I.B.A., and Mr. Ralph Knott, F.R.I.B.A.

No date. Isolation Hospital for Infectious Diseases, Doncaster. Assessor, Mr. T. R. Milburn, F.R.I.B.A. Particulars from Mr. W. Bagshaw, Town Clerk. Deposit £1 1s.

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

No date. Café in the Mooragh Park, for the Ramsey Town Commissioners. Particulars from Mr. J. Bell, clerk, Town Hall, Ramsey.

No date. Open Air Bath, Morecambe. Premiums, £100, £50, and £25. Particulars from Town Clerk.

No date. Secondary School for Girls, Worcester. Premiums, 100 guineas and 50 guineas. Assessor, Mr. Herbert T. Buckland.

Chelsea Football Ground.

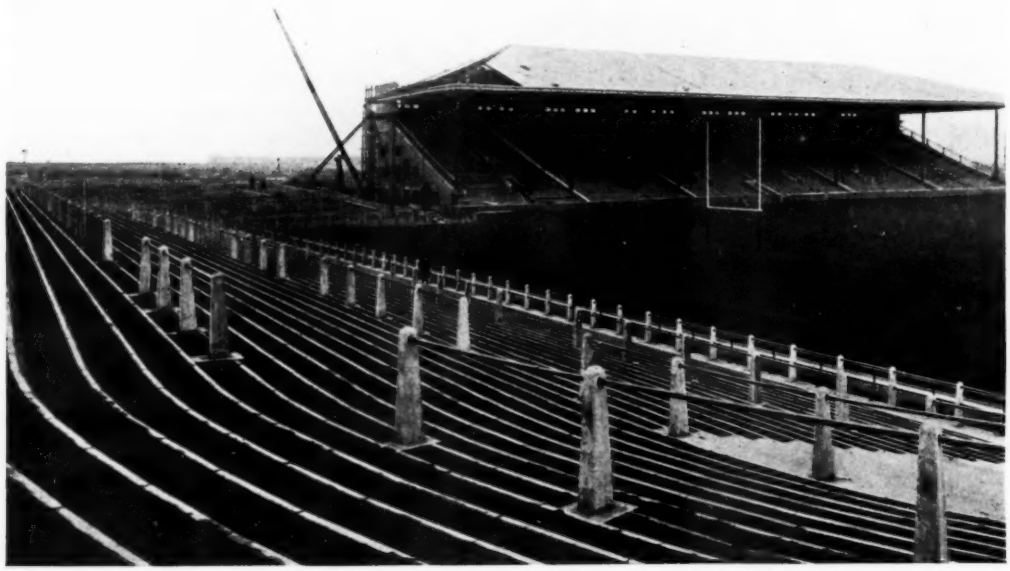
SPORT AND RECREATIONAL BUILDINGS

I: FOOTBALL STANDS

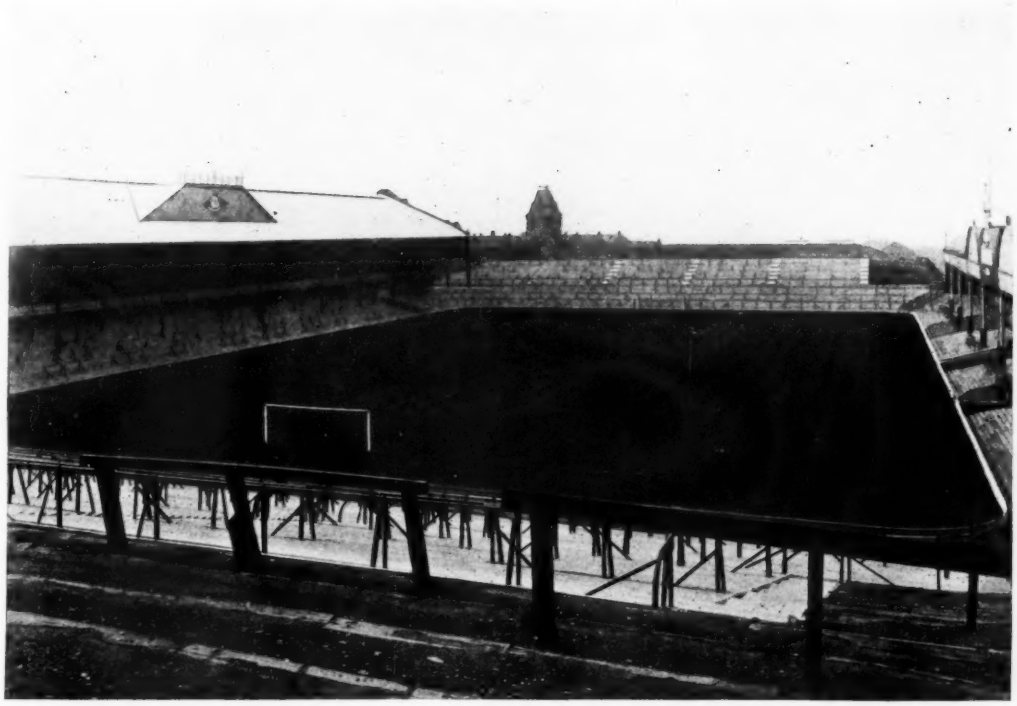
BY EDWARD R. BILL

THE object of the following notes is to indicate in outline the general requirements of a football club in the first division. The accommodation will comprise the administrative department, the team rooms, and the refreshment section. It will also include accommodation for about 50,000 spectators, planned so that every one of them, whether seated or standing, can obtain in comfort an uninterrupted view of the game. Amphitheatres, such as those at Yale or Wembley, can scarcely be regarded as typical of the requirements of an English club, the principal extant examples all being on a much less pretentious scale. Stands erected by provincial clubs in country districts will not require many of the special rooms so indispensable to a first division team.

Within easy walking distance of the entrances should be a parking space for cars, planned for convenient supervision by the minimum number of attendants. A spacious assembly ground should be provided outside the entrances, and this should be of adequate dimensions to accommodate the total number of spectators likely to congregate around the doors. Any encroachment by the crowd upon the public paths or roadways must be carefully avoided. The directors' entrance should open into a vestibule or hall, having cloakroom and lavatory accommodation for each sex within easy reach. The hall should communicate with the directors' rooms and their box on the grandstand. The players' entrance should be so arranged that it may be approached without traversing the area occupied by the public waiting for admission. The entrance for the press leading to their box on the grandstand, should afford uninterrupted ingress and egress clear of the public space. The spectators' entrances must be planned so that each class of ticket-holder is admitted through separate turnstiles leading only to the particular section of the grandstand or ground to which the charge admits. The entrances to the higher-priced seats should be kept away from



Murrayfield Football Ground, Edinburgh, erected for the Scottish Rugby Union. The flooring, seats, and risers are of reinforced concrete.

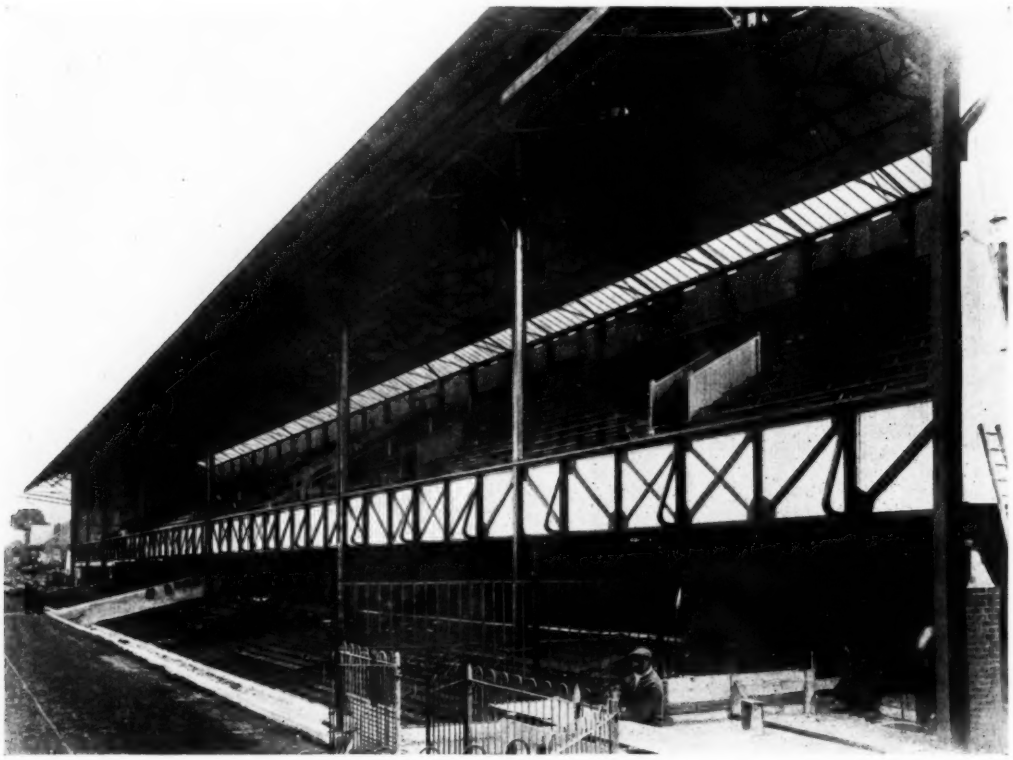


Aston Villa Football Ground. The grandstand is on the right, the covered stand is on the left, and the open stands are behind the goal posts. The team entrance to the field is in the centre of the grandstand. In the foreground is seen the flights of steps communicating with the several stages of the open stands.

the entrances to the open stands, and, if possible, on a different side of the ground. The turnstiles may be arranged advantageously in a series of pairs with a pay-box (with a pay-window at each end) between each pair. The pay-boxes must be strongly constructed to withstand rough usage, and may be enclosed on the sides next the turnstiles and towards the stand with strong steel mesh netting above the level of the desk. This, while admitting light and permitting supervision, effectually protects the till. In some instances the entrance door to the turnstile also forms the door to the pay-box, so that when the gate official enters his box and shuts himself in, he also, by the same action, opens the entrance to the turnstile. To prevent the gates being rushed by the crowd the width of the entrance to the turnstile should not be more than 20 in. Similar turnstiles and pay-boxes are required inside the stand at points controlling "transfers."

A point which cannot be emphasized sufficiently is the importance of arranging adequate exits to enable a crowd of some 50,000 people to leave the ground within a quarter of an hour at the most. The actual number of exits will depend upon the environs (one first division team has thirty-seven), but they should be distributed around the ground as much as possible, for it is useless to form exits at any one point in the enceinte walls of greater capacity than that of the street into which the people are discharged. Another point of great importance is to avoid steps in the line of exit after leaving the stands and buildings. The actual exit doors may be either wide double-folding, or sliding doors, as high as possible, and of an unclimbable design.

Opening from a corridor affording easy access to the field should be separate dressing-rooms and bathrooms for the use of the home and visiting teams respectively. The dressing-rooms should have a floor area of some 400 sq. ft., while around the walls should be fixed a continuous seat with a shelf below for shoes. Lockers are not usually provided. Hats and coats may be accommodated either on stands in the centre of the room, or upon hooks arranged around the walls. Opening from the dressing-rooms should be the bathrooms, having a team bath (to accommodate the whole team at once), and one or more slipper baths, a shower-bath, and hot and cold sprays. The team bath is, perhaps, best sunk below the level of the floor, and should not be less than about 14 ft. long, 7 to 8 ft. wide, and 3 ft. deep inside. It may be lined inside with glazed bricks, tiles, or Terrazzo. In the case of team baths constructed above the floor level, a rounded wood "roll" or capping should be fixed on top of the enclosing walls. The slipper baths are required principally in the event of accidents. Two are sometimes placed in the home team's room, and one in that of the visiting room. Two or three lavatory basins and a range of urinals are essential adjuncts to the bathrooms, which must also have a w.c. adjoining each. A copious supply of hot water is of the utmost importance, and should be obtained from an independent boiler used solely for that purpose. The floor of the dressing-rooms may be of wood blocks or boarding, and the bathroom floors may be Terrazzo, tiles, or granolithic paving. A wooden dado in the dressing-rooms and a tile dado in the bathrooms are desirable when funds permit. Some arrangement to carry off the considerable volume of steam from the bathrooms will be found essential, and an electric fan placed in or near the ceiling is, perhaps, the best thing for extracting it without the discomfort caused by draughts from open windows. The team entrance to the field from the corridor communicating with the dressing-rooms should be planned to centre with the minor axis of the ground. The drying-room should be well lit and ventilated. An excellent method of drying the boots is to lay them out on tiers of removable lattice trays fitting into a rack standing in the middle of the room. These should be open all round so that the air can circulate throughout the fitting. A dirt bin is most useful for boot cleaning purposes. The jerseys, etc., may be dried and aired on three or four steel horses sliding into a gas-heated drying closet. The trainer's storeroom may have a floor area of about 150 sq. ft. It is sometimes planned to open out



The Portsmouth Football Club's new stand at Fratton Park. Among the features of particular interest are the wide overhanging eaves at the front, and the continuous roof glazing along the back.

of the home team's dressing-room, and it should be fitted up with cupboards, bench, and table. The referee's and linesmen's room, having a floor area of some 150 sq. ft., must be planned as a dressing-room, with a cubicle containing a slipper bath opening out of it. A private w.c. for the use of these officials will also be required.

Although not frequently installed an electrical treatment room, such as that in the Aston Villa stand, is a tremendous asset. The apparatus may include an electric battery, with appliances for the treatment of the limbs and body by radiant heat. Electrical baths for arms and legs, and electrical massage are also included in the treatment as practised at the Villa ground. The room must be large enough to hold a single bed with ample space around it for the working, and accommodation, of the apparatus. An X-ray room and a small dark room are other useful adjuncts.

The secretary's room or office may have a floor area of about 100 to 150 sq. ft., and should be planned for easy communication with all other units. The directors' room may, with advantage, overlook the ground, and the windows should be so arranged that a good view of the game may be obtained by any of the occupants partaking of refreshment. This room will also be used for directors' and other business meetings in connection with the club, and should be planned near the secretary's office. Private lavatory accommodation must be provided for the directors' use. A recreation room for the use of the team is necessary, and should be provided with one or more billiard tables. A gymnasium measuring, perhaps, 60 ft. by 30 ft., and some 20 ft. high to eaves is a necessity, and may include in its apparatus hand-rings and ropes, parallel bars, climbing ropes, vaulting horses, bridge ladders, wall bars, and sets of double beams. A covered training-ground, including a 60-yd. sprinting track, should be provided for training in bad weather.

A ladies' tea-room may be included for the use of the directors' friends, and should have separate lavatory accommodation opening off a lobby communicating with the tea-room. Refreshment and dining-rooms, with perhaps a bar for the sale of intoxicants, for each class of ticket-holder is occasionally provided in the larger schemes, while in the smaller stands tea and Oxo buffets are generally installed. Where a common refreshment-room is provided to serve two or more classes of ticket-holders separate entrance turnstiles for each class will be necessary. Lavatory accommodation for each sex must be provided in connection with each refreshment-room. The kitchen must be so arranged that easy communication by means of lifts to all refreshment rooms is possible. The room itself need not be large, but should contain, perhaps, three gas-cookers, a couple of sinks with draining boards, one or two water-boilers, and a cupboard or two. A small storeroom or cupboard opening from the kitchen will be very useful. Service pantries may be provided where the size of the scheme requires them, but where they are omitted provision for the washing-up of crockery and its storage will be necessary.

In the centre of the grandstand will be separate enclosures (or boxes) for the home and visiting directors respectively. These boxes may each contain seating accommodation for about thirty persons, although the home directors' box will often seat a much larger number. The seats are generally of the armchair pattern, with tip-up seats, and are fixed on wooden staging, having steps about 25 in. to 30 in. wide, with risers varying in different examples from 8 in. to 14 in. The risers in the same staging are also frequently varied from about 8 in. on the bottom row to 10 in. or so on the top tier, following (as do the nosings on the open stands) the line of a parabolic curve. Gangways some 3 ft. wide, with intermediate steps, will give admittance to the several tiers. A minimum allowance of 24 in. centre to centre

of frontage per chair should be provided in the best seats, but 18 in. per person is sometimes considered sufficient in the cheaper seats. The box for players' wives usually adjoins the directors' box, and may provide accommodation for about thirty persons on chairs, with tip-up seats, similar to those provided in the directors' boxes. Balancing the box for players' wives, on the other side of the directors' boxes, may be the press box, with accommodation for approximately thirty pressmen. The seats should be provided with desks for taking notes during the progress of the game, and may also be provided with a telephone, which fits underneath the seat when not in use. Within convenient reach of the press box should be the reporters' writing-room, provided with a table and chairs. Opening from the writing-room should be half-a-dozen telephone cubicles for the reporters' use. In some stands the pressmen occupy a few rows of seats below the directors' boxes, but when it is possible a separate reporters' box is much to be preferred. The remainder of the grandstand will be divided into different sections according to the prices of admission, the better seats being nearer to the centre of the stand. The eaves of the grandstand roof should project several feet beyond the front row of seats, and the gable ends should also be projected well over the ends of the stand as a protection from the weather. The back of the stand should be enclosed where it is not occupied by the rooms above described.

The open stands are, of course, at each end of the field behind the goal-posts and on the long side opposite the grandstand. The terracing is usually constructed of concrete steps, resting on either made or natural earth formed to the requisite levels and gradients. When the preparatory work has been carefully carried out little in the way of structural engineering is required beyond the reinforcing of the concrete stepping with some kind of steel wire mesh on the lines of the B.R.C. fabric. Occasionally it is necessary to construct the staging upon a level site without the earth embankment, in which case staging, beams, pillars, and rakers of reinforced concrete will probably give the best result with the minimum expenditure. The terraces may measure about 14 in. wide and rise (following a parabolic curve) from about 2 in. on the lowest step to 3½ in. on the top step. The steps sometimes consist of pre-cast concrete slabs having a "frog" on their upper surface, which, when filled up with ashes, forms an excellent non-slip tread in frosty weather. In other cases the staging is finished with asphalt with a narrow stone or concrete nosing. Plain concrete treads, roughened by grooving, is a very common form of stepping to an open stand. While it is desirable that the tiers should have a slight fall from back to front for protection in bad weather, there is a tendency to give too great a weathering in many instances, with the result that the comfort of the stand becomes impaired. An important provision will be the guard-rails. These may be placed at intervals of about twelve tiers apart, and "staggered" so that the intervals in the rows of rails above and below occur opposite the rail in the row between them, thus preventing a crowd from slipping any distance. These guards are usually 3 ft. 9 in. high, the rail being 2½ in. diameter wrought-iron pipe, with 2 in. by 2 in. by ¼ in. angle-steel uprights and struts. The length of the rails may be about 10 ft., and the distances apart vary from 7 ft. to 10 ft. in different examples. Horizontal gangways about 2 ft. 6 in. wide should be arranged between every thirty to forty tiers, care being taken that the riser on the top side of the gangway rises to the line of the parabolic curve; which will give a riser of about 10 in. on the upper side when the next riser below the gangway is about 3¼ in. high. Whenever possible some portion of the open stands should be under cover, and this may be achieved by arranging terraces below a projecting balcony containing seats of higher price. Two decks of boxes are undesirable, as the back seats of the upper deck are too far from the field and too high up from the ground to afford a proper view of the game. Latrine accommodation should be provided at various points around the ground, and each class of spectators should be able to reach the latrines apportioned to his section without having to pass through sections of a different price. Separate latrines for each sex are indispensable.

West Ham Football Ground. The reinforced concrete barrier wall round the ground is an unusual feature.

CORRESPONDENCE

THE HOUSE

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—The little story given to us by your note-writer "Astragal" might have been told from the life, so closely does it follow an experience of mine.

I designed a house for a difficult old gentleman; *I* was forestalled of my fees by his death; *I* was presented with the house in lieu of my fees.

The house has a rather curious plan. My client told me that he had all his life been much troubled by hawkers and tradespeople coming to the *front door*, and he wanted me to provide a plan whereby the front door should be get-at-able only by first entering at the back. Beyond that he wished not to be troubled until the house was ready for him to move in.

I left the office straight away, in order to get home early and think the matter out.

I evolved one or two plans in my head, but always on attempting to put them on paper they melted into thin air, or they looked so remarkable and impracticable as to cause me hastily to tear the piece of detail paper off the drawing-board and throw the idea away. At a late hour I had still to nail the thing on the head, and at last I went to bed deciding to hand the planning over to Jenkins while I concentrated on the elevations of the house.

I had every confidence in Jenkins, and often during the following days I caught him looking solemnly and wisely at a maze of lines set out on a large piece of paper. In the meantime I had finished the elevations, and was getting on with full sizes of some decorative tiles I had a fancy to use for the eaves and ridge. I had a particularly happy treatment for the front porch, but Jenkins assured me earnestly that the position of the front door as he had planned it would not allow of any porch.

I left to Jenkins the work of specifications and getting in tenders and visiting the job.

The day came when we were to meet the client and go with him to show him the new house. Jenkins did not turn up. I sent to his lodgings to inquire for him, and my boy brought back word that "Mr. Jenkins had had to be taken away."

I was mystified, and had to go off by myself. To my most utter amazement, what I saw occupying my client's site was a building the like of which, in my practice, I had never before seen. I went in, and the plan was *an exact reproduction of the maze at Hampton Court*.

I now realized that, in trying to find a solution to my client's wishes, my assistant had gone mad.

My fees were never paid.

The client lived in the extreme centre of the house for a short time, and then died.

He died one day after a more than usually exhausting time spent in finding his way out.

With his last breath he thanked God that he was dying *outside*.

HORATIO JAY

A POINT IN PLANNING

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Your correspondent who signs himself "William in the Country" gently satirizes the placing of the water-closet near the front door of the house, and plays amusingly upon the contrast of "*Privy*" closets and "*Public*" parts of the house.

The mental association of the old-fashioned, insanitary, and dangerous privy with the modern and thoroughly sanitary water-closet has led "William in the Country" not only to attack Mr. Hepworth's sound designs under cover of a pseudonym, but to revive an old prejudice which is now rapidly being outgrown by most sensible folk.

Under certain circumstances, the acceptance of "William in the Country's" pronouncement,—"The close neighbourhood of the front door might seem to be the very last position that this apartment should occupy with propriety"—would lead to needless unpleasantness in planning. Mr. Hepworth does not stand alone in his choice of position for the toilet arrangements, for in most modern houses and mansions one water-closet is provided in connection with the cloaks and lavatory for incoming guests, and no one who has been either a host or a guest can doubt the convenience of this arrangement. Just how the doors are placed is a matter of detail, but the provision of a water-closet where a newcomer to the house can find it without wandering down lengthy corridors is a point in good and not in bad planning. In the small house and cottage the same considerations and others equally forcible still apply. The choice of position for a single water-closet in a small single-story cottage, for example, is limited to points approached either from the front passage or the back lobby. Unless the back lobby can be reached by a continuous passage, for which space is not always available, this means that the kitchen or scullery, or both, have to be traversed, bedroom slops having to travel by the same route. It would not be particularly convenient to lead a guest through kitchen and scullery to the back lobby!

From the point of view of real sanitation it is also better to have the water-closet enshrined, as befits its importance, at the best end of the house, where it will be a matter of self-respect on the householder's part to see that it is looked after and kept in first-rate order.

False modesty, which makes "William in the Country" disguise his identity, should not be made an excuse for perpetuating the foul arrangement which necessitates carrying slops through living-rooms in so many modern cottages now being built under Government-aided housing schemes. This is a real inconvenience and a real offence against hygiene, whereas placing the water-closet near the front door which opens into a well-ventilated lobby can only be said to be an offence against sentiment.

In the days when water-closets were really little better than privies, the sentiment may have been comprehensible, but a wide knowledge of many up-to-date plans would show "William in the Country" that most prominent architects have now learned how to disregard it in the interest of a sounder practice.

Where money is no object, a separate lavatory entrance may be arranged, as at "Warnford," Barrowford (Richard Jaques, architect), illustrated in the ARCHITECTS' JOURNAL for February 17; and perhaps "William in the Country" would agree with me in admiring this arrangement; but, where the strictest economy has to be practised, allowing one's planning to be dominated by a sentimental objection only leads to far worse results without making things right sentimentally. If, instead of thinking of the water-closet in respect of *privacy*, its other aspect of *common convenience* is considered, the position where all members can use it with most facility would be voted for as the most appropriate. And this position, whether in the mansion or the cottage, is in connection with the public passage-way of the house.

WILLIAM HARVEY

LINO ON A CONCRETE FLOOR

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Your correspondent, Mr. G. N. Kent, seems to have had similar experience to that of "Subscriber" and myself. My only doubt is whether concrete over a site can ever be regarded as genuinely waterproof. Apart from settlement cracks, which may let in water from the soil below, there is the slow yielding-up of moisture through the pores of the concrete itself, and in any case the water with which the concrete was laid has to be given time —some months—to evaporate if lino laid on top is not to be spoilt. The suggestion that thick lino should be laid without sticking it down was contained in my original reply to "Subscriber," and I am glad that Mr. G. N. Kent concurs in advising the same practice. Contact with concrete laid on a site certainly causes *thin* lino to shrink very noticeably and to curl up at the edges in frosty weather. Its use, even when stuck down with an alcohol-shellac cement, is not altogether satisfactory.

WILLIAM HARVEY

LITERATURE

WESTMINSTER ABBEY RE-EXAMINED

We all know the story of the learned author whose book was sent back to him for review because no other knew enough about the subject on which he wrote to undertake the work. I am very much in the position of one of those other men; but if I fail to disclose the worth of Professor Lethaby's *Westminster Abbey Re-examined*, I hope to excite the interest of some who, like myself, may know relatively very little of this building, so that they, too, may be impelled to read the book; for to do so will be for their enjoyment and for the good of modern architecture, whether they themselves practise or are laymen.

The first quality of the book that stands out clearly is the fact that it very much helps the reader to realize how fine the Abbey was, and how richly it was finished. The Abbey is not treated as an example of Gothic architecture from which to make or prove rules for thirteenth-century forms. The buildings are studied in order that they may be better understood as a great work of English architecture. And as the lover of literature likes to know the names of the authors of his favourite poems and what other works they wrote, so Professor Lethaby seeks to recover an account of the great artists who worked together to complete the Abbey.

That the vision of Westminster Abbey in all the beauty of youth has been more nearly made apparent by this book is an achievement for which we must be grateful; and it is worth our while to try and see how the author has succeeded in doing this. On analysing the contents we find no "fine writing," and few words of superlative praise except in quotation. Professor Lethaby has been content to tell a plain tale commenting on the evidence for, and suggesting the forms of, what is missing, occasionally stating the arguments that make him differ from other authorities. By these means he raises in the mind of the reader some idea of the complete building that was, and of the rich and rare works with which it was furnished and adorned.

The book contains fifteen chapters, illustrated by photographs and many sketches by the author. By giving the headings of some of the chapters, and by quoting some passages, I may succeed in interesting the reader in it, if, indeed, such an attempt is necessary when everyone realizes it is foolish knowingly to neglect a book by W. R. Lethaby. The chapters that most appealed to me were "The Transept and Great Portals," "The Chapter House," "Sculpture and Sculptors," "Illumination," and "Altar, Shrine, and Choir."

In regard to the east end: "The interior of the ring of eastern chapels has been so terribly pared down and put into a modern casing that it looks like a convict's garb, compared with what its ancient, graceful beauty must have been. . . ." "The setting out of the complicated plan is so exceptionally accurate that it is evident that the first work was begun, as a whole, on a cleared site."

Of the front of the north transept in its original form: "The transept front, it cannot be doubted, was pushed on with the earliest work undertaken—that is, it was begun in 1245. The King would have been specially interested in these splendid doorways. . . ." "From what is known of it, and as an important work built in the middle of the thirteenth century by the connoisseur king, this front may be regarded as the supreme example of our medieval art. A student who would make a trustworthy drawing of the front, by carefully bringing together all the evidence that can be gathered with the least possible amount of conjecture, would make a valuable contribution to the history of English building."

Of the tomb of Henry VII: "The tomb portraits of Henry VII and his Queen, with a third figure, that of the King's mother, near by, all of gilt bronze, are really great works of the Italian Renaissance by Torregiani, the contemporary of Michelangelo. They follow the tradition of Donatello, and if they were in Italy they would be noted among the most wonderful things that could be seen on tour."

Of the choir hangings: "In Flete's account of Abbot Barking, who died in 1246, he tells that the abbot gave to the church 'two curtains or dossals of the choir' on which the Life of Christ and the Life of St. Edward were represented in beautiful work. They were in being as lately as 1631, and it may not be doubted that a complete suite of hangings for the choir existed. At Canterbury and elsewhere we have records of similar choir hangings."

Professor Lethaby ends his book by quoting most appropriately from John Carter, 1799: "Again farewell, and may these essays have some influence over thy future welfare; then shall I think my labours well bestowed; and my happy spirit when disrobed of mortal clay, will ever dwell a guardian genius to protect and guard thy architectural glories to time immemorial."

I know only of one work of modern times on which all the first artists of the day were employed. Had the reigning Queen employed these modern masters on a building one wonders how many from the crowds that went to see the doll's house would have gone to see a real church, hall, or house built and adorned for the honour and use of man.

A. R. POWYS

Westminster Abbey Re-examined. By W. R. Lethaby. Duckworth. 21s.

THE THEORY OF STRUCTURES

This book is intended for students taking an engineering degree course. It has many good features, and is very well printed and illustrated. At the end of each chapter reference is made to other books for further study, and at the end of the book is a summary of principal formulæ. The book will probably be of considerable value and interest to students who are attending a university course in engineering, and who possess considerable mathematical facility and a good grounding in the more elementary branches of the subject; and the extensive numerical examples with answers given at the end of each chapter will be welcomed by examination candidates.

During recent years a tremendous number of American books dealing with the theory of structures—some excellent and some good in parts—have appeared in the book-shops in this country, and they seem to be purchased freely in spite of their high prices. In one respect at least they are not so useful to students as the British text-books, of which the one before us is a typical example. Unlike the American books, the British ones give, at the end of each chapter, a series of numerical examples, many of which are chosen from university and engineering institution examinations, with answers so that the student can test his progress.

The author has been ambitious in attempting to cover the whole theory of structures in 313 pages—not closely printed. The result, almost an inevitable one, is that the more elementary parts of the subject are scantily treated, and by the time we have reached page 38 we have finished bending moment and shear for dead loads, stress and strain, the theory of bending and section modulus, etc. Teachers and writers should realize that the elementary portions of a subject require the greatest skill in handling; in fact, we might have a new proverb for lecturers—"Take care of the elementary parts, and the advanced parts will take care of themselves." It is probable, however, that Mr. Coultas intends his book principally for those students who have already been well grounded in the elementary parts of the subject and, having a fair mathematical equipment, are anxious for guidance in the more advanced portions, from among which examination questions are principally chosen. Such students will find this book well worth its place on their book shelves.

E. S. A.

Theory of Structures. By H. W. Coultas, M.SC., A.M.I.STRUCT.E. Sir Isaac Pitman and Sons, Ltd. Price 15s. net.

CHANGING LONDON

There is a quality about all Mr. Hanslip Fletcher's work which makes a double appeal. The artist will recognize in it a subtle regard for values and for the *mot juste*, so to term it, of artistic expression; the eye less trained in such matters will at once perceive in his achievement something which is no less attractive than familiar, in a word, the presentation of what most of us know, etherealized through the alembic of the artist's magic. The book before us is the second series of these wholly delightful records of interesting and picturesque features in London—features which become doubly valuable to us when we see their essential attractions through the medium of the trained eye and hand. That is where the function of the topographical artist comes in, and that is why, when London is almost daily losing so many of its alluring "bits," it is essential that the aid of the draughtsman should be invoked, if not haply to save some threatened landmark, at least to record its likeness for our future remembrance and for the sake of those who come after us.

From among the many beautiful pictures in this book, pictures which range from the library of the Lambeth Palace to Harrington House in Craig's Court, and embrace such diverse places as Woburn Buildings, and the church of Austin Friars, Waterloo Bridge (just now likely to be one of the most interesting), and Lindsay House, Chelsea (where Whistler, who, one thinks, would have sheathed his bitter tongue before this picture, once lived), we reproduce one which will give an excellent idea of Mr. Hanslip Fletcher's gift of vivid and accurate portrayal. It is in a bolder, freer style than was possible where he was dealing with landmarks whose architectural features required more precise handling. As will be seen, however, he here not only reproduces the salient characteristics of his subject, but contrives to indicate the activity of a great London terminus. This combination of the static and the restless is wholly admirable.

Changing London (second series), by Hanslip Fletcher. Cassell & Co. Price 10s. 6d. net.

PUBLICATIONS RECEIVED

Modern Cabinet Work. By Percy A. Wells and John Hooper, M.B.E. London: B. T. Batsford, Ltd. Price 25s. net.

Some Lesser-Known Architecture of London. By James Burford, A.R.I.B.A., and J. D. M. Harvey, B.A. London: Ernest Benn. Price 15s. net.

Spons' Architects' and Builders' Pocket Price Book, 1926. London: E. and F. N. Spon, Ltd. Price 5s. net.

Victoria and Albert Museum. A Picture Book of English Alabaster Carvings. London: Published under the authority of the Board of Education.

Architecture of the Renaissance from Brunelleschi to Michelangelo. By Dagobert Frey. The Hague: G. Naeff. Price 10s. net.

The "Practical Engineer" Electrical Pocket Book and Diary, 1926. London: Humphrey Milford, The Oxford University Press. Price 2s. 6d. net (cloth), and 3s. net (pluviusine).

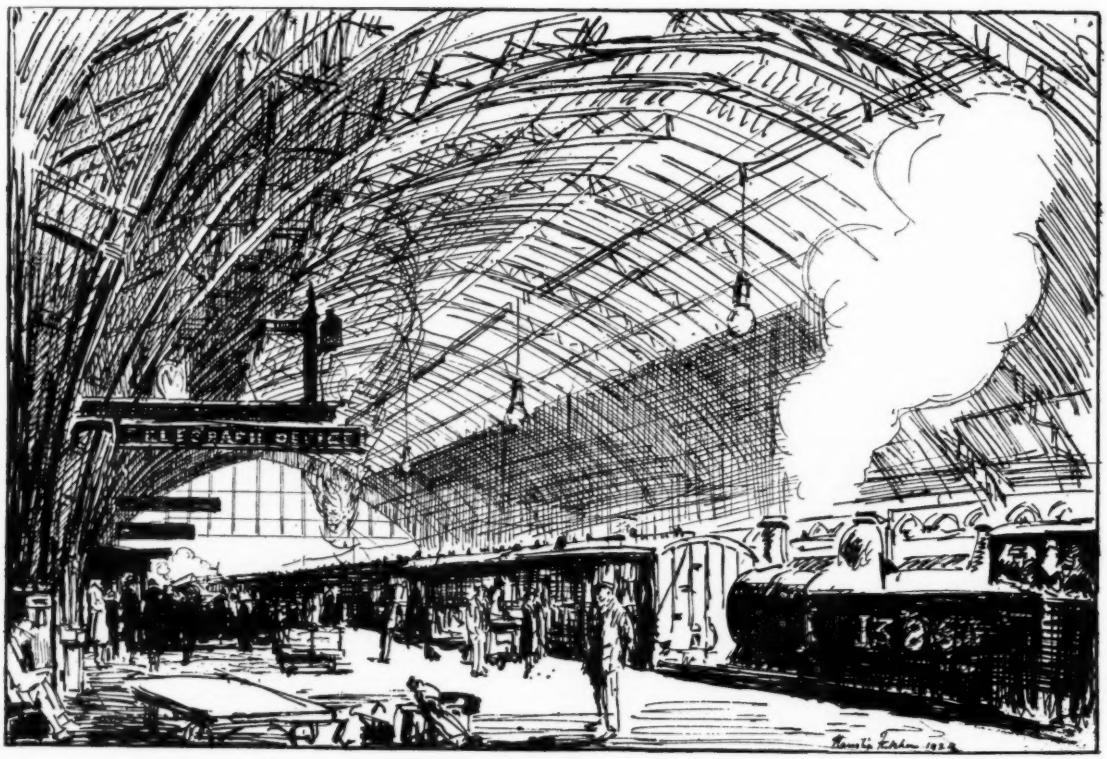
OBITUARY

MR. W. B. WOOD

We regret to record the death of Mr. Walter Bryan Wood, at Gloucester, at the age of seventy-four. He was a native of Lancashire, and was elected an Associate of the R.I.B.A. in 1881. Among many Gloucestershire buildings built to his designs were St. Catherine's Church, Gloucester; Gloucester Girls' High School, St. Andrew's Church, Churchdown, near Gloucester; and Stroud General Hospital.

MR. C. H. ASHWORTH

Mr. Charles Herbert Ashworth, F.R.I.B.A., F.R.I.A.I., M.I.C.E.I., who died recently, was a native of Liverpool, and went to Dublin at the age of about twenty-three to take up a position as assistant in the office of the late Sir Thomas Deane. He was later appointed architect to the Dublin Artisans' Dwellings Company, and had an extensive practice in Dublin.



The Great Span, St. Pancras Station. Drawn by Hanslip Fletcher (From Changing London)

THE ROME SCHOLARSHIP

The Faculty of Architecture of the British School at Rome have selected the following candidates to take part in the final competition for the Rome Scholarship and Henry Jarvis Studentship, of 1926, offered by the Commissioners of 1851 and the R.I.B.A. respectively: E. M. K. Ellerton and K. E. F. Gardiner, Architectural Association; J. B. Wride, Cardiff Technical College; H. G. C. Spencely, H. Thearle, and T. T. Wills, Liverpool University; J. R. Alabaster, London University; A. D. Connell and B. R. Ward, London University Atelier.

SOCIETIES AND INSTITUTIONS

The R.A. and the R.I.B.A.

Sir Frank Dicksee, President of the Royal Academy, and Mr. F. L. Griggs, A.R.A., have just been elected respectively to the Honorary Fellowship and the Honorary Associateship of the R.I.B.A.

R.I.B.A. By-law Amendments

By an order of the Lords of His Majesty's Privy Council dated February 5, the following amendments to By-law 25 of the R.I.B.A. were approved: "25. Any charge under the preceding by-law 24 must be preferred in writing and signed and forwarded to the secretary, who shall lay it before the . . ." etc., as printed down to ". . . . such record and publication. During the period of suspension the member shall not be entitled to use the title 'chartered architect' or the affix of the class to which he belongs, nor shall he be entitled to the use of the library, attendance at Institute meetings or right of voting, and his name shall not be printed in the list of members in the *Kalendar* during the period of his suspension, and he shall return his diploma for such period. Before any member so suspended is reinstated the Council shall consider any further complaints as to his professional conduct during his period of suspension, and if not deemed satisfactory, may decree a further period of suspension or his expulsion; in either case the above procedure of announcement and publication shall again be followed. Provided always . . . ." etc., to end of by-law as printed.

R.I.B.A. New Members

At the last general meeting of the R.I.B.A. the following members were elected:

As Fellows (20)

Allcock, Edward Thomas	Scott, Theodore Gilbert, M.C.
Fread, Horace Charles	Tait, Thomas Smith
Gold, Hugh Andrew, M.C.	Taylor, Samuel Pointon
Goldsmith, Major George Hartley, M.C.	Tetley, Charles Reginald
	Westwood, Percy James
Hampson, Joseph Louis	Anderson, Arthur Ernest
Hughes, Thomas Harold, A.R.C.A. (Arch. London), F.S.I., F.R.G.S.	Finlayson, William
	Pritchett, Herbert Dewes
Newnum, Eric George	Cleland, John Stockwin, M.B.E.
Robertson, Alexander Robert	Sudbury, Harry Tatham
Scott, Eric Wilfrid Boning	Thraves, Alfred John

As Associates (6)

Ali, Syed Aziz	Bhuta, Gopalji Mulji
Alsop, George Hatherley	Meikle, Edyth
Barnes, Thomas Scott	Silcock, Frances Thelma

The Convention of the American Institute

Mr. E. Guy Dawber, President of the R.I.B.A., has received the following letter from Mr. D. Everett Waid, President of the American Institute of Architects: "Dear Mr. Dawber, the fifty-ninth convention of the American Institute of Architects will occur in Washington, D.C., May 5, 6, and 7, 1926. We should like all members of the Royal Institute of British Architects to know that they will be as welcome to attend as our own members. Any of your members who may find it possible to be present will receive further information if they will kindly send their addresses to our secretary, The Octagon House, Washington, D.C. You, Mr. President, will be thrice welcome if you can pay us a visit."

The National Housing and Town Planning Council

Mr. John G. Martin, at present organizing secretary of the United Kingdom Alliance, has been appointed secretary of the National Housing and Town Planning Council in place of Mr. H. R. Aldridge, who recently resigned.

The South Wales Institute of Architects: Central Branch

A smoking concert was held recently by the South Wales Institute of Architects (Central Branch), at Cardiff. Mr. T. Alwyn Lloyd (chairman of the branch) presided, and the company included Mr. C. F. Ward (Newport), president of the South Wales Institute; Mr. and Mrs. Ivor P. Jones, Mr. and Mrs. Percy Thomas, Mr. H. Teather, Mrs. T. Alwyn Lloyd, Mr. W. S. Purchon, Mr. R. H. Winder, Mr. and Mrs. A. G. Edwards (Bridgend), Mr. W. D. Thomas (Porth), Mr. and Mrs. Williamson. The evening was so highly appreciated that it has been decided to hold similar gatherings in the future. On February 4 the third of the session's series of lectures, organized jointly by the South Wales Institute of Architects (Central Branch), and the Institute of Builders (South Wales Branch), was given by Mr. J. E. Barton, M.A., of Bristol. This lecture, entitled "Gothic Craftsmanship," was illustrated by a fine collection of lantern slides.

ANNOUNCEMENTS

Messrs. Gledhill and Wigmore, architects and surveyors, have moved to No. 118 Old Kent Road, London, S.E.1. Telephone: Hop 2964.

The practice of the late Mr. James Forbes, of 19 Grange Road West, Middlesbrough, architect and surveyor, has been taken over by Mr. Stephen H. Clarke, who will carry on the practice at that address.

The partnership between Mr. James H. Mangan and Mr. Wilfrid C. Mangan, practising as architects and surveyors under the style of Messrs. J. H. and W. C. Mangan at No. 18 Guildhall Street, Preston, Lancashire, has been dissolved by mutual consent. Mr. Wilfrid C. Mangan is now carrying on the practice at the same address on his own account and in his own name.

TRADE NOTES

Mazda electric lamp bulbs were used successfully throughout the motor expedition from the Cape of Good Hope to Cairo, recently concluded by Major Court-Treatt. The expedition fought its way for sixteen months through almost impenetrable country, and covered a distance of 12,732 miles.

We are informed that the new cement which has been placed on the market under the name of Gough's "Three Star A.P.C." is now being used with satisfactory results by several county councils, county boroughs, corporations, rural district councils, contractors, concrete manufacturers, etc. We are also informed that the surveyor of the Portsmouth Corporation recently stated in public that the cement was exceedingly satisfactory. Messrs. Gough's General Distributing Co., Ltd., give a written guarantee that this cement is 50 per cent. above the old British standard specification, and 25 per cent. above the new. The head office of the firm is at Southampton.

Guarantor fire-doors for party-wall and hoist-openings are described and illustrated in a booklet issued by Messrs. Matthews and Mumby, Ltd. To ensure the easy working of the doors the sliding type is mounted on ball or roller-bearing pulleys, and the hinged type swings on turned steel bearing surfaces, only one turn of the hand being necessary to operate the three fastenings. A guarantee appears on all the regulation fire-doors of the firm that they are constructed to the regulations of the Fire Offices Committee. The head offices of the company are in Stockport Road, Manchester.

THE WEEK'S BUILDING NEWS

A New Ipswich Church

By the gift of Mr. Charles Bantoft, Ipswich is to have a new £15,100 church.

Renovations at Bethnal Green

Renovations at the establishments of the Bethnal Green Guardians are expected to cost £35,000.

More Houses for Loughborough

The Loughborough Housing and Town Planning Committee has decided to recommend the erection of 200 more houses.

Glasgow's Acquisition of Dalry Brickworks

The Glasgow Corporation has under consideration a proposal to take over the brickworks at Dalry, Ayrshire.

A New School for Hitchin

The Herts Education Committee proposes to build a new school at Hitchin at a cost of £17,000.

New School Buildings for Cheshire

The Cheshire Education Committee proposes to spend £22,400 for new buildings at Caldy Grange Grammar School.

Road-widening in the Lake District

The cost of widening Borrowdale Road from Lodore to the foot of Honister Pass and Seathwaite Pass will be £30,285.

Newton Abbot Station Improvements

Improvements at Newton Abbot station are to be made in the immediate future, at an estimated cost of £67,000.

More Houses for Sowerby Bridge

The Sowerby Bridge Urban District Council is to erect another twenty-five houses on the Willow Street housing site.

Proposed Extension to Caird Hall

A proposal to proceed with the construction of the east wing of the Caird Hall, at a cost of £81,000, has been made at Dundee.

Improvement Scheme for Keynsham

The Keynsham Rural District Council has decided to proceed with a scheme for improving Hunstrete corner. The scheme will cost £2,000.

A New Dundee Road Scheme

A proposal has been made by the city engineer at Dundee to build a new road from Dock Street to Broughty Ferry Road, at a cost estimated at £27,500.

The Sea Mills Estate

The Bristol Housing Committee has decided to proceed with the erection of 1,000 houses at Sea Mills, at a cost of £488,900.

Church Requirements at Liverpool

It was stated at the annual meeting of the Church Building Society, of Liverpool, that £50,000 is needed for immediate church building and £50,000 for parochial halls.

Housing at Whickham

The Whickham Town Council has approved of plans drawn up by the surveyor for the lay-out of land at Dunston, on which it is proposed to erect 136 houses.

The New Kelvin Hall

The Glasgow Corporation General Finance Committee has agreed to recommend a scheme for the erection of a new Kelvin Hall at a cost of £207,000.

Education Schemes at Brighton and Hove

Hove's educational programme for the next four years includes the provision of a new central school and the reorganization of the elementary schools.

New Washhouses for Leith

The Edinburgh Town Council's Plans and Works Committee will have before them shortly a proposal for new washhouses in Leith at an estimated cost of £20,000.

Ryde Pavilion and Bandstand

The Ryde Town Council is applying to the Ministry of Health for sanction to a loan of £10,025 for a pavilion and enclosure, and £3,332 for a bandstand.

A New School for Nottingham

The Corporation is recommended to build a new school in Bar Lane, in the Stockhill district, at an estimated cost of £31,000.

A Further Brighton Housing Scheme

The Brighton Town Council has acquired land lying between Brighton and Lewes on which it is proposed to erect 200 houses at £561 per house. A further 200 houses will be built later.

A Proposed School at Haworth

The Worth Valley Education Committee has recommended the West Riding County Education Committee to proceed with a scheme for the provision of a middle school at Haworth.

Baths at Bradford

The Bradford Baths Committee is considering proposals for the building of combined baths and libraries on the Bradford Moor, Bierley, Lower Grange, Five Lane Ends, and Thornton estates.

Building in Aberdeen

Plans of ten dwelling-houses to cost £9,880, and nine other buildings and alterations to cost £2,626 have been passed by the Plans Committee of the Aberdeen Town Council.

Brighton's £80,000 Scheme

The Corporation of Brighton has decided to spend £80,000 on the construction of an open-air swimming pool. Other councils which have definitely embarked on similar undertakings are those of Morecambe, Ilfracombe, Hornsea, and Blyth.

A Leicestershire Isolation Hospital

The Leicestershire County Council proposes that the Isolation Hospitals Committee should erect at Markfield, in conjunction with a hospital to be established by the County Council for the treatment of phthisis, an isolation hospital under the Leicester Isolation Hospitals Order.

Housing at Liverpool

The Liverpool Housing Committee approved of plans for the erection of two five-story blocks, one in South Hill Road to contain 180 dwellings, and the other in Melrose Road, 275 dwellings. Sanction has also been given to the erection of 100 houses of a new type, the walls being covered with asbestos sheeting.

A New Hospital for Biddulph

The Lancashire County Council is applying to the Ministry of Health for sanction to borrow £25,000 to cover the cost of the purchase of the Biddulph Orthopædic Hospital and Estate for the orthopædic treatment of crippled children; £10,000 will be spent on furnishing.

Proposed L. & N.E.R. Control System

The London and North-Eastern Railway have decided to install an up-to-date train control system embracing Cambridge (where the control office will be situated), Ely, March, Spalding, Peterborough, St. Ives, Bury St. Edmunds, and Bishops Stortford, at a cost approaching £8,000.

A New Street for Glasgow

In prospect of the formation of a housing scheme on ground at M'Neil Street, South Side, the General Finance Committee of Glasgow Corporation has approved of the construction of a street on the south bank of the River Clyde, from Rutherglen Road northwards. A plan involving an expenditure of £42,000 has been considered.

Two Hotels for Leeds

Plans are being prepared for the erection of a new hotel on the Compton Road allotments estate, Leeds, the architects being Messrs. A. and F. Mosleys, Wormald Row, Leeds. An hotel is also to be built at the junction of Foundry Lane and York Road, Leeds, from the designs of Mr. G. W. Atkinson.

Improvements at Morecambe

The Morecambe Corporation contemplates carrying out the following improvement schemes: The erection of 127 houses on the South Grove estate; the lay-out of a new park at Happy Mount, at an estimated cost of £10,000; the construction of bowling greens, tennis courts, putting greens, lavatories, shelter, etc., at an estimated cost of £19,575; and a new arterial road extending from the Victoria Esplanade at Morecambe to Bolton-le-Sands.

LAW REPORTS

PUBLIC HEALTH ACT: LIABILITY TO ROAD REPAIR

Harrow U.D.C. v. *Wreathall. Court of Appeal. Before the Master of the Rolls and Lords Justices Warrington and Sargant.*

This case, which was an appeal by the defendant from a judgment of Mr. Justice Russell in the Chancery Division, raised the point as to whether Bonnersfield Lane, Harrow, was a highway repairable by the inhabitants at large at the time the Council carried out the work. The appellant's case was that the Council had not proved that the lane was repairable as alleged, and that there had been a dedication before the Highways Acts came into force in 1836. The Council claimed the sum of £171 odd from the defendant under the Public Health Act, 1875, section 257.

Mr. Scholefield, K.C., for the appellant, said the judgment of Mr. Justice Russell was to the effect that the dedication, if it took place, must have occurred after 1817, the date of the inclosure award. He also held that it had been established that at intervals the local board did execute some repairs to the lane, and the same was true to a lesser extent of the plaintiff Council, but no repairs had been done by the Council since 1908, and that would not convert a private road into a public road. Notwithstanding the evidence as to repairs the learned judge said he had no doubt that no highway existed before 1817, and that no dedication did or could have taken place before 1836, that being so the lane had never become a highway repairable at large, and he granted the Council the declaration asked for, with costs, and he also dismissed with costs the defendant's counterclaim for a declaration that the lane was a public highway. Counsel said his client appealed from this decision, his contention being that the learned judge had gone wrong in law.

The Court, without calling upon Mr. Bennett, K.C., for the Council, dismissed the appeal, with costs.

The Master of the Rolls said the Court agreed with the decision of Mr. Justice Russell, and came to the conclusion that he was right in law in holding that the lane in question upon the whole of the evidence was not a public highway.

VIBRATION: ALLEGED DAMAGE TO PROPERTY

Isaacs v. *Metropolitan Electric Tramways, Ltd. King's Bench Division. Before Mr. Justice Roche.*

This was an action by Mr. Albert Isaacs, the owner of Chichele Mansions, at Cricklewood, against the defendants, claiming damages in respect to alleged damage to the property by vibration. The defendants denied the allegations and denied that they had been guilty of any negligence.

Mr. Craig Henderson, K.C., for the plaintiff, stated that the defendants were reconstructing the tram track, which had a fixed concrete bed, and the concrete breaker was used in breaking up the existing bed, which was to be replaced by a new one. A powerful pneumatic drill was used, and it caused enormous vibration, the effect of which plaintiff alleged was to cause extensive cracks in the front of the plaintiff's flats. Counsel argued that in view of the cases the defendants were liable for the damage done.

Mr. Charles Doughty, K.C., on behalf of the defendants, said his contention was that the cracks were due to the settlement of the buildings, and that the concrete breaker had nothing to do with them. He made a further point that the vibration of the concrete breaker was not unusual, and that, therefore, in law there was no liability on the defendants. There must be some excess before there was any cause of action. Here that cause did not exist, he submitted.

His lordship, in giving judgment for the defendants, with costs, said he was not satisfied that any part of the damage complained of was due to any act or operation of the defendant company in the use of the machine. He thought the cause of expansion in cracks in the building, of which complaint was made, might have been due to subsidence. He had had evidence that the concrete breaker had worked for two years breaking concrete over some six miles, and that case represented the first complaint of any damage from vibration. He had also had evidence of a test made of the machine by the defendants, and the conclusion to be drawn from it was that the machine caused less and not more vibration in amount and effect on the building than was caused by heavy road traffic as proceeded from day to day along Chichele Road, past the plaintiff's flats.

HOUSING SCHEME

Butler & Co., Ltd. v. *Sculcoates U.D.C. Court of Appeal. Before the Master of the Rolls and Lords Justices Scrutton and Sargant.*

This was an appeal by the defendants from a judgment of Mr. Justice Acton.

Plaintiffs, who carry on business at Leeds, brought their action in the Court below to recover damages for alleged breach of a contract in connection with the erection by the plaintiffs for the defendants of houses under the Addison Housing Scheme, 1921, at Kirk Ella and Anlaby.

Sir Henry Maddocks, for the appellants, said his clients' case was that their contract was to erect twenty-two houses at Kirk Ella at a price of £21,047 and twenty houses at Anlaby at a price of £18,080. After the erection of ten of the houses at Kirk Ella and eight at Anlaby the Council gave the plaintiffs notice not to go on with the erection of the others, and the plaintiffs accordingly brought the present action for consequential damages by reason of the abandonment of the two contracts.

Mr. Neilson, K.C., for the respondents, said his clients' defence to the action was that if the contracts stipulated for the erection of twenty-two and twenty houses respectively they did not embody the agreement, the agreement being for ten and eight houses only, and the Council by counterclaim asked for rectification. The learned judge held that the defendants were liable to the plaintiffs for damages for breach of the contracts, and gave judgment for the plaintiffs, with costs. This judgment he supported.

Sir Henry Maddocks argued that the judge had gone wrong in law, and that the judgment should have been entered for his clients, as there was ample evidence of a mutual mistake.

The Court held that there was no evidence of mutual mistake, and dismissed the appeal, with costs.

PASSAGE WAY: RIGHT OF ENTRY

Katz v. *Bloomenfeld. Chancery Division. Before Mr. Justice Lawrence.*

Plaintiff, as tenant of five houses, Nos. 50 to 58 Brick Lane, Spitalfields, holding a lease from the freeholder, Sir A. Osborne, subject to existing leases, sought an injunction against the defendant, the lessee of No. 52, which included the passage between Nos. 50 and 52, to restrain her from obstructing or interfering with plaintiff's use of the passage.

Mr. Farwell, K.C., for the plaintiff, explained that a portion of No. 52 was built over the passage in dispute, and the question for decision here was whether defendant was entitled to exclude plaintiff, who was tenant of the ground forming the passage-way, from entering into that passage-way. There was a gate at the passage-way which defendant kept locked. The passage-way led to a hall of which plaintiff was tenant, and he desired to make use of the passage-way to get to the hall. Counsel contended that defendant was not entitled to exclude the owner of the soil or the person who had leased the soil from the freeholder from the use of the passage simply because defendant had been given a right to use the passage herself.

Mr. Jenkins, K.C., for the defendant, argued that the point raised as to the right of way by the plaintiff could not be maintained. If plaintiff had brought his action as the owner of the soil that would have been quite a different matter.

Evidence was given that the passage had been used as a store, and Mr. Nicholls, surveyor to the Osborne Estate, said the plaintiff's predecessor had signed an agreement that he would abandon the right of way and erect a brick wall at the end of the passage.

His lordship granted the plaintiff an injunction, with costs. He said he came to the conclusion that the defendant had no right to exclude the owner of the soil from its use. He did not think it could ever be said in that Court that any owner was bringing a frivolous action when he desired to have his rights in the soil declared. The alleged object of plaintiff to gain a right of passage to the Osborne Hall was wholly immaterial to the issue raised in the present action.

RATES OF WAGES

			I	II
			s. d.	s. d.
A	ABERDARE	S. Wales & M.	1 8	1 3½
A₁	Abergavenny	Do.	1 7½	1 2½
B	Abingdon ..	S. Counties	1 6	1 1½
A	Accrington	N.W.Counties	1 8	1 3½
A₃	Addlestone	S. Counties	1 6½	1 2
A	Adlington ..	N.W.Counties	1 8	1 3½
A	Airdrie ..	Scotland	*1 8	1 3½
C₁	Aldeburgh	E. Counties	1 4	1 0½
A	Altrincham	N.W.Counties	1 8	1 3½
B₃	Appleby ..	N.W. Counties	1 4½	1 0½
A	Ashton-under-Lyne	N.W.Counties	1 8	1 3½
A₃	Atherstone	Mid. Counties	1 6½	1 2
B₃	Avlesbury ..	S. Counties	1 4½	1 0½
B	BATH ..	S.W.Counties	1 6	1 1½
B₃	Banbury ..	S. Counties	1 4½	1 0½
B₂	Bangor ..	N.W. Counties	1 5	1 1
A	BarnardCastle	N.E. Coast	1 8	1 3½
A	Barnsley ..	Yorkshire	1 8	1 3½
B₁	Barnstaple	S.W. Counties	1 5½	1 1½
A	Barrow ..	N.W.Counties	1 8	1 3½
A	Barry ..	S. Wales & M.	1 8	1 3½
B₃	Basingstoke	S.W. Counties	1 4½	1 0½
A	Batley ..	Yorkshire	1 8	1 3½
B	Bedford ..	E. Counties	1 6	1 1½
A₂	Berwick-on-Tweed	N.E. Coast	1 7	1 2½
A₃	Bewdley ..	Mid.Counties	1 6½	1 2
B₃	Bicester ..	Mid. Counties	1 4½	1 0½
A	Birkenhead	N.W.Counties	†1 9	1 3½
A	Birmingham	Mid. Counties	1 8	1 3½
A	Bishop Auckland	N.E. Coast	1 8	1 3½
A	Blackburn	N.W.Counties	1 8	1 3½
A	Blackpool	N.W.Counties	1 8	1 3½
A	Blyth ..	N.E. Coast	1 8	1 3½
B₃	Bognor ..	S. Counties	1 4½	1 0½
A	Bolton ..	N.W.Counties	1 8	1 3½
A₃	Boston ..	Mid. Counties	1 6½	1 2
B₁	Bournemouth	S. Counties	1 6	1 1½
A	Bradford ..	Yorkshire	1 8	1 3½
A₃	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 8	1 3½
B₂	Bridgwater	S.W. Counties	1 5	1 1
A₁	Bridlington	Yorkshire	1 7½	1 2½
A	Brighouse ..	Yorkshire	1 8	1 3½
B₁	Brighton ..	S. Counties	1 6	1 1½
A	Bristol ..	S.W. Counties	1 8	1 3½
B₃	Brixham ..	S.W. Counties	1 4½	1 0½
A₃	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 4	1 0½
A	Burnley ..	N.W.Counties	1 8	1 3½
A	Bursiem ..	Mid. Counties	1 8	1 3½
A₂	Burton-on-Trent	Mid. Counties	1 7	1 2½
A	Bury ..	N.W.Counties	1 8	1 3½
A₃	Buxton ..	N.W.Counties	1 6½	1 2
B	CAMBRIDGE	E. Counties	1 6	1 1½
B₃	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 8	1 3½
A	Carlisle ..	N.W.Counties	1 8	1 3½
B	Carmarthen	S. Wales & M.	1 6	1 1½
B₂	Carnarvon ..	N.W.Counties	1 5	1 1
A₁	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford ..	Yorkshire	1 8	1 3½
B₁	Chatham ..	S. Counties	1 5½	1 1½
B₁	Chelmsford	E. Counties	1 5½	1 1½
B	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W.Counties	1 8	1 3½
A	Chesterfield	Mid Counties	‡1 8	1 3½
B₃	Chichester..	S. Counties	1 4½	1 0½
A	Chorley ..	N.W.Counties	1 8	1 3½
B₂	Cirencester	S. Counties	1 5	1 1
A	Clitheroe ..	N.W.Counties	1 8	1 3½
A	Clydebank	Scotland	1 8	1 3½
A	Coalville ..	Mid. Counties	1 8	1 3½
B₁	Colchester..	E. Counties	1 5½	1 1½
A	Colne ..	N.W.Counties	1 8	1 3½
B₁	Colwyn Bay	N.W.Counties	1 5½	1 1½
A	Consett ..	N.E. Coast	1 8	1 3½
B₁	Conway ..	N.W. Counties	1 5½	1 1½
A	Coventry ..	Mid. Counties	1 8	1 3½
A₃	Crewe ..	N.W.Counties	1 6½	1 2
A₃	Cumberland	.....	1 6½	1 2
A	DARLINGTON	N.E. Coast	1 8	1 3½
A	Darwen ..	N.W.Counties	1 8	1 3½
B₃	Deal ..	S. Counties	1 4½	1 0½
B₁	Denbigh ..	N.W.Counties	1 5½	1 1½
A	Derby ..	Mid. Counties	1 8	1 3½
A	Dewsbury ..	Yorkshire	1 8	1 3½
B	Didcot ..	S. Counties	1 6	1 1½
A	Doncaster ..	Yorkshire	1 8	1 3½
C₁	Dorchester	S.W.Counties	1 4	1 0½
A₃	Driffield ..	Yorks	1 6½	1 2
A₃	Droitwich ..	Mid. Counties	1 6½	1 2
A₂	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 8	1 3½
A	Durham ..	N.E. Coast	1 8	1 3½
B₁	EAST-BOURNE	S. Counties	1 6	1 1½
A	Ebbw Vale	S. Wales & M.	1 8	1 3½
A	Edinburgh	Scotland	1 8	1 3½
A	E. Glamorganshire & Mon. Valley	S. Wales & M.	1 8	1 3½
B	Exeter ..	S.W. Counties	§1 7	1 2½
B₂	Exmouth ..	S.W. Counties	1 5	1 1
B	FELIXSTOWE	E. Counties	1 6	1 1½
A₃	Filey ..	Yorks	1 6½	1 2
A	Fleetwood ..	N.W.Counties	1 8	1 3½
B₃	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W.Counties	1 8	1 3½
B₃	Frome ..	S.W.Counties	1 4½	1 0½
A	GATESHEAD	N.E. Coast	1 8	1 3½
B₁	Gillingham	S. Counties	1 5½	1 1½
B	Gloucester..	S.W.Counties	1 6	1 1½
A₂	Goole ..	Yorkshire	1 7	1 2½
B₁	Gosport ..	S. Counties	1 5½	1 1½
A₃	Grantham..	Mid. Counties	1 6½	1 2
A₂	Gravesend..	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 8	1 3½
A	Grimsby ..	Yorkshire	1 8	1 3½
B₁	Guildford ..	S. Counties	1 5½	1 1½
A	HALIFAX..	Yorkshire	1 8	1 3½
A₁	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate ..	Yorkshire	1 8	1 3½
A	Hartlepools	N.E. Coast	1 8	1 3½
B₂	Harwich ..	E. Counties	1 5	1 1
B₃	Hastings ..	S. Counties	1 4½	1 0½
B₁	Hatfield ..	S. Counties	1 5½	1 1½
B	Hereford ..	S.W.Counties	1 6	1 1½
B	Hertford ..	E. Counties	1 5½	1 1½
A₁	Heysham ..	N.W.Counties	1 7½	1 2½
A	Howden ..	N.E. Coast	1 8	1 3½
A	Huddersfield	Yorkshire	1 8	1 3½
A	Hull ..	Yorkshire	1 8	1 3½
A	ILKLEY ..	Yorkshire	1 8	1 3½
A	Immingham	Mid Counties	1 8	1 3½
B	Ipswich ..	E. Counties	1 6	1 1½
C₁	Isle of Wight	S. Counties	1 4	1 0½
A	JARROW ..	N.E. Coast	1 8	1 3½
A	KEIGHLEY	Yorkshire	1 8	1 3½
B₂	Kendal ..	N.W. Counties	1 5	1 1
B₂	Keswick ..	N.W.Counties	1 5	1 1
B	Kettering ..	Mid. Counties	1 6	1 1½
A₃	Kidderminster	Mid. Counties	1 6½	1 2
B₂	King's Lynn	E. Counties	1 5	1 1
A₁	LANCASTER	N.W.Counties	1 7½	1 2
A₃	Leamington	Mid. Counties	1 6½	1 2½
A	Leeds ..	Yorkshire	1 8	1 3½
A	Leek ..	Mid. Counties	1 8	1 3½
A	Leicester ..	Mid. Counties	1 8	1 3½
A	Leigh ..	N.W. Counties	1 8	1 3½
B₃	Lewes ..	S. Counties	1 4½	1 0½
A₃	Lichfield ..	Mid. Counties	1 6½	1 2
A	Lincoln ..	Mid. Counties	1 8	1 3½
A	Liverpool ..	N.W.Counties	†1 9	1 3½
B	Llandudno	N.W.Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 8	1 3½
	London (12 miles radius)		1 9½	1 4½
	Do. (12–15 miles radius)		1 9	1 4
A	Long Eaton	Mid. Counties	1 8	1 3½
A	Loughborough	Mid. Counties	1 8	1 3½
B	Luton ..	E. Counties	1 6	1 1½
A	Lytham ..	N.W. Counties	1 8	1 3½
A₁	MACCLESFIELD	N.W.Counties	1 7½	1 2½
B	Maidstone ..	S. Counties	1 5½	1 1½
A₃	Malvern ..	Mid. Counties	1 6½	1 2
A	Manchester	N.W.Counties	1 8	1 3½
A	Mansfield ..	Mid. Counties	1 8	1 3½
B₃	Margate ..	S. Counties	1 4½	1 0½
A₃	Matlock ..	Mid. Counties	1 6½	1 2
A	Merthyr ..	S. Wales & M.	1 8	1 3½
A	Middlesbrough	N.E. Coast	1 8	1 3½
A₃	Middlewich	N.W. Counties	1 6½	1 2
A	Monmouth	S. Wales & M.	1 8	1 3½
	S. and E. Glamorganshire			
A₁	Morecambe	N.W. Counties	1 7½	1 2½
A₃	NANTWICH	N.W.Counties	1 6½	1 2
A	Neath ..	S. Wales & M.	1 8	1 3½
A	Nelson ..	N.W. Counties	1 8	1 3½
A	Newcastle ..	N.E.Coast	1 8	1 3½
A	Newport ..	S. Wales & M.	1 8	1 3½
A	Normanton	Yorkshire	1 8	1 3½
A₂	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 8	1 3½
A	North Shields	N.E. Coast	1 8	1 3½
B	Norwich ..	E. Counties	1 6	1 1½
A	Nottingham	Mid. Counties	1 8	1 3½
A	Nuneaton ..	Mid. Counties	1 8	1 3½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W.Counties	1 8	1 3½
A₃	Oswestry ..	Mid. Counties	1 6½	1 2
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 8	1 3½
C	Pembroke	S. Wales & M.	1 4½	1 0½
A	Perth ..	Scotland	*1 8	1 3
A₃	Peterborough	Mid. Counties	1 6½	1 2
A	Plymouth	S.W. Counties	¶1 8	1 3½
A	Pontefract..	Yorkshire	1 8	1 3½
A	Pontypridd	S. Wales & M.	1 8	1 3½
B	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W.Counties	1 8	1 3½
A	QUEENSFERRY	N.W.Counties	1 8	1 3½
B	READING..	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A₃	Retford ..	Mid. Counties	1 6½	1 2
A	Rhondda Valley	S. Wales & M.	1 8	1 3½
A₃	Ripon ..	Yorkshire	1 6½	1 2
A	Rochdale ..	N.W.Counties	1 8	1 3½
B	Rochester ..	S. Counties	1 5½	1 1½
A₁	Ruabon ..	N.W.Counties	1 7½	1 2½
A₂	Rugby ..	Mid. Counties	1 8	1 3½
A₃	Rugeley ..	Mid. Counties	1 6½	1 2
A	Runcorn ..	N.W. Counties	1 8	1 3½
A₃	ST. ALBANS	E. Counties	1 6½	1 2
A	St. Helens..	N.W.Counties	1 8	1 3½
A₁	Scarborough	Yorkshire	1 7½	1 2½
A	Scunthorpe	Mid. Counties	1 8	1 3½
A	Sheffield ..	Yorkshire	1 8	1 3½
A	Shipley ..	Yorkshire	1 8	1 3½
A₃	Shrewsbury	Mid. Counties	1 6½	1 2
A₂	Skipton ..	Yorkshire	1 7	1 2½
B	Slough ..	S. Counties	1 5½	1 1½
A₂	Solihull ..	Mid. Counties	1 7	1 2½
B	South'pton	E. Counties	1 6	1 1½
B₁	Southend-on-Sea	E. Counties	1 5½	1 1½
A	Southport ..	N.W.Counties	1 8	1 3½
A	S. Shields ..	N.E. Coast	1 8	1 3½
A₂	Stafford ..	Mid. Counties	1 7	1 2½
A	Stockport ..	N.W.Counties	1 8	1 3½
A	Stockton-on Tees	N.E. Coast	1 8	1 3½
A	Stoke-on-Trent	Mid. Counties	1 8	1 3½
B	Stroud ..	S.W.Counties	1 5½	1 1½
A	Sunderland	N.E. Coast	1 8	1 3½
A	Swansea ..	S. Wales & M.	1 8	1 3½
B	Swindon ..	S.W. Counties	1 6	1 1½
A₁	TAMWORTH	N.W.Counties	1 7½	1 2½
B₁	Taunton ..	S.W. Counties	1 5½	1 1½
A	Teeside Dist.	N.E. Counties	1 8	1 3½
A	Todmorden	Yorkshire	1 8	1 3½
A₂	Torquay ..	S.W.Counties	1 7	1 2½
B₁	Tunbridge Wells	S. Counties	1 4½	1 1½
A	Tunstall ..	Mid. Counties	1 8	1 3½
A	Tyne District	N.E. Coast	1 8	1 3½
A	WAKEFIELD	Yorkshire	1 8	1 3½
A₂	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W.Counties	1 8	1 3½
A₃	Warwick ..	Mid. Counties	1 6½	1 2
B	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 8	1 3½
B	Weston-S-Mare	S.W. Counties	1 6	1 1½
A₃	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W.Counties	1 8	1 3½
A	Wigan ..	N.W.Counties	1 8	1 3½
B₂	Winchester	S. Counties	1 5	1 1
B	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 8	1 3½
A₃	Worcester ..	Mid. Counties	1 6½	1 2
A	Worksop ..	Yorkshire	1 8	1 3½
A₁	Wrexham ..	N.W. Counties	1 7½	1 2½
B	Wycombe ..	S. Counties	1 6	1 1½
B₁	YARMOUTH	E. Counties	1 5½	1 1½
B₂	Yeovil ..	S.W. Counties	1 5	1 1
A	York ..	Yorkshire	1 8	1 3½

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

* Plasterers, 1*s.* 9*d.*

† Carpenters and Painters, 1*s.* 8½*d.*

‡ Plumbers, 1*s.* 9*d.*

§ Painters, 1*s.* 6*d.*

‖ Carpenters and Plasterers, 1*s.* 8½*d.*

¶ Painters, 1*s.* 7*d.*

PRICES CURRENT

EXCAVATOR AND CONCRETOR

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

Broken brick or stone, 2 in., per yd.	£0	10	0
Thames ballast, per yd.	0	13	0
Pit gravel, per yd.	0	18	0
Pit sand, per yd.	0	14	6
Washed sand	0	16	6

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

Portland cement, per ton	£2	19	0
Lias lime, per ton	2	5	0

Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.
Transport hire per day:

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

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0
Exceeding 6 ft., but under 12 ft., add 30 per cent.
In stiff clay, add 30 per cent.
In underpinning, add 100 per cent.
In rock, including blasting, add 225 per cent.
If basketed out, add 80 per cent. to 150 per cent.
Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	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.

HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	£0	2	1
DO. 6 in. thick, per yd. sup.	0	2	10
PUDDLING, per yd. cube	1	10	0
CEMENT CONCRETE, 4-2-1, per yd. cube	2	3	0
DO. 6-2-1, per yd. cube.	1	18	0

DO. in upper floors, add 15 per cent.
DO. in reinforced-concrete work, add 20 per cent.
DO. in underpinning, add 60 per cent.

LIAS LIME CONCRETE, per yd. cube	£1	16	0
BREEZE CONCRETE, per yd. cube	1	7	0
DO. in 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
Portland cement and sand, see "Excavator" above.			
Lead for caulking, per cwt.	£2	7	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	7	0
Flettons, per M.	3	6	0
Staffordshire blue, per M.	9	12	0
Firebricks, 2½ in., per M.	11	3	0
Glazed salt, white, and ivory stretchers, per M.	22	0	0
DO. *headers, per M.*	21	10	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 4½ in., per roll	0	2	6
DO. 9 *in. per roll*	0	4	9
DO. 14 *in. per roll.*	0	7	6
DO. 18 *in. per roll*	0	9	6

BRICKWORK in stone lime mortar, Flettons or equal, per rod	35	0	0
DO. in cement do., per rod	37	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, ¾ in., per yd	0	8	6
DO. SKIRTING, 6 in.	0	0	11
BREEZE PARTITION BLOCKS, set in Cement, 1½ in. per yd. sup.	0	5	3
DO. DO. 3 in.	0	6	6

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 enquiry.

MASON

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

Portland Stone:			
Whitbed, per ft. cube	£0	4	4
Basebed, per ft. cube	0	4	7
Bath stone, per ft. cube	0	2	9½

Usual trade extras for large blocks.

York paving, av. 2½ in., per yd. super.	0	6	6
York templates sawn, per ft. cube	0	6	9
Slate shelves, rubbed, 1 in., per ft. sup.	0	2	6

Cement and sand, see "Excavator," etc., above.

HOISTING and setting stone, per ft. cube	£0	2	2

DO. for every 10 ft. above 30 ft., add 15 per cent.

PLAIN face Portland basis, per ft. sup.	£0	2	8
DO. circular, per ft. sup.	0	4	0
SUNK FACE, per ft. sup.	0	3	9
DO. circular, per ft. sup.	0	4	10
JOINTS, arch, per ft. sup.	0	2	6
DO. sunk, per ft. sup.	0	2	7
DO. DO. circular, per ft. sup.	0	4	6
CIRCULAR-CIRCULAR work, per ft. sup.	1	2	0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0	1	1
DO. circular, do. per ft. run	0	1	4
HALF SAWING, per ft. sup.	£0	1	0

Add to the foregoing prices if in York stone 35 per cent.

DO. Mansfield, 12½ per cent.
Deduct for Bath, 33⅓ per cent.
DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0	0	6
RUBBED round nosing to do., per ft. lin.	0	0	6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1	9	0
YORK SILLS, W. & T., ft. cub. fixed.	1	13	0

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
TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	5	6	0
DO., machine-made DO., per square	4	17	0

Vertical Tiling, including pointing, add 18*s.* 0*d.* per square.

FIXING lead soakers, per dozen	£0	0	10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0	10	0
LABOUR only in laying slates, but including nails, per square	1	0	0

See "Sundries for Asbestos Tiling."

CARPENTER AND JOINER

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

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

7 × 3, per std.	£23	0	0
11 × 4, per std.	33	0	0

Memel or Equal. Slightly less than foregoing.

Flooring, P.E., 1-in., per sq.	£1	8	0
DO. *T. and G., 1 in., per sq.*	1	8	0
Planed Boards, 1 in. × 11 in., per std.	36	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 33⅓ per cent.

FIXING only boarding in floors, roofs, etc., per sq.	0	13	6
SARKING FELT laid, 1-ply, per yd.	0	1	6
DO., 3-ply, per yd.	0	1	9
CENTERING for concrete, etc., including horsing and striking, per sq.	3	10	0
SLATE BATTENING, per sq.	0	18	6

PRICES CURRENT; *continued.*

CARPENTER AND JOINER; *continued.*

DEAL GUTTER BOARD, 1 in., on firring, per sq.	£3	6	0
MOULDED CASEMENTS, 1¼ 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., 1¼ in., per ft. sup.	0	3	0
DO., DO., moulded b.s., 2 in., per ft. sup.	0	3	9
DO., DO., DO., 1¼ in., per ft. sup.	0	3	3
If in oak multiply 6 times.			
If in mahogany multiply 6 times.			
If in teak multiply 7 times.			
WOOD BLOCK FLOORING, standard blocks, laid in mastic herringbone :			
Deal, 1 in., per yd. sup., average	0	10	0
DO., 1¼ in., per yd., sup., average	0	12	0
DO., DO., 1¼ in. maple blocks	0	15	0
STAIRCASE WORK, DEAL :			
1 in. riser, 1¼ in. tread, fixed, per ft. sup.	0	3	6
2 in. deal strings, fixed, per ft. sup.	0	3	9

PLUMBER

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

Lead, milled sheet, per cwt.	£2	7	6
DO. *drawn pipes, per cwt.*	2	8	0
DO. *soil pipe, per cwt.*	2	11	0
DO. *scrap, per cwt.*	1	4	0
Copper, sheet, per lb.	0	1	5
Solder, plumber's, per lb.	0	1	3
DO. *fine, per lb.*	0	1	7
Cast-iron pipes, etc. :			
L.C.C. soil, 3 in., per yd.	0	4	2
DO. *4 in. per yd.*	0	5	1
R.W.P., 2½ in., per yd.	0	1	10
DO. *3 in., per yd.*	0	2	2
DO. *4 in., per yd.*	0	3	0
Gutter, 4 in. H.R., per yd.	0	1	10
DO. *4 in. O.G., per yd.*	0	2	0
MILLED LEAD and labour in gutters, flashings, etc.	3	16	0
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	1
DO. ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	3
DO. 1¼ in., per ft.	0	4	6
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	0
DO. 3 in., per ft.	0	7	0
DO. 4 in., per ft.	0	9	9
CAST-IRON R.W. PIPE, at 24 lb. per length, jointed in red lead, 2½ in., per ft.	0	2	3
DO. 3 in., per ft.	0	2	8
DO. 4 in., per ft.	0	3	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 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.	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, 1*s.* 9½*d. per hour;* LABOURER, 1*s.* 4½*d. per hour.*

Chalk lime, per ton	£2	12	6
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 bdl.	0	2	4
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 or Sand, 1 to 3, for tiling or woodblock, ¾ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	7
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	9
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	5
WHITE glazed tiling set in Portland and jointed in Parian, per yd. and up	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 8½*d. per hour.*

Glass : 4ths in crates :			
Clear, 21 oz.	£0	0	5
DO. 26 oz.	0	0	6
Cathedral white, per ft.	0	0	5½
Polished plate, British ¼ in., up to 2 ft. sup.	0	2	5
DO. *3ft. sup.*	0	3	2
DO. *7 ft. sup.*	0	3	9
DO. *25 ft. sup.*	0	4	3
DO. *100 ft. sup.*	0	5	1
Rough plate, ¼ in.	0	0	5½
DO. *¼ in., per ft.*	0	0	6
Linseed oil putty, per cwt.	0	16	0
GLAZING in putty, clear sheet, 21 oz.	0	0	10
DO. 26 oz.	0	0	11
GLAZING in beads, 21 oz., per ft.	0	1	0
DO. 26 oz., per ft.	0	1	3
Small sizes slightly less (under 3 ft. sup.).			
Patent glazing in rough plate, normal span 1*s.* 5*d.* to 2*s.* per ft.			
LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, and up, per ft. sup.	£0	3	6
Glazing only, polished plate, 6½*d.* to 8*d.* per ft., according to size.			

DECORATOR

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

Genuine white lead, per cwt.	£3	0	0
Linseed oil, raw, per gall.	0	4	2
DO., *boiled, per gall.*	0	4	5
Turpentine, per gall.	0	7	2
Liquid driers, per gall.	0	9	6
Knotting, per gall.	1	5	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	10
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	6
FRENCH POLISHING, per ft. sup.	0	1	2
STRIPPING old paper and preparing, per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	0	4	0
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SMITH

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

Mild steel in British standard sections, per ton	£11	0	0
Sheet steel :			
Flat sheets, black, per ton	18	0	0
Do., Galvd., per ton	27	0	0
Corrugated sheets, galvd., per ton	26	0	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts, per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	27	0	0
DO., in small sections as reinforcement, per ton	17	0	0
DO., in compounds, per ton	18	0	0
DO., in bar or rod reinforcement, per ton	20	10	0
WROT. IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity.			
The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, fixed on, but not including studs or grounds, per ft. sup.	0	0	6
Plaster board, per yd. sup. . from	0	1	7
PLASTER BOARD, fixed as last, per yd. sup. . . . . from	0	2	8
Asbestos sheeting, $\frac{5}{32}$ in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup.	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, $\frac{5}{32}$ in. punched per M. grey	17	0	0
DO., *red*	19	0	0
ASBESTOS COMPOSITION FLOORING : Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casement in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7
Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.			
Plywood			
3 m/m alder, per ft. sup.	0	0	2
4½ m/m amer. white, per ft. sup.	0	0	3¾
¾ m/m figured ash, per ft. sup.	0	0	5
4½ m/m 3rd quality, composite birch, per ft. sup.	0	0	1½