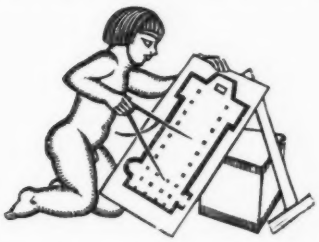
THE

ARCHITECTS'



JOURNAL

THE ARCHITECTS' JOURNAL
WITH WHICH IS INCORPORATED THE BUILDERS' JOURNAL AND THE ARCHITECTURAL ENGINEER IS PUBLISHED EVERY WEDNESDAY BY THE ARCHITECTURAL PRESS (PROPRIETORS OF THE ARCHITECTS' JOURNAL, THE ARCHITECTURAL REVIEW, SPECIFICATION, AND WHO'S WHO IN ARCHITECTURE) FROM 9 QUEEN ANNE'S GATE, WESTMINSTER, S.W.

In our next issue Professor C. H. Reilly, whose outspoken criticisms of street architecture have made many a modern thoroughfare famous (or infamous), will discuss some of the most recent additions to the architecture of Oxford Street.

THE ANNUAL SUBSCRIPTION RATES ARE AS FOLLOWS:
BY POST IN THE UNITED KINGDOM..... £1 3 10
BY POST TO CANADA..... £1 3 10
BY POST ELSEWHERE ABROAD..... £1 8 6
SUBSCRIPTIONS MAY BE BOOKED AT ALL NEWSAGENTS

* * *

SINGLE COPIES, SIXPENCE; POST FREE, SEVENPENCE. SPECIAL NUMBERS ARE INCLUDED IN SUBSCRIPTION; SINGLE COPIES, ONE SHILLING; POST FREE, 1S. 2D. BACK NUMBERS MORE THAN THREE MONTHS OLD (WHEN AVAILABLE), ADD 1S. 6D. TO ABOVE PRICES

* * *

SUBSCRIBERS CAN HAVE THEIR VOLUMES BOUND COMPLETE WITH INDEX, IN CLOTH CASES, AT A COST OF 10S. EACH. CARRIAGE IS EXTRA. A USEFUL BINDER, ALLOWING THE COPIES TO OPEN FLAT FOR READING, COSTS 4S. 6D. POST FREE

* * *

9 Queen Anne's Gate, Westminster, London, S.W.1
TELEPHONE: VICTORIA 6936 (OWN EXCHANGE)
TELEGRAPHIC ADDRESS: BUILDABLE, PARL., LONDON

WEDNESDAY, DECEMBER 1, 1926. NUMBER 1663: VOLUME 64

PRINCIPAL CONTENTS

The Index to Advertisers will be found on page iv.

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.

xlvi: Antonio Canale (Canaletto) (1697-1768).
A Portico.

As a rule, Antonio Canale was, as is well known, the rigidly accurate portrayer of a definite locality; but there exist a number of pictures (as well as etchings and drawings) by him in which he has given free rein to his architectural imagination. The present picture is a particularly happy example when independent of a definite subject before his eyes; though, of course, the ingredients of his composition are evidently drawn from the life and scenery of contemporary Venice. The picture well exemplifies the artist's extraordinarily effective command of perspective, as well as his consummate skill at massing and contrasting light and shade; the remarkable certainty of his figure drawing is also admirably seen, and the amazing precision and firmness of his brush-stroke, with its almost calligraphic quality, can be studied here to great advantage. Canaletto's sense of tone is, however, fully equal to his accomplishment as a master of line and draughtsmanship.—[Venice, Accademia.]

THE ARCHITECTS' JOURNAL

Wednesday, December 1st, 1926

THE CITY CHURCHES

It was with feelings of immense relief we learnt that the Union of Benefices and Disposal of Churches Measure was defeated in the House of Commons by a substantial majority. In this matter the instinct of Parliament was undoubtedly right. It was in vain for Lord Hugh Cecil to affirm that the measure provided adequate safeguards to prevent the City churches being destroyed without sufficient regard being paid to their historic and artistic value. The plain brute fact of the situation was that the destruction of the churches, with the object of selling their sites, was the primary and, indeed, the sole object of the bill. Nobody seriously supposes that the Bishop of London and his accomplices proposed this measure in order to protect the City churches, yet Lord Hugh Cecil had the effrontery to suggest that these churches would actually be better safeguarded under the dispensation proposed in the Union of Benefices and Disposal of Churches Measure than they are at present. It is important to note that it would have been possible to save all the heart-burnings caused by the measure if its promoters had accepted Sir Martin Conway's suggestion to include a schedule of those churches which were on no account to be destroyed.

There is no need to reiterate here the numerous arguments advanced by those who have so successfully defended the City churches. Notable aid has been given by the public Press which, with few exceptions, has been " on the side of the angels " in this matter. It must also be recorded that no small part of the success of the opposition to the Union of Benefices and Disposal of Churches Measure has been due to energetic action on the part of the representatives of the City of London itself. It was a unique occasion, and one which added lustre to the annals of the City of London, when in the exercise of its ancient right the Corporation authorized the sheriffs to appear at the bar of the House of Commons in order to present its opposition to a measure which, in their opinion, might result in the City being deprived of some of its principal architectural ornaments. And the House of Commons itself undoubtedly was influenced by considerations of its own prestige, it being seriously open to question whether any ecclesiastical body can claim the right to treat as its own property those church fabrics of which the building, upkeep, and restoration have been maintained in past ages by the laity and by the State.

Let us now consider the part which the architectural profession has played, and can yet play, in this battle. In the first place it may be affirmed with pride that no considerations of personal gain, no thought of possible new commissions to build the numerous churches which could undoubtedly be erected with the money obtained by the sale of the very valuable City sites, has entered into the minds of architects, who, with a singular unanimity, have held the view that the preservation of the City churches was both desirable and necessary. The public has been impressed by this attitude on the part of the profession, but it is not for us to flatter ourselves unduly on this account for we are conscious what a very sorry figure the present generation of architects would have cut in the eyes of posterity if it had aided or connived at the destruction of such noble masterpieces of their art. It remains rather for us to consider what services we may still render to make the preservation of these churches still more secure. Unfortunately, it may be taken for granted that the originators of the Union of Benefices and Disposal of Churches Measure will not accept the present Parliamentary decision as a final defeat, but will renew the charge at a later date whenever they imagine that a suitable opportunity presents itself. One of the surest ways of protecting the churches is by an educational propaganda with a view to explaining to the public the high artistic merit of this Renaissance ecclesiastical architecture. We must analyse the subtle composition of the Wren spires and direct the attention of the public to them. Painters should be induced to celebrate their beauty in line and colour so that the churches of St. Bride, St. Mary Woolnoth, St. Magnus the Martyr, and others will be as familiar to the average Englishman as is the Doge's Palace, Venice, or the Bridge of Sighs. It is important to realize that the defence of the City churches cannot be left, or should not be left, to the City Corporation, nor even to the inhabitants of London alone, for it should also be the concern of every provincial who takes a pride in his metropolis and realizes how splendid is our national heritage of noble architecture.

Those of us who love the City churches have, however, a task in front of us even more difficult than that of their preservation, for it is incumbent upon us to try to maintain for these buildings a suitable architectural environment, that is to say, we must make an attempt to limit the height of the neighbouring buildings so that the churches are not entirely submerged by them. If the City Corporation could give still further evidence of its solicitude on behalf of the City churches by making some provision for the continuance of their present status as conspicuous features rearing their heads above the commonalty of commercial and private buildings by which they are surrounded, it will, indeed, have established itself as a true friend of architecture.

NEWS AND TOPICS

THE SAVING OF THE CHURCHES—THE PRINCE OF WALES AT THE R.I.B.A.—STONE DECAY OF THE HOUSES OF PARLIAMENT—THE TERRORS OF TOWN PLANNING.

IT has been left to the House of Commons to save the City churches from the fate to which the House of Lords would have consigned them. By a five to one vote the Lower House has thrown out the City Churches Bill, and has thus taken a directly opposite course to the Upper House, which, although always regarded as the chamber in which art, learning, and science have full sway, some months ago approved of the Measure to destroy these monuments of ancient London. The discussion in the Commons on Thursday night was somewhat shorter, if sharper, than had been expected. Lord H. Cecil's motion took the form of a "prayer" to the King, asking that he would give his assent to the Measure. As "prayers" come within the category of "exempted business," they can be taken after 11 o'clock in the evening, but actually the debate started soon after ten, members having got through a good deal of very dull Scottish business with unaccustomed celerity. Lord H. Cecil was not at all happy in moving his motion. From the low murmurs of disapproval it was evident that he had not the sympathy of the majority of members, and, as his long speech of an hour drew to its close, he did not improve matters by indulging in a violent attack on his critics. It was left to Sir Martin Conway, speaking for a number of artistic and historical societies, to clinch the issue. Why, he asked, amid cheers, had not the Church Assembly requested a Commission representative of these societies to draw up a list of the churches in the City which in no circumstances should be destroyed or sold? If such a list had been added to the Measure, there would have been no opposition. After this, members in all parts of the House showed their impatience by greeting new speakers with loud cries of "Divide! divide!" and the "closure" was agreed to shortly after midnight. On a division, Lord H. Cecil's motion was defeated by 124 votes to 27.

* * *

There are, perhaps, few social functions which seem so to evoke and to demonstrate certain peculiarities of the Englishman, and certain qualities which differentiate him from his fellows, as the public dinner of a large professional body. At least, so I thought while listening to the speeches at the R.I.B.A. dinner in Guildhall last week. Surely there can be no doubt that as a nation we concern ourselves seriously neither with Thought nor with Art, for how else is the successful evasion of these two topics during some hour and a-half of speech-making at the annual dinner of a body of men who have dedicated their lives to an artistic calling to be accounted for? There were exceptions to this generalization, and they occurred in the speeches of Professor Östberg, and in the message read by Herr Kristoffer Hult, president of the Swedish Association of Engineers and Architects, from his Association. From the remarks of both these gentlemen it was clear enough that art was a matter of paramount importance to them; a subject not to be ignored, and if not ignored, not to be treated flippantly or facetiously.

* * *

I thought it strange, too, that there should be so little reference to Professor Östberg's achievement. Apart, indeed, from the Prince of Wales's remarks, in which the Stockholm City Hall was characterized with some truth as "one of the greatest buildings ever produced by human genius," there was scarcely a reference to Östberg's work, and, for my own part, I had the impression that many present failed to realize either the significance of the ceremony or the immensity of the achievement which had earned the Royal Award. I have been to Stockholm and have seen for myself that this generation has produced a building as great as any that the world has hitherto known. But the Prince of Wales has an infallible instinct for saying the right thing. He certainly said it when he praised the Stadhuset, he also said it when he referred to the inability of architects to design monkey and reptile houses if there were no monkeys or reptiles to put in them; a remark which was appreciated by all who knew its significance, and not least by the president. He paid, too, some well-deserved tributes to the architects to his Cornish and Kennington estates, emphasizing, as he did so, a fact which still requires more general recognition, that good architecture pays.

* * *

The picture pages of some newspapers have lately contained photographs showing men at work removing loose and dangerous fragments of stone from the outer walls and parapets of the Houses of Parliament. Stone decay is an important subject upon which research is continually at the point of resulting in the discovery of a beneficial treatment, which, somehow, fails to materialize. Those who are familiar with the examination of old buildings are always impressed with a sense of the futility of former repairs, patchings, or smearings with oils and chemicals, and the advocates of the newest prescription invariably express a hearty contempt for all former preservatives. In a great many cases decay has undoubtedly been hastened by injudicious treatment, and with all coatings of the surface there is the risk, which practically amounts to certainty, that the colour values of the stone will be degraded to a flat tone and an unpleasant tint. The selection of sound stone in the first place is the only safe course.

* * *

After exhaustive trial and experiment this course has been advocated in the Memorandum on the Stonework of the Houses of Parliament, which is based upon a carefully prepared report by Sir Frank Baines, Director of Works. Sir Frank recommends the use of Stancliffe stone, a sandstone quarried at Darley Dale, Derbyshire, for repairs to the exterior faces of the building, and of Chilmark stone in the Cloister court where Caen stone was used in the original construction. It is of interest that "Stancliffe or Darley Dale" stone was included among those reported upon in the "Inquiry with reference to the Selection of Stone for Building the New Houses of Parliament" in 1839. It is described as "Sandstone. Quartz grains of moderate size and decomposed felspar, with an argillo-siliceous cement; ferruginous spots, and plates of mica. Colour, light ferruginous brown. Irregular masses, without regular joints or beds. Blocks can be procured of very large size."

Its cost was given as three shillings and three pence per cubic foot delivered in London as against Portland stone at two shillings and three pence. In the body of this old report it is added as a desirable building material after several other stones had been mentioned, but "the magnesian limestone, or dolomite, of Bolsover Moor and its neighbourhood," was recommended. Modern writers agree that Darley Dale stones have splendid weathering properties, though their rough sandy surfaces hold the soot of large towns. Coal shortage will soon compel us to take the soot nuisance in hand, however, as the heating power of soot comes to be economically exploited, so that point may be of relatively slight importance.

* * *

Chilmark stone, also reported upon in 1839, is obtainable in several different qualities from different quarry beds. The "Trough bed" and "Green bed" weather well, while the "Pinney bed" is unable to stand polluted atmosphere. A proposal that some of the excessively elaborate undercut ornaments shall be relaced by similar ornaments in which the elaboration is not to be carried to such extremes is to be considered by the Royal Fine Art Commission. The cost of the work is provisionally estimated at £1,062,350 and the time it will take may be between twelve and fifteen years.

* * *

Town planning at its best has such delightful prospects of the sound and the beautiful, and at the worst of such wholesale slum production, that the lecture delivered by Mr. Topham Forrest before the London Society in November is productive of rather mixed emotions. A London stretching uninterruptedly from Hertford to Coulsdon and from Edgware to Southend might fill the mind of a Bedouin Arab with astonishment and delight. To him it would be something new and great, a stupendous work of art and evidence of the power of all-compelling Fate. To us Londoners who thirst for open fields and open skies the prospect of additional miles of suburb is not attractive. It is, in fact, positively depressing and obnoxious in the highest degree. Unfortunately for us it seems inevitable, and since the excessive growth of London cannot be cured it must be endured. It is well to look ahead and foresee the pitfalls in time to avoid them, for to ignore difficulties that are so closely besetting us would only end in worse confusion. The post-war period of slackened control over building has done incalculable harm to English architecture, but it has at great cost demonstrated the futility of the go-as-you-please policy that has ruined miles of country with ill-planned, ill-arranged dwellings which fail to comply with any standard of sound construction, and are contemptible and nauseating if one should forget oneself so far as to consider them as architecture. One can only hope that conscious control by competent town-planners will mitigate the evil in future.

* * *

The characteristic stone-built cell of the early monks in Ireland was described by Professor R. M. Butler recently in a lecture in Dublin on Hiberno-Romanesque architecture. A beehive dome constructed like the famous Mycenæan domes of southern Greece in a series of oversailing courses with horizontal beds is a convenient form of building in a stony district, and has been adopted in many lands from the North of Scotland to the Levant. Ireland also possesses some very interesting oratories of rectangular plan built in stone, with steeply-pitched roofs constructed upon high vaults of the same material as the walls. The long endurance of buildings of this primitive character demonstrates the practical science of the constructors, and in this age of skeleton construction, the simplicity and straightforwardness of these ancient works should serve as an object lesson concerning the practical value of sincerity in architectural arts. The lecturer drove home this point in connection with the design of new churches, and it is to be hoped that his audience was duly impressed. Too often, the only result of an appeal for greater sincerity of construction coupled with illustrations of its charming results in times past, is that a new and complex revival is started in which the ancient forms are tacked on to a modern framework. Should the lecturer then explain that this result was not in the least in accordance with his intentions, the enthusiastic revivalist is prone to defend himself by demonstrating that the ancient forms he has adopted are quite well executed in genuine stone fully 6 in. thick, and not of putty, plaster, or tin, as they might have been in less scrupulous hands. Architecture has certain principles, and sincerity of construction is not least of them, but the discussion of this particular principle sometimes leads to the production of the most flagrant insincerities.

* * *

From reading my friend the editor's article on "The Architect's Fees" in last week's JOURNAL, I gather that in this profession of architecture you may need to master two distinct techniques—the technique of the actual work and the technique of getting paid for it

ASTRAGAL

ARRANGEMENTS

MONDAY, DECEMBER 6

At the Royal Institute of British Architects. 8.0 p.m. Arthur H. Smith, C.B., F.S.A., HON. A.R.I.B.A., on The Building Inscriptions of the Acropolis of Athens.

TUESDAY, DECEMBER 7

At the Design and Industries Association. 8.0 p.m. Marriott Powell and Harry Trethowan on Glass Ware.

At the Royal Institute of British Architects. 3.30 p.m. First meeting of the Council for the Preservation of Rural England. The Earl of Crawford and Balcarres and Mr. Neville Chamberlain will speak. Members of the general public are invited to attend.

THURSDAY, DECEMBER 9

At the Architectural Association. The Conversazione.

FRIDAY, DECEMBER 10

At the Royal Technical College Architectural Craftsmen's Society, Glasgow. 7.45 p.m. James Gillespie on Scottish Domestic Architecture (illustrated).

The Town Planning Institute. (At the Caxton Hall.) 6.0 p.m. G. L. Pepler on "Land" in Many Countries; Information Extracted from the Papers presented to the International Federation for Housing and Town Planning.

THE ORDINARY MAN ON ARCHITECTURE: ii

[BY EDWARD SHANKS]

LET us, then, for a little while consider the question with railway stations as our examples. And let me premise that, in so far as I am grumbling on behalf of myself and my fellows, I am not grumbling at architects, but a state of society. Were it otherwise, any architect could turn on me and tell me that our poetry to-day is but a disappointing expression of modern life—which is a fact. But poetry and architecture alike are parts of society in which symptoms of illness very often first show themselves.

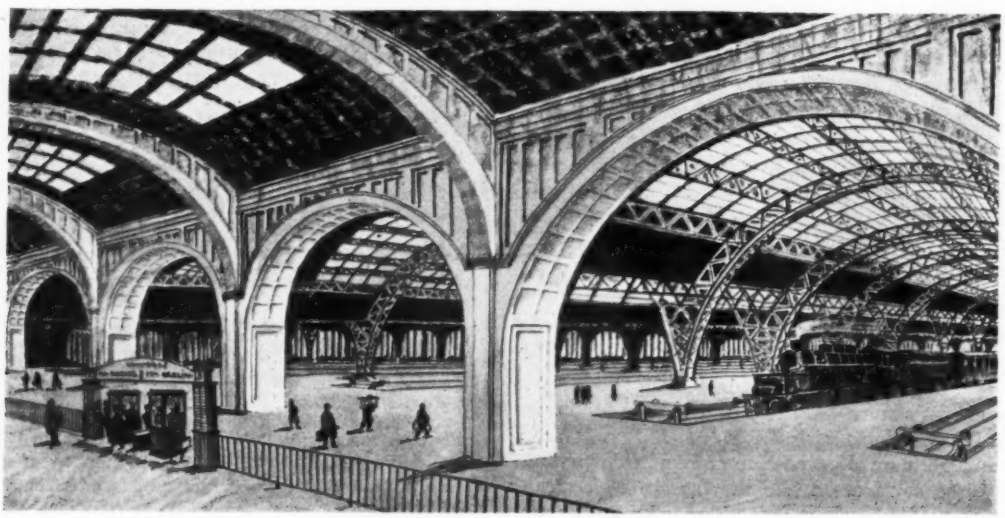
In architecture they show themselves in two ways. Society will not often, perhaps will only rarely, let the architect do what he wishes to do. It will give him the job of designing a railway station, and at the same time lay on him instructions that hamper him both as craftsman and as artist. That is a sign of illness in society. But it is also true that often the architect, when he is tolerably free from these hindrances, will fail to rise to the level of his opportunity. That is the same illness showing itself in a more specialized form.

To return to the specific instance, the railway station is for the architect the latest birth of time. Nothing like it has ever been known before in the history of the world. There are no precedents. He has, then, a virgin field, both technically and artistically, to work in, and, at first sight, one would have expected a burgeoning wealth of new forms and devices. Instead we have had, with but few exceptions, an amazing wilderness of confusion and ugliness.

This country in particular suffered the usual fate of the pioneer. Railways came on it suddenly, and not thought out, and we were committed to sites for the chief stations, and in many cases to forms for them, before we knew what we were about. But this does not wholly account for the fact that most of them produce on the arriving or departing traveller an effect of depression, bewilderment and, on his more sensitive side, disappointment. They do not, broadly speaking, work well as railway stations. They are not so constructed as of themselves to lead the traveller to the proper place for taking his ticket and thence to the place where his train is standing. Liverpool Street is the type of this failure; it is more like a German mousetrap than anything else in the world. But there are others and plenty of them. Waterloo was recently remodelled, but because of what exigencies I do not know the opportunity, it seems, was lost. The confusion is not so bad as it was before, but the arrangement of the platform heads still seems to be haphazard.

Sometimes a more ambitious attempt is made, and then the chances are that one will find the architect making a desperate effort to design a structure that will look like anything but a station. I have never seen the Pennsylvania Station in New York, but examination of an album of photographs suggests that, whatever the success of his planning, this was Stanford White's chief aim and the main cause of the praise his achievement has earned. The classical style was evolved for the building of temples, and a railway station that looks like a temple looks also, to me, at any rate, rather silly. One instance of this came under my own notice a few years ago in the little town of Görlitz, in Silesia, where there is a railway station which, from the outside, resembles a rather pleasant town hall with suggestions of the Middle Ages. Both money and loving care must have gone to the erection of that building, and both were wasted. An Athenian, asking his way to the Temple of Neptune, and being told that if he would take the second on the right and the first on the left he would see it, would not have passed it by under the impression that it was a canning factory. But the traveller in Görlitz might very well mistake the railway station for anything else from an art gallery to the local courts of justice.

Compare all these, the great Hauptbahnhof at Leipzig, with its huge arched roof and its strictly alined platform heads. There the observer can stand close by the main



Leipzig Railway Station.

Railway station at Gorlitz, Silesia.

entrance and see all the trains coming in and going out, and can have within a single view all the complicated activities of the station. And when he does this he does not feel only the satisfaction that is communicated by fitness for purpose, though that is present in a very high degree. He feels also that the widespread and impressive organization of the modern railway, which is one of the most significant things in our life to-day, is here expressed for him. The temples raised by earlier civilizations to their gods celebrated, as it were, their triumph over their own previous savagery. Should not our modern buildings celebrate, as well as serve, our triumphs over Nature? The possibility of safe and swift travel is the backbone of our civilization, and the observer who fails to find that fact expressed in a building devoted to that purpose experiences a feeling of disappointment, whether he understands its origin or not.

There are, to be sure, buildings in London which, both in design and in ornamentation, adequately express the spirit in which they were erected. There are great stores which say very plainly that they were built to serve foolish and feeble luxury and that they are places where silly people will be induced to buy things which they do not want. There are monstrous insurance offices expressing the state of mind of people who do not know what to do with their money, but must spend it somehow with as much precision as if it were put in words by a great writer. But these naïve confessions in brick and stone, though exceedingly interesting, are not very satisfactory.

To return to stations, where is the London terminus that in any degree expresses our ability to travel, that triumphant progress of invention which has made it possible, the network of rails all over the country and the vast concerted effort which have brought such a difference into our lives? A station is, in the first place, a gate, or, to use the more magniloquent word which the occasion seems to require, a portal. For the merchant it opens on new markets, for the holiday-maker on rest, for all travellers on the twin delights of going home or getting away from home. Now Euston Station, in its queer (very queer) way, does suggest a gate, but, rather than anything else, the doorway into the tomb. No one wants to have it suggested to him that he is entering his tomb when, at the worst, he is only going to Manchester. Some other stations have their characters, all bad characters, except Marylebone, which is the only terminus for a gentleman to travel from. But none of them conveys to the traveller that it is what it is, the end and the beginning of a force majestic in its potency. And here, or so the ordinary man feels, modern architecture has failed to give him that overplus of expression he demands from it.

To no one the blame for all this. Where architecture fails, many of the other arts are failing; and, besides, the architect is less free to follow his own will than any other artist. He cannot publish his railway station at his own expense and be hanged to the public. And this means that he is twice in danger from the same enemy. If there is a force abroad in society which enfeebles our efforts in the arts, and more especially in the public arts, then he will be twice exposed to its attacks, first in his own person and second in those whose co-operation and approval he must secure before he can do his work.

One hears much of a new architecture in America, not only in skyscrapers, but also in other types of building. Of that I cannot judge, even in my uninstructed way. But it does seem highly probable, on a priori grounds that that is where a renaissance is most to be expected. If, as I have tentatively suggested, the present estrangement between the public and the most public of all the arts is due to the fact that we are passing from one sort of civilization to another, then beyond all doubt the focus of the change is in America. Moreover, it is both accompanied and fostered by great accumulations of wealth. Further still, we have present also a national pride in achievement hardly to be paralleled anywhere else in the world at this moment. These are the factors which create the atmosphere in which great architecture has always flourished. It is the art of a people celebrating its triumphs, just as poetry is the art of a

people talking to itself. The moment is not yet, for development is still so rapid that it is unwise to put up a building to last more than a short term of years—conditions under which the great architect must feel discouragement. But the time may come when, with development slackening, the remaining energy and wealth and pride may burst into a great blossoming.

Meanwhile, we have the new stand at Lord's which serves cricket and looks like cricket.

AUTHORITY AND LIBERTY: ii

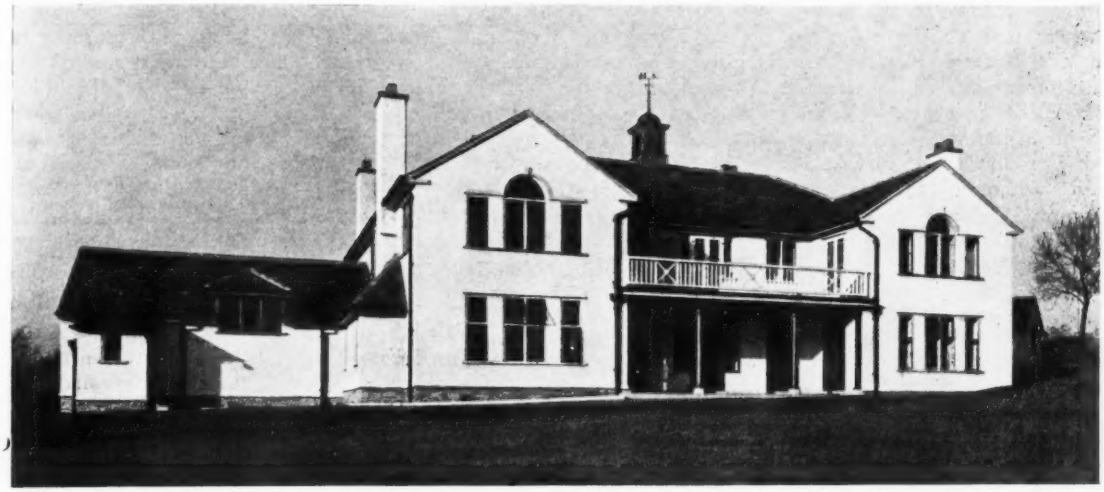
[BY A. TRYSTAN EDWARDS]

IN Mr. Penty's eulogy of the work of the Gothic Revivalists he maintains that they were the true inheritors of the medieval tradition, and in so far as they failed in their attempt to revivify English architecture this was due to the influence of their Classic predecessors who had previously corrupted the building for operations. He speaks of "the pedantic attitude of the architects of the Classic Revival in the latter half of the eighteenth century which resulted in the total strangulation of any feeling for design." This seems to me to be an extraordinary statement. If we were to obliterate from our English towns all the buildings erected between, say, 1750 and 1830, we should at once be depriving ourselves of considerably more than half of the civic architecture which even to-day we have most reason to be proud of, and from which we have most to learn. Of this architecture only a tiny fraction was designed by architects pedantic or otherwise, for the bulk of it was the work of builders who practised a truly vernacular style. So far from being bound down by the examples of copybooks these builders introduced innumerable delightful variations of Classic details and proved how spontaneous was the national absorption of the Classic spirit. Wherever we go, that is to say, to whatever town or village which contains buildings belonging to the period mentioned we must recognize immediately the high distinction of this vernacular architecture which is essentially an architecture of the street, quiet, urbane, but yet possessed of an infinite resource. Both formal and informal dispositions of shops and houses, large or small, set in companionable groups were all fully imbued with the civic spirit. And meanwhile the standard of craftsmanship expressed in all the building trades was almost uniformly excellent. Yet it never occurred to the architects and builders of those days to make much boast about this craftsmanship. It was taken for granted as craftsmanship always is, in the great periods of artistic creation. It is only when men have entirely lost the instinct for design that they find it necessary to exalt the act of craftsmanship until it becomes more important than the activity of the spirit which should precede it.

In the eighteenth and early nineteenth centuries architecture was regarded as a "polite" art. Mr. Penty may, perhaps, shudder at this expression. To him it may suggest merely a sham gentility. It is probable that more falsely "genteel" architecture was designed in one year of the Gothic Revival than during the whole of the eighteenth century. What the vernacular architecture of this latter period possessed was not gentility, but manners. The humblest and most "uneducated" builder of that age was imbued with the desire to make his buildings "polite," that is to say, to give them an agreeable social personality such as would enable them to take their place without offence even in the most distinguished architectural company. A building of that period was always capable of "team-work." It could be in harmonious relationship to the buildings next to it, and could subordinate itself to a larger scheme. If the vast majority of these vernacular Classic buildings happened to be unobtrusive, and what Mr. Penty would perhaps describe as merely "respectable," this is because respectability in the average individual in society is the principal factor which holds that society together. To the Bohemian, of course, this respectability appears dull, but then the Bohemians could never build up a society of their own. The average Gothic Revivalist building is neither respectable nor polite, it is a Bohemian that scoffs at the social virtues, it is incapable of team-work, it is like a nasty spoilt child that refuses to "play" unless it be given the principal part itself. And these undesirable temperamental qualities of the Gothic Revivalist building have nothing whatsoever to do with craftsmanship. It need not even be disputed that the masonry, brickwork, the carpentry and joinery in such a building may be executed with competence. The finest craftsmanship, however, will not redeem a vulgar conception, and I contend that it is this vulgarity of outlook which characterizes the Gothic Revivalists, which is the cause of the disrepute from which they are not likely to be rescued.

For after all what is vulgarity? It is the absence of good manners. How do children learn good manners? The answer to this is that they acquire such information by being taught good manners, or, at least, the elements thereof. If they are not so taught they grow up to be little hooligans. With whom rests the responsibility of teaching children manners? Surely with their elders and spiritual advisers. Again, are these spiritual advisers more likely to inculcate a respect for manners in their charges if their philosophy includes the concept of manners or if it does not so include it? If their philosophy does not include this concept we are right in assuming that the pupils who submit to be guided by them and receive no other spiritual nourishment except at their hands will grow up devoid of manners. If they are devoid of manners they will be vulgar and their preceptors will be responsible for this vulgarity. The Gothic Revivalists propounded a theory of architecture which ignored manners, for their theory contained no implicit recognition that the relation of one building to another and to the township of which it formed a part was of importance. On the contrary, they so magnified the elements of craftsmanship and construction and cast such a saintly halo around these that although they failed to notice the highest and most gracious qualities of architecture they yet succeeded by their flowery and sanctimonious language in persuading large numbers of people that they, and they alone, were capable of envisaging the spiritual aspects of this art. The worst of it was that architects trained in the traditions of the Gothic Revival, even when they altered their style and affected a Renaissance manner, still retained the profound disregard for civic values which was inculcated in them in their youth. Moreover there are to-day many "Classic" architects who without the excuse of having been brought up in the office of Scott, Pugin, or Waterhouse, still repeat the Revivalist shibboleths of craftsmanship and construction while they proceed gaily to erect buildings which have no sound conscience whatsoever.

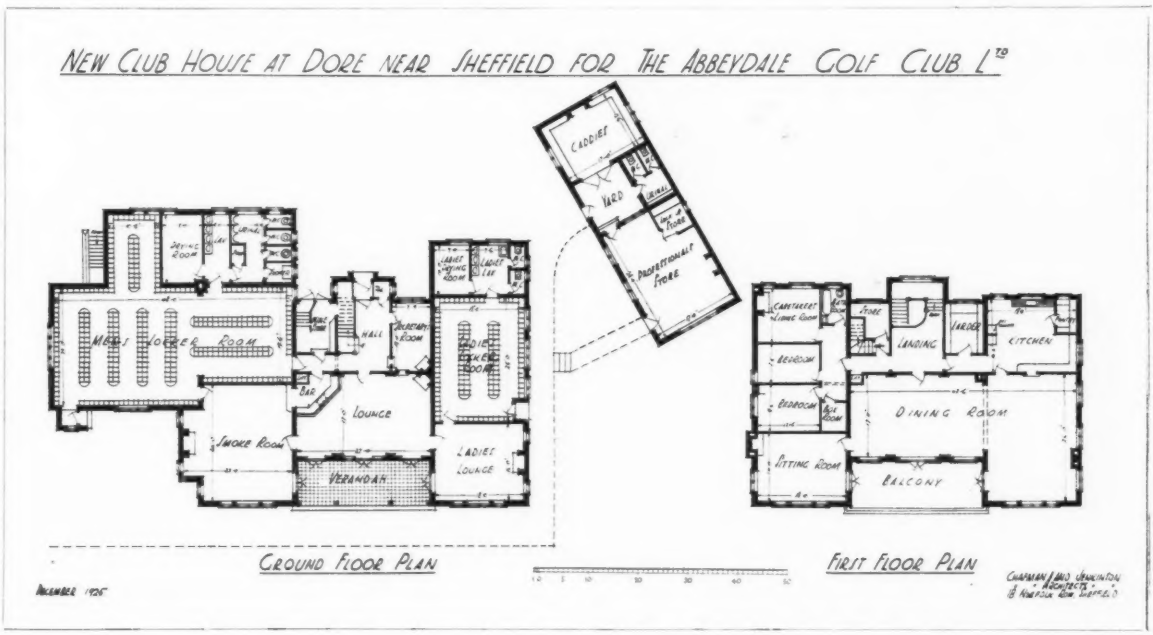
CURRENT
ARCHITECTURE
SECTION



A SHEFFIELD FIRM

[BY H. ST. JOHN HARRISON]

THE firm of Chapman and Jenkinson have recently made some interesting contributions to the domestic architecture of South Yorkshire, principally in and around the city of Sheffield, where their practice is carried on. Good results have been achieved by making the best use of the sites at their disposal, by a careful consideration for their clients' wishes, and by a thorough understanding of local labour and materials. Their



Golf club house at Dore, near Sheffield. By Chapman and Jenkinson. Above, the main front. Below, the plans.

domestic work generally shows a keen appreciation of the traditional Yorkshire type of building—uncoursed rubble stone walls, stone mullioned windows, and flat-pitched slated roofs—combined with care and treated economically.

One of their most important commissions was "High Wray," Ecclesall, for Mr. W. Bayldon Barber. It is a large country house on an excellent site of about four acres, with a commanding view to the south of the Derbyshire moors. The house is planned symmetrically, and is of generous dimensions, all the important rooms having a south aspect. The servants' quarters are placed in the roof over the main block, and advantage has been taken of a fall in the ground at the east end of the house, where a basement washhouse is provided. Spacious bay windows, a large veranda, and a fine terrace are the main features of the south elevation. Local stone of varying colours is used for the walls, and the roof is covered with very thick rustic slates. The staircase and the floors in all the principal rooms are of oak. An artificial lake is an interesting feature of the garden, which has been well planned by Mr. Jenkinson in collaboration with Mrs. Barber. A gardener's cottage and garage adjoining are built of similar materials.

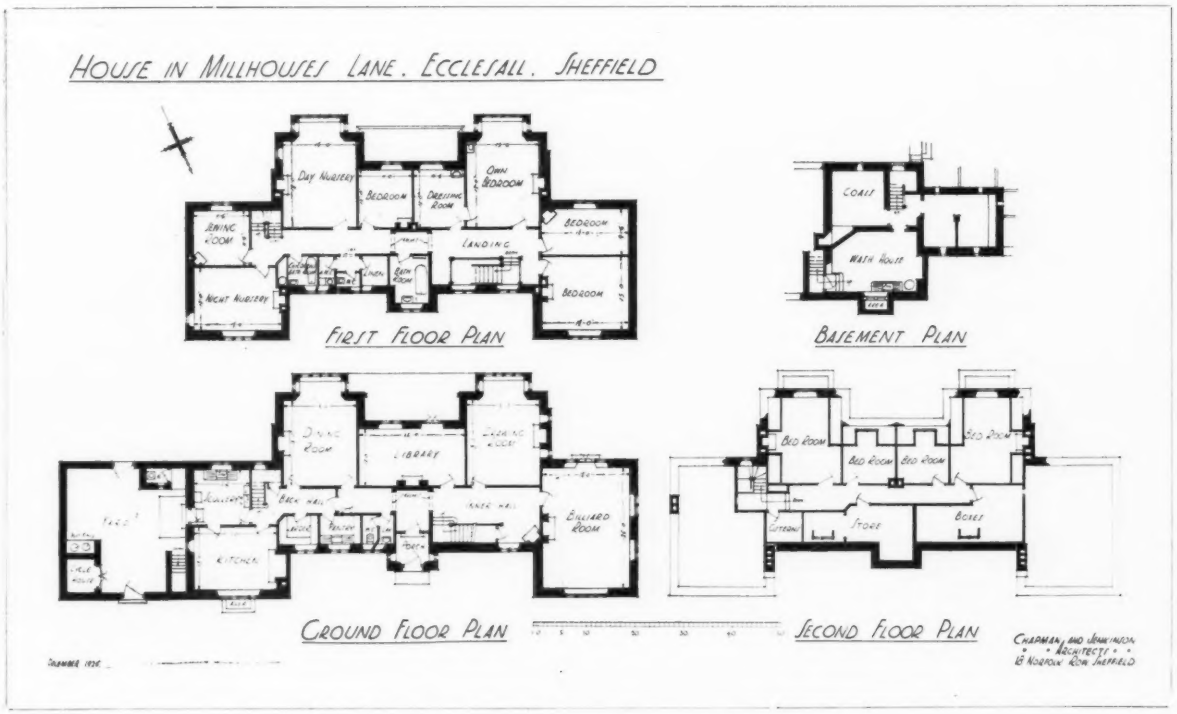
Of the two houses built at Ranmoor, Sheffield, the smaller one was built for Mr. R. L. Foxon, and has attractive and well-proportioned elevations. It is planned in a direct manner, although the service arrangements between the dining-room and the scullery might, perhaps, have been arranged a little more conveniently from the washing-up point of view. The bay window gives an added interest to the front.

The larger house was built for Mr. W. Trickett, and has the same expression and character. It contains two sitting-rooms, a study, four bedrooms, and bathroom, etc., on the first floor, and two bedrooms and a boxroom in the roof. Again the service might have been improved. Instead of the food having to be taken through the hall to the dining-room, it might have been transferred by way of a hatch or other direct means, but it is probable the client thought otherwise. The veranda was added when the house was partly built, and it was, therefore, rather difficult to treat in relation to the general composition. It is built of local stone.

The pair of cottages in Abbey Lane, Sheffield, were built for Mr. A. C. Davy, for his chauffeur and gardener. They are planned in an economical manner around a central stack, and contain a living-room, parlour, and scullery on the ground floor, and three bedrooms, bath, and w.c. on the first floor. The elevational treatment would, perhaps, have had a more restful appearance if the eaves gutter had been allowed to carry through in one unbroken line.

One of the most important features in a house of this type is the entrance door, and in this case it has been designed in good taste and proportion, with refined consoles and mouldings. The walls above the stone base are faced with white cement roughcast. Metal casements

"High Wray," Ecclesall, Sheffield. By Chapman and Jenkinson. The south elevation.



"High Wray," Ecclesall, Sheffield. By Chapman and Jenkinson. Above, the north elevation. Below, the plans.

Gardener's lodge and garage to "High Wray," Ecclesall, Sheffield. By Chapman and Jenkinson. The north elevation.

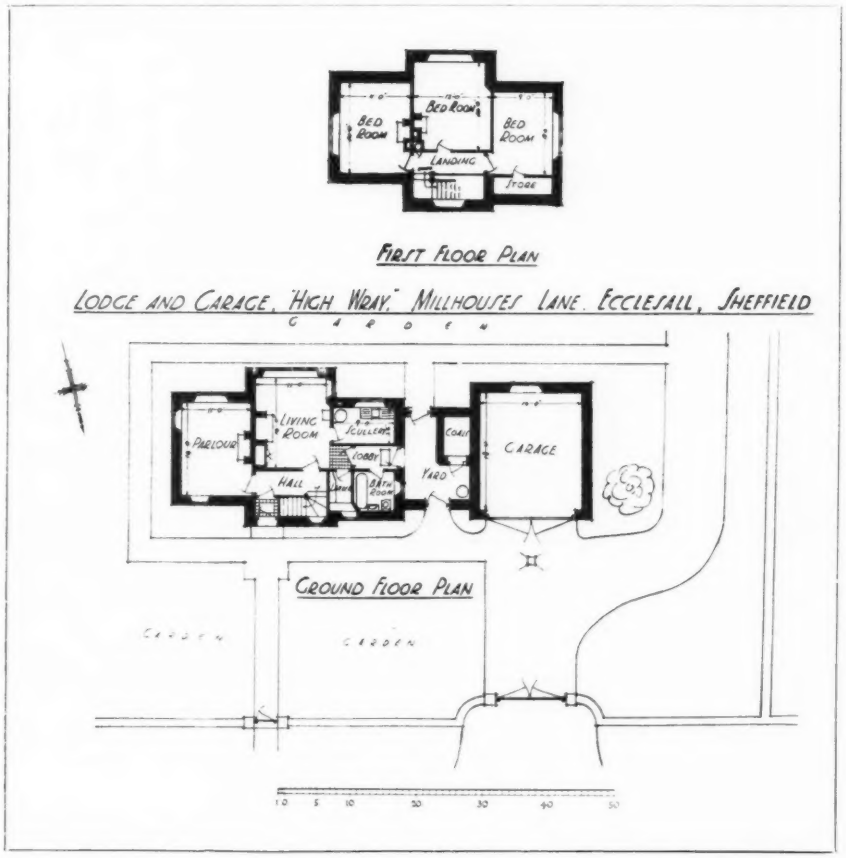
have been used, and the roof is covered with rustic slates.

Messrs. Chapman and Jenkinson's design for the club house for Abbeydale Golf Club, Dore, near Sheffield, was placed first in a local competition. An essential condition of the competition was economy, and in spite of this too frequent condition in all manner of building nowadays, the architects are to be congratulated on having produced a composition which is a logical expression of its purpose.

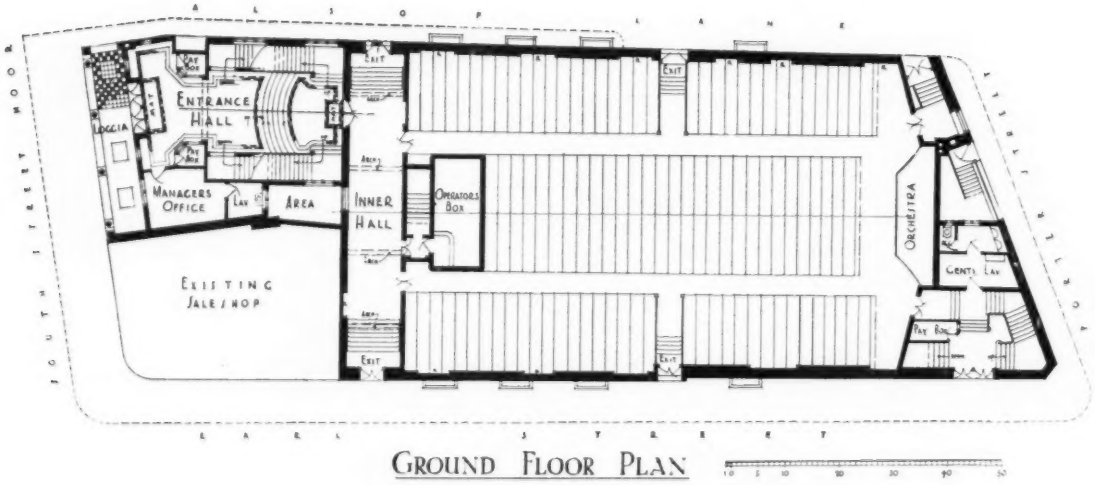
It is generally understood that the most important unit of a golf club is the locker-room, and around this unit all the other rooms are grouped. This is an important point in the Abbeydale club house, the locker-rooms for both sexes being well planned and within easy reach of the lounge, smoking-room, and ladies' lounge. They also have separate outside doors. It is important to note that the men's locker-room has through ventilation and ample wall space for lockers, and the windows have been placed high in the room so that the maximum number of lockers is obtained. Small hatches for the payment of green fees, etc., are conveniently placed between the hall, lounge, and the secretary's room. The upper floor contains a large L-shaped dining-room with plenty of window space giving a good view of the course. The service kitchen, etc., caretaker's apartments, and a small sitting-room are also on this floor. Opening off the dining-room is an open balcony where refreshments are served. Externally the two gables are linked well together by the simple balustrading of the balcony, and the semicircular headed windows add a distinctive note. The "mass" generally is of pleasing proportions. The walls are of brick finished with rough-cast. The plinth and the roof covering are of stone. Metal casements and leaded lights are used for the windows. The floors are in polished maple. The cost was about £6,000.

The present-day cinema is planned so as to give the people of this world of "rush and bustle" a few hours of rest and pleasure in comfortable surroundings. The façade should express the purpose of the building; the entrance hall and lobbies should be designed to interest the people waiting for tickets, in order to take their minds off the fact that they are waiting. Restaurants and cafés are also important and necessary units. Unfortunately, the architect cannot always procure a good enough site for his ideal scheme, and it is often a case of making the most of a very restricted entrance frontage. This appears to have caused a slight cramping in the entrance hall of the Central Picture House, South Street Moor, Sheffield. The building was erected on an irregular site occupied by an old brewery, parts of which were incorporated in the new structure. The staircase leading to the upper floor is well arranged and opens on to a foyer from which the café and balcony are approached. Seating for 1,600 people is provided in the auditorium and the lower ground floor contains a billiards hall with accommodation for seventeen tables. The walls are of brickwork with artificial stone dressings, and the cost, apart from furnishing, etc., was just under £50,000.

The Star Picture House at the junction between Ecclesall Road and William Street, has seating accommodation for 1,000 people, with a billiards hall containing five tables. Brickwork with concrete pilasters and entablature are the materials used for the external walling.

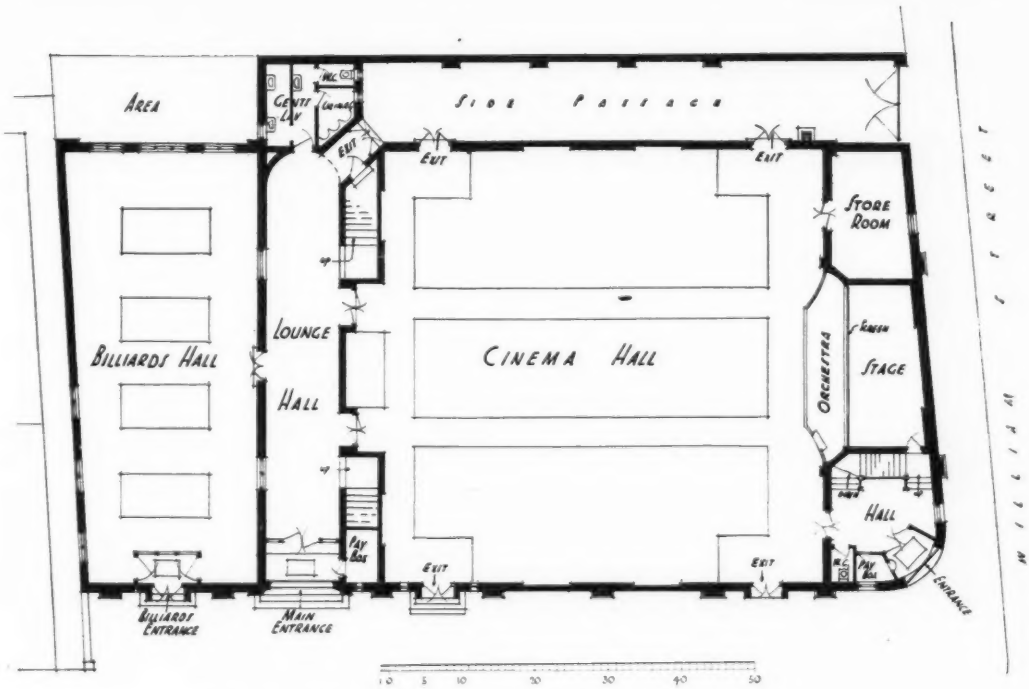


Gardener's lodge and garage to "High Wray," Ecclesall, Sheffield. By Chapman and Jenkinson. Above, the south elevation. Below, the plans.

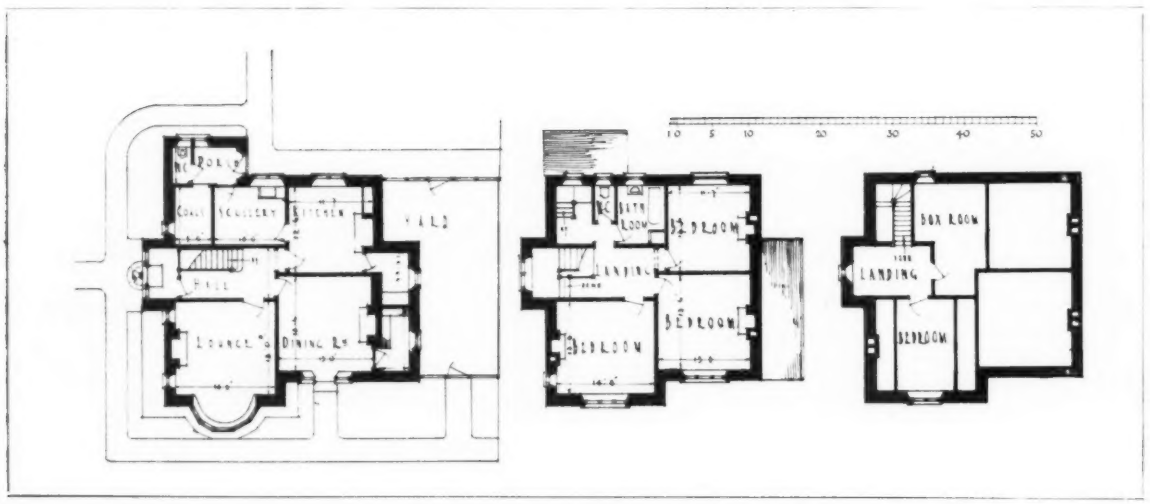


GROUND FLOOR PLAN

The Central Picture House, Sheffield. By Chapman and Jenkinson. Above, the elevation to South Street Moor. Below, the ground-floor plan.



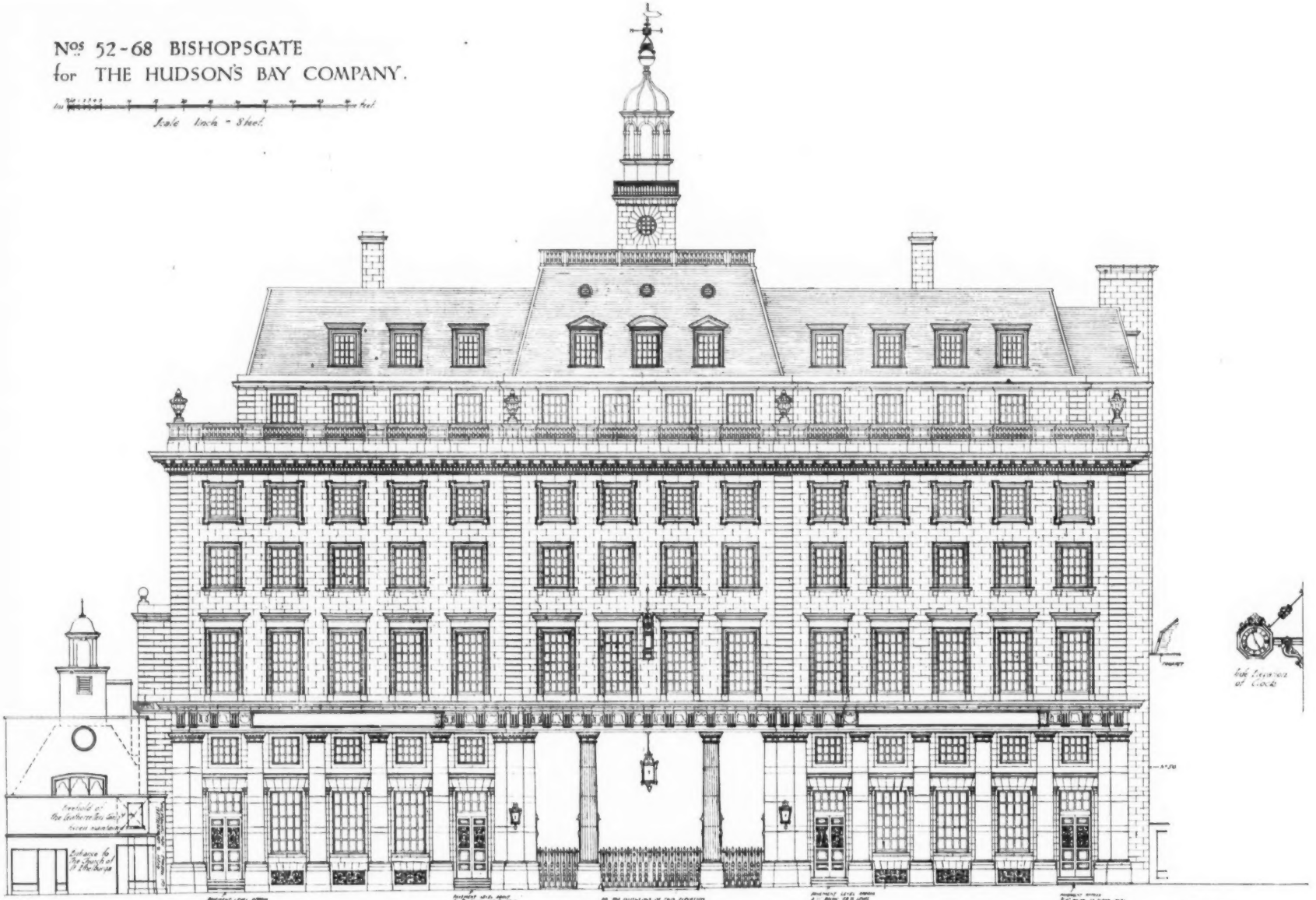
The Star Picture House, Ecclesall Road, Sheffield. By Chapman and Jenkinson. Above, a general view. Below, the ground-floor plan.



A house at Ranmoor, Sheffield. By Chapman and Jenkinson. Above, a general view. Below, the plans.

Nos 52-68 BISHOPSGATE
for THE HUDSON'S BAY COMPANY.

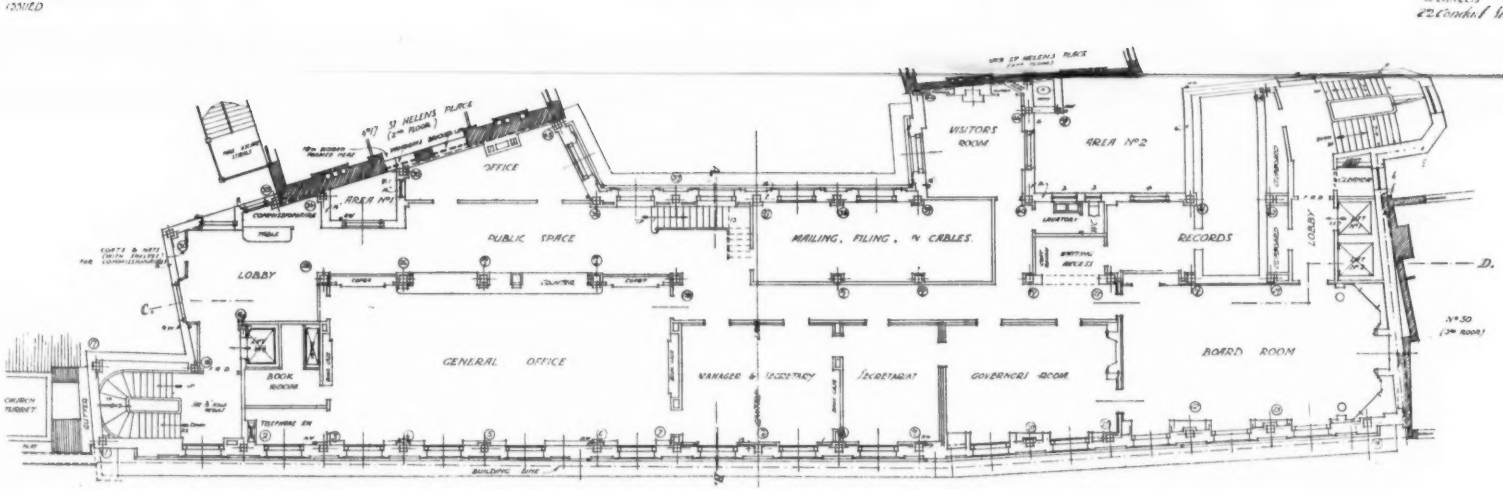
Scale Inch = 8 feet.



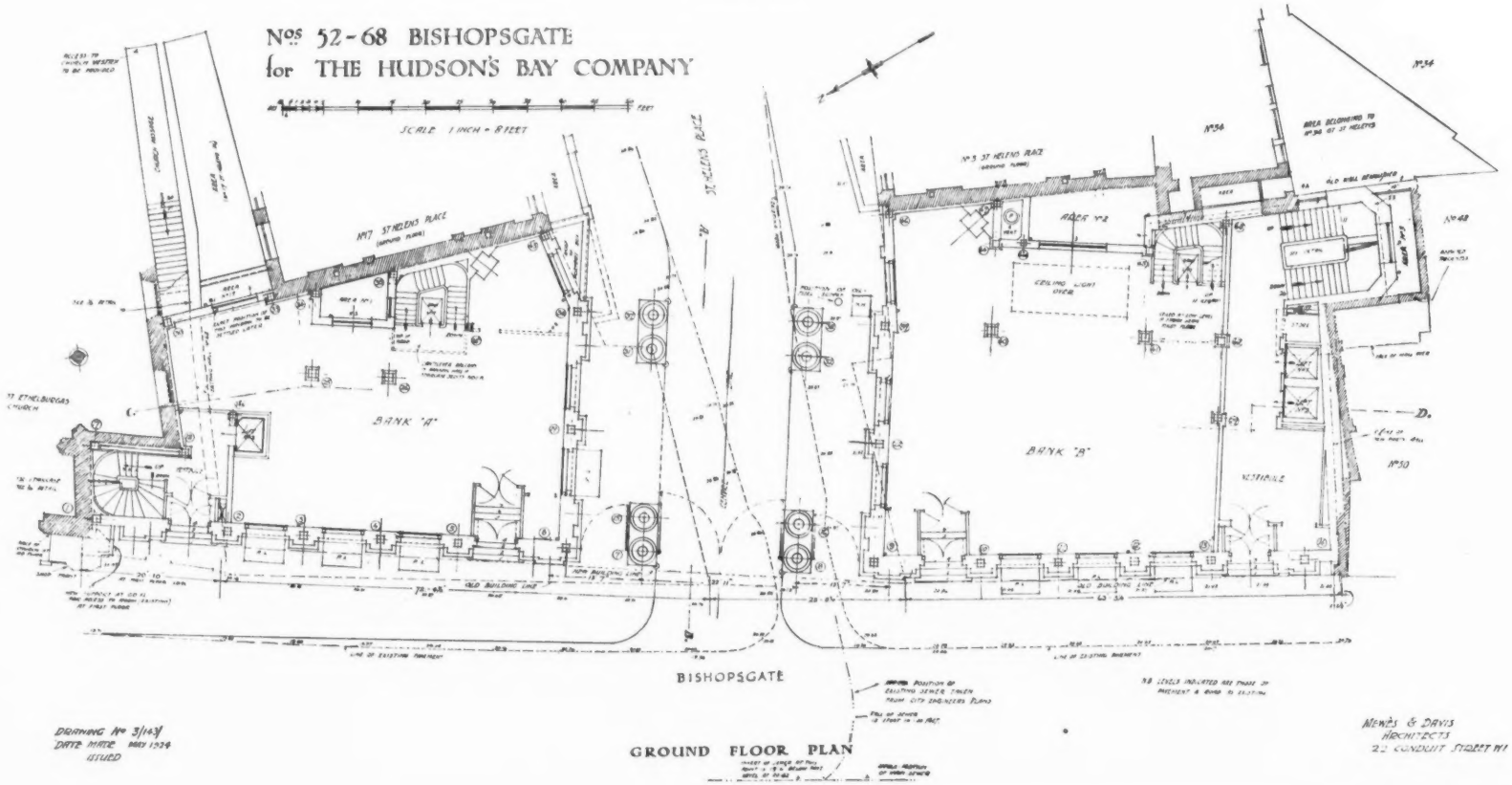
ELEVATION TO BISHOPSGATE.

DRAWING No 21/143/ (previous XXIII)
DATE MADE January 1924
REVISED June 1924
ISSUED

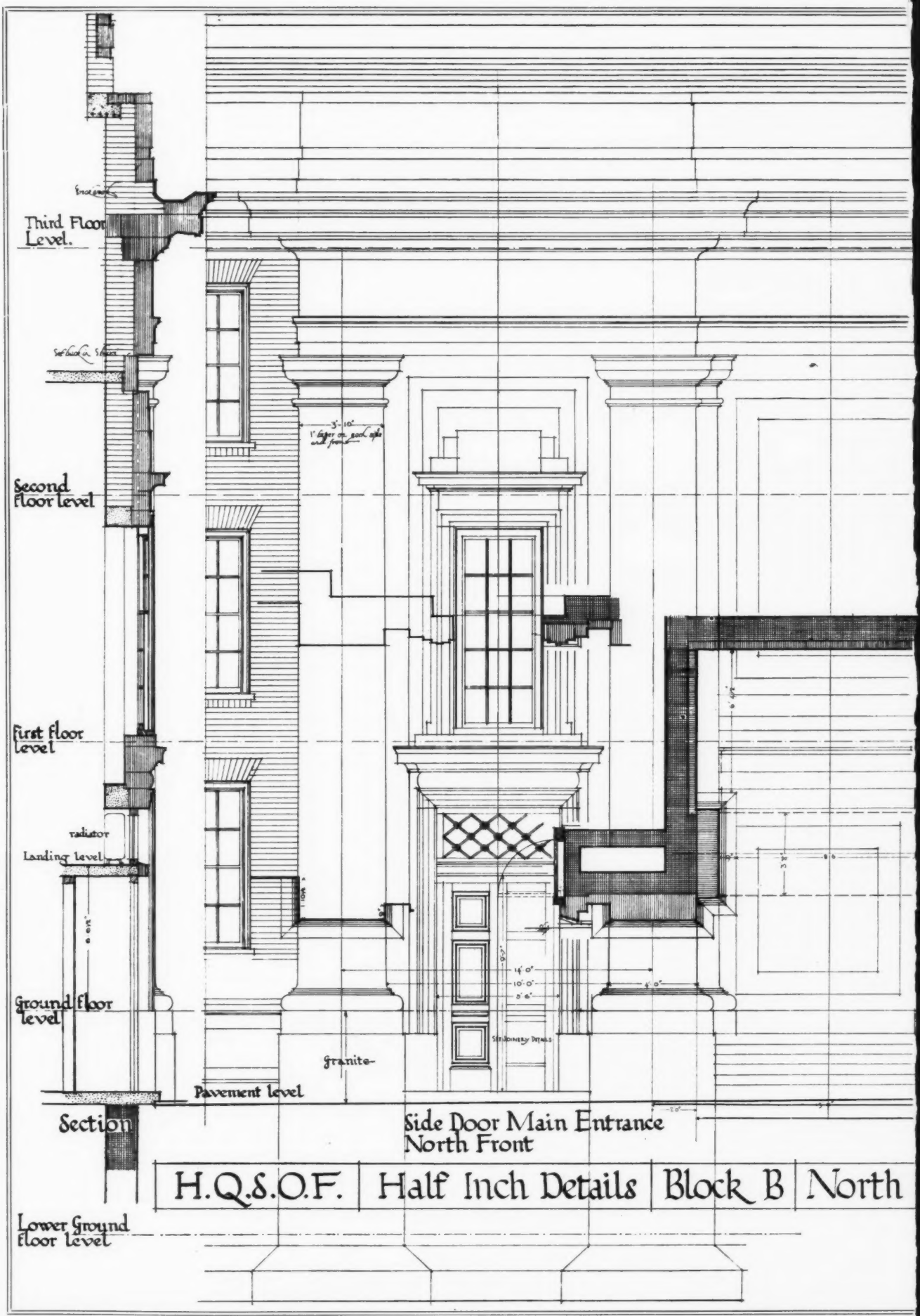
Lloyds & Bows
Architects
22 London Wall



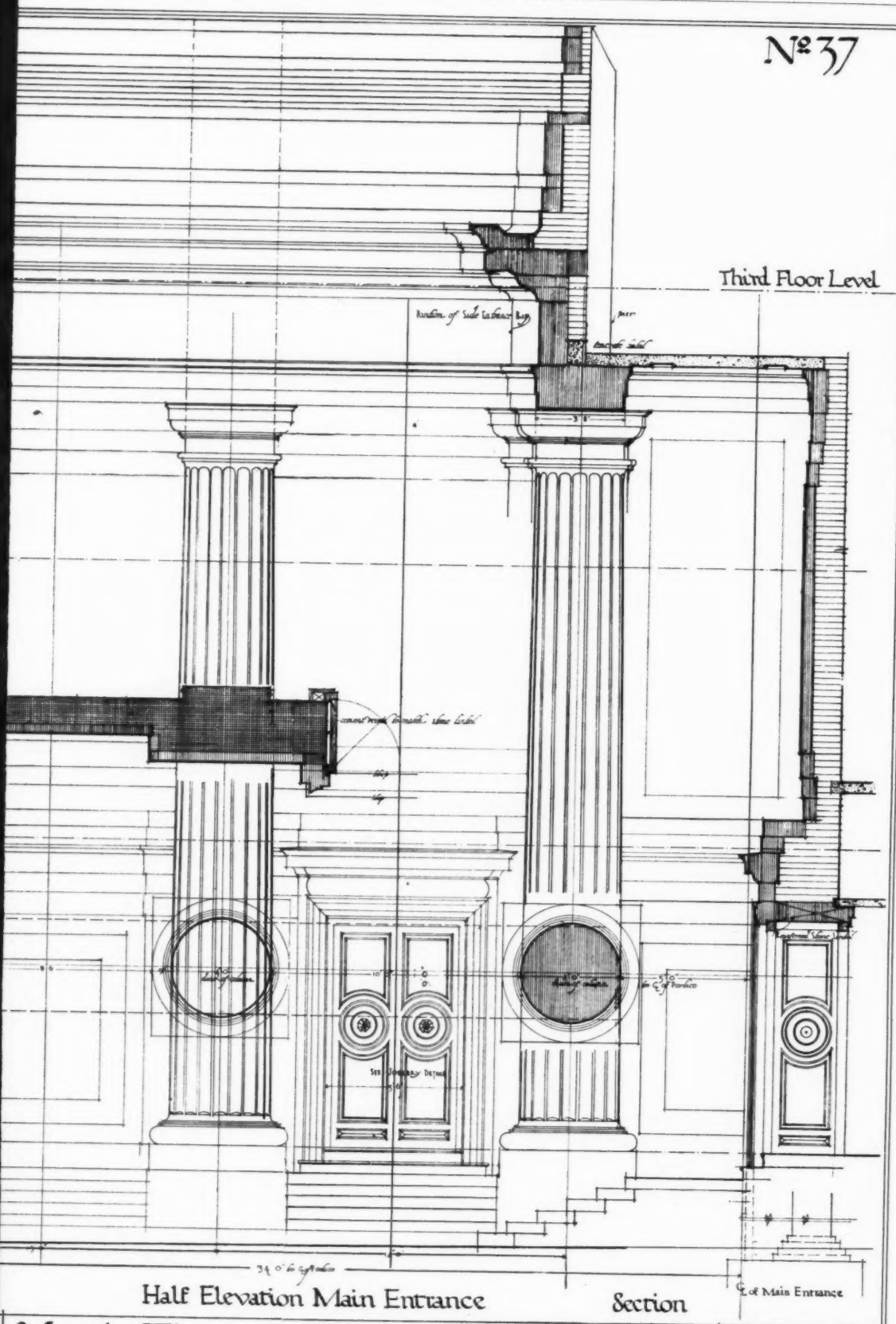
Second-floor plan.



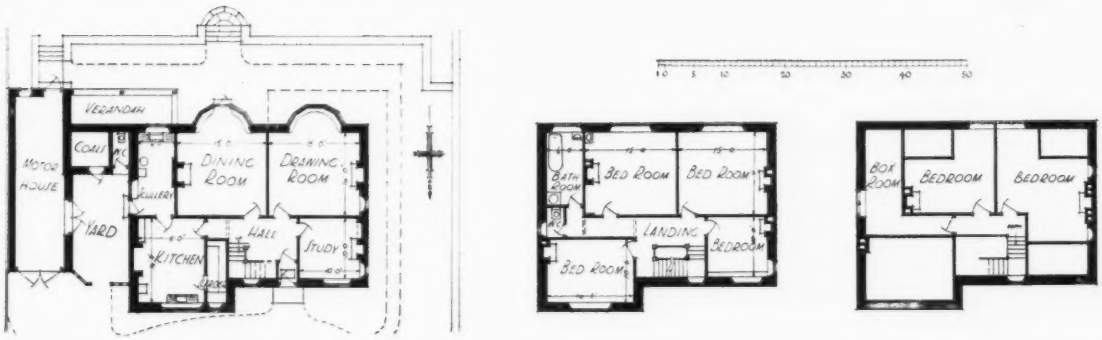
THE HUDSON'S BAY COMPANY'S BUILDING, BISHOPSGATE. BY MEWÈS AND DAVIS.



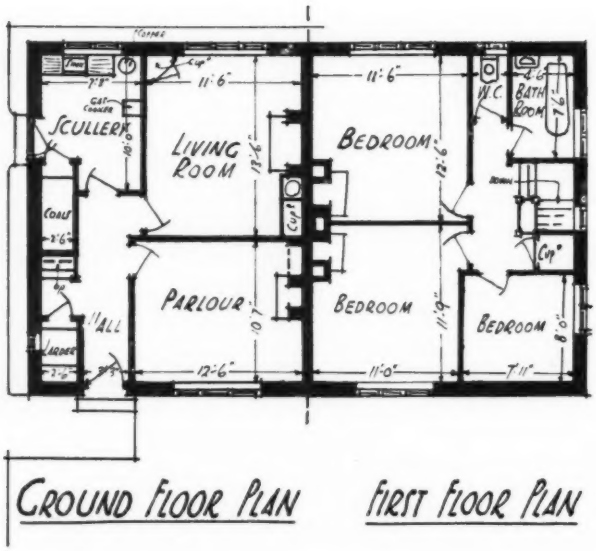
H.Q.S.O.F. | Half Inch Details | Block B | North



HEADQUARTERS, SOCIETY OF FRIENDS, ENDSLEIGH GARDENS, EUSTON ROAD. BY HUBERT LIDBETTER.



A house at Ranmoor, Sheffield. By Chapman and Jenkinson. Above, the south elevation. Centre, the plans. Below, the north elevation.



A pair of cottages, Abbey Lane, Sheffield. By Chapman and Jenkinson. Above, a general view. Below, the plans.

TRIBULATIONS OF EARLY PRACTICE: ii

[BY KARSHISH]

vi: CONDUCT OF THE WORKS

IT is right that our architect should feel out of countenance and ill at ease and have a sense of experiment when he first goes on to the works, for, if not, it will be because his confidence is overweening; yet he is ignorant even of the appearance of materials and workmanship which he has to recognize and assess, and he has no experience to guide his address in dealing with the persons he has to do with. This last is a matter of some importance. His manner, his bearing, must, of course, be freely his own, as when men meet on equal terms there will be no suggestion of condescension or of strutting authority, but at the same time he must keep something in hand, so to speak. He must not be too large and expansive in throwing himself upon the good offices of the foreman, yet, on the other hand, he must not be so remote as to discourage the help the foreman will freely extend to him. He must be friendly to builder and foreman without in the least being companionable; easy and intimate without a trace of familiarity; frank without impertinence; gay, even, without a suggestion of being personal. The thing is much easier to get a sense of in actual performance—like riding a bicycle—than to gather from words; but if our architect can approach the business without shyness—which is, in his case, fear of not giving the impression he wishes to give—and with enthusiasm for the work, sympathy for the workers, and a sense of his responsibility, he will be safe.

I trust that nothing written above implies a snobbish superiority for the architect, for anything of the kind is remote from my intention. The all-abiding satisfaction in directing building operations depends very much on the entire absence of that kind of nonsense. We are, if you please, just for once, in a world of realities, where men stand for what they are worth, and where each knows the worth of his fellows. It is a world where all are alike involved in one of the most compelling instincts known to humanity—that of creating and well-making things. The spirit of brotherhood in craftsmanship is no superimposed sentiment, but a primitive fact of human nature; its disappearance is mainly due to the displacement of craftsmanship by industry; no man now respects another for his "mystery" as it was called. Thus our architect will not in the least stand aloof, but identify himself in the fullest way with the common aim and the common work, but he must not be on terms of familiarity with those whose work he directs as well as shares, or he will weaken the authority which is his special prerogative. Sympathy then, and a genuine unconsciousness of superior virtues (not a priggish condescension) will do the rest; and let our architect remember that no gathering in any drawing-room will see through pretentiousness with a keener or more humorous eye than the men on the building scaffold. It is odd that those who most readily swallow that kind of affectation are those who most lavishly deal in it themselves.

It is necessary here to say that under no circumstances should our architect drink with the builder or his foreman, or accept any hospitality or consideration from them. To this rule there is to be no exception of any kind or in any degree. Our architect may, quite possibly, employ, sooner or later, a firm of builders whose principal is a better man than he, better born and better educated, perhaps; cultivated highly in the field of special hobbies and distinguished by rank; yet our architect must not allow such a man, nor any other, even to pay his 'bus fare or send him a brace of pheasants, or deny him the right to half share in the taxi. Some who read these lines will grin; if there were not such kinds of grinning men it would be unnecessary to press, to such trivial issues, principles which are surely innate in everyone who is sensitive of his personal self respect and of his professional obligations. Sophisticated men who scoff, like true cynics, at wholesomes entiments do so either because they have never experienced them or, more generally, because they once knew better and now seek to cover the weakness of character which led them to qualify their true natures by avowed contempt for those who have been strong to hold by them. Our architect will find, especially in his early years, that it is often difficult to maintain this principle of independence. He may, however, freely show anger in opposition to an obstinate attempt to overrule his view of a matter which is as much his private affair as are his religious convictions. In any case, he has to draw the line somewhere or he will find himself the recipient of cases of champagne; if he forms the habit of swallowing the wine, he will one day, possibly, have to refuse, or accept, a motor-car. Is it necessary to point out why the motor-car is offered? Is it even necessary to say why the champagne? It is worth while to consider, however, why it is that the person who is under contract to perform to his satisfaction should be more anxious to pay our architect's railway fare and stand him lunch than his own brother would be. The reason clearly is either that this person has an extraordinary affection for the architect, which takes no account of coarseness of nature, or that he hopes to curry favour with him and create a sense of obligation in him; or that he fears that if he neglects to do this he will disappoint the architect's expectations and arouse his animosity. This last is probably the true reason for this extravagant and misplaced affability, and it is, indeed, the only reason which is in the least to be reconciled with the known reputation of builders; they are induced to behave in this way only when they have been led to believe, by the kind of men whom I have supposed to grin, that architects expect it of them. Hospitality is offered sometimes, no doubt, in sheer good fellowship, and it is hard not to be able to respond to an impulse of goodwill of that kind; wedding presents are for the same reason sometimes sent; wine and other gifts are—or more commonly were—offered as a genuine mark of gratitude for some activity of the architect on behalf of the builder or in appreciation of just dealing under difficult circumstances, but all such gifts must be refused. There is no difficulty in doing this; our architect has only to avoid any implication of superior virtues and explain that it is impossible for him as an agent to accept presents from those with whom he does business, and to send them back carriage paid. If he feels a prod to be deserved he may add that he has no doubt that his client will be delighted to accept what he is obliged to refuse. Here he will touch the heart of the matter. Why is it always the agent who inspires altruistic spasms of this kind, and not the principal who finds the money and has made the occasion? Why does my tailor never send me the box of cigars he would give my valet, if I kept one; and why in all these years has my grocer never acknowledged with so much as one box of Elvas plums the tons of his groceries which I have incontinently devoured, but bestowed all such emblems of regard upon my cook? The implications are clearly unsavoury; we are here on the edge of the hideous domain of bribery. A client once said, in disparagement of his architect: "He had his legs under the contractor's table." A small matter, it would seem, for an architect to dine with the builder, but why do the words strike home like the kick of a horse? "He has his legs under the contractor's table." The implication is intolerable. What reputation, professional or personal, can support the contempt conveyed by the accusation? I would finally clinch the matter, for I am loth to leave it until all is said, by referring to the attitude of the Courts on the subject.

Many years ago there was a case involving claims under a building contract. The building was a large one; the architect prominent in his day and in high repute as a man and in professional standing. The lawyers gained the knowledge that there was an occasion when the architect, when in the company of the contractor, entered a shop, and that when there the contractor had bought and given to the architect some little catchpenny trifle, a new device in matchboxes, or something of the sort. The cost of the thing had been two shillings and sixpence. These

facts meant nothing; as much or more might readily have been spent on a cigar, and the thing could have no kind of significance except by implying a special kind of intimacy between the agent and the contractor which was foreign to the right spirit of the relationships of those persons. The principle of the thing was wrong; and how disastrously wrong the lawyers, with the countenance of the judge, the acceptance of the Press and the gaping wonder of the public, made abundantly clear. Humiliation untold must have been piled on the head of the architect who was made to fill the public eye as a disgraced man. That he died soon after is not to be overlooked. I do not hold up this bit of history as a warning, but to show that there is a well-established and exacting rule which prescribes that no agent shall stand in any personal indebtedness whatever to those with whom, as agent, he does business.

In addition to the foregoing, our architect must not allow himself to get on terms of personal intimacy with the contractor or any of his people. To be addressed as " old boy " in good fellowship is not a mark of happy conditions for the architect, although it may favour the interests of the builder. That kind of personal regard is likely to create personal enmity if and when the time comes for a strong conflict of views, and it is not necessary to point out the disaster of any such falling away from the formal, dispassionate urbanity with which our architect must meet all such differences of opinion; he must never allow personal rancour to sway his judgment, and the only way to secure that this shall not happen is to guard against any intrusion of familiarity upon his relations with those whom he has to control.

Next to the need for tempering cordiality with reserve is the necessity for firmness. Our architect will find this a difficult matter. Firmness does not involve stiffness, except in the last resort. The more complaisant and pliable it is the better, but it depends on clear vision informed by knowledge and directed by fixity of purpose, and it is in this that our architect's difficulty lies. His judgment, it is to be remembered, is neither supported by experience nor fortified by reasons; he has been accustomed to draw and specify various things in various ways by habit only, without knowing the reason why he so draws and specifies them, or, if he ever knew the reasons, he has had no occasion to remember them. Thus, when he goes on to the works and is confronted with practical issues, each of which has stout reasons to recommend or discredit it, and is further met by the arguments of practical men whose angle of view is entirely a new thing to him, he will be likely to vacillate, become confused, contradict himself, and fall into a state of indecision, which leaves him incapable of grappling any problem and makes him feel that he is being led sheep-like from one decision to another, and that he is exhibiting a lack of knowledge and capacity which does small justice to his true attainments and abilities. It must be borne in mind, as has already been mentioned, that the field of building operations is, for the architect, a field of conflict. The builder and his foreman are always disposed to recommend certain kinds of material or workmanship rather than others, either because certain ways of doing things are customary and understood by their workpeople, or, in some cases, because they have had a low quotation or hold materials, or hope to make a good bargain. And if the architect presents a flabby indecisive front they might urge their recommendations shrewdly and with all the force of minute practical knowledge and long experience. If they notice that the architect cannot make up his own mind, they naturally, and in perfect good faith, gladly perform that task for him; and to speed up the process some builders are not always above bluffing and stating a plausible, fantastic, or even humorous reason, which will serve their purpose, rather than be put to the trouble of justifying their position honestly. Thus an architect who found that cement concrete was not setting properly was told by a waggish foreman: " There's been so much rain, sir, it hasn't had a chance yet." This sort of thing, for many obvious reasons, will not do at all, and it must be remembered that the individuality of the architect will scarcely appear in a house so built. How, then, is our architect to face and overcome the difficulties which arise out of his inexperience?

First, let him always prime himself up before he goes on to the works; and, second, let him at the outset make the builder and his foreman understand that when he says a thing he means it. The first he may readily do by getting well ahead with the working drawings in advance of the builder's requirements. If he does this, and also takes the precaution, before he goes on the works of making up his mind what he is going to see when he gets there, and of refreshing his mind from the drawings and specification, he will speedily recognize his surroundings, seize on any divergencies, and be able to ask intelligent questions to balance his inevitable foolish ones, and to give clear and definite answers to the questions asked of him. If he thus makes a point of knowing thoroughly all about his own particular job, and his mind is made up as to the *results* he wants, and if he holds his tongue as much as may be, he will keep himself in countenance and lean on the resource of the foreman in practical matters without any embarrassing display of ignorance. The foreman will tell him a great deal he does not know, and open his eyes astonishingly; but he, on his part, will be able to instruct the foreman upon a number of points he has already worked out and provided for in the drawings.

The principle by which our architect is to make the builder understand that he means what he says operates when a building first starts, and its application is most necessary when the builder is a stranger to him. Our architect, then, must at the outset of any operations keep a sharp eye for small irregularities. Those to which no exception can be taken should, nevertheless, be commented upon and allowed to pass, but any which show a tendency on the part of the builder to make things easy for himself, or to conclude that his way of doing a thing is as good as another, or which do not hold up the full intent and meaning of the contract, he must object to decisively and require the defect to be amended or the work done anew. For this purpose the more trivial the irregularity or evasion the better is the architect's purpose served, which is to warn the builder that he must mind his " p's " and " q's." The application of this discipline is no more unkind than it is capricious, for the builder is by it prevented from overstepping the mark in important matters and being put to the cost and trouble of doing work a second time over. On the other hand, if our architect, when the works are first begun, hesitates to assert himself—to which weakness he will be tempted—and allows unimportant divergencies from the strict interpretations of specification and drawings to pass without stricture, he will mislead the builder (who is accustomed to work under lax and incompetent architects as well as under strict and able ones) into supposing himself right to take things into his own hands, and give him a just cause for grievance when some important work, which our architect cannot bring himself to accept, is done as it should not be done.

Let our architect be as exacting as may be in the early stages of the work, and then when he has established a conscientious, wideawake attentiveness in the builder and his workpeople, he may well extend to them every indulgence, and overlook, whenever possible, bona-fide oversights or errors which have arisen in spite of the good intent which his discipline has established.

[*To be continued*]

THE LONDON STREET ARCHITECTURE MEDAL

The Council of the R.I.B.A., on the recommendation of the Art Standing Committee, have decided to strengthen the personnel and add to the representative character of the London Street Architecture Medal Jury by inviting the Corporation of the City of London, the London County Council, and the Metropolitan Boroughs' Standing Joint Committee, each to appoint one representative to serve on the jury. The following appointments have now been made by these bodies: The Corporation of the City of London: Alderman Josiah Gunton, F.R.I.B.A.; The London County Council: Mr. William Hunt, J.P., vice-chairman of the L.C.C.; The Metropolitan Boroughs' Standing Joint Committee: Alderman George A. Lansdown, F.R.I.B.A.

FOUNDATIONS

[BY PROFESSOR HENRY ADAMS]

ADEQUATE foundations are essential to every building, but how they may be obtained without going to unnecessary expense is often a matter of the gravest consideration. Information may be obtained from textbooks as to the load per foot super different soils are capable of supporting safely without visible settlement, but the architect and builder have to identify the soil they have exposed with one or other of those described. Experience acquired from similar buildings in the neighbourhood is most useful, and in many cases will prevent the necessity for sinking trial holes on the site. Some sites, however, especially near the banks of a river, may show considerable variation in the subsoil. Generally speaking, an ordinary foundation in the neighbourhood of London is considered safe under a pressure of $1\frac{1}{2}$ tons per foot super, irrespective of the depth from the surface. The depth ought, however, always to be taken into account. Approximately 2 ft. 6 in. deep on gravel, 3 ft. 6 in. on a friable soil, and 5 ft. on clay are the minimum. Rankine gives the formulæ :

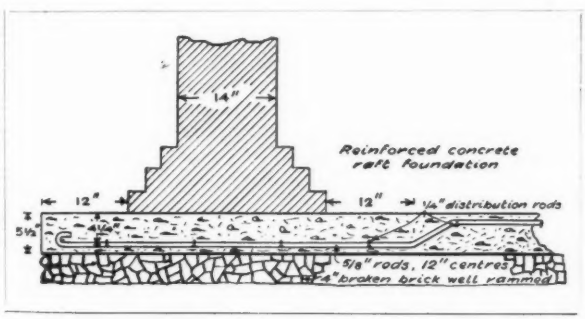
$$W = wd\left(\frac{1 + \sin\theta}{1 - \sin\theta}\right)^2,\ d = \frac{W}{w}\left(\frac{1 - \sin\theta}{1 + \sin\theta}\right)^2$$

where W = maximum safe vertical load in lb. per foot super, w = weight of a cubic foot of the soil in lb., d = depth in feet of base of foundation below the immediately surrounding surface, θ = angle of repose of soil. The angle of repose may be looked upon as a measure of the stability of the material, but its value is not readily obtained apart from the textbook statements. Taking $W = 1\frac{1}{2} \times 2240 = 3360$, $w = 112$, $\theta = 35$ degrees, as average values, then $d = \frac{3360}{112} \times 0{\cdot}073 = 2{\cdot}19$ ft., which would compare with the 2 ft. 6 in. given above, but would evidently not be suitable for clay. Taking the nearest available figures for clay we have $W = 3360$, $w = 120$, $\theta = 30$ degrees, then $d = \frac{3360}{120} \times 0{\cdot}111 = 3{\cdot}1$ ft., which the writer's experience would lead him to say is quite inadequate, and would result in a movement of the foundations with changes in the weather. After due consideration the writer suggests the following formulæ for use within reasonable limits, (A) for clay subject to weather variations, and (B) for clay free from moisture and not subject to weather variations :

$$\text{(A)}\quad W = \left(\frac{d}{5}\right)^2,\ d = 5\sqrt{W}$$

$$\text{(B)}\quad W = 2\sqrt{d},\ d = \left(\frac{W}{2}\right)^2$$

where W = pressure in tons per foot super, and d = depth of underside of foundation in feet. At, say, 9 ft. deep the limiting pressures would be reached in each case, and although the depth might be increased the pressure should not. When the top of the clay is some distance below the general level and acts as a holder for subsoil water, it is under bad conditions for supporting a load, although apparently protected from the weather. In such a case the concrete foundation should go a little way into the clay and not rest on the soapy surface which would spurt out under pressure.



The foundations for large buildings in London are frequently taken down to the " London clay " or stiff blue clay, which occurs at from 25 to 35 ft. below the surface, and is 180 to 200 ft. thick. Above this there are several shallow beds of ballast and brown clay, with occasional beds of gravel 2 or 3 ft. thick. Sometimes the top layer consists of 10 or 12 ft. of made ground. The irregularity of composition and thickness of the upper layers renders it desirable in important cases to ascertain by trial holes what are the layers actually occurring for some distance below the proposed base of foundation, so that the safe pressure may be determined.

It is sometimes said that it is all very well to talk about safe load if you are considering one square foot, but when a foundation runs to hundreds of square feet the soil cannot get away whatever you may put upon it. To a certain extent this is true, and Professor Unwin has shown that the pressure round the edges of a foundation is only about half that at the centre, owing to the partial yielding of the soil round the edges escaping from the pressure, while in the middle it is shut in, and this sometimes forces up the concreted area between the outer walls. Investigations in America have shown the rate of dispersal of pressure in the subsoil, thereby explaining how a comparatively thin but good layer of material overlying weak material may support a load at a shallow depth, when penetration of this layer would involve failure. For example, at a depth of three times the width of foundation the maximum stress is only about 10 per cent. of the surface pressure.

The concrete for foundations should always be specified in three items, Portland cement, sand, and larger aggregate, as, say, 1 : 3 : 6 for mass concrete, to be measured separately; namely, 1 part of British standard Portland cement, slow-setting, 90 lb. to be considered equivalent to 1 cubic foot; 3 parts of sand, preferably varying in size from $\frac{1}{50}$ in. to $\frac{1}{16}$ in. diameter, and quite free from loam or vegetable matter—which is the technical meaning of " sharp," as all sand unless from fresh broken stone is rounded by the prior action of water; and 6 parts of larger aggregate, which may be broken stone or hard brick free from dust, from $\frac{1}{4}$ in. gauge and upwards to $1\frac{1}{2}$ in. for plain concrete. The builder should never be allowed to call this a 9 to 1 mixture and say that the ballast used for aggregate contains the right proportion of sand. There would not be so much harm if he called it a 6 to 1 mixture as that would be approximately correct, the sand being contained in the interstices of the gravel, but it is always better to make sure by separate measurement of what is being used.

If the foundations are extended and reinforced with steel rods to save depth, the strength should not be less than 1 : 2 : 4, and the larger aggregate should not exceed $\frac{3}{4}$ in. diameter, so that it may be certain of passing between the reinforcing bars and also between the shear stirrups. The grading in size adds very much to the density of the concrete and, therefore, to its strength and endurance, and increases its resistance to the passage of moisture. In reinforcing a concrete raft to cover the site of a building it is necessary to consider the nature of the stresses produced, as that affects the position of the steel. For instance, in the case shown in the accompanying diagram, the projecting portion acts as a cantilever, the tensile stress being at the bottom, but in the space between the walls the earth tends to bulge the concrete upwards, and the tensile stress is, therefore, at the top. Suppose we calculate that the pressure on the soil is $1\frac{1}{2}$ tons per square foot below the wall, then at the edge of footings we have the bending moment on the cantilever $1\frac{1}{2} \times 2240 \times 6 = 20{,}160$ lb. in. Then by the ordinary rule for finding thickness we have $20{,}160 = 95bd^2$. Taking a running length of 12 in. for b we have $d = \sqrt{\frac{20{,}160}{95 \times 12}} = \sqrt{17{\cdot}7}$ $= 4{\cdot}207$, say, $4\frac{1}{4}$ in. effective depth. Giving $1\frac{1}{4}$ in. cover below the centre of the steel we have a total thickness of concrete $= 5\frac{1}{2}$ in. The amount of reinforcement at the economical ratio of 0·675 per cent. will be $\frac{12 \times 4{\cdot}25 \times 0{\cdot}675}{100} = 0{\cdot}344$ sq. in. at 12 in. centres.

which will be given by $\frac{11}{16}$ in. diameter rods, but no doubt $\frac{5}{8}$-in. rods would be sufficient. The rods may bend up inside the wall at the same distance as the outside projection, say, 12 in. In order to bind all together and provide for what are commonly called "temperature stresses," but in reality shrinkage stresses, $\frac{1}{2}$-in. diameter rods should run at right angles to the main rods every 12 in. and be securely wired at each crossing. The main reinforcement will be put across the shortest width in a rectangular building, and be repeated in short lengths under end and cross walls.

LITERATURE

A GERMAN CATHEDRAL

Every year we see more and more examples of a kind of book that is bound to multiply with the progress of architectural photography. I mean the monograph devoted to the description and illustration of a great individual building. As the material, written and pictorial, accumulates throughout Europe and Asia, the units in which a quantity of it is brought together must of necessity become more confined in subject and more prolific in detail. Books about whole periods are very difficult to write, and the increase of information is making the writing of them more and more difficult every day. Meanwhile the intensive study of smaller areas of knowledge goes on apace. And the ideal area for the detailed monograph is, of course, a great building of historical importance and artistic interest.

Such a building is the cathedral of Naumburg, which is, as the author of the present work points out, together with Bamberg Cathedral, the most characteristic product of the heyday of German Gothic. Of this building over one hundred amazingly fine photographs have been taken by the well-known photographer Walter Hege. The result is a volume which, though produced without any ostentatious nonsense whatsoever, and bound in paper covers, is a model of this kind of production. The photographs are both good pictures and good photographs; they are faithful and comely, a combination one does not often meet with. The sculpture, in particular, is given with great skill, and the best of the Naumburger sculpture is among the finest medieval work extant. It occurs in the western choir (for Naumburg, like Liverpool, has a choir at either end, though their shapes are not symmetrical about a transverse axis as at Liverpool), built between 1250 and 1280, that is to say, before the eastern choir, which went up from 1280 onwards. The author makes no exaggerated claim when he says that this western choir is equalled nowhere for the manner in which it contrives to marry sculpture to architecture. Plates 55 to 87, which illustrate this part of the building, bear out his claim, and the arrangement and execution of the statues of saints about these walls are worth the closest study.

GEOFFREY HOYS

Der Naumburger Dom und Seine Bildwerke. By Wilhelm Pinder; photographs by Walter Hege. Berlin: Deutscher Kunstverlag, 1926.

THE PRACTICAL DECORATION OF FURNITURE

Following quickly upon the *Encyclopædia of Furniture*—which Messrs. Ernest Benn published last April, and which had an introduction to the English edition by Mr. H. P. Shapland—comes the first volume of a series of three on the *Practical Decoration of Furniture*, of which Mr. Shapland is author. The volume to hand deals with veneering, inlay, and marqueterie, gilding, and painting; and the series, the publishers claim, will form a complete encyclopædia of every method of decoration and enrichment which has been applied to furniture from the earliest times down to the present day. The decoration of furniture, of whatever type or style, will always hold our interest, and, to quote Mr. Shapland's own words, "though decoration is not essential to good furniture, its universal use suggests that ornament of one kind or another is a genuine need of the human mind."

Each section is prefaced with short historical notes—rather too brief in my opinion—and then follow descriptions of the various practical methods employed both formerly and at the present time. Thus we learn of the important changes that have taken place in veneer cutting; the interesting methods of the marqueterie cutter with his "donkey" are clearly explained, the description following all stages to the final laying of the complete and assembled marqueterie design or panel on the piece of furniture it is intended to decorate. I cannot find, however, any description of the methods of veneer laying—special reference in this regard to the walnut furniture of the late seventeenth century would have been particularly interesting in addition to the information concerning the laying of marqueterie: the caul and veneering hammer might have been described and their old and present-day uses explained.

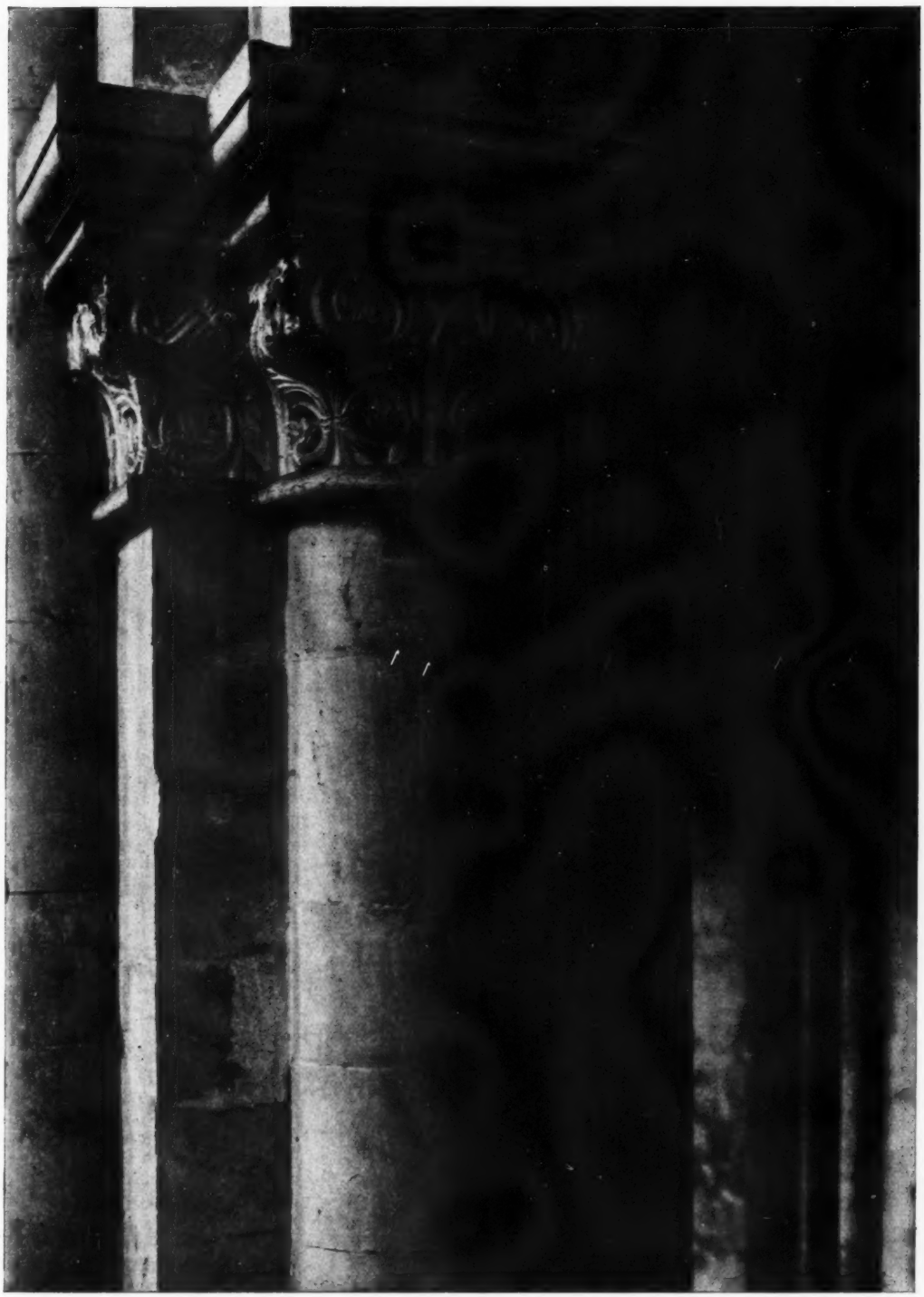
Perhaps the most interesting section is that on painted furniture, dealing as it does with some very early and curious work: apparently this country is unable to show any examples that can compare either in age or condition with such rareties as the early thirteenth-century chest at Halberstadt Cathedral (plate thirty-four), in fact, this country is only represented amongst the illustrations of this section in work of the late eighteenth century. To my mind English work has been excluded from the illustrations to a greater extent than the merit of surviving examples deserves. Doubtless the author's aim has been to give the finest examples he had discovered, irrespective of nationality; but apart from the probability of greater interest in the work, its value to the British student would have been much increased. For instance, under marqueterie there are only two plates of English examples, the first a Queen Anne period cabinet decorated with inlay of fine scrollwork, and the second a commode of the late eighteenth century inlaid in severe classic taste: thus all the early marqueterie in veneers in the latter part of the seventeenth century and the magnificent designs contemporary with the best period of the Adam brothers are unrepresented. However, it cannot be denied that the examples selected from continental craftsmen are remarkably fine. The format is distinctly good, the book being divided into two parts. In the first is the text with seventeen inset line diagrams, then follows the second part devoted entirely to the half-tone illustrations, which are perfectly produced and mostly full page. The inclusion of illustrated trade advertisements following the plates is not in good taste.

JOHN C. ROGERS

The Practical Decoration of Furniture, vol. 1. By H. P. Shapland, A.R.I.B.A. Ernest Benn, Ltd. Price 2s. 6d. net.

READY-WRITTEN SPECIFICATIONS

The authors refer in their preface to the distaste of most architects for the burdensome process of specification writing, and the tendency as a consequence to use models containing obsolete or stereotyped clauses too often either vague or devoid of the information they should contain. In the preparation of this considerable volume of over 270 pages they have certainly undertaken a large task and have called to their aid the experience of a large number of American architects. The general arrangement is by trades as followed in this country, and each clause is designated by a letter and attached number, the former referring to the section, the latter to the specific clause. Thus General Conditions are "A," clauses being A.1, A.2, Demolition is "B" similarly numbered, and so on. On the usually blank left-hand pages alternative clauses opposite those on the right are inserted where necessary and specially designated. The book is intended to be placed in the hands of the stenographer with a list of the clauses to be reproduced interspersed by such notes and amplified as may be required. The labour saved by the use of this volume should be very considerable, and its perusal will, of course, further suggest a great many clauses which might escape insertion without such an aid before the writer. Naturally practice in this country differs in some respects from that in America, and some of the clauses would not be suitable for British craftsmen; further, the custom followed here of nominating the most important sub-contractors and arranging the details of their contracts in advance to be subsequently inserted in the general specification, or less desirably including provisional sums to be expended upon such



Naumburg Cathedral: One of the great nave pillars.
[*From* Der Naumburger Dom und Seine Bildwerke.]

work to be subsequently arranged, does not appear to be dealt with, though, of course, the volume could be used for the compilation of sub-specifications for such specialist work. These specifications often form separate documents alluded to only as to name and cost in the general specification, but the reviewer's experience is that they are best included in full detail when everyone concerned will know exactly what is intended. In spite of these differences in practice there is so much in the volume which is common to both countries. It is concise and well printed in bold type.

Ready-Written Specifications. By Leicester B. Holland, B.S. in ARCH., PH.D., and Harry Parker, M.S. in ARCH. John Wiley and Sons.

IN PARLIAMENT

[BY OUR PARLIAMENTARY CORRESPONDENT]

Housing Progress

Interesting figures with regard to the latest progress of housing in England, Scotland, and Wales were given by Mr. Chamberlain, the Minister of Health, in reply to questions. The approximate number of houses completed since the war was, he said, as follows: England (excluding Monmouth), 440,053 with State assistance; 272,500 without State assistance; total, 712,553. Scotland: 45,019 with State assistance; 8,702 without State assistance, total, 53,721. Wales (including Monmouth): 26,818 with State assistance; 15,700 without State assistance; total, 42,518. This gave a grand total of 511,890 houses built with State assistance; 296,902 built without; making in all 808,792 post-war houses completed.

Further details were supplied by the Parliamentary Secretary to the Ministry, Sir Kingsley Wood, who stated that the number of houses built with State assistance during the six months ended September 30 were, in 1926, 36,732 by local authorities, and 38,631 by private enterprise; in 1925, 19,548 by local authorities, and 30,907 by private enterprise; in 1924, 8,082 by local authorities, and 17,751 by private enterprise. On October 1 of this year the number of houses under construction under the various Housing Acts were 58,294 by local authorities, and 45,217 by private enterprise. The total number of houses authorized for erection under the various Housing Acts (including houses completed and under construction) was 706,699, as compared with 543,284 a year ago.

Slum Clearances

With regard to slum clearances, Sir Kingsley Wood said that since the war loans amounting to £2,023,435 had been sanctioned to local authorities by the Ministry of Health in connection with such schemes—£389,367 for the acquisition of property, and £1,634,068 for re-housing. In addition, the London County Council had spent £236,545 on the acquisition of slum property, and £608,554 for re-housing, and had sanctioned loans to metropolitan borough councils amounting to £42,956 and £24,181 for such purposes respectively. The sums represented an expenditure of £2,935,671 on slum clearance.

Steel Houses

Replying to Sir F. Meyer, Sir K. Wood said that the number of external steel or cast-iron houses, the erection of which had been authorized in England and Wales, was 993, excluding those erected for demonstration purposes.

The Earl of Ypres

Sir Arthur Holbrook inquired of the Prime Minister whether his attention had been called to the fact that no national memorial had yet been erected to perpetuate the memory of the Earl of Ypres, who commanded the British Army during the first period of the Great War, and whether it was proposed to erect such a memorial?

Mr. Baldwin replied that while he fully appreciated the great services rendered by the Earl of Ypres, he did not think that this was a matter in which the Government should take action.

The Rent Restriction Act

Asked whether it was the intention of the Government to introduce legislation to prolong the operation of the Rent Restriction Act next session, Sir K. Wood said that the Increase of Rent and Mortgage Interest (Restrictions) Act, 1920, continued in force in England and Wales till December 25, 1927, and in Scotland until May 28, 1928. The question whether it would be necessary to prolong the operation of the Act would be very carefully considered, but the Minister of Health was unable at present to make any announcement on the subject.

The Housing (Rural Workers) Bill

Despite the moving of several Labour "wrecking" amendments, Mr. Chamberlain had no difficulty in securing the passage of the necessary financial resolution for the Housing (Rural Workers) Bill. He explained that the grants from the Exchequer, under the Bill, towards the provision and improvement of housing accommodation for agricultural workers and others who were in substantially the same position, would last for five years only. Applications for financial assistance, therefore, must be in the hands of the local authorities before October 2, 1931. The number of buildings that could be affected by the proposal was strictly limited, and it was very desirable, if they were to be improved, that the work should start at the earliest possible moment. The resolution provided that the contributions of the local authorities and the Exchequer combined should not exceed two-thirds of the total cost of the alterations, and that they should be subject to a maximum sum, for any one house, of £100. The Exchequer grant was to be one-half of the total contribution made by the local authority. The expense of these alterations would be borne in three equal shares, by the owner, the local authority, and the Exchequer. Each would contribute one-third of the cost, but the maximum amount which would be demanded of the Exchequer would be £50.

The City Churches Saved

The House of Commons, by 124 votes to 27, has rejected Lord H. Cecil's motion praying that the Union of Benefices and Disposal of Churches (Metropolis) Measure be presented to His Majesty for the Royal assent, and the City churches have been saved.

Lord H. Cecil, in proposing the motion, said he was aware that he had against him the great Corporation of the City of London and a large body of artistic and archæological opinion. He should feel daunted but for the fact that he was certain that there was a profound misunderstanding which had led his opponents to be the unwitting means of misleading others. It was not desired to destroy churches; it was desired to have a proper investigation and a wise decision. There were very elaborate safeguards under the Measure, and the first was the Commission, a very much greater safeguard from the point of view of those who criticized the Measure than the safeguards under the Act, for whereas the majority in the Commission under the Act was approved by the Bishop of the Diocese and the Dean and Chapter of St. Paul's, under the Measure no one single commissioner was chosen by the Bishop of London. The majority of the Commission were perfectly independent of the Bishop. The second safeguard was that the whole transaction was surrounded by a much greater degree of publicity than attached to the sittings under the Act. If a church was to be removed notice must first be sent to the Fine Arts Commission, who had to make an inquiry and send a report as to the artistic or architectural value of the church. If people supposed that that was a conspiracy to destroy churches one trembled for the reason of mankind. If these churches were really of first-class artistic value or of considerable artistic value there was no intention of destroying them. By all means let the artistic value of them be publicly announced and fully weighed again, and if it turned out that they were all of them of such great value, then they could not possibly be destroyed under the Measure. This publicity was further secured because notice had to be sent to a whole catalogue of artistic and other societies, who

were invited to object if they had any objection. The Measure had been framed to preserve the church and not to destroy.

Sir T. Vansittart Bowater, one of the Members for the City of London, moved that the Measure be not presented for the Royal assent. He said that the object of the Measure was to pull down the churches and destroy the sites. Lord H. Cecil had said that the churches would be more protected than ever under the Measure, but the people of the City of London, the architectural and archæological societies, did not want more protection than they had already. The Measure was nothing more or less than confiscation. These churches were built after the Great Fire by money provided by the citizens, and were the abiding monuments in the history of the City of London. Why should fine old churches, built by eminent architects, be sold? He hoped the House would say, "Hands off the City churches."

Sir H. Slesser, in supporting the motion, contended that the churches were protected in every way from wanton destruction. The policy of uniting benefices and getting rid of superfluous churches had become part of the ecclesiastical policy of the Established Church in recent years. In this Measure Lord H. Cecil had preserved an exact balance between spiritual and artistic values.

Sir Martin Conway, speaking on behalf of a number of artistic societies, including the Royal Academy, the Royal Institute of British Architects, the National Trust, the Society of Antiquaries, and other bodies, opposed the Measure. Why had not the Church Assembly requested a Commission representative of the artistic, historical, and monumental bodies of this country to draw up a list of the churches in the City which they considered in no circumstances whatever should be destroyed or sold? If such a list had been attached to the first schedule of the Measure there would have been no opposition to it. It was to the great god Mammon that the Measure bent the knee. As one walked through the City of London and saw these churches still remaining in streets like Lombard Street, given up almost entirely to business life and the making of money, they broke the visible materialism of the City, and gave to many people the suggestion that there was in the world something finer and greater than mere commerce and industry. For that purpose alone he would have churches in the heart of the City, which were no longer used much for worship, remain as the witness of the existence of a higher life.

Major Kindersley supported the motion, because, he said, many of the City churches no longer fulfilled the objects for which they were erected. They had no congregations, while people in the suburbs required more churches.

Mr. Ammon, speaking from the Labour benches, opposed the Measure. He believed that it was very necessary to preserve these churches at a time when materialism pressed so hardly upon very many people.

The debate was concluded by Mr. R. McNeill, who strongly advised the House to reject the Measure.

After the closure, moved by Sir H. Craik, had been agreed to without a division, the House rejected Lord H. Cecil's motion by 124 votes to 27—majority 97. The announcement of the result was received with loud cheers.

SOCIETIES AND INSTITUTIONS

The Northern Architectural Association

"There will be no wide advance in architecture until the whole world takes an interest in it and educates itself to it," said Lieut.-Colonel G. Reavell, O.B.E., F.R.I.B.A., in his presidential address to the Northern Architectural Association. "Let us miss no chance of teaching all and sundry to take our art to their bosoms, and then I think we shall respond," continued the President. "If we get to the Florentine ideal and find the postman and the milkman criticizing the mouldings on our doors we shall get such a fresh zest in life that successes will come and the world be in the way of being civilized. I am no pessimist. There is no necessary antagonism between the most fertile mechanical invention and the sublimest art. Science and art are not enemies but sisters," declared Colonel Reavell, after pointing to the art and engineering work of the Egyptians and the Greeks. "Our craft has been called 'The Mistress Art,' and given mighty men among us and a cultured public, there is no reason why the world should not look forward instead of back to see its greatest achievements. This culture, like charity, must begin at home. We must do all we can to give our young men every facility to learn from what has been done before, that they may go on and surpass it. We must back, with all our power, the efforts of the R.I.B.A. to improve our system of training; watching, at the same time, that the first steps are not too steep for those who are not over-blessed with this world's goods."

Architecture for Workers in the Building Trades

The second of the series of informal illustrated lectures on architecture confined to workers in the building trades was given in the R.I.B.A. Galleries. Mr. Maurice E. Webb, D.S.O., M.C., F.R.I.B.A., again presided, and Mr. Hubert Worthington, A.R.I.B.A., read a paper, illustrated by lantern slides, on "Materials and Craftsmanship." At the conclusion of the paper an interesting discussion took place on the special points brought out by Mr. Worthington in his paper. The lecture was well attended, and it is evident that the series is arousing great interest.

NEW INVENTIONS

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

LATEST PATENT APPLICATIONS

28475. Barker, A. H. Heating and cooling devices for buildings. November 12.
28258. Barker, F. Door furniture. November 10.
28192. Bauer, B. Reinforcement for concrete columns. November 9.
28343. Beckett, E. G. Means for prevention of incrustation in cement, etc. November 10.
28232. Binfield, S. T. Plaster for building construction. November 10.

SPECIFICATIONS PUBLISHED

260689. Roger, G. Construction of floors made of earthenware or the like blocks and reinforced concrete or cement.
260706. Townsend, H. G., and Searle, H. E. Mechanism for operating greenhouse ventilators, fanlights, and the like.
260783. Gayer, A. E. Staves for use in surveying.
260797. Fawcett, Ltd., T. C., and Fawcett, D. L. Brickmaking-machines.
260833. Heyl, G. E., and Kunze, O. Plastering-walls.

ABSTRACT PUBLISHED

258668. Crittall Manufacturing Co., Ltd., and Crittall, W. F., Braintree, Essex. Window frames.

OBITUARY

Mr. J. W. Walker

We regret to record the death of Mr. John W. Walker, F.R.I.B.A. He met with a serious accident on the Aberdeen-Stonehaven Road, near his residence, Hillside House, Portlethen, and died in the Aberdeen Royal Infirmary without having regained consciousness. He was forty-six years of age, and was educated privately at Robert Gordon's College, afterwards entering the firm of Messrs. Ellis and Wilson, architects, as a pupil. Subsequently he travelled abroad to study architecture, and became a Fellow of the R.I.B.A. Returning to Aberdeen, he entered into partnership with Mr. R. G. Wilson and his son, the title of the firm becoming Messrs. Wilson and Walker.

THE COMPETITORS' CLUB

PROMOTERS AND ASSESSOR

THE Promoters: Now that your appointment as our assessor is confirmed, we presume that our next step is to issue the conditions that have been prepared for this competition. We have, as you know, been careful to include the clauses demanded by the R.I.B.A.

The Assessor: Yes, the preliminaries seem to be all in order, but there are yet some other points calling for a little discussion. First, let us take this plan: you have got the levels of the ground and the lines of the sewers, but the depths of the latter are not shown.

P: Is that necessary?

A: Well, you suggest a basement, and competitors ought to know how deep this can be taken. I find that it is only possible to carry drains at a depth of some 6 ft. below the lower end of the site; therefore, the basement will probably be only a half-basement at this end.

P: That is what we intended.

A: Then it would be well to mention it and define the possible depths. Again, on this plan you only show some of the neighbouring frontages; it should extend farther south to make it clear that there is a view of the site from the High Street.

P: How will that affect the arrangement of the building?

A: I don't know that it will, but it is conceivable that it might; most people will approach the building from this point.

P: No; probably more will come from the East Street end.

A: Then where do you think the entrance ought to be?

P: We imagine it will be in the centre of the east front; certainly not on the north or west.

A: Perhaps it would be as well to include a note to that effect in the suggestions. We will say east or south, because the latter seems a possible alternative. By the way, several of your conditions should be transferred to the "suggestions" clauses; they are not essential to a good scheme.

P: Which do you object to?

A: I don't object to them. But there may be other and better ways of doing what you want. There should be a clear division between what must, and what may, be done. For example, you say here that the accountant's office "must" be in direct communication with A and B, and later on you say the same thing as regards C. Now, it is extremely difficult to plan rooms in this way, and these connections can, at most, be only suggested as desirable.

P: That may be agreed. Are there any other points?

A: Yes. I must more particularly draw your attention to the stipulations you make as to the floors the rooms should be on. Where staircases, corridors, walls, etc., have been added, the first-floor accommodation works out at about 20,000 superficial feet, while the site only measures some 16,000. Thus you are demanding an impossibility. Moreover, you only demand 9,000 ft. for ground-floor rooms, the area of which cannot be materially less than that of the first-floor. It is essential to give more latitude in these stipulations.

P: We see your point, but any alteration will make things less convenient.

A: Some change is a necessity, but I would suggest that you give more information as to the working of the departments, so as to make the competitors responsible for devising the best arrangement, instead of trying to do their work for them. Surely the large statistical section might be as convenient on two floors as on one.

P: Yes, that might be managed.

A: Therefore, I propose that instead of defining floors, you merely indicate the comparative importance of the departments, and their relation to each other, leaving the competitors to devise the best grouping. Now, as to the architectural treatment——

P: We have said that we don't want Gothic.

A: Yes, but you might go farther than this.

P: Are we to say that it should be Classic?

A: By no means. Though the term "Classic" is capable of a very wide interpretation, I would suggest that you include photographs of the neighbouring buildings and leave to the competitors the task of working out their ideas on lines that will harmonize with these.

P: But they are none of them the sort of thing we want.

A: No, I trust not; but at the same time they must receive some consideration in the design of a building to be placed among them. I admit they are all too restless and fussy, but a building on very severe lines would only emphasize this, and some concessions should be made, such as could be effected without detriment to a good general treatment.

P: Well, you know best about this—as long as they are not to imitate these buildings——

A: That can be made clear. If you will hand your draft to me, I will revise it on these points and any others that occur to me, and go through these revisions at our next meeting.

SENESCHAL

Appreciative of the fact that two heads may be better than one, Seneschal will be at all times ready to consider articles on competition subjects for publication on this page. Such should be from 800 to 1,200 words in length, and deal with questions of general interest to competitors.

COMPETITION CALENDAR

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

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

January 8. Town Hall Extensions and Public Library Building, Manchester. Assessors, Messrs. T. R. Milburn, Robert Atkinson, and Ralph Knott. Particulars from Mr. P. M. Heath, Town Clerk. Deposit £1 1s.

January 15. Designs for complete modern furniture for *a*, a double bedroom, *b*, a drawing-room, *c*, sitting hall, *d*, dining-room. Assessors, the Countess of Oxford and Asquith, the Lady Islington, Sir Frank Baines, C.V.O., C.B.E., F.R.I.B.A. (Director of H.M. Office of Works), Messrs. H. Clifford Smith, F.S.A. (Department of Woodwork, Victoria and Albert Museum), F. V. Burridge, O.B.E., R.E., A.R.C.A. (Principal of the Central School of Arts and Crafts), P. Morley Horder, F.S.A., Philip Tilden, Percy A. Wells (Principal of the Cabinet Department, Shoreditch Technical College), Holbrook Jackson (Editorial Director, The National Trade Press, Ltd.), and Captain Edward W. Gregory (Editor, *The Furnishing Trades' Organizer*). For the preliminary adjudication there are 200 guineas in prizes, and for the final, 300 guineas. Particulars from the Editor, *The Furnishing Trades' Organizer*, Regent House, Kingsway, London, W.C.2.

January 25. Conference Hall, for League of Nations, Geneva. 100,000 Swiss francs to be divided among architects submitting best plans. Sir John Burnet, R.A., British representative on jury of assessors.

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

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

No date. Town Hall and Library, Leith. Assessor, Sir George Washington Browne, R.S.A. Particulars from the City Chambers, Edinburgh.

LAW REPORTS

ARBITRATOR: QUESTION OF APPOINTMENT

Gross, Sherwood and Heald, Ltd., v. *Essex County Council. Chancery Division. Before Mr. Justice Eve*

This was a motion by Messrs. Gross, Sherwood and Heald, Ltd., against the Essex County Council, and an injunction to restrain the Essex County Council from proceeding with an arbitration. It was agreed to treat the motion as the trial or action.

Sir Lynden Macassey, for the plaintiffs, said his clients were the owners of certain lands situated on the banks of the river Witham, which were acquired compulsorily for the purpose of constructing a bridge to carry one of the new arterial roads. An arbitrator was appointed to determine the compensation which was payable. While the matter was in the course of hearing the arbitrator fell ill. The plaintiffs alleged that he was removed from his office by a Government department, and another arbitrator appointed. They sought to restrain the defendants from proceeding with any arbitration otherwise than before Sir Anker Simmons, the official arbitrator appointed by the reference committee. The matter was of great importance. The point raised was whether a Government department could, for reasons which they thought fit, intervene in an arbitration and take the matter out of the arbitrator's hands and give it to another. Before 1919 those matters were dealt with under the Land Clauses Act, 1845. In that year a new and different procedure was established in the case of lands acquired for public purposes. Under the new Act the Acquisition of Land (Assessment of Compensation) Act, 1919, rules were made by the reference committee established thereunder, consisting of the Lord Chief Justice, the Master of the Rolls, and the President of the Surveyors' Institution.

The arbitrator had resigned on account of ill-health from the panel, but subject to the completion of any existing arbitration. There was no power to appoint another arbitrator where, under the rules, one had already been appointed.

His lordship, without calling upon the Solicitor-General (Sir T. Inskip, K.C.) for the Council, dismissed the action with costs. His lordship said the plaintiffs sought to obtain a declaration that the notice served by the secretary of the reference committee in August was *ultra vires*, and to ask for consequential relief. In order to see whether that was so one must look at the statutory powers and also see how those powers had been exercised. (His lordship referred to them and continued.) No point was raised about the appointment of the first arbitrator. In the course of the hearing he became seriously ill, and on June 11 wrote to the secretary that with great regret he must resign his appointment as official arbitrator.

In the interval before the resignation became effective his health improved, and it appeared that he had been attending to the business of his own firm. He therefore was treating his position as a member of the panel as determined under Section 2 of the Act. On August 1 his position as arbitrator was determined. In those circumstances the question was whether the rule was *ultra vires*. One must realize that a person appointed might die or become hopelessly incapacitated, and it must be assumed that the Legislature intended not that the power of selection should be exhausted by one exercise of it, but that it should be a recurring power.

On the facts he was quite satisfied that the man first appointed had become incapable of continuing the arbitration under the panel. The authority of the committee included the power to replace him by someone else, and that was what they purported to do.

The Solicitor-General said the reference committee was not a public authority. It consisted of the Lord Chief Justice, the Master of the Rolls, and the President of the Surveyors' Institution.

ALLEGED OBSTRUCTION AND A WEIR

The King v. *The Salisbury and Fordingbridge District Drainage Board. King's Bench Division. Before the Lord Chief Justice and Justices Avory and Salter*

This matter came before the Court on a rule granted to the Southern Tanning Co., of Downton, Hants, calling upon the Drainage Board to show cause why an order they had made, with regard to the alleged obstruction by the company on the River Avon by the raising of a weir near the mill, should not be quashed.

Mr. Holman Gregory, K.C., showed cause on behalf of the Board, and said the Tanning Company refused to remove the obstruction although, several times, the board had had it taken away only to find it replaced, and it was considered that a trespass had taken place to the detriment of other people. In the end a notice was served on the company to abate the nuisance, and a claim was made by the board for damages and an injunction, and that was now pending.

Counsel argued that the order could not stand because of bias by one member of the board whose land adjoined the company's mill and was affected by the obstruction, and who voted for the making of the order. He submitted the board had no jurisdiction to make the order, which was merely a notice issued by the chairman of the board and the surveyor, and not by the board in accordance with the statutory powers it then possessed.

The rule was discharged with costs.

The Lord Chief Justice said the admission of counsel as to the nature of the agreement resulted in the Court discharging the rule. The Tanning Company had been misled when they made the application, and therefore the Drainage Board would pay the costs.

It was stated that the notice did not purport to be made under the statutory powers of the board.

A MAYFAIR LEASE

Du Cros v. *Ricci. King's Bench Division. Before Mr. Justice McCardie*

This was an action by Sir Arthur Du Cros, Bart., against the Marchesa Maria Carla Ricci, of Davies Street, W., to recover damages for alleged breach of a contract to purchase the unexpired portion of a lease of 24 Curzon Street, Mayfair, W., for £1,000. The contract, which was entered into in January 1925, provided that Sir Arthur Du Cros should obtain the consent of Earl Howe, the head landlord, to the assignment, and if such consent could not be obtained the contract was to be void. The date of completion was to be February 10, 1925. The references originally furnished of the defendant's financial position were not satisfactory to Earl Howe, and on February 25, 1925, the defendant furnished further references, including the Princess of Monaco. It was contended that by thus giving additional references after February 10 the defendant extended the time for completion; that within a reasonable time—namely, on March 5—Earl Howe's licence to assign was obtained; but that on March 24 the defendant refused to go on with the transaction.

The lease proved difficult to dispose of, and was eventually sold by auction for £500 to Miss Walton King. Sir Arthur Du Cros claimed £500, and a further £279 for the expenses he had incurred. The defendant denied liability, and counterclaimed for the return of her deposit and her expenses.

Mr. St. John Field appeared for the plaintiff; the defendant appeared in person.

The defendant said she had a decoration shop in Davies Street which did well the first year, but she had since lost £2,000 or £3,000 and could not even afford to instruct counsel.

His lordship, in giving judgment for plaintiff and £679 and costs and dismissing the counterclaim, said under the evidence of the case he had carefully gone into this legal dispute. The defendant on February 10 should have treated the contract as at an end; for "void" in the contract did not mean *ipso facto* void, but "voidable," and the head landlord's assent had not been obtained. But instead of treating the contract as ended she went on and furnished further references, and it was not till some time after the consent had been obtained that she announced that she would not go on. In those circumstances she had no defence to the plaintiff's action. He wished he had had the assistance of counsel on the question of damages. If he had thought that there was evidence that Miss King was a nominee of Sir Arthur Du Cros he would have credited the defendant with another £100. He could not, however, come to the conclusion that the contract with Miss King was other than an independent contract. Sir Arthur Du Cros was entitled to recover £500 for loss of contract, and to the expenses claimed, but the deposit of £100 must be set off.

THE WEEK'S BUILDING NEWS

Burton Museum Extension

The Burton Town Council proposes to extend the museum.

Shadwell Church Improvements

St. Paul's Church, Shadwell, is to be repaired and improved.

Housing at Welwyn Garden City

The Welwyn Public Utility Society proposes to erect 100 houses.

One Hundred Houses for Meriden

The Meriden Rural District Council has decided to erect 100 houses.

New Municipal Offices for Herne Bay

The Herne Bay Council is to prepare a scheme for new municipal offices.

More Houses for Wembley

The Wembley Council proposes to erect another fifty houses.

London School to be Rebuilt

The Springfield L.C.C. School, South Lambeth, is to be rebuilt at a cost of £34,694.

More Concrete Houses for Woolwich

Five hundred concrete houses are to be erected on the Woolwich Council's estate at Eltham.

A New School for Margate

The Kent Education Committee has acquired a site at Margate for a secondary school for boys.

Finsbury Housing

The Finsbury Council is to borrow £56,946 for building eighty tenement dwellings in Mansell Street, E.1.

Three New London Schools

A new secondary school is to be erected at Highbury Hill, and new central schools are to be built at Brixton and Norwood.

Housing at Baldock

The Baldock Urban Council has decided to build twenty-four houses of the bungalow type.

Proposed New Town Hall for Clacton

It is proposed to consider a scheme to erect a new town hall at Clacton. The scheme is estimated to cost about £40,000.

Housing at Bromley

The Bromley Council has sanctioned a plan for the erection of twenty houses.

A New P.L.A. Warehouse

A warehouse is to be built by the Port of London Authority at Victoria Docks, E. The cost is £50,000.

Housing at Brighton

The Brighton Corporation is to build sixty houses, in brick, on the Whitehawk Valley housing site, East Brighton.

Proposed Cinema for Ferryhill

Plans have been passed for a cinema to accommodate 1,000 persons at Ferryhill. The site is in Main Street.

A New School for Tottenham

The Tottenham Education Committee is to build a new elementary school for 500 children in Lordship Lane.

A New Lambeth Parish Institute

The Old Brew House, adjoining Lambeth Palace, is to be demolished, and a parish institute for St. Mary's, Lambeth, erected in its place, at a total cost of £10,000.

Housing at Cobham

The Cobham Parish Council has asked the Epsom Rural Council to provide forty more houses for Cobham, some of them on sites other than Portsmouth Road.

Concrete Houses for Taunton

The erection of 100 additional concrete houses on the Lambrook Road site has been decided upon by the Taunton Town Council.

Improvements to Tynemouth Bathing Pool

The improvements which it is proposed to make at the Tynemouth bathing pool have been approved by the Tynemouth Town Council.

Fifty More Houses for March

The March Urban District Council has decided to erect fifty houses and construct roads and lay sewers on a site sufficient for 100 houses.

Bampton Housing Scheme

The Bampton Urban District Council, Devon, has under consideration a scheme for the erection of twenty-eight houses at a cost of £15,981.

Forty Houses for Redditch

The Redditch Urban District Council, Worcester, has decided to apply for sanction to borrow £18,000 for the erection of forty houses on the Beoley Road estate.

Dundee Market Reconstruction

The Corporation Markets Committee of Dundee has approved a scheme for the reconstruction of the market at an estimated cost of £50,850.

A School for Wandsworth

A new school is to replace the temporary schools in Magdalen Road, Wandsworth Common, S.W. The estimated cost is £18,933.

A Brighton Nurses' Home

The Brighton Guardians have decided to build a nurses' home on vacant land adjoining the Poor Law Institution at an estimated cost of £35,000.

Rushden Housing Scheme

The Minister of Health has approved the extension of the Rushden Urban District Council's scheme for the erection of 132 houses.

Proposed Derby Reservoirs

In Derby Corporation's Parliamentary Bill powers are to be sought to construct service reservoirs at Littleover, Spondon, and Quarndon, also to borrow £150,000 for waterworks purposes.

Housing at Seisdon

The Housing Committee of the Seisdon Council has decided, subject to the approval of the Ministry of Health, to erect fifty-four houses on various sites in the district.

Proposed New Birkenhead School

Application is to be made to the Ministry of Health, by the Birkenhead Education Committee, for sanction to borrow £21,316, to cover the total cost of erecting the new Cole Street Council School.

Public Baths for Bethnal Green

A swimming "palace" and public laundry which, it is claimed, will be one of the most luxurious and best-equipped in the world, is to be erected at Bethnal Green. The cost will be £115,000.

Proposed £25,000 Gift to Cambridge

A gift of £25,000 has been offered by the Privy Council for the erection and equipment of an extension to the low-temperature research station at Cambridge University.

Housing at Merton

The Merton and Morden Urban District Council has resolved to proceed with the erection of approximately 100 houses on surplus housing lands in Cannon Hill Lane and Whatley Avenue.

Plans Approved for a Coventry School

The Coventry Education Committee has approved plans for a new school to accommodate 1,170 scholars on the Radford housing estate. The estimated cost is £35,000.

Housing at Penparke

The Penparke Council has adopted recommendations of their Housing Committee for erecting forty parlour-type houses and ten non-parlour-type houses on Nanteos estate.

A New School for Billingham

Following upon an inquiry held recently, the Durham County Council has now intimated its intention to erect a new elementary school at Billingham to serve the growing needs of that area. The school will accommodate 450 scholars.

Proposed Bermondsey Fire Station

It is proposed to build a new fire station in the Hickman's Folly area of Bermondsey, to displace the existing stations in Tooley Street and Rotherhithe. The new station will form a drill centre for the district, and the estimated cost is £16,250.

More Houses for Bonhill and Benton

The Western District Committee of the Dumbarton County Council has decided to erect fifty additional houses at Benton at an estimated cost of £19,000, and 150 houses at Bonhill at an estimated cost of £58,000.

A New Hospital for Eccleshall

The Staffs County Council has agreed to purchase Standon Hall, near Eccleshall, and 43 acres of land for providing an orthopædic hospital. The purchase price is £13,350, and a further sum of £14,500 will be spent on building and equipment.

Improvements at Rowley Regis

An extensive lay-out which provides for the erection of between 600 and 700 houses at Blackheath and Rowley has been approved by the Rowley Regis Council. Suitable sites have also been selected for a school and a maternity and child welfare centre.

Woolwich Improvements

An estimate of £64,325 for new roads on the Woolwich Borough Council's estate has been approved, and the Borough engineer instructed to carry out the work. A lay-out for sixty further houses on the estate, estimated to cost £35,620, has also been approved.

Improvements at Southport

A new floral hall for first-class entertainments, with sunken gardens, motor-park, café, and a bathing lake, which is to cost £60,000, are features in the scheme for the development of Prince's Park, Southport. It is proposed to construct the bathing lake this winter.

Housing at Woking

At the meeting of the Woking Urban District Council it was reported that the Minister of Health had approved of the extension of the Council's scheme to assist private building enterprise so as to include a further twenty-five houses, making a total of 300 houses.

Howick Hall to be Rebuilt

Howick Hall, the well-known residence of The Right Honourable Earl Grey, and which was destroyed by fire in February last, is now to be rebuilt. The associated architects are Sir Herbert Baker, A.R.A., F.R.I.B.A., of London, and Colonel G. Reavell, F.R.I.B.A., of Alnwick.

A New School for Tooting

The first public secondary school erected by the London County Council since the war was formally opened by Sir George Hume, M.P., chairman of the Council. Situated in Beechcroft Road, Tooting. It has been completed at an approximate cost of £56,000.

Housing at Billingham

The Billingham Urban Council upon the recommendation of the Housing Committee has decided to erect 166 houses on the Belasis Lane site, the Ministry of Health's sanction having been obtained; also for a further fifty-eight houses on the Chilton Lane site.

Houses at Clutton

The Clutton Rural Council is to erect thirty-six additional houses in the district, being the first instalment of the third housing scheme. The Ministry of Health has given specific approval for the building of eighty-four houses included in the third scheme, and has intimated that they would be eligible for subsidy.

Big Hammersmith Housing Scheme

The London County Council is to develop the Wormholt estate, Hammersmith. It is proposed to erect about 662 houses, and also nineteen shops with flats over them, and sixty flats in three-story buildings—in all, 741 lettings (2,900 rooms) and nineteen shops. The cost of the scheme is estimated at £450,000.

Parliament Repairs Scheme

According to a memorandum, based on Sir Frank Baines' report, repairs to the stonework of the Houses of Parliament will cost £1,062,000 and will take from twelve to fifteen years to complete. It is proposed to seek the advice of the Fine Arts Commission as to the general character of the scheme of repair.

Hatfield Rural Housing Schemes

The Hatfield Rural District Council has agreed to enter into negotiations for the purchase of a site at Balloon Corner for the erection of twelve houses, and for the purchase of one and a-half acres of land for the erection of twelve houses at Cuffley. The sanction of the Ministry of Health has been received to the borrowing of £19,700 for the erection of thirty-six houses in connection with Hatfield's sixth housing scheme.

New 'Phone Centre for Whitehall

A new telephone exchange is to be established in Whitehall. The Government has bought from Lloyds Bank, Ltd., a site covering an area of between 12,000 and 13,000 sq. ft. at the top of Whitehall. Plans for the new exchange are only in a provisional state, but when it is equipped all Whitehall lines, including those from the Government offices, may be transferred there.

Chelmsford's New County Offices

The General Purposes Committee of the Essex County Council has adopted the report of a special sub-committee to commence building the new county offices at Chelmsford. It is proposed to deal with the general scheme in portions, and first to commence building on the south-east corner of the site facing Threadneedle Street and King Edward Avenue. This portion of the building is estimated to cost £90,000.

A New Pavilion for Poole

The Poole Town Council has decided to erect a pavilion at a cost of £10,000. It will be of reinforced concrete and will provide a main shelter, forty-two bungalows, 148 bathing cubicles, girls' and boys' bathing rooms, kiosks, and lounges. It will be flat-roofed to form a promenade, and gardens will be laid out to include bandstands, flower gardens, and a motor park. A start will be made at once, so that the pavilion will be ready next summer.

Brighton Boundary Extension

A new Parliamentary Bill is being prepared by the Legal and Parliamentary Committee of the Brighton Town Council seeking power to extend the borough boundaries to the extent of some 10,000 acres, most of which is so far unspoiled downland. It is proposed to take in the villages of Rottingdean, Ovingdean, and part of Falmer, and the new boundary will extend from Rottingdean on the east to Portslade on the west.

Armstrong College Scheme

Armstrong College, Newcastle, has been promised a grant of £20,000 from the Miners' Welfare Central Committee for the purpose of building a new mining laboratory at the college. It has been agreed to authorize the preparation of plans and the securing of tenders for the building of the proposed laboratory. The suggested site is the Queen Victoria Road frontage, to the south-west of the present building. It is believed that the grant would cover about half the cost.

£32,000 Development Plan at Holyhead

For some time the Holyhead local authority has had under consideration a scheme estimated to cost £32,000 for the development of the town as a seaside resort. A deputation has waited upon the Ministry of Health, who suggests that details should be submitted for a portion of the scheme up to £10,000. When it is completed further application can be made to the Ministry and the work completed in stages. The report has been adopted by the local authorities and referred to the Town Development Committee for consideration and report.

RATES OF WAGES

			I	II
			s. d.	s. d.
A	ABERDARE	S. Wales & M.	1 8	1 3½
A₁	Abergavenny	S. Wales & M.	1 7½	1 2½
B	Abingdon ..	S. Counties	1 6	1 1½
A	Accrington	N.W. Counties	1 8	1 3½
A₃	Addlestone	S. Counties	1 6½	1 2
A	Adlington	N.W. Counties	1 8	1 3½
A	Airdrie ..	Scotland	*1 8	1 3½
C₁	Aldeburgh	E. Counties	1 4	1 0½
A	Altrincham	N.W. Counties	1 8	1 3½
B₃	Appleby ..	N.W. Counties	1 4½	1 0½
A	Ashton-under-Lyne	N.W. Counties	1 8	1 3½
A₃	Atherstone	Mid. Counties	1 6½	1 2
B₃	Aylesbury ..	S. Counties	1 4½	1 0½
B₃	BANBURY	S. Counties	1 4½	1 0½
B₃	Bangor ..	N.W. Counties	1 5	1 1
A	BarnardCastle	N.E. Coast	1 8	1 3½
A	Barnsley ..	Yorkshire	1 8	1 3½
B₁	Barnstaple	S.W. Counties	1 5½	1 1½
A	Barrow ..	N.W. Counties	1 8	1 3½
A	Barry ..	S. Wales & M.	1 8	1 3½
B₃	Basingstoke	S.W. Counties	1 4½	1 0½
B	Bath ..	S.W. Counties	1 6	1 1½
A	Batley ..	Yorkshire	1 8	1 3½
B	Bedford ..	E. Counties	1 6	1 1½
A₂	Berwick-on-Tweed	N.E. Coast	1 7	1 2½
A₁	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
A₁	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
B₂	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
A₃	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
B₃	Carnarvon	N.W. Counties	1 5	1 1
A₁	Carnforth ..	N.W. Counties	1 7½	1 2½
A	Castleford	Yorkshire	1 8	1 3½
B₁	Chatham ..	S. Counties	1 5½	1 1½
B₁	Chelmsford	E. Counties	1 5½	1 1½
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
B₃	Cirencester	S. Counties	1 5	1 1
A	Clitheroe ..	N.W. Counties	1 8	1 3½
A	Clydebank	Scotland	1 8	1 3½
A	Coalville ..	Mid. Counties	1 8	1 3½
B₁	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W. Counties	1 8	1 3½
B₁	Colwyn Bay	N.W. Counties	1 5½	1 1½
A	Consett ..	N.E. Coast	1 8	1 3½
B₁	Conway ..	N.W. Counties	1 5½	1 1½
A	Coventry ..	Mid. Counties	1 8	1 3½
A₃	Crewe ..	N.W. Counties	1 6½	1 2
A₃	Cumberland	.....	1 6½	1 2
A	DARLINGTON	N.E. Coast	1 8	1 3½
A	Darwen ..	N.W. Counties	1 8	1 3½
B₃	Deal ..	S. Counties	1 4½	1 0½
B₁	Denbigh ..	N.W. Counties	1 5½	1 1½
A	Derby ..	Mid. Counties	1 8	1 3½
A	Dewsbury	Yorkshire	1 8	1 3½
B	Didcot ..	S. Counties	1 6	1 1½
A	Doncaster	Yorkshire	1 8	1 3½
C₁	Dorchester	S.W. Counties	1 4	1 0½
A₃	Driffield ..	Yorks	1 6½	1 2
A₃	Droitwich	Mid. Counties	1 6½	1 2
A₃	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 8	1 3½
A	Durham ..	N.E. Coast	1 8	1 3½
B₁	EASTBOURNE	S. Counties	1 6	1 1½
A	Ebbw Vale	S. Wales & M.	1 8	1 3½
A	Edinburgh	Scotland	1 8	1 3½
A	E. Glamorganshire & Monmouthshire	S. Wales & M.	1 8	1 3½
B	Exeter ..	S.W. Counties	§1 7	1 2½
B₂	Exmouth ..	S.W. Counties	1 5	1 1
B	FELIXSTOWE	E. Counties	1 6	1 1½
A₃	Filey ..	Yorks	1 6½	1 2
A	Fleetwood ..	N.W. Counties	1 8	1 3½
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
A₃	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
B₂	Hastings ..	S. Counties	1 4½	1 0½
B₁	Hatfield ..	S. Counties	1 5½	1 1½
B	Hereford ..	S.W. Counties	1 6	1 1½
B	Hertford ..	E. Counties	1 5½	1 1½
A₁	Heysham	N.W. Counties	1 7½	1 2½
A	Howden ..	N.E. Coast	1 8	1 3½
A	Huddersfield	Yorkshire	1 8	1 3½
A	Hull ..	Yorkshire	1 8	1 3½

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

			I	II
			s. d.	s. d.
A	ILKLEY ..	Yorkshire	1 8	1 3½
A	Immingham	Mid. Counties	1 8	1 3½
B	Ipswich ..	E. Counties	1 6	1 1½
C₁	Isle of Wight	S. Counties	1 4	1 0½
A	JARROW ..	N.E. Coast	1 8	1 3½
A	KEIGHLEY	Yorkshire	1 8	1 3½
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
B₂	Lewes ..	S. Counties	1 4½	1 0½
A₃	Lichfield ..	Mid. Counties	1 6½	1 2
A	Lincoln ..	Mid. Counties	1 8	1 3½
A	Liverpool ..	N.W. Counties	‖1 10	1 4½
B	Llandudno	N.W. Counties	1 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
A₃	Skipton ..	Yorkshire	1 7	1 2½
B	Slough ..	S. Counties	1 5½	1 1½
A₃	Solihull ..	Mid. Counties	1 7	1 2½
B	South'pton	S. 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 5½	1 1½
A	Tunstall ..	Mid. Counties	1 8	1 3½
A	Tyne District	N.E. Coast	1 8	1 3½
A	WAKEFIELD	Yorkshire	1 8	1 3½
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

* Plasterers, 1s. 9d

† Carpenters and Painters, 1s. 8½d.

‡ Plumbers, 1s. 9d.

§ Painters, 1s. 6d.

‖ Carpenters and Plasterers, 1s. 8½d.

¶ Painters, 1s. 7d.

PRICES CURRENT

EXCAVATOR AND CONCRETOR

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

Broken brick or stone, 2 in., per yd.	£0	11	6
Thames ballast, per yd.	0	13	0
Pit gravel, per yd.	0	18	0
Pit sand, per yd.	0	14	6
Washed sand	0	15	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	10	0
Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.			

Transport hire per day:

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

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

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

In stiff clay, add 30 per cent.

In underpinning, add 100 per cent.

In rock, including blasting, add 225 per cent.

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

Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0	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 lintels, 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	5	6
Gaskin, per lb.	0	0	5½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. 0 4 3

DO. 6 in., per ft.	0	5	0
DO. 9 in., per ft.	0	7	9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0	9	0
DO. 6 in., per ft.	0	11	0

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

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

BRICKLAYER

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

London stocks, per M.	£4	15	0
Flettons, per M.	2	18	0
Staffordshire blue, per M.	9	10	0
Firebricks, 2½ in., per M.	11	3	0
Glazed salt, white, and ivory stretchers, per M.	23	0	0
DO. *headers, per M.*	23	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	17	0
Mixed lime mortar, per yd.	1	6	0
Damp course, in rolls of 4½ in., per roll	0	2	6
DO. *9 in. per roll*	0	4	9
DO. *14 in. per roll*	0	7	6
DO. *18 in. per roll*	0	9	6

BRICKWORK in stone lime mortar, Flettons or equal, per rod 33 0 0

DO. in cement do., per rod	36	0	0
DO. in stocks, add 25 per cent. per rod.			
DO. in blues, add 100 per cent. per rod.			
DO. circular on plan, add 12½ per cent. per rod.			
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 inquiry.

MASON

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

Portland Stone:			
Whitbed, per ft. cube	£0	4	6
Basebed, per ft. cube	0	4	7
Bath stone, per ft. cube	0	3	0
Usual trade extras for large blocks.			
York paving, av. 2½ in., per yd. sup.	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 *18s. 0d.* per square.

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

See "Sundries for Asbestos Tiling."

CARPENTER AND JOINER

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

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

7 × 3, per std.	£20	0	0
11 × 4, per std.	30	0	0
Memel or Equal. Slightly less than foregoing.			
Flooring, P.E., 1 in., per sq.	£1	5	0
DO. *T. and G., 1 in., per sq.*	1	5	0
Planed Boards, 1 in. × 11 in., per std.	30	0	0
Wainscot oak, per ft. sup. of 1 in.	0	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	5	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. 1½ 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 3 times.			
If in mahogany multiply 3 times.			
If in teak multiply 3 times.			
WOOD BLOCK FLOORING, standard blocks, laid in mastic herringbone:			
Deal, 1 in., per yd. sup., average	0	10	0
DO. 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	4	6
DO. *drawn pipes, per cwt.*	2	6	0
DO. *soil pipe, per cwt.*	2	8	0
DO. *scrap, per cwt.*	1	9	6
Copper, sheet, per lb.	0	1	0
Solder, plumber's, per lb.	0	1	2
DO. *fine, per lb.*	0	1	5
Cast-iron pipes, etc.:			
L.C.C. soil, 3 in., per yd.	0	4	1
DO. *4 in. per yd.*	0	5	0
R.W.P., 2½ in., per yd.	0	2	0
DO. *3 in., per yd.*	0	2	5
DO. *4 in., per yd.*	0	3	3
Gutter, 4 in. H.R., per yd.	0	1	5
DO. *4 in. O.G., per yd.*	0	1	9
MILLED LEAD and labour in gutters, flashings, etc.	3	12	6
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	5
DO. 3 in., per ft.	0	2	10
DO. 4 in., per ft.	0	3	3
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	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 (plus allowances in London only)*; LABOURER, 1*s.* 4½*d. per hour.*

Chalk lime, per ton	£2	17	0
Hair, per cwt.	0	18	0
Sand and cement see "Excavator," etc., above.			
Lime putty, per cwt.	£0	2	9
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	9
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Thistle plaster, per ton	£3	9	0
Lath nails, per lb.	0	0	4
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	3
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ¾ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	7
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER, float, and set, trowelled, per yd.	0	2	9
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	5
WHITE glazed tiling set in Portland and jointed in Parian, per yd., from	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 8½*d. per hour.*

Glass: 4ths in crates:			
Clear, 21 oz.	£0	0	6
DO. 26 oz.	0	0	7½
Cathedral white, per ft.	0	0	6½
Polished plate, British ¼ in., up to 2 ft. sup.	0	2	0
DO. *3 ft. sup.*	0	2	6
DO. *7 ft. sup.*	0	3	6
DO. *25 ft. sup.*	0	4	0
DO. *100 ft. sup.*	0	4	6
Rough plate, ⅛ in.	0	0	6
DO. *¼ in., per ft.*	0	0	6½
Linseed oil putty, per cwt.	0	16	0
GLAZING in putty, clear sheet, 21 oz.	£0	0	11
DO. 26 oz.	0	1	0
GLAZING in beads, 21 oz., per ft.	0	1	1
DO. 26 oz., per ft.	0	1	4
Small sizes slightly less (under 3 ft. sup.).			
Patent glazing in rough plate, normal span 1*s.* 6*d.* to 2*s.* per ft.			
LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, per ft. sup. and up	£0	3	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	11	0
Linseed oil, raw, per gall.	0	3	7
DO., *boiled, per gall.*	0	3	10
Turpentine, per gall.	0	6	2
Liquid driers, per gall.	0	9	6
Knotting, per gall.	1	4	0
Distemper, washable, in ordinary colours, per cwt., and up	2	0	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4
Single gold leaf (transferable), per book	0	1	11
Varnish, copal, per gall. and up	0	18	0
DO., *flat, per gall.*	1	2	0
DO., *paper, per gall.*	1	0	0
French polish, per gall.	0	19	0
Ready mixed paints, per gall. and up	0	10	6
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	10
DO., subsequent coats, per yd. sup.	0	0	9
DO., enamel coat, per yd. sup.	0	1	2½
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	£0	5	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	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, per 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	£12	10	0
Sheet steel:			
Flat sheets, black, per ton	19	0	0
Do., galvd., per ton	23	0	0
Corrugated sheets, galvd., per ton	23	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	25	10	0
DO. in small sections as reinforcement, per ton	16	10	0
DO. in compounds, per ton	17	0	0
DO. in bar or rod reinforcement, per ton	20	0	0
WROT. IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO. in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity. The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, including cutting and waste, fixed on, but not including studs or grounds, per ft. sup. . . . from 3d. to	0	0	6
Plaster board, per yd. sup. from	0	1	7
PLASTER BOARD, fixed as last, per yd. sup. from	0	2	8
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO. *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup.	0	4	0
DO. corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles, 5/32 in. punched per M., grey	16	0	0
DO. *red*	18	0	0
ASBESTOS COMPOSITION FLOORING: Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO. ¾ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO. *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casement in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7
Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.			
Plywood:			
3 m/m alder, per ft. sup.	0	0	2
4½ m/m amer. white, per ft. sup.	0	0	3½
⅜ m/m figured ash, per ft. sup.	0	0	5
4½ m/m 3rd quality, composite birch, per ft. sup.	0	0	1½