



Wednesday, March 30, 1927

THE D.I.A. AND SOME FALLACIES

TODAY we are so busy with our inventions and our activities that there is very little time for thought, and so it comes about that an active organization whose labours may be of real use to the community is apt to promulgate fallacies and unsound doctrines, the results of inadequate thought, when it endeavours to justify itself and its work.

The Design and Industries Association is endeavouring to inculcate the desirability of making articles of everyday use beautiful, and on the face of it this is work of immense value to the community. Yet, when it attempts to explain the reasons for, and methods of, undertaking this good work, it gives vent to a series of atrocious and confusing fallacies. Far better would it be were it to emulate the spider, who spins his gossamer for the delight of all who pass and reasons not. Ever since the industrial revolution it has been considered necessary to devise some excuse for beauty in daily life. Beauty was only admissible if it could be introduced under cover of some other quite irrelevant quality that was esteemed of real value and which received the general approbation. Last century morality stood high in the scale of national values, and Ruskin attempted to mix up beauty with morality and so smuggle it into daily life. If once it could be proved that a beautiful thing was more moral than an ugly thing, or that it was more honest or more religious, it became more desirable. And so all sorts of irrelevancies became mixed up with art, such as Sacrifice, Memory, Obedience, Truth, Power, and so on; and thus, like the spy of a besieging force gaining entry into a garrison by secreting himself in a wagon carrying boots, potatoes, ammunition, and other miscellaneous supplies, beauty gained a surreptitious entry into daily life.

Now, however, morality, obedience, sacrifice, and all the other eminent Victorian qualities do not stand high on the list of current values, which is today headed by one transported across the Atlantic, and its name is Efficiency. If only beauty can be shown to be either a measure of, or an aid to, efficiency, it can be admitted, and so the D.I.A. adopt for their slogan "Fitness for purpose"; if only the more beautiful thing can be shown to be the fitter thing, then beauty, since it is an aid to efficiency, can be nurtured and cherished. But a little clear thinking will show that beauty has no more to do with efficiency and fitness than it had to do with morality and obedience. Let us be concrete: we make a chair, we make it from good material, we put it together in the best possible way, the seat is at a

comfortable height and of a comfortable size, the back gives us support where we need it most, and the chair is well balanced. It is, in fact, fit for its purpose, as fit as it possibly can be if that purpose be to support us in comfort while we sit at our dining-room table to take meat and drink. But the chair for all that *may* not be particularly beautiful. Let us, however—remember we are generalizing—give the legs an outward curve; let us groove, carve, inlay, or otherwise embellish the back; let us, say, upholster the seat in damask or tapestry, and let us french-polish the wood, and without having added one jot to the chair's efficiency we have made it beautiful. We have added beauty, and this brings us to our fundamental contention that beauty is fortuitous; it has nothing to do with morality, it has nothing to do with efficiency. Is a plate more efficient, is it fitter for its purpose because it has a design on it? Is a tumbler fitter for its purpose because it is fluted, cut, or otherwise ornamented? No; and until this is realized, until beauty is valued entirely and absolutely for its own sake, until all apologetics become unnecessary and cease, we can never expect to have beauty constantly around us in our daily lives. Just so soon as we value beauty and want it as unconsciously as the air we breathe, and rejoice in it as wholeheartedly and as spontaneously as we do in the blueness of the sky and in the brightness of sunshine, just so soon and no sooner will beauty become an integral part of our daily life.

The D.I.A. has adopted "Fitness for purpose" as a slogan, but this is not the sole evidence of loose thinking in its year-book. We have not space to deal with it all, nor should we desire to do so were it not that it is typical of current thought. There is, for example, the implied supposition that there is something sacred and absolute in man's treatment of materials, whereas history shows that his natural advancement synchronizes with, and is often dependent upon, his increasing ability to render materials subservient to his will. Beauty is not dependent upon archaisms. Neither is the beauty of an article dependent upon the ease with which it can be kept clean. Hygiene is today efficiency's competitor as an apologist for beauty. Once show that beauty is cleaner than ugliness, then at once beauty is made respectable.

But beauty must be wooed not for her morals or for her obedience, not for her efficiency or for her cleanliness, but with a wholehearted, disinterested love for her fair self alone.

NEWS AND TOPICS

THE LATE SIR CHARLES WALSTON—A THREAT TO HOLBORN VIADUCT?—THE NEW BRIDGE AT POOLE—THE ADAM BROTHERS' OLD HOME.

SIR CHARLES WALSTON, of whom obituary notices were given in the newspapers of March 25, died less than a fortnight before the occurrence of his seventy-first birthday. Although he was an archaeologist of undoubted eminence, I fear that he just missed greatness because he had too many irons in the fire. "The world is so full of a number of things" that any temptation to master the lot must be sternly repressed, lest shallowness supervene on facility. Now, Sir Charles always seemed reluctant to acknowledge his natural limitations. He was by no means content to be an accomplished archaeologist and an inspiring lecturer. He seemed to aim at the comprehensiveness of a Humboldt. Walston's enthusiasm for art was manifested in multifarious ways, of which I can enumerate here only a meagre few. Twice he was Slade Professor. He assumed directorship of the Fitzwilliam Museum. He supervised excavations by the American Archaeological School at Athens. He wrote *Essays on the Art of Phidias*, which powerfully influenced at Cambridge the study of ancient sculpture, which I suppose to have been his own favourite line. But in truth omniscience was his foible. He wrote on philosophy, eugenics, and evolution, and contributed copiously on all sorts of subjects to the newspapers and magazines—was, in short, an indefatigable penman. With all this practice he was but a poor writer. His book on the *Work of John Ruskin*, for instance, I never could read with any degree of pleasure; not because of its fulsome eulogy of the sublime sciolist, but because of Walston's fifty-word long sentences. To condone his turgid style, one has to remember his foreign descent—he had changed his name from Waldstein, and was, I believe, of Austrian Jewish extraction. Like many another, if he had attempted less he would have accomplished more.

* * *

Is Holborn Viaduct threatened by the "Ludgate Bridge" scheme? I trust not; for to me the viaduct is so typically an integral fragment of Cockneydom that I could willingly spare a better structure. But in noting that the "Ludgate Bridge" scheme postulates a high level from Southwark Street to Holborn Viaduct, I cannot repress the fear that in the peradventure of the tremendous changes contemplated in the scheme, the old familiar aspect may somehow suffer a C.E. change into something new and strange. They may construct circuses, as they will, one at Giltspur Street and another at Aldersgate Street. I do not shudder at that prospect, for in each instance alteration might favour amenity, but the viaduct, which I love though I cannot pretend to admire it whole-heartedly, I should like to be spared to us in its integrity, although it has only existed since 1869, and although it is only a skew-bridge of iron girders supported on polished red-granite piers.

Is "the Parliament of Man, the Federation of the World" visible in the offing? Or "is wisdom about"? An article in the *Times* of March 22 seems to offer us these embarrassing alternatives. It summarizes a scheme which its "Labour Correspondent" says has received the final approval of the Executive Council of the existing National Federation of Building Trade Operatives. I must confess that I should feel more confidence in the scheme but for a disconcerting recollection of the dismal failure of the attempt to establish a Builders' Parliament. In that celebrated case it was found impossible to discover the formula of an amalgam for so many heterogeneous elements, and it seems to me that in the present scheme the difficulties are not less formidable. Until the poet's ideal is reached, and the pure "spirit of association" becomes as all-pervasive as the dulcifying influence of Mr. Wells's benign comet, we shall hope in vain for a loving brotherhood of all sorts and conditions of building operatives of various provenance. Not that I would throw cold water on any scheme that seeks to bring harmony to operatives, and possibly to simplify and facilitate amicable settlements between employers and employed; but I cannot lay the ghost of the demarcation disputes, whose name is Legion, nor the grisly spectre of the "sympathetic strike." Nor does the not infrequent litigation between rival master-builders encourage any confidence in the roseate hues of an early dawn of the builders' millennium.

* * *

Once again the Eternal Triangle! Speaking at the annual meeting of the National Federation of House Builders, its president denounced building subsidies as unfair—" (1) to the public, which has to pay for them; (2) to the builder, who has to pay high prices all round; and (3) to the buyer, whose independence is sapped by getting something for nothing." This triangle does not seem to be an equilateral. But perhaps it is I who am obtuse in being unable to reconcile its third side with the other two—the high prices with the "something for nothing" theory.

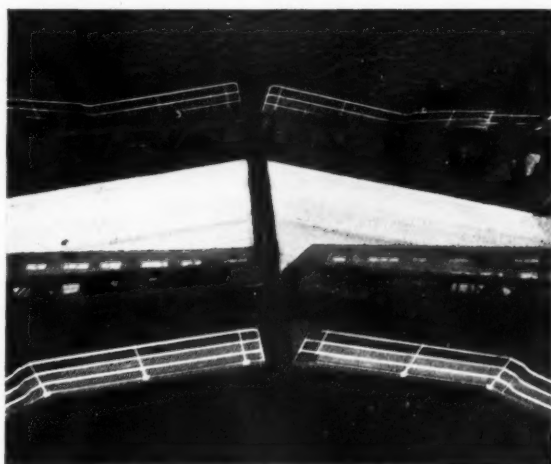
* * *

The fate of the Tilmanstone Colliery, Kent, is, apparently, still undecided. It will be remembered that the owners decided that they must close down owing to the refusal of the Railway and Canal Commission to permit the construction of an aerial ropeway from the pits to the coast, without which profitable working was, in their opinion, impossible. I have always found it difficult to regard the development of the Kent coalfields dispassionately, for, even under the best town-planning guidance, coalfields cannot be developed to the enhancement of the landscape; and it has always seemed to me that the Home Counties are worth preservation, even at some cost. As far as I know, the reasons for the Commission's decision have not been published. I suspect, however, that they are not based upon anything as sentimental as the preservation of rural amenities or the landscape. The closing down of the works means the dismissal of 900 men. This is a serious matter, both for the men, their families, and for the Dover Corporation. Moreover, increased unemployment and diminished industrial activity is just what is not wanted at the present time. And so I try and view the matter with a philosophic equanimity.



The new bridge at Poole, Dorset.

An interesting engineering problem has been solved by Messrs. Livesey, Son and Henderson in the lifting bridge at Poole which has just been opened for public use. Simple in outline and in its general treatment, it is a quite pleasing



Air view of the bridge while lifting.

solution of a very perplexing question—the question of combination of pure utility and constructive need, with something that satisfies a more critical eye—an eye looking for things beyond just girders and piles.

★ ★ ★

One of the buildings which it is proposed to demolish under the new housing scheme at Kirkcaldy, Fifeshire, is the house in which were born the famous architects, the brothers Adam. The house is now a lodging-house, and is marked for demolition under a scheme of town improvements. Incidentally, besides the Adam brothers, Adam Smith was born in Kirkcaldy, while Thomas Carlyle and Edward Irving taught school there.

★ ★ ★

From a Disembodied Architect

There was nothing about the busy evening preparations in the kitchens of the Savoy Hotel to have conjured up

John of Gaunt rowed back from the French wars to his Savoy Palace, in all the turbulence of his youth, before he was "gaunt in being Gaunt." If clairvoyance had a hand in it, then clairvoyance was defective as usual, for the beginnings of Wellington Street, and not the hotel, mark the site of the old Savoy Palace. Such was the potency of the lamplit waterside, seen from the steps of the Savoy pit, that I saw this "fairest manor in all England," and near me the beretta-shadowed, the strained eyes of Henry VII. He had beautifully restored it with four-light battlemented windows, ceilings adorned with images of angels at the corbels, and turned it into a hospital for a hundred poor people. Why, inquired his eyes, was he not liked?

The dark pile of theatre and embankment rolled away. "My Lord Cardinal of York" jeered a voice. Wolsey came in sight and walked towards Whitehall Palace. A noble in his train flung a taunt to a young esquire, who showed his worship of the friendless queen by wearing in his huge sleeves of black and white her device of pomegranates. In passion the boy's heart framed the answer to his tormentor: "You are like a crawling insect, but too loathsome for the earth to bear your full body you walk on two feet." He leant against a wall, a rose broken upon its stalk in summertime. Walls, walls, higher and higher; within them watergates and terraced gardens, striped with climbing roses. The craft on the Thames had increased; Elizabeth reigned now, and her hot-tempered brilliant nobles feasted and skirmished along the strand between the Savoy and the Charing Cross—here Cecil's palace, there Bedford's, Villiers', Arundel's, Paget's, Essex's . . . "Come on," cried my friend, scrambling up, "get your money out; we're moving!"

ASTRAGAL

ARRANGEMENTS

WEDNESDAY, MARCH 30

At the Institution of Civil Engineers. 6.30 p.m. Vernon Francis Cornish on The London County Council Becontree Housing Estate.

FRIDAY, APRIL 1

At the Royal Institution of Great Britain. 9.0 p.m. John Allen Howe, O.B.E., B.Sc., F.G.S., on The Stones of London.

TUESDAY, APRIL 5

At the Design and Industries Association. 8.0 p.m. H. W. Hobbs, A.I.N.A., on Modern French Decorative Art.

WEDNESDAY, APRIL 6

The Southend-on-Sea and District Society of Architects. (At the School of Arts and Crafts, Southend.) 8.0 p.m. General Meeting. W. R. Davidge, F.R.I.B.A., F.S.I., A.M.I.C.E., on Some Aspects of Town Planning.

SATURDAY, APRIL 9

The Royal Institute of British Architects. Visit to the Star and Garter Home, Richmond. For full particulars apply to the Secretary, R.I.B.A.

MONDAY, APRIL 11

At the Royal Institute of British Architects. 8.0 p.m. General Meeting. Professor Patrick Abercrombie on The Planning of East Kent.

THE REGISTRATION BILL

[BY MAJOR HARRY BARNES]

[This timely article by the Chairman of the R.I.B.A. Registration Committee will be read with special interest in view of the publication by the Government last week of the text of the Architects' Registration Bill.—Editor, A J.]

THERE is a Bill before Parliament to provide for the registration of architects. It is essential that the purpose of the Bill should be plainly and clearly stated. It is evident from communications that have appeared in the public Press and have been received by the Registration Committee that some misapprehension exists, which it is the purpose of this article to remove. Much has already been done in this direction, as will be apparent to those who read the Bill, as now printed, and compare it with the draft which was circulated by the Registration Committee for the purpose of eliciting comment and criticism.

It is believed that the Bill, as it now stands, meets in the main the criticism directed against the draft, although it may be that as the Bill passes through its Committee stage it will be found necessary to make more clear passages which are found to be obscure, vague, or capable of more than one interpretation. It will be readily understood that around any measure which attempts to change, even in the smallest degree, the social structure, considerable controversy will arise. Amongst architects who are devoted to the cause of registration there may be some disappointment as regards the scope of the Bill. Enthusiasts for registration will desire to see it, with all its implications, in full force immediately on the passage of the Bill. Its opponents, though happily small in number, will regard the slightest restriction placed upon existing practice as being an intolerable interference with liberty.

The promoters of the Bill believe, however, that the vast body of opinion, that which desires to make haste, but always desires to make haste slowly, will see in the measure a moderate and justifiable proposal based on the public interest, which while full of promise for the next generation does not bear too heavily on the present.

The case for the registration of architects must stand or fall on its merit as a measure advancing public interest and public welfare, and on this ground it is confidently believed that its passage is assured.

* * *

It rests upon three propositions. The FIRST is that the establishment and maintenance of a high architectural standard is a matter of public concern and national importance.

It seems hardly necessary to do more than affirm this proposition. The natural beauties of a country are hardly more the heritage of the nation inhabiting it than are the glories of its architecture. Indeed, these very beauties will be enhanced or debased according to the standard of architecture which prevails.

It is not necessary to go back to the glories that were Greece and the grandeur that was Rome to support the argument. We have had striking evidence during the past year of a growing public sensitiveness which is being out-

raged by the carrying out of building operations, particularly in rural England, which are divorced from all architectural merit. The Council for the Preservation of Rural England is no association of visionaries, faddists, and cranks. Its constituents form a solid and representative body of public opinion. It comprises the great associations of local authorities and of those experts in the matters to which its attention is directed. Side by side with these are to be found, not only those bodies whose concern with matters of taste is more contemplative than constructive, but also those whose activities have been responsible for the preservation in many parts of the country of both the natural beauties of our land and its architectural achievements.

The truth is that the formation of this Council marks a definite stage in public consciousness. A new Lecky, writing a history of the development of taste, would point out that in this Council we have the outward and visible sign of a definite public recognition that national interests cannot be fully satisfied by the attainment of purely utilitarian ends. To usefulness must be added beauty.

But further, this upward movement is not confined to a concern for the countryside. More men dwell in cities than in the country, and these are, if slowly, concluding that cities not only may, but must, be beautiful.

Local authorities are beginning to apprehend that fine buildings mean more than the thickness of walls, the strength of floors, and the provision of dampcourses. Powers have already been secured by cities like Liverpool, Bath, and Edinburgh to demand some standard of design. These powers will be more extensively sought, and it is understood that it is already under consideration to give them general effect in both city and countryside. Thus, architecture is coming to be regarded as a matter of first importance, and enough has been said to establish the first proposition.

* * *

The SECOND proposition is that if there is to be maintained and established a high standard of architecture, architects must be trained and educated. Here, again, it would seem only necessary to affirm this proposition were it not for an amount of loose thinking and loose speech on the subject of genius in architecture.

Genius is the infinite capacity for taking pains, and the first pains that are to be taken are in the acquisition of the knowledge of what has been done by the great architects of the past, so that a solid foundation may be laid for corresponding achievement in the future.

It is not suggested, and it is not necessary to suggest, that there is complete agreement on every detail of an architectural education. It is sufficient to point out that there is not a civilized country where training in architecture is not regarded by those competent to form an opinion as being as essential as training in any other profession.

We need not look abroad for support for this view. The fact is that in this country the subject is taking its place in the general educational system, and is part of the

curriculum in the chain of education which stretches from the technical school to the university.

Architectural education in its fullest and roundest form comprises training in the office, in the school, and by travel. At one period or another these have varied in their prominence. In the first half of last century the office played the prominent part, today school training is more and more being regarded as fundamental. At all times travel, with its study of great works of the past and present, has been made use of by those who could afford it. If Wren was never a pupil in an office, or a student in a school, he was a traveller with the set purpose of studying the great works of the architects of his day and of the times before him.

It seems, however, a waste of time to go on arguing this point. In this age, in which the great factor of efficiency is regarded as being education, is it necessary to plead that at the head of a great industry—the building industry—there should be educated men?

* * *

The THIRD proposition is that it is in the public interest that a clear distinction could be drawn between the trained and the untrained practitioner. This principle has received full recognition by the public and by Parliament. It is the foundation of confidence in the professions. It must always be kept in mind that the professions are entrusted with the conduct of matters of great moment to the general public and to the national life. That is very clear in respect of law and medicine. It is becoming equally clear in respect of architecture.

In these days one of the heaviest burdens upon the public purse and one of the most pressing problems of public health arises from the fact that the amazing urban development which took place in this country in the nineteenth century was largely in the hands of men uneducated and untrained in the principles and practice of architecture.

The next generation is to solve this problem and remove this burden, and in its task it needs to be guided by the best that education can bring it. Both the private individual and the public authority should have the most absolute security that can be given, that when they turn for advice to men who use the title of architect they may be assured that these men possess at least a minimum standard of architectural knowledge.

* * *

If these three propositions be established, the case for the Architects' Registration Bill is proved, because that Bill comprises—as an essential part of its structure—in the Board of Architectural Education the most complete and representative organization for promoting architectural education that exists in any country in the world.

The work of the Board today is largely hampered and frustrated by the fact that it cannot offer the inducement to a student who is prepared to undergo the toil, the time, and the expense of architectural education that the title of architect, which he will employ after his training is over to indicate the profession he has adopted, will in any sort of way distinguish him from any ignoramus who, without a shadow of education or training, presumes to call himself an architect.

So far, the case for the Bill seems unanswerable; but there remains the objection which will be, and indeed has been

raised in some quarters, that the Bill does make a change in social organization and may, while its benefit to the future is acknowledged, result in hardship to individuals at present living.

No complaint need be made of this attitude; it is a very proper point of view, and it is to be hoped that Parliament in its examination of proposed measures will always regard, not only the benefits they confer, but the injuries they may inflict.

This point of view has been appreciated by the Registration Committee, and it is believed is fully met by the Bill as now drawn. It is recognized that every person who is now engaged in architectural pursuits must be protected from injury. The Bill therefore provides that the three present classes—students, assistants, and practitioners—are entitled, either to go on the register at once, or on the completion of their training.

The care with which, in this respect, the Bill has been finally drafted will be appreciated when the provisions governing admission to and removal from the register are examined.

The two things aimed at have been to get representative and impartial bodies who could be relied upon to give absolute fair play to the individual concerned without regard to whether they belong to this body or to that, or to none at all.

The Bill sets up, accordingly, an Admission Committee composed of representatives of all the professional organizations likely to be concerned, and if any question arises as to whether a person is entitled to go on the register, that question will not be settled by any single professional body, but by this representative committee.

In the same fair way, the important question of removal from the register is dealt with. To govern this a Discipline Committee is set up, consisting of representatives of registered persons, with the addition of a member appointed by the Law Society and another by the Ministry of Health. This Discipline Committee, not being an entirely professional body, may be safely relied on to prevent any person being removed from the register on merely selfish professional grounds.

In its protection of existing interests the Bill goes even farther than that of admitting present students, assistants, and practitioners to the register.

The Bill recognizes that people cannot be protected against themselves, and that, while the public is entitled to have a clear distinction drawn between the trained and untrained architect, it would not be proper to prevent a person from carrying on building operations except under the design and supervision of the trained architect. It is believed that in the long run it will be generally recognized that not only amenities, but efficiency and economy are secured by the employment of trained architects to direct building operations. But, in the meantime, it is recognized that where people are regardless of this fact they must be allowed, as long as they conform to laws and by-laws, to carry out building operations in such manner as they think fit. *It cannot, therefore, be too strongly emphasized and too clearly understood that the Bill, as drawn, does nothing more and nothing less than restrict the use of the title "Architect" and the term "Architectural" to people at present engaged in the pursuit of architecture, and to those in the future who attain the qualifying standard.*

On the general question one last thing may be said. There appears to be in some quarters the view that the services of the trained architect are only necessary when

works involving great expenditure are being carried out. No view more fallacious or more disastrous could prevail. It is the trifles that make perfection, and one cheap and nasty structure may spoil a whole landscape. Such a view is tantamount to saying that the only field for the display of taste is in important public and commercial buildings and in the dwellings of the well-to-do. It is forgotten that in bulk these buildings form a comparatively small percentage of the total number of buildings in the country. The truth is, that we shall not get a country architecturally fit until it is realized that there is no building, however simple in construction, limited in accommodation, and inexpensive in cost, but will benefit by being the subject of trained architectural design.

The Bill will not bring about a new architectural heaven and earth in the twinkling of an eye, but it will provide the means by which the future may draw upon an adequate supply of trained architectural ability, and be spared the devastating consequences of the work of the ignorant and untrained practitioner.

1. SAINT-SIMON ON MARLY

[ARRANGED AND RENDERED BY
P. MORTON SHAND]

The following extracts from Saint-Simon's Mémoires form an interesting sequel to the passage on Versailles, printed in last week's issue.

IN the end the King, weary of beauty as of the crowd, persuaded himself that he preferred solitude and rustic simplicity at certain seasons, and began to look about him in the immediate neighbourhood of Versailles in quest of some spot where he could satisfy this new taste. With this object in view he visited many different sites, exploring the slopes which descry Saint-Germain, and that vast plain beyond in which the Seine, after passing through Paris, waters so many rich and important centres. He was urged to fix his choice on Lucienne, where Cavoye has since had a house built, the view from which is entrancing, but he replied that such a chosen position would ruin him, and that as what he desired was a mere insignificant and unpretentious retreat, he wanted to find some situation which would not permit him to dream of doing anything to it. Behind Lucienne he found a deep and narrow valley with rugged sides and no sort of view, which was rendered inaccessible by swamps and shut in by hills on either hand. The whole formed an extremely confined site. On the slope of one of these hills was a wretched village called Marly. This closed-in position, without either a view or the possibility of obtaining one, constituted its sole merit; while the narrowness of the valley, which could not be broadened out, enhanced it yet further in his eyes. He acted in this decision just as if he were choosing a minister, a favourite, or a general for his armies.

It was a vast undertaking to drain this cesspool, into which ran the sewer outfalls of the whole surrounding neighbourhood, and to bring up earth for the amelioration of the site. But the hermitage was duly built, a hermitage designed for the King to spend three nights in at a time, from Wednesday to Saturday, two or three times a year, accompanied only by the dozen or so courtiers who were incumbents of the most essential personal charges. Little by little the hermi-

tage was extended by one addition after another, and the hillsides were cut away and levelled to make room for new buildings: the knoll at the extremity of the valley being in great part removed to give at least some sort of a snatch of prospect, imperfect though it was. In course of time it became that curious conglomeration of buildings, parterres, ornamental waters and channels which is so well known under the name of Marly. Its lawns, shrubberies, enclosed plantations, sculpture, and precious furniture grew little by little to be what they can be seen to be today, despoiled though the place has been since the King's death. Ready-made forests of great trees were brought over ceaselessly from Compiègne, and even farther afield—I am speaking of physical vicissitudes I myself have witnessed within the space of six weeks—three-quarters of which died, only to be immediately replaced by others. Vast expanses of thick underwood and darkling avenues were suddenly transmogrified into wide sheets of water, on which one sailed in gondolas, only to be restored to forest so dense that the light waned as soon as it was replanted. Ornamental basins had their shapes changed as often as the form of their fountains, a hundred times in succession; and the carp ponds as well. All sorts of decorations, such as the most exquisite paintings and gildings, were no sooner finished and placed in position than they were for ever being removed and rearranged, or replaced by others, by their artists. It is no exaggeration to say that Versailles, such as we have seen it, did not cost as much as this prodigious machine, Marly, with its immense system of conduits and water-courses and their dependent reservoirs which were created for Marly alone, and furnished no water to Versailles.

Such was the destiny of a haunt of frogs, toads, vipers, and carrion that was expressly chosen to avoid all outlay. Such was the King's bad taste in all things and his arrogant pleasure in outraging Nature, which neither the most burdensome of wars nor the practice of piety could attenuate.

This arbiter of war and peace upon earth, this distributor of crowns and their kingdoms, this chastiser of the nations, this mighty conqueror, this supreme great one of the world, with his overweening pride, in the service of whose glory marble and bronze ran to very dearth, and for whom at the last all was but incense at the shrine of his own magnificence; this immortal, it were not too much to say, but for his fear of the Devil, a fear which the Almighty never once withdrew from him even amidst his extremest disorders, had fain let himself be adored as a god, for which, forsooth, there had been no lack of worshippers. As a testimony whereto may serve, among others, his outrageous monuments—to speak with fitting moderation—such as his statue in the Place des Victoires, that inspired so eminently pagan an inauguration (an occasion at which I was present in person) in which, notwithstanding, he took a most exquisite pleasure.

The Place Vendôme as designed, and, indeed, as begun, was square. Louvois, whose project it was, saw the elevations of its four sides built. He intended to house in these four blocks the royal library and collection of medals, the mint, and the sessions of all the various academies, and of the Grand Council. On the very day of Louvois' death the King gave orders—indeed, it was his first action after learning the news—to suspend the work and reduce the area of the square by cutting off the angles cantwise. He further commanded that none of the buildings were to house any of the bodies or departments for which they had been designed, but that they should be made into ordinary dwelling-houses, as may be seen today.

ADSHEAD AND RAMSEY'S RECENT WORK

[BY A. TRYSTAN EDWARDS]

THE work of Messrs. Adshead and Ramsey is worthy of special study by architects of today, inasmuch as it has the distinction of being almost the sole representative of the English *urban* tradition of building. I say almost, because it is now apparent that these two artists have, by their example and precept, done a great deal to foster in others that respect for the architectural achievement of our eighteenth- and early nineteenth-century forefathers which has been sadly neglected by a whole generation of practitioners devoted to what I may describe as the "country cousin" type of design, the cottagy house, the cottagy mansion and, worst of all, the cottagy street façade. In any estimate of the achievements of Professor Adshead and his partner, Mr. S. C. Ramsey, reference must be made to the invaluable work of propaganda which has been consistently carried on by them on behalf of their ideals. Professor Adshead, from the time when, some fifteen years ago, he accepted the Chair of Civic Design at the University of Liverpool, has held before his contemporaries a conception of town-planning which was based upon an understanding of the broadest aspects of our urban civilization. Being both a scholar and an artist, he has the rare advantage of being able to recognize the true sources of architectural inspiration, and this knowledge has governed both his teaching and his practice. To Mr. Ramsey, also, the present generation of architects is indebted for his valuable collections of eighteenth-century examples which he has placed at the service of the profession. There can be no doubt that his two illustrated volumes devoted to this period have had a considerable influence in stimulating a tendency towards a greater measure of urbanity in architecture.

Of the numerous buildings which bear the imprint of Messrs. Adshead and Ramsey, the ones, perhaps, destined to contribute most to their permanent reputation are the shops, houses, and flats erected at the Duchy of Cornwall estate at Kennington. It was an exceedingly fortunate occurrence that the oppor-

tunity for urban development upon this scale was given to a firm of architects so well qualified to take advantage of it. Kennington has already had an important influence upon the town-planning movement in this country, and it may be hoped that its example may yet serve to remind local authorities and others engaged in urban development that the street formation still holds its own as the most important and interesting of all the architectural configuration, in which buildings may be construed. At present, when an old street is pulled down there so often arises in its place a strange medley of gabled forms in which the idea of a continuous composition extending over several façades is entirely lost. At Kennington, Messrs. Adshead and Ramsey have had the courage to design streets of houses very similar in character to the best eighteenth-century examples in the neighbourhood, except that the planning is in accordance with the most modern standards.

How delightful it is to see once more a corner treatment, such as is here illustrated, where the junction of two long street façades in planes forming an acute angle is effected by the simple, yet elegant, device of an intermediary block semicircular on plan. This element not only punctuates the façades at the extremities where they approach

the corner, but bridges over the chasm between them by a curved plane having an adequate æsthetic relationship to the main frontages, while itself possessing an artistic entity which fits it to become a charming terminal to a street vista. There are many such curved corner treatments still extant in towns which, owing to industrial stagnation or other causes, have still preserved substantial portions of their eighteenth-century architecture, and wherever they appear they always seem to be a perfect solution of the problem they were designed to meet.

The decoration of this particular frontage is also in accordance with



Duchy of Cornwall estate, Kennington. By Adshead and Ramsey. Detail of corner to block of flats in Chester Street.



a distinguished tradition, the Ionic Order being delicately detailed. At a time when the pilaster is in a certain amount of disfavour, even among those who profess to be adherents of the Classic School, it indicates some courage on the architect's part to employ this decorative form, but, fortunately, Messrs. Adshead and Ramsey are not influenced by the misguided purism which would rule out the pilaster as "unconstructional," and, therefore, anathema maranatha. The pilaster as here used is a well-known æsthetic device for giving a marked degree of cohesion to a particular stretch of wall surface. It stabilizes the vertical dimension of that part of the façade which is above the basement story; while at the same time the superincumbent entablature with balustrade provides a grand punctuation for the building. In the position in which they are placed the pilasters are far preferable to free-standing or three-quarter columns, because these latter, apart from the additional expense which they would have involved, would have belied the actual structure of the building, which is not a post and transom framework, but a fabric surrounded by walls of even thickness, which themselves provide such strength as is required to make the building stable. Moreover, just as the projection of the pilasters is slight, that of the entablature corresponds exactly therewith, so it cannot be said that the proportionate stresses borne by the component parts of the Order are in any way different from what they

would have been had the columns been standing free. The only difference is that both column and entablature are now backed by a wall. If we ask "Are the pilasters necessary for the structural stability of the wall?" we must answer "No; but they have a decorative function which gives them significance and justifies their use."

Reference may here be made to the delightful design for the cast-iron railings which adorn the balconies. Messrs. Adshead and Ramsey are faithful to the eighteenth-century tradition which elevated the cast-iron railing to a status superior to that of wrought iron. Current architec-

ture suffers so much on account of the quantity of atrocious wrought ironwork which is now being designed, that it may be worth while to indicate what is the particular quality of cast-iron which so often gives it great artistic distinction. In the first place, in a railing the repetitive element is desirable, for this feature on most occasions should be unobtrusive and have a pattern dominated by vertical and horizontal lines which accord with those of the adjacent architecture. Special points of interest should, of course, be provided in order to punctuate and inflect the pattern of the railing and make it not only coherent but sensitive. It



Duchy of Cornwall estate, Kennington. By Adshead and Ramsey. Above, studios in Sancroft Street, with garages under. Below, old tenants' hostel: a view through the entrance arch.



Duchy of Cornwall estate, Kennington. Flats in Sancroft Street. By Adshead and Ramsey. Above, a general view. Below, detail of central entrance.



*House at Dorking. By
Adshead and Ramsey. Above,
the entrance front. Below,
a detail of the entrance.*

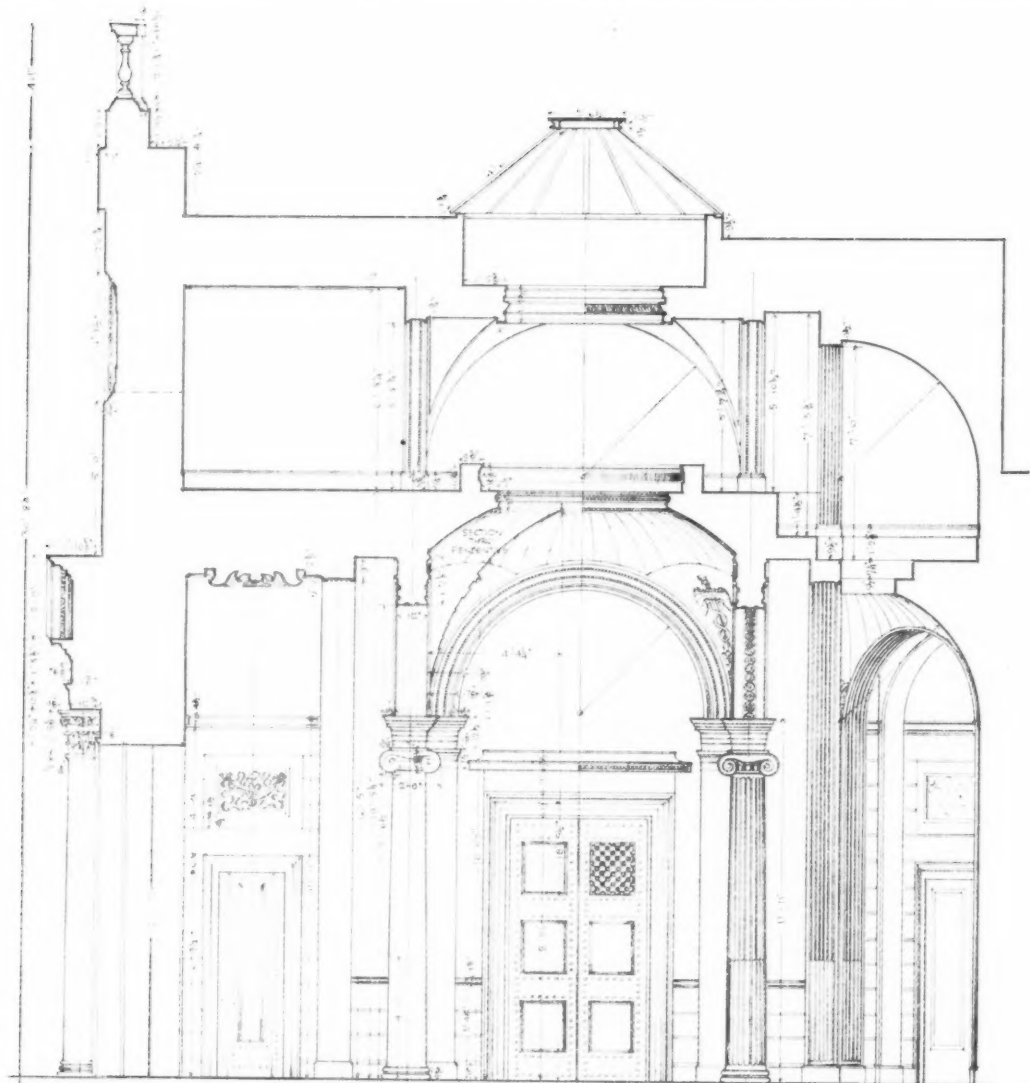
SOANE'S BANK OF ENGLAND

vi: THE "DIAGONAL PASSAGE"

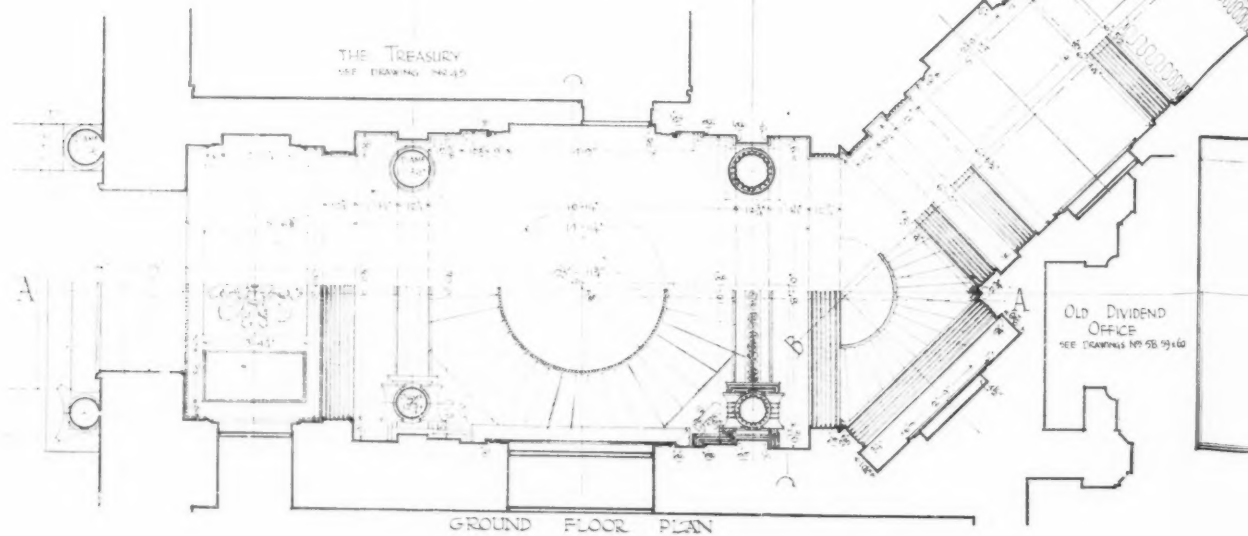
Plans and Sections

The demolition, in 1815, of Taylor's vestibule to make way for the outer Treasury demanded a fresh means of access to the rotunda from the front courtyard. Soane preserved the entrance from the courtyard, proceeded "normally" across the southern end of the former vestibule, and then boldly drove a way through the massive base of the rotunda at its thickest part, on the diagonal. In the clock chamber above the passage there were recently discovered several finely chiselled marble heads that had stood originally, it is thought, in niches within the pediments of Taylor's street walls which were rebuilt by Soane during the years 1823-27.—

[H. ROOKSBY STEELE.]



SECTION A-A



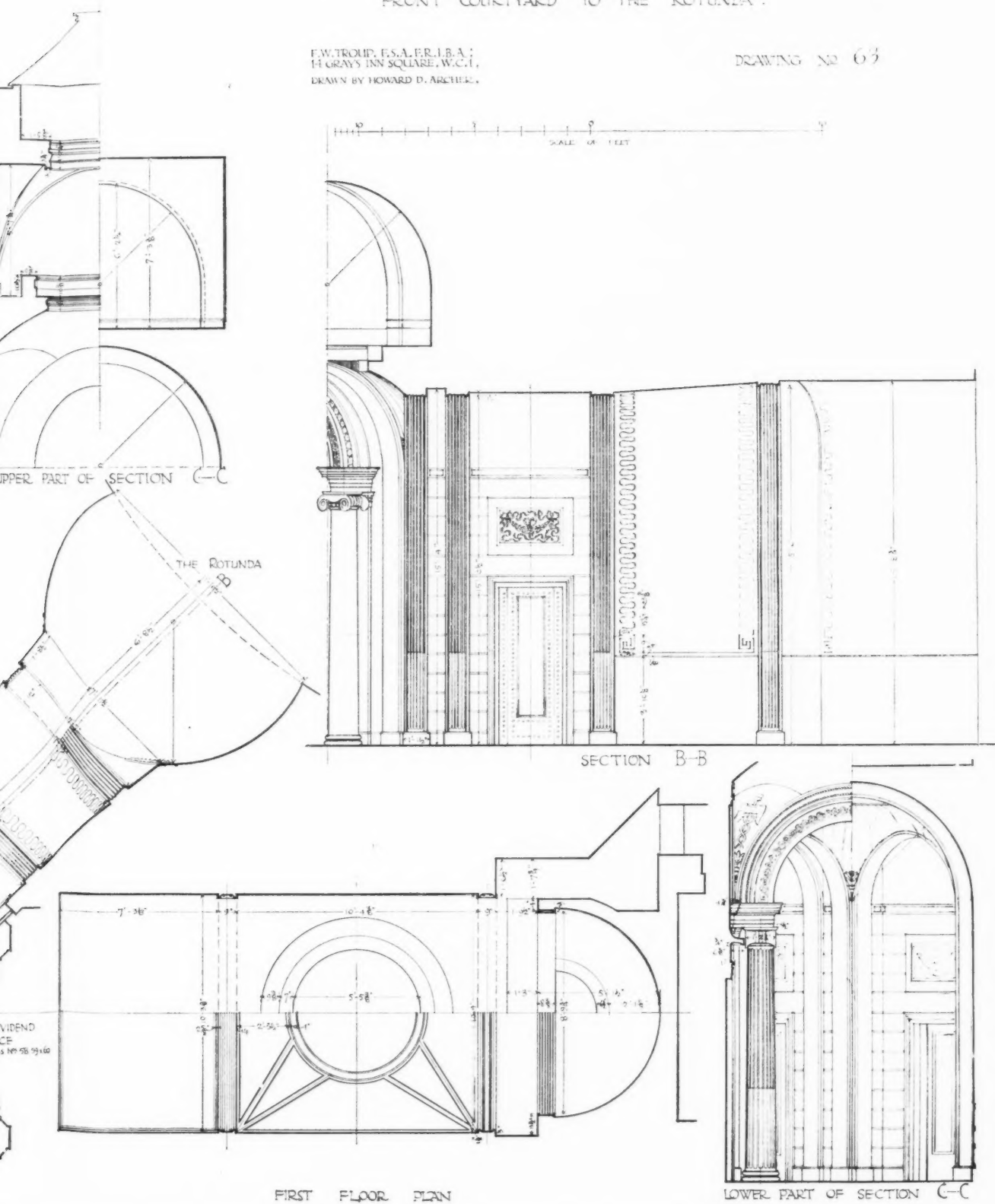
GROUND FLOOR PLAN

THE BANK OF ENGLAND

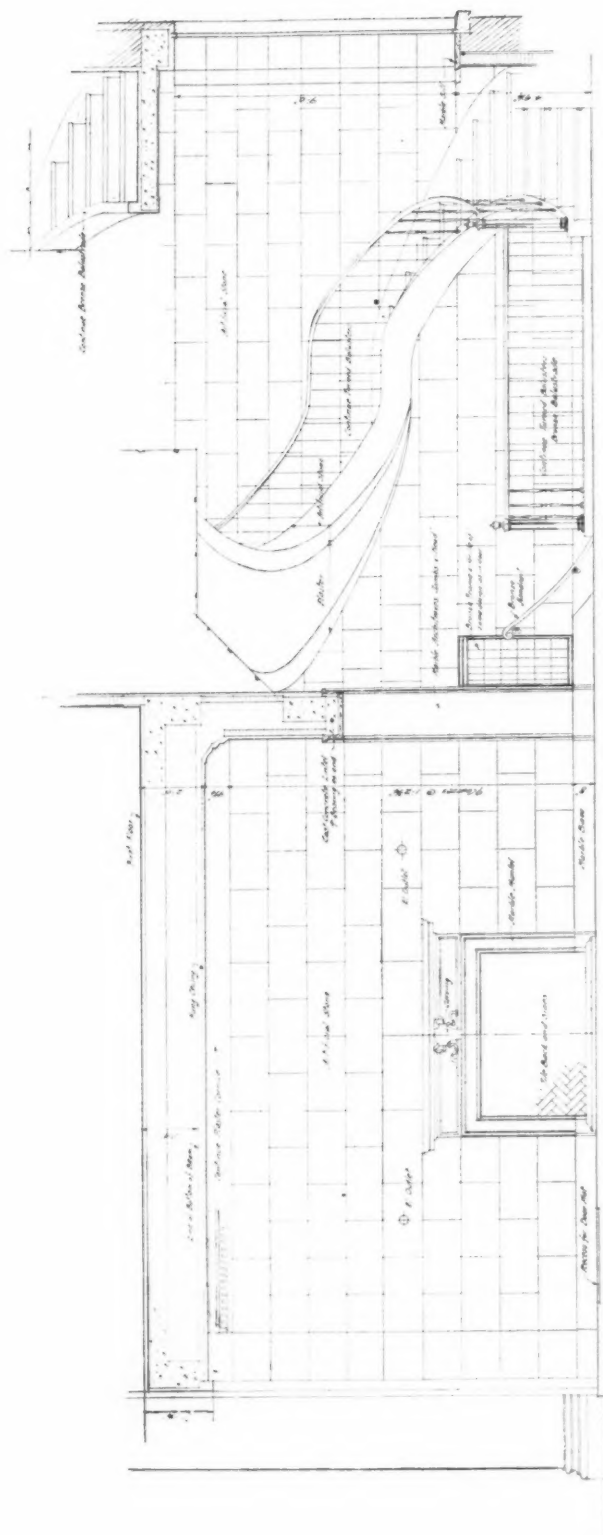
HALF INCH SCALE PLANS & SECTIONS OF PASSAGE FROM
FRONT COURTYARD TO THE ROTUNDA.

F.W. TROUP, F.S.A., F.R.I.B.A.;
14 GRAYS INN SQUARE, W.C.1,
DRAWN BY HOWARD D. ARCHER.

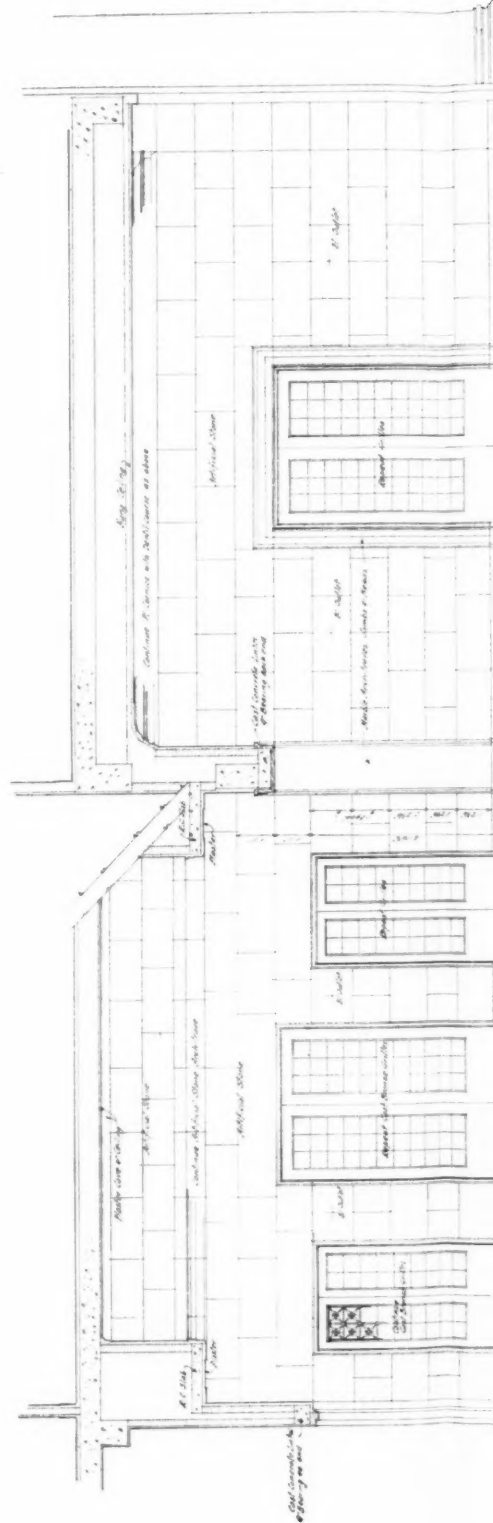
DRAWING NO 63



SOANE'S BANK OF ENGLAND. MEASURED DRAWINGS OF THE
INTERIORS. (vi) THE "DIAGONAL PASSAGE." PLANS AND SECTIONS.

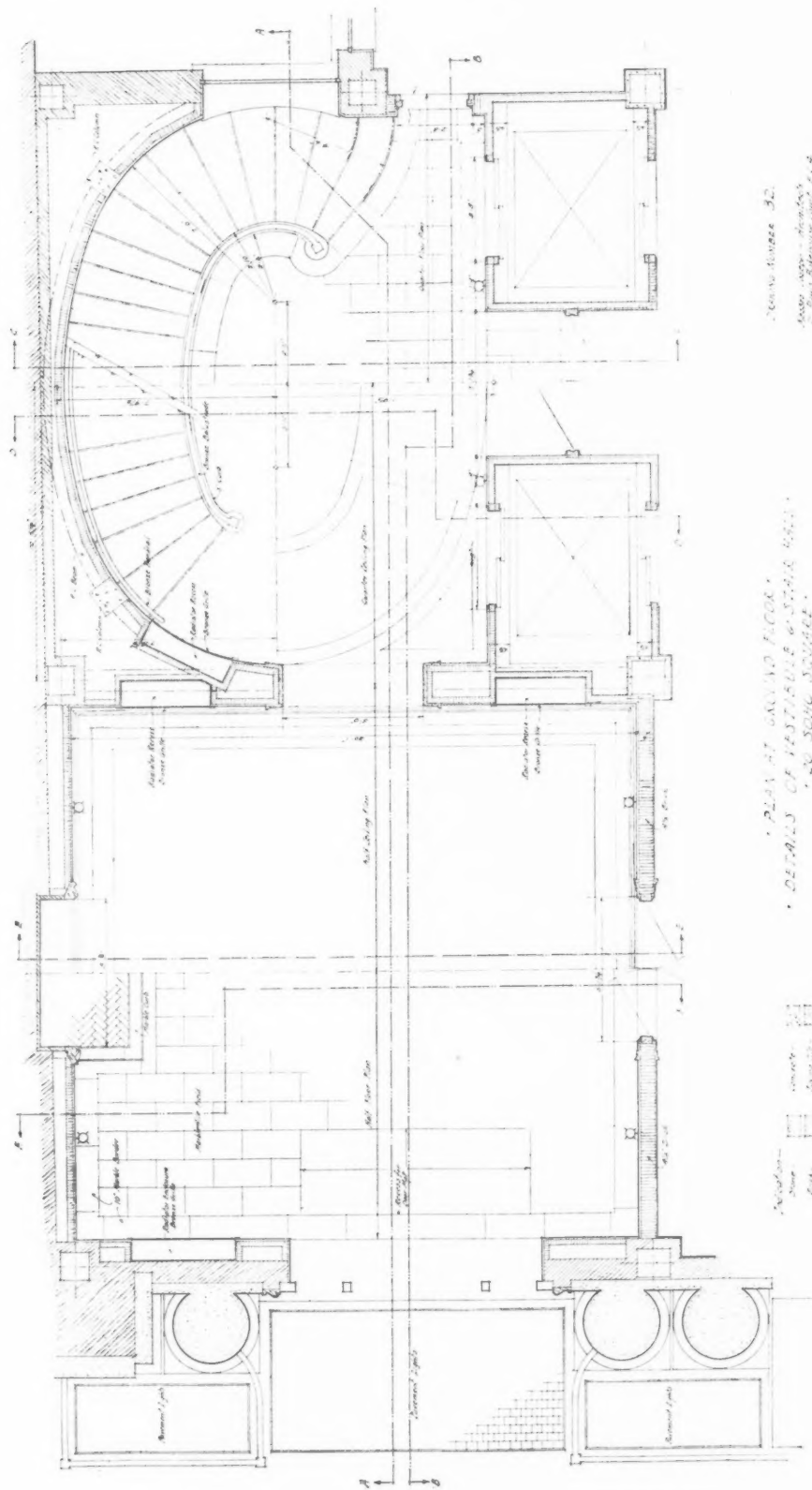


SECTION A-A





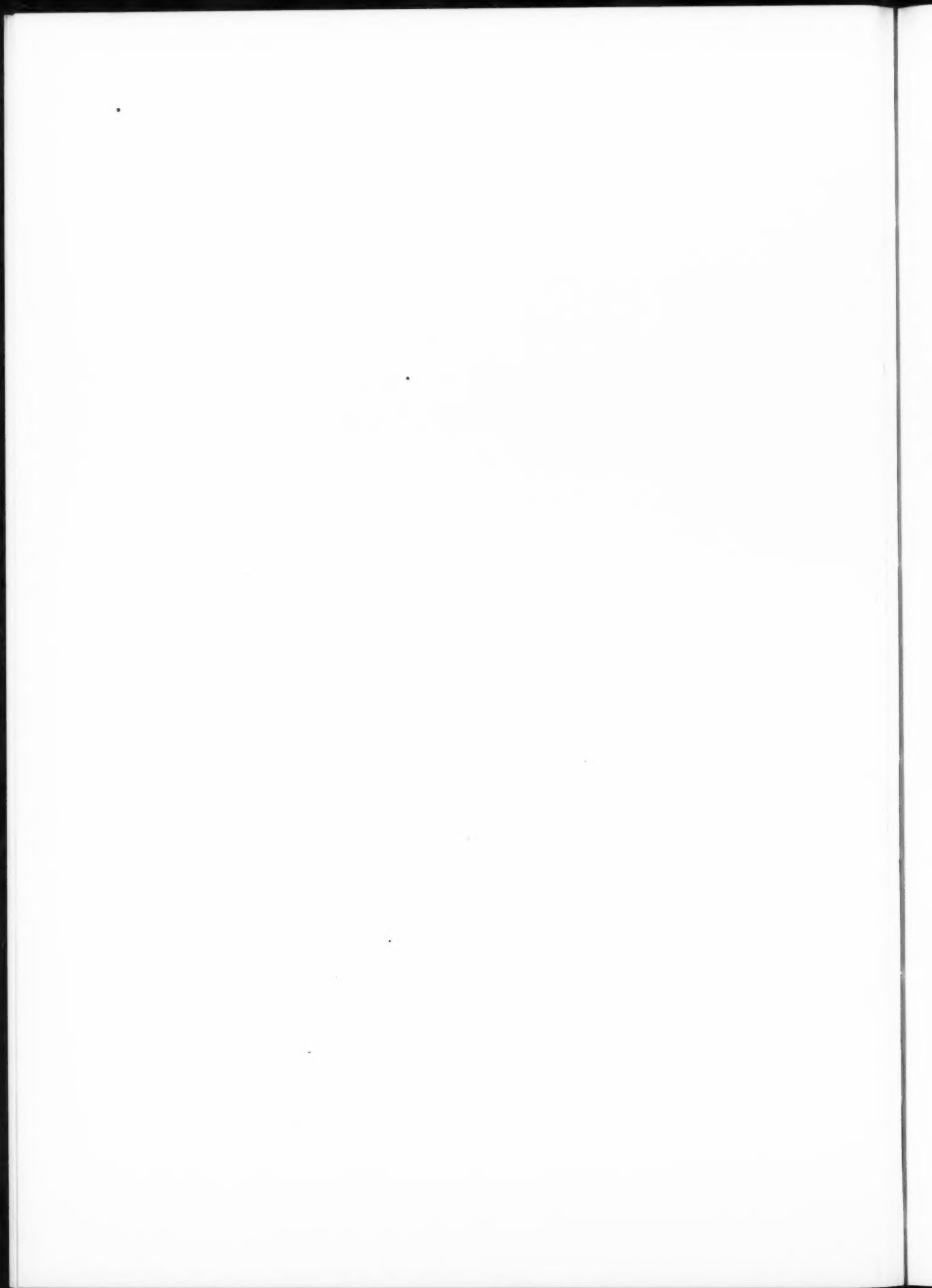
SECTION B-B



PLAN AT GROUND FLOOR

DETAILS OF VESTIBULE & STAIR HALL

Room	Area	Height	Notes
Vestibule	100 sq. ft.	12 ft.	
Stair Hall	150 sq. ft.	12 ft.	
Drawing Room	200 sq. ft.	12 ft.	
Parlour	180 sq. ft.	12 ft.	
Bed Room	120 sq. ft.	12 ft.	
Bath Room	80 sq. ft.	12 ft.	
Kitchen	100 sq. ft.	12 ft.	
Dining Room	120 sq. ft.	12 ft.	
Breakfast Room	80 sq. ft.	12 ft.	
Larder	40 sq. ft.	12 ft.	
Cellar	100 sq. ft.	8 ft.	
Garage	200 sq. ft.	12 ft.	
Stable	100 sq. ft.	12 ft.	
Coach House	100 sq. ft.	12 ft.	
Barn	100 sq. ft.	12 ft.	
Pigsty	40 sq. ft.	8 ft.	
Poultry	40 sq. ft.	8 ft.	
Orchard	100 sq. ft.	12 ft.	
Garden	100 sq. ft.	12 ft.	
Vineyard	40 sq. ft.	12 ft.	
Plantation	100 sq. ft.	12 ft.	

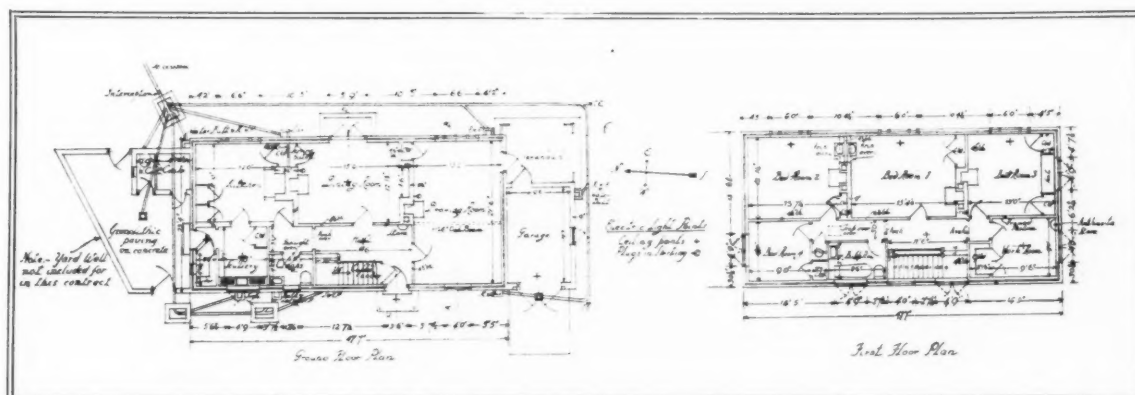




will be found, however, that in the best designs for railings the repetitive element is far in excess of the non-repetitive; thus the cast-iron process leads to an important economy both in labour and cost. With wrought iron, however, there is always a tendency to reproduce the scroll *ad nauseam*, and restless and fussy designs are apt to result unless the artist can put a check upon himself. While cast-iron at its best is expressive of the moderating influence of the mind, wrought iron only too often displays the arrogance and stupidity of the hand.

The urbanity of Messrs. Adshead and Ramsey's work is shown to peculiar advantage in the distinguished quadrangle group of "Old People's Dwellings," of which a

view is here illustrated. Visitors to the Academy and Architecture Club Exhibition last year will recollect a charming little plaster model of the group which, of course, gave an excellent idea of the whole composition. The photograph, however, enables us to judge the detail of the central feature of the courtyard, and shows how skilfully the problem of the two-storied building has been treated. Just where the steps, unsupported by the balustrade which runs around the courtyard at first-floor level, are tending to over-accentuate the equality of the two stories, there has been interspersed an attic with low-pitched hipped roof supported by ramps on either side, and this gives a three-storied effect just where it was



House at Dorking. By Adshead and Ramsey.
Above, the garden-side. Below, the plans.

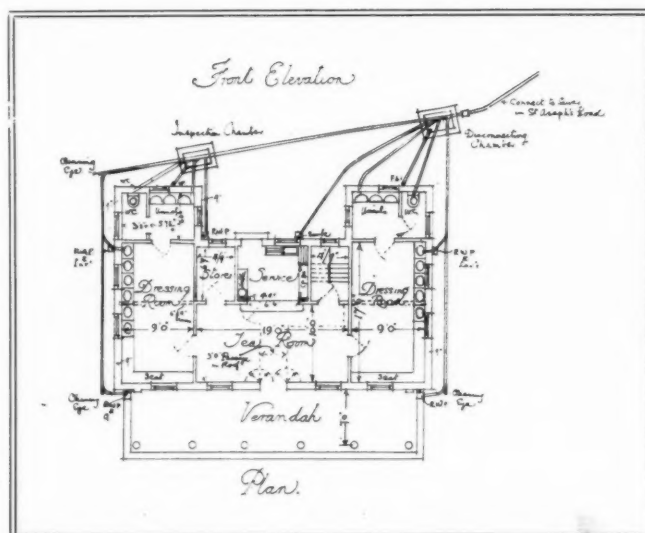


needed most to unify the composition, and has the additional advantage of inflecting the roof to take cognizance of the prominent flight of steps. This is a design of great subtlety and refinement. The same qualities are evident in the row of garages in the Duchy estate. It is noteworthy that Messrs. Adshead and Ramsey, in their urban architecture, favour either parapet walls or roofs of low pitch, and in this also they show how completely they have assimilated the eighteenth-century tradition. For a cottage in a rural environment, however, they recognize the propriety of a different treatment. The design for a groundsman's cottage at Hackney Marsh, with steep roof of mansard shape, smacks of the countryside while still retaining that sense of orderliness and refinement which characterize all their work.

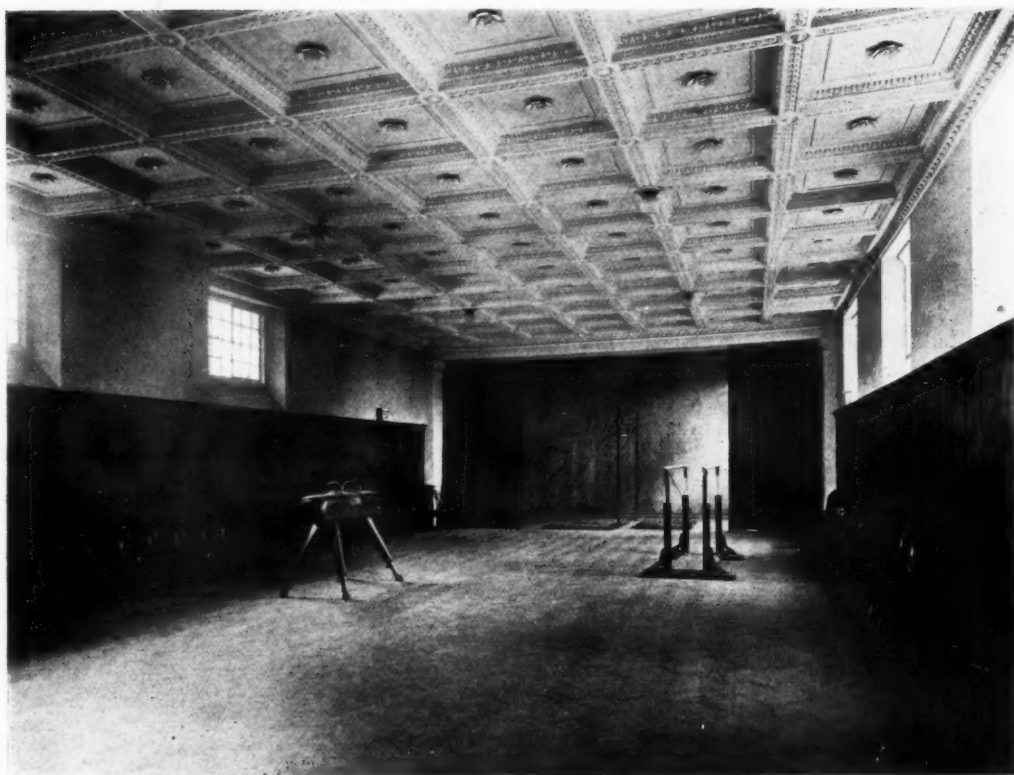
The delightful stucco house at Dorking has a symmetrical front towards the garden and a more informal one towards the road. Here we have a house of the suburban, as distinct from the urban type, which well illustrates the manner in which the architects adapt their design to the locality. This façade towards the road suggests that the house is con-

veniently arranged, and that the planning has not been sacrificed to the pattern of the fenestration. The symmetrical three-window group in the centre, however, gives to the façade just enough coherence to prevent its assuming too *négligé* an air.

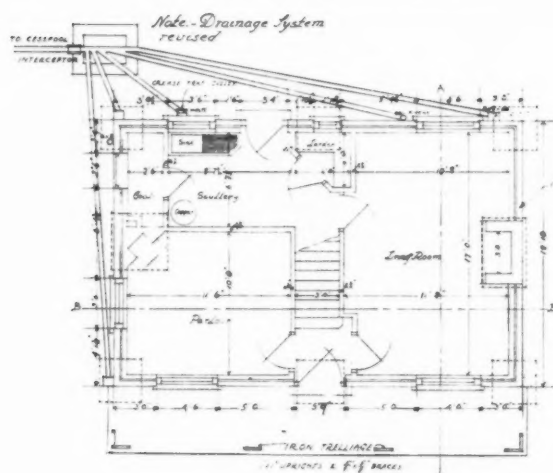
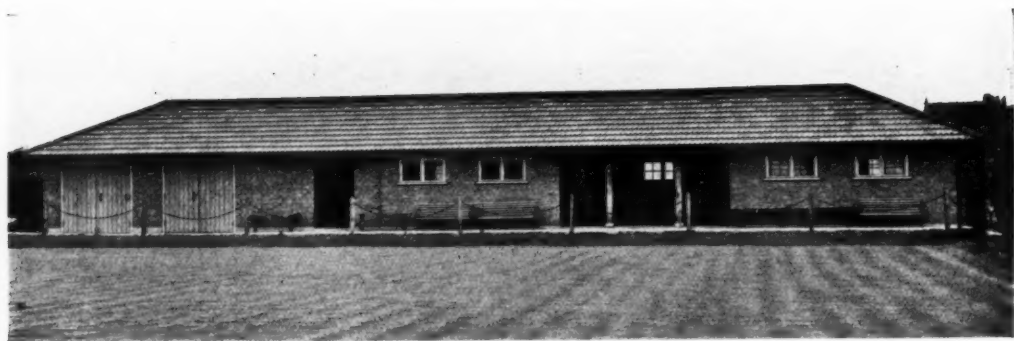
The illustrations of the War Memorial Pavilion at Aske School, New Cross, and the Hoxton Manor Boys' Club show finely-detailed interiors, and bear witness to the variety of accomplishment which lies to the credit of Messrs. Adshead and Ramsey. The extent of their achievement cannot, of course, be judged unless reference be made to their ecclesiastical work and to the seaside architecture, the pavilions and concert halls at Brighton and Worthing, and to the numerous housing schemes which they have undertaken. But this selection from some of the latest designs executed by them will serve to remind us once more of the range and distinction of Messrs. Adshead and Ramsey's contribution to modern architecture.



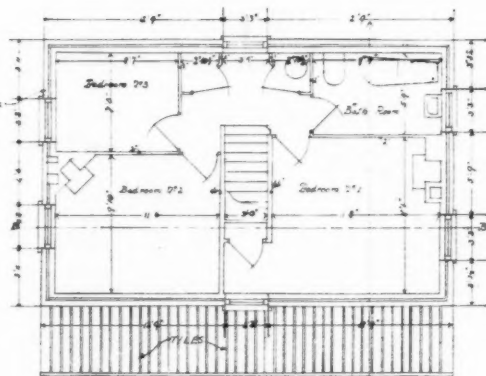
War Memorial Pavilion, Aske School, Brockley. By Adshead and Ramsey. Above, a general view. Below, the plan.



The Hoxton Manor Boys' Club, Wiltshire Road, Hoxton. Above, a view of the principal hall. Below, the entrance.



GROUND FLOOR PLAN



FIRST FLOOR PLAN

Hackney Manor Boys' Club. By Adshead and Ramsey. Above, the sports pavilion. Centre and below, the groundsman's cottage and plans.

TRIBULATIONS OF EARLY PRACTICE: 3

[BY KARSHISH]

IV: THE ARCHITECTS' IMP

OUR architect has been warned, after the house is completed and before the time within which the builder has contracted to make good "shrinkages and defects" has expired, to keep a sharp eye for these defects; for as long as the retention money held back as security for such making good remains in hand, the builder will be anxious to do what is asked so as to draw his final balance and be quit of the job. Our architect must also bear in mind that, as shrinkages and defects are due either to the causes which require adjustment in all building work or to the employment of unsuitable material or scamped workmanship, the time limit set to the builder's responsibility may bear unfairly upon the building owner, and our architect should accordingly see that he gets full measure of such relief as the contract affords him. The certification for payment of the retention money is the builder's formal release, and the moment he is so released an entirely new position of affairs arises; whereas he before had every reason for compliance with claims for making good, he now has every reason for resistance to such demands.

Defects appearing many months after completion, or the recurrence of defects already dealt with, usually point to radical faults in the work, and raise serious questions of responsibility in which the builder will be careful not to involve himself by the admission of liability that would be implied by his consenting to make good. The more grave the defect and the more urgent the need for reparation, the more troublesome and costly will that reparation be, and the more obstinate the builder in disclaiming liability and plausible in exculpating himself. In so exculpating himself he has to put the blame on another, and that other is commonly the architect. Let our architect, then, crawl over his buildings from roof to cellar with the intimate microscopic eye of an ant, and withhold release to the builder till not only all defects, but the cause of those defects, have been rectified. For instance, we will suppose that the linings of a door in an 18 in. wall are noticed to have warped. Our architect is not to be satisfied with having that lining put right. He will examine other linings with a straight-edge, and where he sees this tendency to warp in 14 in. openings, he will require restoration of those, for the evil will increase with years. Further, when he finds, as he may, that the dovetailed ledges specified have been omitted, and that the backings are not heavy enough or so secured as to resist the tendency of the wide linings to curl, he will require the builder to take down the whole of such linings and complete them with screwed ledges before refixing. So, too, should he notice a certain brick showing signs of decay, it will not be enough for him to require the builder to cut it out and renew it. The indication is that some of the red bricks among the broken coloured facings are not properly burnt, and this may become a serious matter in the future. The builder will probably urge that there are very few place bricks, and resist cutting out all the suspects; our architect should, in that case, as an alternative to requiring such cutting out, get a written undertaking from the builder that if any bricks decay in the future he will cut them out and renew free of cost.

It need scarcely be said that the builder's responsibility is not entirely wiped out by the certification of the retention money, but it is impossible here to unravel the intricacies of his, or the architect's, liability for defects, or to display the technical issues usually involved in questions of that kind. If our architect follows the advice given in these articles he will at least secure himself against any probability of becoming accountable for serious defects; but small defects may have serious consequences, and it was shown in the first article of the second part of this series that

an architect's liabilities extend to matters scarcely within his control, and that they may hang over his head for years after a building has been finished and paid for. In particular our architect has been warned against the machinations of his attendant imp, and if some of the ways in which these exhibit themselves are displayed, an intimate picture will be presented of the manner in which, all blameless and unsuspecting, our architect may yet be caught out by his imp. It will be noticed that although the devilish ministrations of the creature cannot, humanly speaking, be prevented, the worst consequences of them can be softened and their mischievousness overcome, by conscientious, methodical, and energetic attention to business on the part of the architect. We shall here be concerned entirely with horrors: damp walls, settlement, dry-rot, insanitary drains, structural defects. I make no apology for offering the illustrations as bald anecdotes such as any architect who has been long in practice can cull from his experiences. The answers to such problems as are presented will generally be found in the warnings and advice which have already been given. The first case is of the nature of a practical joke on the part of the imp. It is presented here merely for the purpose of sparing our architect an unnecessary shock should his imp play it off on him.

A house of roughcast brick walls and iron casements glazed with leaded glass, plastered and papered with lining paper, is built during a wet spring, finished in the summer, and occupied at the end of September. In October our architect receives from his client letters culminating in a shriek of dismay. The house is "reeking" with damp. The water "pours" in through the lead glazing and forms puddles on the window boards, which have to be mopped two or three times a day; the walls are "soaking," the paper peeling off, and water is oozing up through the concrete floor in the passage. Our architect spurs down into the country, his skin creeping with consternation. There has been no rain for half a week; it is a mild, cloudy day after several frosty ones, and he finds things as described: or it may be a day of storm with rain lashing the house, and he is met by nothing but stains of past damp and voluble protestations. Our architect does not at once understand that there is nothing wrong but the tightly-shut windows. The tons of water enclosed between the roughcast and the plaster has had no chance to dry out, evaporation into steam is going on with condensation on the windows, and on the walls when they are cold and the air is humid. Time, good fires, and, above all, open windows is the remedy.

A house in an exposed situation is built by our architect. The walling is of the customary local bricks, but certain facing bricks are strongly recommended by the builder, who (orally) guarantees what he says he has used for years, and he even asks as a personal favour that the facings may be ordered from this particular brickyard. Our architect accepts the builder's recommendation without further test or inquiry, and without the caution, based on experience, of the penetrating power of rain which he acquires for all time when south-west gales drive right through his 14-in. walls and the water streams from the soffits of window openings.

This, or another house, is given a cellar. The excavation for this is in hard blue clay and perfectly dry. Our architect takes some satisfaction in the adequacy of his vertical and horizontal dampcourses. The cellar will, he feels, be, in the foreman's words, "as dry as a bone." Our architect, however, is led by his imp to forget that the impervious clay will form a tank in which surface water, running down the outside of his vertical dampcourse, will collect, and that the cellar will stand in a bath of water. A pensive ten minutes, however, enlightens him when some weeks later he contemplates the eight inches of water which has forced its way through the concrete floor from the water-logged hardcore below.

Our architect builds a village school. It is a great success and much admired, and is illustrated by a double inset page in THE ARCHITECTS' JOURNAL. He frequently sees the building, and for six years ventures to admire it. After that he turns his head so as to avoid being reminded of it, poor man. It has been devoured by an outbreak of dry-rot which only the roof escaped; the concreters did not take up the bench pegs fixing the level of screeding for wood-block floors, and the architect is responsible.

Our architect builds a pair of cheap cottages, and the cheap cottages are built by a cheap builder, who lives on parings saved from his obligations, much as Jews lived, in the Middle Ages, by trimming the edges of the unmilled currency or "sweating" guineas. Our architect has much trouble and anxiety getting things decently done, and his imp arranges for a motor accident in the road outside at a moment when he is about to tell the foreman to take a half-brick out of the concrete floor foundation, where it has been bedded. Our architect is reminded of the facts two months later when dry-rot, beginning in the wood-block floor where this half-brick conducted damp to it from the ground, has involved skirtings and door frame and eaten up the carriages of the stairs.

The imp is especially lively where drains are concerned, for if an old lady can manage to get tonsillitis in a house whose sanitation our architect has reconditioned, or a mouse dies behind a wardrobe, and a sanitary specialist, with a shop-front displaying a black gauze blind like an undertaker's somewhere in Mayfair or Knightsbridge, finds a defect of some kind by filling up the closets with water to the brim or using a galvanometer to test the jointing of metal pipes, our architect is in the soup. Our architect, too, may be called to a house where his client has just gone to reside with wife and family and there be confronted with a dreadful smell, and then shown that a joint between soil pipe and fitting has never been made and that the drains are ventilating into the house. If anyone is taken ill our architect will be held responsible, and what is more, he will feel his responsibility.

Another house our architect builds, we may imagine, gives his imp the sort of opportunity he loves to roll in. It is a delightful house, built without regard to any reasonable expenditure; and for greater perfection it has not 14-in. and 18-in. walls, but 16-in. and 20-in. hollow ones. The panelling of that house is a special feature of it. It takes nearly two years to build, and the owners are delighted with it—delighted that is until the winter, when fires are lighted. "The house is always full of smoke" it is then complained; "could you come down and see what is wrong?" Our architect goes down, and he sees. The smoke of coal fires fills the whole house. Where it comes from cannot be said, unless it is from behind the panelling; but it is not due to smoky chimneys, for some rooms where there are no fires are more fogged with smoke than those where fires are burning. The architect's imp could delightedly explain what it may take our architect weeks of perplexity to establish. Careless bricklayers have left openings from flues to hollow walls.

The imp often gets at the architect indirectly, and particularly through the client. The client sees exhibits of a new wonderful glossy paint. He asks our architect to use it in decorating the house. The painting all goes wrong; it will not dry; dust collects on it, and when it finally is finished it is a dreadful failure. The client tells the architect he looks to him to get it put right; the architect says he knows nothing of the paint and did not order it; the manufacturer says the painters did not follow directions; the painters say they did follow them; the builder says he never had any directions except what were printed on the tin; and our architect's life is for weeks made a burden to him.

The imp's ingenuity in devising pitfalls in the construction of buildings is specially subtle and mischievous. The following is a true story, and if it is represented as an imaginary experience of our architect, that is only to conform to the scheme of this writing. Our architect, then, is to be supposed as commissioned to build a village hall in Kent, near where he lives. There is no money to spare, and 9 in. walls thickened to 14 in. where roof principals bear upon them are made to serve by keeping the plate low and getting the ceiling at collar level and as near the ridge as possible. As the walls are incapable of giving any lateral support and the collar is high up, the system of bracing the principals is a matter for careful judgment. The work is carried out by a first-class builder, who, among other things, lays the floor of American hemlock flooring, secret nailed to joists carried on sleeper walls. The hall is opened with that kind of solemnity which would tempt Providence, if Providence had a sense of humour. However, our architect's imp has made his own arrangements.

The building is completed in the late summer, and our architect returning home one night sees the hall in use for a village dance, and a day or two afterwards he is roundly complimented by a village worthy on the fine spring dancing floor fitted to the new hall. Our architect does not understand what this means, but thinks it wise not to disclaim professional merits which are only too tardily recognized, and accepts the compliment with a smile. A week or so after this he meets the rector, under whose chairmanship the hall was built, and the rector says: "We think we notice cracks between the windows of the new hall." Our architect's mental ejaculation is, "Oh, gosh!" but he replies lightly, "Oh, cracks! Indeed! All right; I'll go and look at them." The tone of his reply indicates that when an architect consents to look at a crack all is well. Sure enough, the cracks are there, just where they should not be, for the 14 in. piers are sloping outwards, and the principals are only too clearly pushing the walls over. Our architect sends for the foreman, who brings a plumb-bob and the key of the place. While the architect applies the plumb-bob to learn that the wall is over 1½ in. in 4 ft., the foreman has entered the hall and returns with his eyes wide open. "Have you been inside, sir?" Inside, the floor from end to end of the room is lying in waves, exactly like the swell which sweeps with the first flow of the tide into still evening pools. The foreman jumps on the floor, which responds like a spring mattress, and an undulation passes down to the end of the room and actually can be seen returning and its arrival felt by the foot. The architect's imp has, in fact, been hard at work. He has arranged that the blocks fixing the distance from the wall to the first board, and those against which the last board was folded, should be left in place under the skirtings. He did this foreseeing that the "strong," kiln-dried hemlock flooring would swell when damp autumn airs played over its under surface, and that the cumulative pressure against the walls would become so great that with the swing of dancers the floor would buckle and, with the 7 in. x 2 in. joists nailed to it, rest, not on the sleeper wall, but wedged between the outer walls. This thrust, applied only some 18 in. above the top of the footings (the turning point), has thrown the walls over, and the roof principals are actually holding the walls up. As the dancers bounded in unison the floor flung them into the air like a spring mattress with the impulse of the walls trying to get back; the walls waggled backwards and forwards in time with the music, and flags and Chinese lanterns hung upon the principals showed these fine members opening and shutting like scissors in time with the swaying walls. This dancing floor, for the perfection of its resilience and the exhilaration it inspires in dancers, has not before been equalled, and probably never will be. The whole building ministers to the floor, but if the schemes of the imp concerned had not been interfered with by the conscientious roof design of the architect the outward-thrust walls would have caused the roof to spread and collapse on top of the dancers. When, however, our architect has caused certain flooring boards to be removed, the walls swing into position, the cracks close up, and no sign remains of the distortion except the curve still retained by the refractory line of cast-iron eaves gutters.

[This is the last article in the *Tribulations* series. For the information of those readers who may wish to check over their acquaintance with the twenty-four instalments we append a list of headings together with the dates on which each was published. The regular price today for such of the 1926 ordinary issues as remain in print is two shillings each, but the publisher is prepared to supply any of the following issues for one week only at the price of sixpence each, or sevenpence post free. Prepaid application should be made to The Manager, The Architectural Press, 9 Queen Anne's Gate, on or before Thursday, April 7 next.—Ed., A.J.]

PART THE FIRST

	1926			
i. The Enigma at Large	July	7		
ii. Essentials of Success	"	14		
iii. Early Frustrations	"	21		
iv. Setting Up	"	28		

1926			
v. The First Commission	August	4	
vi. The Preliminary Estimate	"	11	
vii. Architect <i>versus</i> Client	"	18	
viii. The Nose on the Grindstone	"	25	
ix. Contract Documents	September	1	
x. Tenders at Last !	"	8	

PART THE SECOND

1926			
i. Facing Responsibility	October	20	
ii. Organization	"	27	
iii. Office Routine	November	3	
iv. Builders	"	10	
v. The Men	"	17	
vi. The Conduct of the Works	December	1	
vii. Supervision	"	8	
viii. A Visit to the Job	"	15	
ix. Settling Up	"	22	
x. Charges	"	29	

PART THE THIRD

1927			
i. Disputes with Clients	March	9	
ii. Further Disputes	"	16	
iii. Disputes with Builders	"	23	
iv. The Architect's Imp	"	30	

CORRESPONDENCE

EARLY LONDON

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—The committee in charge of the Guildhall Museum are anxious to enlist the help of architects whose practice may include work in the City, with a view to identifying and recording the structural remains of Early London (more particularly Roman London) as they are brought to light by excavations. The Council of the Society of Antiquaries and the authorities of the British Museum, the London Museum, and the R.I.B.A. have kindly promised to give all possible assistance in this direction. It is intended to establish here a system for the registration of all authenticated discoveries as they occur. The committee realize that under present-day conditions there is often great difficulty in delaying for more than a brief period work which must necessarily destroy, in most cases, earlier substructures. Accordingly, arrangements have been made which will enable detailed measurements to be taken, within a short space of time, of any remains of historical importance. Any communication on this subject addressed to me here will receive immediate attention.

Guildhall Library, J. L. DOUTHWAITE,
London, E.C.2. Librarian and Curator.

ARCHITECTURAL STAFF SALARIES

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—The part played by my Association in the endeavour to obtain fairer terms of remuneration and an improved status for the salaried architect is well known, and its claim for recognition of a basic minimum salary is even now before the Council of the R.I.B.A. Whilst the recognition by practitioners and certain public companies and corporations of the pressing need for such a minimum is becoming more generally accepted, there is a small, but influential, minority who steadily block the way. Like many such minorities it forgets nothing and learns nothing.

This minority in the profession has so far offered no valid reason to support their opposition. Sometimes it volunteers an excuse for delay upon the grounds that the operation of minimum salaries would mean a weekly financial loss to the assistant. How that is possible only those who make the excuse can show. It will certainly not be apparent to the greater number of assistants who earn less than £5 10s. per week. As for that smaller number who earn more, they already know that if the basic minimum salary is recognized, their own experience and ability will correspondingly ensure them an increase in remuneration.

Private practitioners are, as a rule, extremely modest in

publicly advertising the salaries offered and paid to their staffs. From the information possessed by my Association on the subject I am not at all surprised that this is so. Your readers, however, may be assured that the notices inserted by public bodies in need of assistants, where a salary is almost invariably stated, reflect fairly accurately the average of the salaries being paid by practitioners in the locality.

Some light is shed upon the salaries being paid in Devon and Cornwall by the recent notice of a vacancy for a draughtsman at a commencing salary of £130 per annum from which a deduction of 5 per cent. is made for superannuation.

The Devon County Council, by publicly stating the value it places on professional services, need not fear that it stands alone in offering such terms. On the contrary, it is known that the above salary is offered and paid by private practitioners in both Devon and Cornwall, not excepting towns such as Plymouth and Exeter.

A disclosure such as this may produce a good effect in opening the eyes of many architects to the fact that falling salaries will not of themselves reach a minimum; and that if a barrier is to be erected against the exploitation of the assistant by any class of employer, that barrier must be minimum salaries as agreed upon and recognized by the R.I.B.A. and the A.A.S.T.A. Further inaction is unpardonable, and must result in the hardening of opinion that a certain small section of the profession only is to reap the benefit of organization and professional protection. I may add that my Association has already lodged a protest with the Devon County Council.

JOHN MITCHELL

General Secretary, A.A.S.T.A.

THE NATURE OF ELASTICITY

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Mr. Barman asks at p. 428 if I will give an article on this subject, but I do not think many words are necessary to make clear the difference between a man walking across a yielding plank and a hammer blow on a yielding material supported underneath where the hammer strikes. In the former case the load has very little effect on the part it touches, its chief result being

to produce a *bending moment* varying as, say, $\frac{Wl}{4}$ where W is

the central equivalent dead load in lbs. and l the span in inches. This induces a *resistance moment* varying as, say, ZC where Z is the section modulus of the plank in inch units and C the maximum stress produced in lbs. sq. in. In the case of the material struck by a hammer, say a piece of lead supported on an anvil, there is no *bending moment*; the force of the blow, or kinetic energy, is $\frac{Wv^2}{2g}$ where W is the weight of hammer in lbs., v the velocity

of hammer in ft. per sec. at instant of striking, and g the force of gravity, say, 32. The resistance varies as the material is compressed; it will be less at first and greater as the compression proceeds, until the force of the blow is used up. Suppose the resistance to increase uniformly and the total compression to be

$\frac{1}{2}$ in., then if $W=2$, $v=20$, $g=32$, $\frac{Wv^2}{2g} = \frac{2 \times 20 \times 20}{2 \times 32} = 12.5$ kinetic

units. This being used up in $\frac{1}{2}$ in. or $\frac{1}{24}$ ft. the average pressure will be $\frac{12.5}{\frac{1}{24}} = 300$ lb. and the maximum double this. Had the

compression been only $\frac{1}{4}$ in. the average pressure would have reached 600 lb. and the maximum 1,200 lb.

HENRY ADAMS

[These figures are admirable, and no one could ask to be shown the difference between the bending plank supported at its ends and the yielding piece supported all over more clearly than Professor Adams here shows it. They also support my original comparison; for the one thing these two objects are proved to have in common is their habit of setting up a resistance which increases as they are distorted.—CHRISTIAN BARMAN.]

CLAIMS ON ARCHITECTS' ESTATES

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—In an article in your JOURNAL for November 10 last, page 560, attention was called to the fact that an architect's estate is liable for claims made "within a certain period after his demise" in respect of professional negligence; and in the *R.I.B.A. Journal* for November 20 last, page 70, this "certain period" has been stated to be six months from the date of the architect's death. We are advised that the period of six months referred to (as provided in the "Civil Procedure Act, 1833") runs from the date upon which the representatives of the deceased enter upon their office, which is not necessarily, although it may be, the date of his demise; further, that it is possible that the relations between the architect and his client might be held to be on a contractual basis, in which case the limitation of six months would not apply at all. It seems clear, therefore, that there is no certainty that a claim of this nature could not succeed, if it were brought after the lapse of a much greater period than that mentioned; still less that the estate might not be put to the expense of contesting a claim, even though the latter might fail. The risk is, of course, recognized by the existing insurance against architects'

professional liability, and is accepted by the underwriters during the normal period of the currency of the policy.

The only new point raised, therefore, is whether it is in the interests of the architect to determine the period of the policy's liability six months after the decease of the policyholder, and irrespective of its normal expiry date. Obviously, such a course would involve no "generosity" on the part of the underwriters; since an extension in one case ("A") of the period in respect of which premium had been paid, would be balanced by a curtailment of that period in another case ("B").

Equally obviously, if all risk did, in fact, cease after the lapse of six months, then nothing would be lost to the assured in the second case, while the arrangement would be beneficial in the first case. But if, as would appear to be the fact, liability may continue for a much greater period, then evidently underwriters have no right to curtail the period of protection for which "B" has paid, in order to benefit "A." It would seem that the proper course is to leave the position as it already exists; it being open to the deceased's representative to renew the insurance for any required period at a premium reduced in proportion to the reduction in the risk.

LEONARD LAIT,

Manager, Architects' and Professional Agencies, Limited

DRAUGHTSMEN OF TODAY

iii: KEITH MURRAY

[BY FREDERIC TOWNDROW]

MR. KEITH MURRAY, who came from New Zealand, is distinguished as an artist by those qualities of directness and sincerity which one, in fancy maybe, associates with a man who, half the world away, has been able to choose for future study just those things which are essential and to the point. It is not easy to get to the bones of a thing hampered as one is by the thought of what this man does or what one did oneself on a previous occasion with such success. To see a thing as in itself it really is, is the mission of the artist and the critic, and Mr. Keith Murray recognizes this; believing only, that with an eye to see and a hand to work, individuality, mannerism, atmosphere, soul, or what you will, will come of its own accord.

A shadow is to him a shadow and no more.

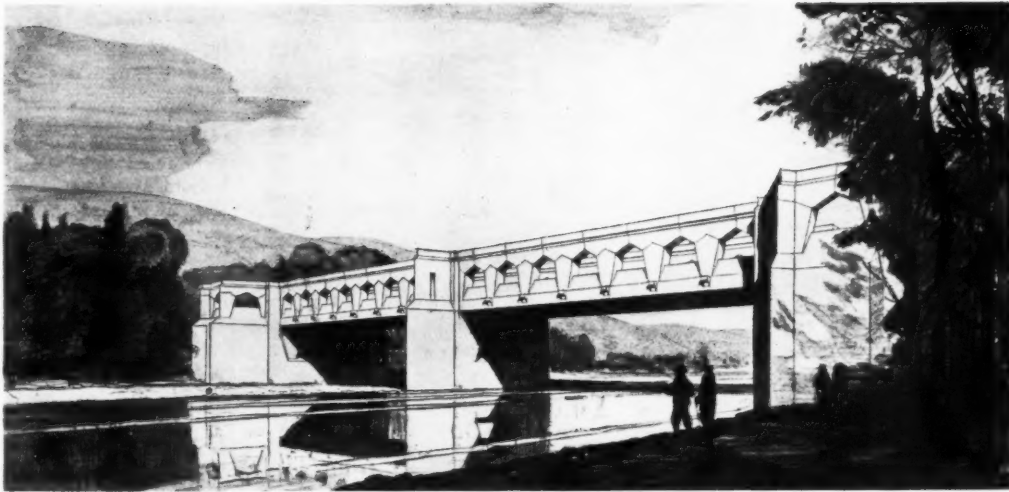
And, incidentally, no less. Not vivid greens running down

through blue to violet and a hard framed-up edge, nor the washings of the palette thrown up under the eaves, but the absence (not the aberration) of pure sunlight on the face of a building. He is, I believe, a great admirer of the sound draughtsmanship of the early nineteenth century, of Samuel Prout, of Thomas Shotter Boys, and of Daniell, the topographer. These men sought to produce truthful rather than emotional pictures of what they saw, and, coming as they did before the days of colour process-work, were successful by the study of pure tone alone to convey the sense of colour. Samuel Prout was particularly successful in this, and Mr. Murray shows this quality in his work. The little street scene of Funchal shown here is full of colour.

Since the days of David Roberts, the pictorial rendering of architecture, after wandering into the nebulous area of impressionism, has emerged, on the one hand, into an elaborate mode of



Viaduct at Neath. [From a crayon sketch by Keith Murray.]



brilliant effect, of highly-coloured brushwork and tricks of the trade, and on the other, into the blot and splash method which has the merit, in the case of many modern buildings, of leaving much to the imagination. The clever perspective, instead of being the means to an end, has become the end itself. So we now have the position at our exhibitions that many an architectural perspective is just as an elaborate work of art as the building itself; and

instead of looking beyond the drawing to the sense of bricks and mortar of the real thing, one's attention becomes arrested by the drawing and rarely gets beyond it.

As it is the prerogative of the architect to be expert in the handling of form, so the manner of expression for those who render architecture should be primarily in line and shade. There is so much beauty in pure line and monochrome drawing that one



Above, Bridge over the River Findhorn. From a carbon pencil drawing by Keith Murray. Below, St. Mary Woolnoth. From a pencil sketch by Keith Murray.

wonders why there is little or none of it shown at our exhibitions.

Mr. Murray is fortunate in being able to work so largely in monochrome, as the drawing of the Findhorn Bridge will show. The method is in charcoal pencil and light wash, which has been traced from a rapid and lively study of tonal values. Note how the bridge has been kept entirely free from surface drawing. This does not merely give brilliance to the shadows, but produces an effect of steadiness and repose, allowing the clean, swift lines to hold the picture. The advantage, as we all know, in working monochrome is that an artist will more assuredly develop a sense for form and tonal relationship than if the strong element of colour is introduced; and many of our artists (by which I mean painters) have something to learn from architects in this respect.

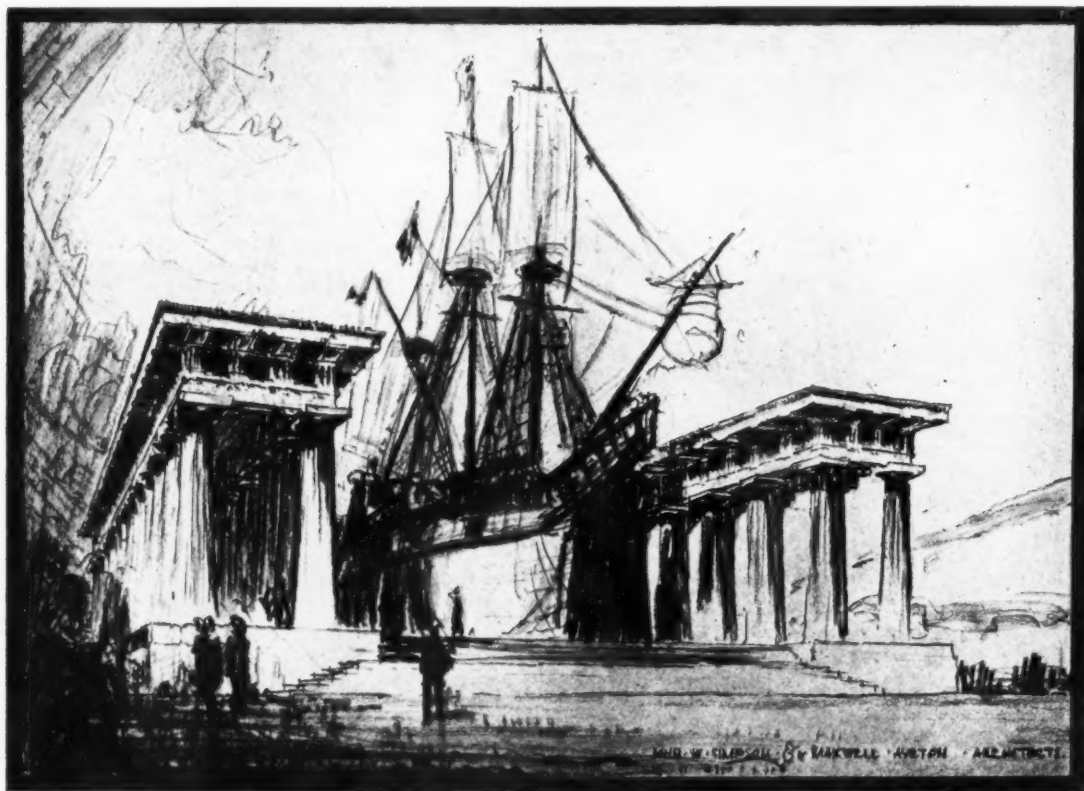
One feels that Mr. Murray has a tender affection for the beauty of light and shade. In the little street scene of Funchal the



shadows are as soft as they are in Nature; and one can see the richness of that lancet window high up in the white wall. There is a richness there as of stained glass and all the other tones in the picture are subordinate to it. One feels that the Parisian block of buildings is not so successful; there is possibly too much in the picture, and the planes of the high roof are confused.

The drawing of the ship in an architectural setting was made for Sir John Simpson and Mr. Maxwell Ayrton in connection with a proposal to exhibit "The Golden Hind," of Sir Francis Drake at the British Empire Exhibition. I have included the drawing of St. Mary Woolnoth, as it shows Mr. Murray in a more impressionistic vein; and is an indication, I think, that with his ability

in true and unaffected drawing and with such a delicate sense—as in this sketch—for vivid essentials in representation, he will go even farther to please us.



Above, Funchal. From a sketch in brown ink by Keith Murray. Below, "The Golden Hind" of Sir Francis Drake in an architectural setting. [Intended to be exhibited at the British Empire Exhibition.] From a charcoal sketch by Keith Murray.

IN PARLIAMENT

[BY OUR PARLIAMENTARY REPRESENTATIVE]

The Prime Minister was questioned last week as to the attitude of the Government towards some of the minor recommendations of the Lee Commission on London Bridges, and in particular with regard to the construction of a Thames tunnel.

Mr. Baldwin, in reply, stated that a lower Thames tunnel between Dartford and Purfleet had been recommended by the London and Home Counties Advisory Traffic Committee, but they considered the Victoria Dock Road scheme, and other schemes, more urgent. The Royal Commission on London Bridges also recommended the construction of the tunnel. The position of the Government was that Waterloo Bridge, Victoria Dock Road, Charing Cross Bridge, and Ludgate Bridge were considered the most urgent matters, and that the other schemes recommended by the Royal Commission, including the lower Thames tunnel, would form the subject of negotiations with the local authorities.

Mr. Albery sought to ascertain whether a definite decision had been taken that the tunnel should be between Dartford and Purfleet, but the Prime Minister would only repeat that negotiations would proceed with the local authorities on the lines of the Lee Commission report. He imagined that no alteration in the recommendations would be made, supposing the financial adjustments could be made, without the consent of the local authorities.

In reply to Mr. Dennison, Mr. Chamberlain, the Minister of Health, gave the following figures showing loans sanctioned by the Ministry of Health under the Small Dwellings Acquisition Act and section 92 of the Housing Act, 1925:

Year	Amounts of loans sanctioned by the Ministry of Health under		Total
	Small Dwellings Acquisition Act.	Section 92 of the Housing Act, 1925. ¹	
	£	£	£
1919	5,533	—	5,533
1920	197,523	—	197,523
1921	90,741	—	90,741
1922	30,515	—	30,515
1923	569,062	866,761	1,435,823
1924	4,600,427	2,494,179	7,094,606
1925	6,809,770	4,116,442	10,926,212
1926	9,316,091	4,054,051	13,370,142
	21,619,662	11,531,433	33,151,095

¹ Formerly Section 5 of the Housing Act, 1923.

In addition, the London County Council, between January 1, 1923, and December 31, 1926, sanctioned or advanced over £2,800,000 under these Acts, and the Birmingham Corporation advanced during the same period under special powers over £1,760,000.

The total numbers of houses in respect of which advances had been made under the two Acts up to the end of 1926 were:

Under the Small Dwellings Acquisition Act	40,636
Under Sec. 92 of the Housing Act, 1925:—	
(a) Advances	24,577
(b) Guarantees to Building Societies	5,937
	71,150

In answer to Mr. Lumley, Sir Kingsley Wood said that the numbers of houses in respect of which local authorities had made advances under the Small Dwellings Acquisition Acts were 13,603 in 1925, and 18,238 in 1926. The numbers of houses in respect of which local authorities undertook to guarantee the repayment of advances by building, etc., societies under section 92 (1) (b) of the Housing Act, 1925, were 1,559 in 1925, and 3,476 in 1926. Local authorities also made advances under section 92 (1) (a) of the Act in respect of 9,563 houses in 1925, and 10,043 in 1926.

Sir Kingsley Wood informed Mr. Hurd that ninety-six rural district councils had so far made applications under section 3 of the Housing (Rural Workers) Act, 1926, to be declared local authorities for the purposes of the Act, and the Minister was in accordance with the terms of the section consulting the County Councils in regard to these applications. Each case would be carefully considered on its merits, and a decision would be arrived at as soon as practicable.

COMPETITION CALENDAR

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

April 12. New offices at Trowbridge for the Wiltshire Working Men's Conservative Benefit Society. Assessors, Messrs. Cyril A. Farey, A.R.I.B.A., and Robert Lowry, F.R.I.B.A. Premiums amounting to £250. Particulars from the Chief Secretary, Mr. Henry H. Dyer, Stallard Street, Trowbridge, Wilts. Deposit one guinea, which will be returned on receipt of a bona fide design or if the conditions are returned two weeks before the closing date of the competition.

April 30. Town Hall and Library, Leith. Assessor, Sir George Washington Browne, F.R.S.A. Four premiums are offered. Particulars and a plan of the site will be supplied to competitors on payment of a fee of two guineas, which will be returned on receipt of a design in accordance with the conditions. Should architects on receipt of the particulars not desire to compete, the deposit will be refunded provided the papers are returned within four weeks. Inquiries to be addressed to Mr. A. Grierson, Town Clerk, City Chambers, Edinburgh.

May 31. New school for 1,000 boys for the Governors of the Bradford Grammar School. Premiums, £300, £200, and £100. Assessor, Mr. Arnold Mitchell, F.R.I.B.A. Particulars and plan of site from Mr. W. Brear, Secretary, Grammar School, Bradford, Yorks. Deposit £1 1s.

June 15. Shakespeare National Memorial Theatre, Stratford-upon-Avon. The competition is open to architects of the British Isles and America. It will be in two sections—a preliminary competition for sketch design only, from which six designs will be selected by the assessors; each of the selected competitors will be paid £100 premium towards the cost of preparing a further more detailed design, which will form the second half of the competition. The selected architect will be paid in accordance with the Schedule of Charges sanctioned by the R.I.B.A. Assessors, Mr. E. Guy Dawber, F.R.I.B.A., and Mr. Cass Gilbert, who will both act in an honorary capacity, and Mr. Robert Atkinson, F.R.I.B.A. Particulars, with site plan, etc., from the Secretary, Shakespeare Memorial Theatre, Stratford-upon-Avon. Deposit £1 1s., which will be refunded should the conditions be returned within one month.

June 30. Designs for the planning of the Civic Centre, Birmingham. Assessor, Mr. H. V. Lanchester, F.R.I.B.A. Premium of £1,000 to the design placed first, and a further sum not exceeding £1,000 divided between the authors of other approved designs. Particulars from Mr. Herbert H. Humphries, M.INST.C.E., City Engineer and Surveyor. Deposit £1 1s., which will be returned after the receipt of a design or the return of the documents supplied.

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

April 30. Designs for a memorial to be erected in the public recreation ground at Merthyr Vale. Cost of the design, materials, and erection of the superstructure not to exceed the sum of £500. The foundation and laying-out of site will be undertaken by the Committee. Only the accepted design will be paid for, and the Committee does not bind itself to accept any design. Designs with plans and specifications to Mr. E. L. Jones, Hon. Sec., Aeronfa, Merthyr Vale, Merthyr Tydvil.

A CORRECTION

Messrs. E. Pollard & Co. request us to correct the statement, made in their advertisement in our issue of March 23, that the bronze metal grilles supplied to the Oxford Street branch of Barclays Bank, Ltd., were carried out by them. These grilles were actually made and supplied by Messrs. Galsworthy, Ltd., of 16 Newman Street, Oxford Street, W.1, under the direction of the architect, Mr. Lionel Barrett.

A MODEL DAIRY

[BY E. B. MUSMAN]

[This article is published at the request of many of our readers, who have written to express their appreciation of the "Design for a Model Dairy," by Victor L. Johnson, published in our last issue.]

To most of us a "Model Dairy" conjures up a vision of cows and milkmaids, quaint farm buildings, delicious butter, and fresh creamy milk; but Mr. Johnson shows us another kind of model dairy, one that hardly enters our field of vision at all, but one that is vitally important to the welfare of the people. This model dairy tells us what happens to our milk from the time it leaves the farm, how it is stored, bottled, and dispatched to every home, and gives us an insight into the elaborate precautions taken to ensure absolute cleanliness and freedom from harmful germs. The design has many interesting features, particularly so, as this type of plan is not very widely known. It is very refreshing to note that the scheme has been treated architecturally, with a due regard to axial planning and good massing. The elevations are simple and restrained, with a pleasing rhythm running through them. The plan is nicely balanced, and has been well considered from the point of view of ease of circulation and the proper provision of light and air, very important factors in the planning of a building of this nature.

The scheme also appears to be a comprehensive one, and provides not only for everything connected with the storage and dispatch of milk, but also suites of offices, recreation rooms, dining-rooms, etc., for the staff.

The milk is handled in the following manner. The milk churns, after being unloaded from the railway trucks, are conveyed to the milk-receiving room and tipped into the receiving tanks; the empty churns, thoroughly drained, are then taken to the churn washing department, and after having been washed and cleaned are stored ready for immediate dispatch and re-use. The milk in the meantime is pumped from the receiving tank into glass-lined storage tanks on the second floor, and from there gravitates through the various machines to further glass-lined storage tanks on the first floor, and is held there ready to flow to the bottle-filling machines on the ground floor, where the bottles are filled, capped, and conveyed to the cold storage rooms for dispatch.

The water and brine storage tanks are arranged on the third floor level. The boiler- and engine-room occupy the basement, together with stores, fuel bunkers, engineer's room, and brine coil enclosures. Power conveyors are provided from these stores to the platform. An ash hoist also runs up to platform level and discharges direct into the railway trucks. There is a large garage with a lift to a workshop over for repairing and overhauling the lorries, and a van-shed with stables above. On the first floor are offices, board, and committee rooms, while on the second floor are recreation rooms for the staff, messrooms, lecture rooms, lavatories, etc. It is very reassuring to learn that such efficient methods are employed to guarantee the purity of our milk supply, and one would like to inquire still further into this very interesting subject and explore the possibilities of some comprehensive plan on a large scale, including a "Model Dairy" such as this, as part of a vast dairy produce farm with all its many ramifications.

This design was approved at the Final R.I.B.A. examination held last June.

ADSHEAD AND RAMSEY'S RECENT WORK

The names of the contractors and some of the sub-contractors for the buildings illustrated on pages 445 to 452 are as follows:

The Hoxton Manor Boys' Club. General contractors, J. Parsons, London. Sub-contractors: Roberts, Adlard & Co., tiles; Henry Hope and Sons, Ltd., casements and casement fittings; Adamsez, Ltd., sanitary ware and fittings; F. Ebner, and Fenning & Co., flooring; Rudd and Tanner, Ltd., plaster work; J. R. Lauder, electric light fixtures; Yannedis & Co., door furniture;

Bostwick Gate Co., folding gates; Dilworth and Carr, Ltd., heating apparatus; the North British Rubber Co., Ltd., rubber flooring.

Askean War Memorial Pavilion. General contractors, Oldman and Sons. Sub-contractors: Permanite, Ltd., asphalt; Young and Son, bricks; Roberts, Adlard & Co., tiles; Tylors, Ltd., sanitary ware and fittings; Carron Co., railing.

House at Dorking. General contractor, M. H. A. Cummins; contract price, £2,250 13s. Sub-contractors: Roberts, Adlard & Co., tiles; Permanite, Ltd., roofing felt; Carron Co., stoves; Yannedis & Co., door furniture.

Cottage at Hackney Marsh, on the Hackney Wick Manor Club Athletic Ground. General contractor, H. Wilson; contract price, £697. Sub-contractor: J. R. Lauder, electric wiring.

TRADE NOTES

The National Radiator Company, Limited, have arranged with Mr. G. H. Burkhardt, the principal, for the exhibition of the film showing the manufacture of Ideal boilers and radiators, as well as lantern slides demonstrating their special features, to the students at the College, Victoria Road, Swindon, at 7.30 p.m. on Wednesday, April 6. Admission can be obtained on presentation of a visiting card.

B.R.C. electrically welded square mesh fabric, which is supplied in rolls, is being used in the foundation of the Borough High Street, also at the junction of Waterloo Road and Westminster Bridge Road. This work is being done under the direction of Mr. A. Harrison, the surveyor for the Southwark M.B. B.R.C. fabric is made by the British Reinforced Concrete Engineering Co., Ltd., at Stafford. The company have produced a cinematograph film depicting the laying of a reinforced tarmac road with B.R.C. fabric. The company are prepared to arrange for exhibitions of the film, and applications from surveyors and municipal bodies should be addressed to: The Roads Department, The British Reinforced Concrete Engineering Co., Ltd., King's Buildings, Smith Square, London, S.W.1.

Messrs. W. H. Gaze and Sons, Ltd., have secured the following contracts. 1: New wing and alterations at The Gables, Surbiton (now known as Hillcroft College, Surbiton), for the Residential College of Working Women. Mr. Douglas Wood, F.R.I.B.A., F.S.I., architect; 2: New Midland Bank, Harrow-on-the-Hill. Messrs. Elcock and Sutcliffe, architects; 3: Alterations and additions to Express Dairy Company's premises, Plantagenet Road, New Barnet. Mr. Frank J. Potter, F.R.I.B.A., architect.

At the Manchester Building Trades Exhibition the Celotex Company of Great Britain, Ltd., Australia House, London, and their wholesale distributors for England, Wales, and Ireland, The Merchant Trading Co., Ltd., 34 Bishopsgate, London, are exhibiting a pavilion which is designed to show the constructional value of Celotex insulating board for sound-deadening; as a damp-proof lining for interior walls and ceilings; for external walls as a base for roughcast; for roof insulation over rafters under tiles; and as a plaster base, etc. The exhibit also shows the many decorative effects that can be obtained on the textured surface of Celotex.

One of the chief features of the Plywood Development Association's exhibit at the Ideal Home Exhibition at Olympia was a room decorated entirely by the use of birch plywood. The walls were panelled with 3-ply $\frac{3}{16}$ in. thick, fixed to deal studding, and stained to a brownish-grey colour. The floor was of $\frac{3}{4}$ in. plywood, on a subfloor of deal, and the ceiling was panelled and coffered with $\frac{3}{16}$ in. of plywood. The general scheme of interior decoration was dignified and pleasing. The outer walls of the room showed large panels of different kinds of Gaboon mahogany, figured plain oaks and Oregon pine, stained to various shades. There were also laminboard doors, and a specimen of laminboard produced in very large sizes. The furniture was specially designed to show how suitable plywood is to the manufacture of modern pieces. The design of the entire exhibit was the work of Mr. J. Emberton.

THE WEEK'S BUILDING NEWS

The managers of the Church of England School, FOLESHILL, have prepared plans for modernizing the school buildings.

The managers of the Roman Catholic School, ATHERSTONE, have prepared plans for improving the school.

The Board of Education has approved the site proposed to be acquired by the Warwickshire Education Committee at KENILWORTH for the erection of a central school.

The WOLVEY Church School managers have prepared a scheme for the enlargement and improvement of the buildings.

The managers of the NAPTON, Warwickshire, Girls' School are considering whether they shall extend the school so as to accommodate boys and convert it into a mixed school.

The RYDE (I.W.) Corporation is erecting a new pavilion on the Eastern Esplanade.

The NEWCASTLE Corporation Housing Committee is considering the development of a shopping centre on the Walker estate.

The NEWPORT (I.W.) Corporation has appointed a subcommittee to ascertain what further land is available for housing schemes.

Plans passed by the BRENTFORD U.D.C.: Erection of "York" houses on the Gunnersbury Park estate, for Messrs. Douglas, Smith and Barley; factory, Great West Road, for Industrial Constructions, Ltd.; ten shops, Lionel Road, for Mr. E. Haydon; sixteen houses, Pope's Lane, for Mr. S. A. Kendall; sports pavilion, Metropolitan Railway Works, Acton Town, for Messrs. W. Downs, Ltd.

A suggestion is before the BARNSELY Corporation for the provision of Turkish baths. Information on the subject is to be obtained from towns that have such provision.

In connection with a proposal to erect municipal washhouses the BARNSELY Health Committee has decided to obtain information from those towns which have such establishments.

The BARNSELY Corporation is negotiating for further housing sites.

Messrs. Frank Myatt, Ltd., are to reconstruct the Mount Pleasant Tavern, High Street, SEDGLEY.

Plans passed by the BEDFORD Corporation: Re-arrangement of rooms at the "Railway Swan," St. John's Street, for Messrs. Higgins and Sons, Ltd.; new bedrooms, Quantock's Boarding-house, Linden Road, for Mr. G. P. Allen, architect; butcher's shop, Coventry Road, for Bedford Co-operative Society; four shops, Midland Road, for Messrs. H. Young and Son; extensions to showrooms, St. Loyes Street, for Mr. I. Daughtry.

The HAMPTON U.D.C. is considering the acquisition of land in Percy Road for a housing scheme.

Application is being made by the London Power Co., Ltd., to the Electricity Commissioners for consent to establish a new generating station at NINE ELMS (at the rear of the Great Western Railway Goods Depot, Battersea Park Road).

The HACKNEY B.C. has made provision in estimates for the extension of the filtration plant at the Central Public Baths.

The PAIGNTON U.D.C. has asked the surveyor to submit an estimate of the cost of proposed alterations to the Badminton Hall for offices for his department.

The PAIGNTON U.D.C. is to grant a further thirty-three housing subsidies.

Plans passed by the CROYDON Corporation: Warehouse, for Mr. C. H. Ridge, 252 London Road; alterations and additions, for Mr. H. Mackintosh, 12 High Street, Croydon; extension to shops, for Messrs. Bethall, Swannell and Durnford, London Road, Croydon; flats, for Messrs. W. H. Merret and Sons, Park Hill Road and Addiscombe Road; bakehouse, for Messrs. Randell, Slade & Co., Portland Road; bank, for Midland Bank, Ltd., Brighton Road; shops, for Mr. W. Sharp, Shirley Road; ten houses and garages, for Messrs. Thorman and White, Wharnecliffe Gardens; six shops and dwelling-houses, for Mr. L. W. Harris, Thornton Road; fourteen houses, for Mr. P. Richardson, Thornton Road (adjoining Broughton Road); shop extension, for Messrs. Fishers, Ltd., London Road; twenty-four shops with flats over, for Messrs. North, Robin and Wilsdon, Dovercourt Parade, London Road; additions, for Mr. W. H. McLaughlin, St. Mary's Church, Wellesley Road.

Mr. W. H. Aston, of Dixon Road, is to erect 179 houses and thirteen garages at Dixon, Nugent, Elm Park Roads, and Whitehorse Lane, THORNTON HEATH.

In connection with the purchase and removal of the WHITECHAPEL haymarket, the L.C.C. proposes to acquire the manorial market rights at a cost of £1,800, and on this basis the total cost of the improvement will be £79,500.

Amended plans were approved by the BRISTOL licensing justices for the proposed new cinema in Castle Street for the Provincial Cinematograph Theatres, Ltd., Regent Street, London. Accommodation will be provided for about 2,250 people.

The FROME Urban District Council has decided to build forty-eight houses on the Keyford site for lower paid workers.

Plans for a new stand for the BRENTFORD football ground have been passed by the District Council.

Sanction by the Ministry of Health has been granted to the borrowing by the MARGATE Corporation of £37,400 for the purchase of the Sands Station site.

The Ministry of Home Affairs has recommended the Land Purchase Commission to issue a loan of £30,000 to the BALLYMONEY Rural Council in connection with the Council's scheme for the building of eighty-six cottages.

A large departmental store is to be built on the site of St. John's Church, High Street, north EAST HAM.

A new elementary school is to be built in East Lane, WEMBLEY, at a cost of £17,000.

Plans passed by the SHIPLEY U.D.C.: Eight houses, Wharnecliffe Road, for Mr. James Cooper; additions, wool warehouse, Otley Road, for Messrs. Wicksteed and Andrea; alterations, shop, Commercial Street, for Messrs. H. Angel and Co., Ltd.

The LONDON C.C. reports the completion of the Piccadilly widening scheme, which has cost £377,000.

The SHIPLEY U.D.C. has obtained sanction to grant a further fifty housing subsidies.

The **STOKE-ON-TRENT** Corporation has asked the City surveyor to prepare sketch plans and estimates for the extension of office accommodation.

The Sutton trustees are to build the following houses on the Stoke Lodge site, **STOKE-ON-TRENT**: Thirty, parlour, three bedrooms; 110, non-parlour, three bedrooms; fifty-six, non-parlour, two bedrooms.

Plans passed by the **FARNHAM U.D.C.**: Bungalow, West End Grove, for Mr. E. W. Timbs; business premises, Firgrove Hill, for Mr. G. Sherrington; and mess room, etc., East Street, for Farnham Gas and Electricity Co.

The **GLASGOW** Corporation is obtaining a site in Kennedy Street for the erection of a Child Welfare Clinic.

The **KINGSTON** Council is to build fifty-eight more houses at a cost of £28,420, and spend £24,000 on road reconstruction.

A new library in the east end of **EAST-BOURNE** is to cost £10,000.

The **MANSFIELD** Corporation is asking the Ministry of Health to approve the granting of financial assistance for the building of a further 100 houses by private enterprise, making a total of 724.

A start will shortly be made in building a new church for the Holy Family mission, Small Heath, **BIRMINGHAM**. The cost of the new church will be several thousands of pounds. The Archdiocesan Building and Sites Committee has already passed the plans.

The estimated cost of **MANSFIELD's** new Town Hall and municipal offices, upon which the borough surveyor has made a report, is about £80,000. The scheme includes an adequate and modern range of offices for various Corporation departments.

Plans for houses and flats have been approved as follows by the **HENDON** Council: Six houses, Hurstwood Road, Golders Green; house at Millway, Mill Hill; house at Western Avenue, Golders Green; thirty-six houses, Delamere Gardens, Mill Hill; eighteen houses, Hillside Grove, Mill Hill; cottage, Eleanor Crescent, Mill Hill; three flats, Woodstock Avenue, Golders Green; six flats, Hoop Lane, Golders Green.

The **SHREWSBURY** Corporation has decided to grant a further fifty housing subsidies.

The **LONDON C.C.** are to build two new elementary schools in Mile End and Bow.

The Legislative Assembly at **DELHI** has voted a provision of £60,000 for the preliminary work to be undertaken in the ensuing financial year for the construction of an India House for London on a site adjoining Bush House in Aldwych. The total cost is estimated at about £300,000 initial, and £15,600 recurring. Provisional plans for the buildings have been prepared by Sir Herbert Baker. The building will comprise one sub-basement, a basement, ground floor, and six upper floors, including an attic floor above the cornice.

The Ministry of Health has given sanction to the **HENDON** District Council to raise a loan of £71,120 for 156 houses at Kingsbury Road, The Hyde.

The **CAMBORNE** Urban Council propose to erect fifty workmen's dwellings at a total cost of £25,000.

The **BRIDLINGTON** Corporation has decided upon large development schemes on the north and south sides of the town. Two and a-half acres on the south side and two and a-half acres of sea front land on the north side are to be transformed into gardens.

To meet the requirements of a large estate which is being rapidly developed at Townville, on the north-east side of the borough, the **PONTEFRAC** Town Council propose to lay down a separate sewerage system at a total cost of £11,500.

The chief business at the meeting of the **BOSTON** Rural District Council was the consideration of the new housing scheme. It is anticipated that the erection of forty-eight houses will necessitate a loan of £20,000.

At a meeting of the University Court of St. Andrews, Principal Sir James Irvine intimated that a benefactor had offered the sum of £100,000 in appreciation of the progress made in development of the **UNIVERSITY**. Towards the cost of the new residence hall for men students £29,000 has been allocated; the sum of £8,000 is to be devoted to the improvement of the University chapel, and the remainder of the gift, amounting to £23,000, is left at the disposal of the Court.

The **SALFORD** City Council has decided to close the old-established Cattle Market, and allow a London syndicate to lease the site of over 10 acres and erect a large exhibition hall, picture house, skating rink, and shops. The whole scheme will cost over a million pounds.

A general post office is to be built in London Road, **MITCHAM**.

Twenty houses are to be built on a **CROYDON** tram depot site.

The **DEVON** County Council has resolved to improve Kingsbridge-Salcombe main road.

Schemes involving an expenditure of over £406,000 are at present in progress or are shortly to be commenced by the **BOURNEMOUTH** Corporation. These include: Reconstruction of Boscombe pier head, £22,500; Boscombe Undercliff Promenade, £53,500; proposed Fisherman's Walk Promenade, £10,000; permanent bungalows, £2,650; Overstrand Restaurant, £9,622; roads, £89,711; housing, £50,142; sanitary, £133,108; cemeteries, £1,700; parks, £7,800; depots, £8,000; schools, £17,492.

On the recommendation of the Highways Committee, **SLOUGH** Urban District Council, plans were approved for roads, sewers, and 109 houses on the Wellesley estate, for Mr. Henry Heath.

The London General Omnibus Company has now agreed to contribute £2,000 towards the scheme of the **HORNSEY** Corporation for the reconstruction of Cranley Gardens Station bridge.

The **CAPE TOWN** Corporation has agreed to the reservation of a site in De Wall Drive for the erection of the Botha Memorial.

The **HORNSEY** Education Committee is now to invite tenders for the erection of an elementary school on the Coldfall site, the revised plans estimating a cost of £37,000.

The **BASINGSTOKE** Corporation Housing Committee is to erect 126 houses on the Hackwood Road estate, and tenders are now being invited.

Mr. G. H. Broad is to build twenty-four houses at Park Avenue, **HANLEY**.

The **STOKE-ON-TRENT** Corporation is seeking sanction to borrow £25,000 for further housing subsidies.

The **STOKE-ON-TRENT** Corporation Health Committee is to formulate a policy for the provision of a number of suitable slaughterhouses in the various districts, either by the Corporation or by private enterprise.

The **BALHAM** railway bridge is to be reconstructed and Balham High Road widened at a cost of £27,450.

Plans have been submitted for 400 houses at Churchfields, LOWER EDMONTON.

On the report by the Housing Subcommittee of the Heart of Midlothian Council it was unanimously resolved to proceed at once with the erection of fifty-two houses at GOREBRIDGE in blocks of four, thirty-two of the houses to be of three rooms and twenty of two rooms.

Plans passed by the TORQUAY Corporation: Twelve houses, Hilly estate, Borough Road, for Mr. W. Steer; alterations, Princess Hall, Princess Road, for Trustees.

The East and West Moseley U.D.C. has scheduled land opposite HAMPTON COURT Palace for an open space and to preserve the amenities of the riverside.

Plans passed by the SOUTH SHIELDS Corporation: Fifty-four houses, Mortimer Road, for Messrs. Holmes & Co.; workshop and office, Imeary Street, for Mr. Milton Swales; workmen's club and institute, Victoria Road, for Messrs. T. A. Page and Son; six houses, Harton Lane, for Messrs. J. T. Armstrong and Son.

Messrs. Worthington & Co. are to reconstruct the Crown Inn, HULL, in connection with the Holderness Road improvement scheme.

Plans passed by the SWANSEA Corporation: Six houses, Walters Street, for Messrs. Weaver Bros.; six houses, Heol-las, for Mr. Henry Jones; four houses, Parc-y-Duc, for Messrs. Walters and Johns; six houses and shops, Gower Road, for Mr. C. M. Gustavus; new road off Caswell Road, for Mr. A. L. Gregor; showrooms, three lock-up shops, and offices, Union Street and Orange Street, for Mr. W. G. Phillips Powell, of Cardiff.

The GLASGOW Corporation is to acquire land for a washhouse in the Overnewton district and to enlarge the slipper baths at Govanhill.

Messrs. Tatchell and Wilson have prepared plans for new masters' quarters for Eastbourne College in Old Wish Road, EASTBOURNE.

Mr. Sidney French, F.R.I.B.A., of Cambridge, has been appointed architect for the rebuilding of the CAMBRIDGE Conservative Club, which was lately destroyed by fire. The cost will be between £9,000 and £10,000.

The CROYDON Corporation has passed plans submitted by Mr. R. Cromie, of 73 Edgware Road, W.2, for the erection of a cinema on the site of 69-79 High Street, Croydon.

The Worcestershire C.C. has asked the county surveyor to prepare plans for the reconstruction of NEW MILL bridge.

Mr. S. G. Scales has prepared plans for the erection of fourteen houses at Seaside, EASTBOURNE.

The borough engineer of CROYDON is to prepare a scheme for the development of two acres adjoining the Woodside School, for housing purposes.

The BEDDINGTON and WALLINGTON U.D.C. has passed a lay-out plan for the development of an estate adjoining the borough boundary near Stafford Road.

Messrs. F. W. Vanstone and Sons have submitted plan of proposed route of the main sewer from the PAIGNTON Harbour to Brixham, showing the site of the proposed pumping station. The U.D.C. has approved the main sewerage scheme with an outfall in the Urban District of Brixham, as submitted by the engineers, who are to prepare detailed plans of the scheme and estimates of the cost for submission to the Ministry of Health.

The HERNE BAY U.D.C. surveyor has submitted plans showing suggested arterial roads affecting the district which it was proposed to include in the regional town planning scheme.

The PAIGNTON U.D.C. is being asked by the Ministry of Health to inquire as to the possibility of entering into suitable agreements with adjoining authorities for the establishment of a Joint Hospital Board, with a view to undertaking the extension of the Isolation Hospital for the treatment of patients from the area now being served by the present hospital.

Plans passed by the PAIGNTON U.D.C.: Lay-out of estate, Roundham Avenue, for Mr. F. Tully; two houses, Woodland Park, for Mr. J. S. German; alterations, Railway Hotel, Torquay Road, for Messrs. Starkey, Knight and Ford; lay-out of estate, Southfield Road, for Mr. J. Perks; two houses, Butland Avenue, for Mr. Land; additions, Adelphi Hotel, Sands Road, for Mr. W. Purkiss; five shops and flats, Victoria Square, for Mrs. Foale; additions, Paignton Hospital, for Committee.

The Girls' Public Day School Trust proposes to purchase the Homestead estate, CROYDON, for an extension scheme.

The L.C.C. is developing the Well Street site, HACKNEY, for rehousing purposes, and are in communication with the B.C. regarding the width of a proposed new road, which the B.C. urge should be 40 ft.

The Salvation Army has acquired a site in Becontree Avenue, BECONTREE, for the erection of a hall.

Plans passed by the HACKNEY B.C.: Building, Mare Street, Pemberton Place, and Weston Place, for Mr. H. W. Binns; extensions, Digby Works, High Street, Homerton, for Messrs. Ashby and Horner, Ltd.; alterations, "Marion Arms," Lansdowne Road, for Mr. W. G. Ingram; workshop extensions, 166-168 Stoke Newington High Street, for Messrs. Eley and Allen.

The STEPNEY B.C. is, by direct labour, to erect eighty-nine tenements and ten shops in Vallance Road, at a cost of £50,000.

The CAPE TOWN Corporation is in negotiation for the inclusion of Wynburg within the city boundaries, and in this connection have prepared the following programme of works which then will be necessary: Roads, £150,000; relief road, £70,000; widenings, £50,000; main drainage, £100,000; stormwater sewers, £50,000.

The MERTON and MORDEN U.D.C. is to erect another 100 houses.

The LLANTARNAM U.D.C. has prepared a scheme for the erection of 280 houses, of which forty are to be commenced at once.

The BEESTON U.D.C. has decided to erect forty-two houses.

The LYTHAM ST. ANNES Corporation is to erect eighty houses on three estates at a cost of about £40,000.

Mr. J. Rankine, the burgh surveyor of FORRES, has prepared plans for the erection of another thirty houses.

The Westmorland and Cumberland County Councils are discussing proposals regarding the reconstruction of EAMONT Bridge, which will cost about £30,000, or saving that ancient bridge and erecting a new one in the vicinity. The old bridge was built in 1425, and efforts are being made to secure its preservation as an ancient monument.

The WOOD GREEN Education Committee has acquired land in Albert Road for the erection of an elementary school.

A MIDDLESEX County Council report mentions that looming in the distance is the completion of the Chertsey Road scheme, which involves the building of three bridges over the River Thames. The important question of Richmond Bridge will also have to be considered. The cost of these schemes is estimated at not less than £2,000,000.

RATES OF WAGES

		I	II			I	II			I	II			
		s. d.	s. d.			s. d.	s. d.			s. d.	s. d.			
A	ABERDARE	S. Wales & M.	1 8	1 2	A	E. Glamor-	S. Wales & M.	1 8	1 3	A	NANTWICH	N.W. Counties	1 6	1 2
A	Abergavenny	S. Wales & M.	1 7	1 2	A	Glamorganshire & Monmouthshire	S. Wales & M.	1 8	1 3	A	Neath	S. Wales & M.	1 8	1 3
B	Abingdon	S. Counties	1 6	1 1	B	Exeter	S.W. Counties	1 7	1 2	A	Nelson	N.W. Counties	1 8	1 3
A	Accrington	N.W. Counties	1 8	1 3	B	Exmouth	S.W. Counties	1 5	1 1	A	Newcastle	N.E. Coast	1 8	1 3
A	Addlestone	S. Counties	1 6	1 2	B	FELIXSTOWE	E. Counties	1 6	1 1	A	Newport	S. Wales & M.	1 8	1 3
A	Adlington	N.W. Counties	1 8	1 3	A	Filey	Yorks	1 6	1 2	A	Normanton	Yorkshire	1 8	1 3
A	Aldrie	Scotland	1 8	1 3	A	Fleetwood	N.W. Counties	1 8	1 3	A	Northampton	Mid. Counties	1 7	1 2
C	Aldeburgh	E. Counties	1 4	1 0	B	Folkestone	S. Counties	1 5	1 1	A	North Shields	N.E. Coast	1 8	1 3
A	Altrincham	N.W. Counties	1 4	1 0	A	Frome	N.W. Counties	1 4	1 0	A	Norwich	E. Counties	1 6	1 2
B	Appley	N.W. Counties	1 8	1 3	A	GATEHEAD	N.E. Coast	1 8	1 3	A	Nottingham	Mid. Counties	1 8	1 3
A	Ashton-under-Lyne	N.W. Counties	1 8	1 3	A	Gillingham	S. Counties	1 5	1 1	A	Nuneaton	Mid. Counties	1 8	1 3
A	Atherstone	Mid. Counties	1 6	1 2	A	Gloucester	S.W. Counties	1 6	1 2	B	OAKHAM	Mid. Counties	1 5	1 1
B	Aylesbury	S. Counties	1 4	1 0	A	Goole	Yorkshire	1 7	1 2	A	Oldham	N.W. Counties	1 8	1 3
B	BANBURY	S. Counties	1 4	1 0	A	Gosport	S. Counties	1 6	1 1	A	Oswestry	Mid. Counties	1 6	1 2
B	Bangor	N.W. Counties	1 5	1 1	A	Grantham	Mid. Counties	1 6	1 2	A	Oxford	S. Counties	1 6	1 1
A	Barnard Castle	N.W. Counties	1 5	1 1	A	Gravesend	S. Counties	1 7	1 2	A	PAISLEY	Scotland	1 8	1 3
A	Barnsley	Yorkshire	1 8	1 3	A	Greenock	Scotland	1 8	1 3	C	Pembroke	S. Wales & M.	1 4	1 0
B	Barnstaple	S.W. Counties	1 5	1 1	A	Grimsby	Yorkshire	1 8	1 3	A	Perth	Scotland	1 8	1 3
A	Barrow	N.W. Counties	1 8	1 3	B	Guildford	S. Counties	1 5	1 1	A	Peterborough	Mid. Counties	1 6	1 2
A	Barry	S. Wales & M.	1 8	1 3	A	HULL	Yorkshire	1 8	1 3	A	Plymouth	S.W. Counties	1 8	1 3
B	Basingstoke	S.W. Counties	1 4	1 0	A	Hanley	Mid. Counties	1 8	1 3	A	Pontefract	Yorkshire	1 8	1 3
B	Bath	S.W. Counties	1 6	1 1	A	Harrogate	Yorkshire	1 8	1 3	A	Pontypridd	S. Wales & M.	1 8	1 3
A	Batley	Yorkshire	1 8	1 3	A	Harwich	N.E. Coast	1 8	1 3	B	Portsmouth	S. Counties	1 6	1 1
B	Bedford	E. Counties	1 6	1 2	A	Hartlepool	Yorkshire	1 8	1 3	A	Preston	N.W. Counties	1 8	1 3
A	Berwick-on-Tweed	N.E. Coast	1 7	1 2	A	Hastings	S. Counties	1 4	1 0	A	QUEENS-FERRY	N.W. Counties	1 8	1 3
A	Bewdley	Mid. Counties	1 7	1 2	B	Hatfield	S. Counties	1 5	1 1	B	READING	S. Counties	1 6	1 1
B	Bicester	Mid. Counties	1 4	1 0	B	Hereford	S. W. Counties	1 6	1 2	B	Reigate	S. Counties	1 5	1 1
A	Birkenhead	N.W. Counties	1 10	1 4	B	Hertford	E. Counties	1 7	1 2	A	Retford	Mid. Counties	1 6	1 2
A	Birmingham	Mid. Counties	1 8	1 3	A	Heysham	N.W. Counties	1 7	1 2	A	Rhondda	S. Wales & M.	1 8	1 3
A	Bishop Auckland	N.E. Coast	1 8	1 3	A	Huddersfield	Yorkshire	1 8	1 3	A	Valley	S. Wales & M.	1 8	1 3
A	Blackburn	N.W. Counties	1 8	1 3	A	Hull	Yorkshire	1 8	1 3	A	Ripon	Yorkshire	1 6	1 2
A	Blackpool	N.W. Counties	1 8	1 3						A	Rochdale	N.W. Counties	1 8	1 3
A	Blyth	N.E. Coast	1 8	1 3						B	Rochester	S. Counties	1 5	1 1
B	Bognor	S. Counties	1 4	1 0						A	Rugby	N.W. Counties	1 7	1 2
A	Bolton	N.W. Counties	1 8	1 3						A	Rugby	Mid. Counties	1 8	1 3
A	Boston	Mid. Counties	1 6	1 2						A	Rugley	Mid. Counties	1 6	1 2
B	Bournemouth	S. Counties	1 6	1 2						A	Runcorn	N.W. Counties	1 8	1 3
B	Bovey Tracey	S.W. Counties	1 5	1 1						A	ST. ALBANS	E. Counties	1 6	1 2
A	Bradford	Yorkshire	1 8	1 3						B	St. Helens	N.W. Counties	1 8	1 3
A	Brentwood	E. Counties	1 7	1 2						B	Salisbury	S.W. Counties	1 4	1 0
A	Bridgend	S. Wales & M.	1 8	1 3						A	Scarborough	Yorkshire	1 7	1 2
B	Bridgewater	S.W. Counties	1 5	1 1						A	Scarthorpe	Mid. Counties	1 8	1 3
A	Bridlington	Yorkshire	1 7	1 2						A	Sheffield	Yorkshire	1 8	1 3
A	Brighouse	Yorkshire	1 8	1 3						A	Shipley	Yorkshire	1 8	1 3
B	Brighton	S. Counties	1 6	1 2						A	Shrewsbury	Mid. Counties	1 6	1 2
A	Bristol	S.W. Counties	1 8	1 3						A	Skipton	Yorkshire	1 7	1 2
A	Brixham	S.W. Counties	1 4	1 0						B	Slough	S. Counties	1 5	1 1
A	Bromsgrove	Mid. Counties	1 7	1 2						A	Solihull	Mid. Counties	1 7	1 2
C	Bromyard	Mid. Counties	1 4	1 0						A	South'pton	S. Counties	1 6	1 2
A	Burnley	N.W. Counties	1 8	1 3						B	Southend-on-Sea	E. Counties	1 5	1 1
A	Burslem	Mid. Counties	1 7	1 2						A	Southport	N.W. Counties	1 8	1 3
A	Burton-on-Trent	Mid. Counties	1 7	1 2						A	S. Shields	N.E. Coast	1 8	1 3
A	Bury	N.W. Counties	1 8	1 3						A	Stafford	Mid. Counties	1 7	1 2
A	Buxton	N.W. Counties	1 7	1 2						A	Stockport	N.W. Counties	1 8	1 3
B	CAMBRIDGE	E. Counties	1 6	1 1						A	Stockton-on-Tees	N.E. Coast	1 8	1 3
B	Canterbury	S. Counties	1 4	1 0						A	Stoke-on-Trent	Mid. Counties	1 8	1 3
A	Cardiff	S. Wales & M.	1 8	1 3						B	Stroud	S.W. Counties	1 5	1 1
A	Carlisle	N.W. Counties	1 8	1 3						A	Sunderland	N.E. Coast	1 8	1 3
B	Carmarthen	S. Wales & M.	1 8	1 3						A	Swadlincote	Mid. Counties	1 8	1 3
B	Carnarvon	N.W. Counties	1 6	1 1						A	Swansea	S. Wales & M.	1 8	1 3
A	Carnforth	N.W. Counties	1 7	1 2						B	Swindon	S.W. Counties	1 6	1 1
A	Castleford	Yorkshire	1 8	1 3						A	TAMWORTH	N.W. Counties	1 7	1 2
B	Chatham	S. Counties	1 5	1 1						B	Taunton	S.W. Counties	1 5	1 1
B	Chelmsford	E. Counties	1 5	1 1						A	Teesside Dist.	N.F. Counties	1 5	1 1
A	Cheltenham	S.W. Counties	1 6	1 2						B	Teignmouth	S.W. Coast	1 6	1 1
A	Chester	N.W. Counties	1 8	1 3						A	Todmorden	Yorkshire	1 8	1 3
A	Chesterfield	Mid. Counties	1 8	1 3						A	Torquay	S.W. Counties	1 7	1 2
B	Chichester	S. Counties	1 4	1 0						C	Truro	S.W. Counties	1 4	1 0
A	Chorley	N.W. Counties	1 8	1 3						B	Tunbridge Wells	S. Counties	1 5	1 1
B	Cirencester	S. Counties	1 5	1 1						A	Tunstall	Mid. Counties	1 8	1 3
A	Clitheroe	N.W. Counties	1 8	1 3						A	Tyne District	N.E. Coast	1 8	1 3
A	Clydebank	Scotland	1 8	1 3						A	WAKEFIELD	Yorkshire	1 8	1 3
A	Coalville	Mid. Counties	1 8	1 3						A	Walsall	Mid. Counties	1 7	1 2
B	Colchester	E. Counties	1 5	1 1						A	Warrington	N.W. Counties	1 8	1 3
A	Colne	N.W. Counties	1 8	1 3						A	Warwick	Mid. Counties	1 7	1 2
B	Colwyn Bay	N.W. Counties	1 5	1 1						B	Wellingborough	Mid. Counties	1 6	1 1
A	Consett	N.E. Coast	1 8	1 3						A	West Bromwich	Mid. Counties	1 8	1 3
B	Conway	N.W. Counties	1 5	1 1						B	Weston-s-Mare	S.W. Counties	1 6	1 1
A	Coventry	Mid. Counties	1 8	1 3						A	Whitby	Yorkshire	1 7	1 2
A	Crewe	N.W. Counties	1 6	1 2						A	Widnes	N.W. Counties	1 8	1 3
A	Cumberland	1 6	1 2						A	Wigan	N.W. Counties	1 8	1 3
A	DARLINGTON	N.E. Coast	1 8	1 3						B	Winchester	S. Counties	1 5	1 1
A	Darwen	N.W. Counties	1 8	1 3						B	Windsor	S. Counties	1 6	1 1
B	Deal	S. Counties	1 4	1 0						A	Wolverhampton	Mid. Counties	1 8	1 3
B	Denbigh	N.W. Counties	1 5	1 1						A	Worcester	Mid. Counties	1 6	1 2
A	Derby	Mid. Counties	1 8	1 3						A	Worsnop	Yorkshire	1 6	1 2
A	Dewsbury	Yorkshire	1 8	1 3						B	Wrexham	N.W. Counties	1 7	1 2
B	Didcot	S. Counties	1 6	1 1						B	Wycombe	S. Counties	1 6	1 1
A	Doncaster	Yorkshire	1 8	1 3						B	YARMOUTH	E. Counties	1 5	1 1
C	Dorchester	S.W. Counties	1 4	1 0						B	Yeovil	S.W. Counties	1 5	1 1
A	Driffield	Yorks	1 6	1 2						A	York	Yorkshire	1 8	1 3
A	Droitwich	Mid. Counties	1 6	1 2										
A	Dudley	Mid. Counties	1 7	1 2										
A	Dundee	Scotland	1 8	1 3										
A	Durham	N.E. Coast	1 8	1 3										
B	EAST-BOROUGH	S. Counties	1 6	1 1										
A	Ebbw Vale	S. Wales & M.	1 8	1 3										
A	Edinburgh	Scotland	1 8	1 3										

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

PRICES CURRENT

EXCAVATOR AND CONCRETOR

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

Broken brick or stone, 2 in., per yd.	£0 11 6
Thames ballast, per yd.	0 13 0
Pit gravel, per yd.	0 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 1 6

SPREAD and level, including wheeling, per yd., 0 1 6

FILLING into carts and carting away to a shoot or deposit, per yd. cube, 0 10 6

TRIMMING earth to slopes, per yd. cube, 0 0 6

HACKING up old grano. or similar paving, per yd. sup., 0 1 3

PLANKING to excavations, per ft. sup., 0 0 5

DO. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.

IF left in, add to above prices, per ft. cube, 0 2 0

HARDWARE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup., 0 2 1

DO. 6 in. thick, per yd. sup., 0 2 10

PUDDLING, per yd. cube, 1 10 0

CEMENT CONCRETE, 4-2-1, per yd. cube, 2 3 0

DO. 6-2-1, per yd. cube, 1 18 0

DO. in upper floors, add 15 per cent.

DO. in reinforced-concrete work, add 20 per cent.

DO. in underpinning, add 60 per cent.

LIAS-LIME CONCRETE, per yd. cube, £1 16 0

BREEZE CONCRETE, per yd. cube, 1 7 0

DO. in lintels, etc., per ft. cube, 0 1 6

CEMENT concrete 4-2-1 in lintels packed around reinforcement, per ft. cube, 0 3 9

FINE concrete benching to bottom of manholes, per ft. cube, 0 2 6

FINISHING surface of concrete spade face, per yd. sup., 0 0 9

DRAINER

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

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 8 0
DO. 6 in., per ft.	0 10 0

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

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

BRICKLAYER

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

London stocks, per M.	£4 15 0
Flettons, per M.	2 18 0
Staffordshire blue, per M.	9 10 0
Firebricks, 2½ in. per M.	11 3 0
Glazed salt, white, and ivory stretchers, per M.	24 10 0
DO. headers, per M.	24 0 0
Colours, extra, per M.	5 10 0
Seconds, less, per M.	1 0 0
Cement and sand, see "Excavator" above.	
Lime, grey stone, per ton	2 17 0
Mixed lime mortar, per yd.	1 6 0
Damp course, in rolls of 4½ in., per roll	0 2 6
DO. 9 in. per roll	0 4 9
DO. 14 in. per roll	0 7 6
DO. 18 in. per roll	0 9 6

BRICKWORK in stone lime mortar, Flettons or equal, per rod, £23 0 0

DO. in cement do., per rod, 36 0 0

DO. in stocks, add 25 per cent. per rod.

DO. in blues, add 100 per cent. per rod.

DO. circular on plan, add 12½ per cent. per rod.

DO. in backing to masonry, add 12½ per cent. per rod.

DO. in raising on old walls, etc., add 12½ per cent. per rod.

DO. in underpinning, add 20 per cent. per rod.

HALF-BRICK walls in stocks in cement mortar (1-3), per ft. sup., £0 1 0

BEDDING plates in cement mortar, per ft. run, 0 0 3

BEDDING window or door frames, per ft. run, 0 0 3

LEAVING chases 24 in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run, 0 0 2

CUTTING do. in old walls in cement, per ft. run, 0 0 4

CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup., 0 0 7

TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run, 0 3 6

DO. 14 ft. by 9 in. do., per ft. run, 0 6 0

FLAUNCHING chimney pots, each, 0 2 0

CUTTING and pinning ends of timbers, etc., in cement, 0 1 0

FACINGS fair, per ft. sup. extra, 0 0 3

DO. picked stocks, per ft. sup. extra, 0 0 7

DO. red rubbers caulked and set in putty, per ft. sup. extra, 0 4 9

DO. in salt white or ivory glazed, per ft. sup. extra, 0 5 6

TUCK pointing, per ft. sup. extra, 0 0 10

WEATHER pointing, do. do., 0 0 3

TILE creasing with cement fillet each side per ft. run, 0 0 6

GRANOLITHIC PAVING, 1 in., per yd. sup., 0 5 0

DO. 1½ in., per yd. sup., 0 6 0

DO. 2 in., per yd. sup., 0 7 0

If coloured with red oxide, per yd. sup., 0 1 0

If finished with carborundum, per yd. sup., 0 0 6

If in small quantities in finishing to steps, etc., per ft. sup., 0 1 4

Jointing new grano. paving to old, per ft. run, 0 0 4

Extra for dishing grano. or cement paving around gullies, each, 0 1 6

BITUMINOUS DAMP COURSE, ex rolls, per ft. sup., 0 0 7

ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup., 0 8 0

DO. vertical, per yd. sup., 0 11 0

SLATE DAMP COURSE, per ft. sup., 0 0 10

ASPHALT ROOFING (MASTIC) in two thicknesses, ½ in., per yd., 0 8 6

DO. SKIRTING, 6 in., 0 0 11

BREEZE PARTITION Blocks, set in Cement, 1½ in. per yd. sup., 0 5 3

DO. DO. 3 in., 0 6 6

BREEZE fixing bricks, extra for each, 0 0 3

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

MASON

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

Portland Stone:	
Basebed, per ft. cube	£0 4 6
Bashed, per ft. cube	0 4 7
Bath stone, per ft. cube	0 3 0
Usual trade extras for large blocks.	
York paving, av. 2½ in., per yd. super	0 6 6
York templates sawn, per ft. cube	0 6 9
Slate shingles, 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
SUNK FACE, per ft. sup.	0 4 0
DO. circular, per ft. sup.	0 3 9
JOINTS, arch, per ft. sup.	0 4 10
DO. sunk, per ft. sup.	0 2 7
DO. DO. circular, per ft. sup.	0 4 6
CIRCULAR-CIRCULAR work, per ft. sup.	1 2 0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0 1 1
DO. circular, do., per ft. run	0 1 4

HALF SAWING, per ft. sup., £0 1 0

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

DO. Mansfield, 12½ per cent.

Deduct for Bath, 33½ per cent.

DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup., £0 0 6

RUBBED round nosing to do., per ft. lin., 0 0 6

YORK STEPS, rubbed T. & R., ft. cub. fixed, 1 9 0

YORK SILLS, W. & T., ft. cub. fixed, 1 13 0

ARTIFICIAL stone paving, 2 in. thick, per ft. sup., 0 1 6

DO. 2½ in. thick, per ft. sup., 0 1 9

SLATER AND TILER

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

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

Slates, 1st quality, per 1,200:

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

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

Ladies, per square	£4 0 0
Countess, per square	4 5 0
Duchess, per square	4 10 0

WESTMORLAND, in diminishing courses, per square, 6 5 0

CORNISH DO., per square, 6 3 0

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

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

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

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

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

SLATING, 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., framed in floors, roofs, etc., per ft. cube, 0 6 6

DO., framed in trusses, etc., including ironwork, per ft. cube, 0 7 6

PITCH PINE, add 33½ per cent.

FIXING only boarding in floors, roofs, etc., per sq., 0 13 6

SARKING FELT laid, 1-ply, per yd., 0 1 6

DO., 3-ply, per yd., 0 1 9

CENTERING for concrete, etc., including horsing and striking, per sq., 2 10 0

TURNING pieces to flat or segmenta soffits, 4½ in. wide, per ft. run, 0 0 4½

DO. 9 in. wide and over, per ft. sup., 0 1 2

(continued overleaf)

PLUMBER

PLUMBER, 1s. 9½d. per hour; MATE OR LABOURER, 1s. 4½d. 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 0
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
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
WIRED soldered joint, ½ in., each	0 2 6
DO. ¾ in., each	0 3 2
DO. 1 in., each	0 3 8
BRASS screw-down stop cock and two soldered joints, ½ in., each	0 11 0
DO. ¾ in., each	0 13 6
CAST-IRON rainwater pipe, jointed in red lead, 2½ in., per ft. run.	0 1 6
DO. 3 in., per ft. run	0 1 11
DO. 4 in., per ft. run	0 2 9
CAST-IRON H.R. GUTTER, fixed, with all clips, etc. 4 in., per ft.	0 2 0
DO. O.G., 4 in., per ft.	0 2 3
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0 4 6
DO. 3 in., per ft.	0 3 6
Fixing only:	
W.C. pans and all joints, p. or s., and including joints to water waste preventers, each	2 5 0
BATHS, with all joints	1 3 6
LAVATORY BASINS only, with all joints, on brackets, each	1 10 0
PLASTERER	
PLASTERER, 1s. 9½d. per hour (plus allowances in London only); LABOURER, 1s. 4½d. per hour.	
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
Staten laths, per bd.	0 2 9
Keene's cement, per ton	5 15 0
Sirapite, per ton	3 10 0
DO. fine, per ton	3 18 0
Plaster, per ton	3 0 0
DO. per ton	3 12 6
DO. fine, per ton	5 12 0
Thistle plaster, per ton	3 9 0
Lath nails per lb.	0 0 4
LATHING with sawn laths, per yd.	0 1 7
METAL LATHING, per yd.	0 2 3
FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock, ½ in., per yd.	0 2 4
DO. vertical, per yd.	0 2 7
RENDER, on brickwork, 1 to 3, per yd.	0 2 7
RENDER in Portland and set in fine stuff, per yd.	0 3 3
RENDER float, and set, trowelled, per yd.	0 2 9
RENDER and set in Sirapite, per yd.	0 2 5
DO. in Thistle plaster, per yd.	0 2 5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0 0 5
EXTRA, if on ceilings, per yd.	0 0 5
ANGLES, rounded Keene's on Portland, per ft. lin.	0 0 6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0 0 3
WHITE glazed tiling set in Portland and jointed in Parisian, per yd., from	1 11 6
FIBROUS PLASTER LABAN, per yd.	0 1 10
GLAZIER	
GLAZIER, 1s. 8½d. per hour.	
Glass: 4ths in crates:	
Clear, 21 oz.	£0 0 5
DO. 26 oz.	0 0 5 ½
Cathedral white, per ft.	0 0 7 ½
Polished plate, British ¼ in., up to 2 ft. sup., per ft.	0 1 8
DO. 4 ft. sup.	0 3 2
DO. 6 ft. sup.	0 3 4
DO. 20 ft. sup.	0 3 11
DO. 45 ft. sup.	0 4 1
DO. 65 ft. sup.	0 4 3
DO. 100 ft. sup.	0 4 6
Rough plate, ¼ in., per ft.	0 0 6 ½
DO. ½ in., per ft.	0 0 7
Linsseed oil putty, per cwt.	0 17 6
GLAZING in putty, clear sheet, 21 oz.	0 0 11
DO. 26 oz.	0 1 1

GLAZING in beads, 21 oz., per ft.	£0	1	4
do., 26 oz., per ft.	0	1	4
Small sizes slightly less (under 3 ft. sup.).			
Patent glazing in rough plate, normal span			
1s. 6d. to 2s. per ft.			
LEAD LIGHTS, plain, med. sqs. 21 oz.,			
usual domestic sizes, fixed, per ft.			
sup. and up	£0	3	0
Glazing only, polished plate, 6jd. to 8d. per ft.			
according to size.			
PAINTER AND PAPERHANGER			
PAINTER, 1s. 8jd. per hour; LABOURER, 1s. 4jd.			
per hour; FRENCH POLISHER, 1s. 9d. per hour;			
PAPERHANGER, 1s. 8jd. 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
Knottling, per gall.	1	4	0
Distemper, washable, in ordinary col-			
ours, per cwt., and up	2	0	0
Double size, per firkin	0	3	6
Single stone, per lb.	0	0	4
Fragile cold 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 pro-			
prietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings,			
and on plaster or joinery, 1st coat,			
per yd. sup.	0	0	10
do., subsequent coats, per yd. sup.	0	0	9
do., enamel coat, per yd. sup.	0	1	2
BRUSH-GRAIN, and 2 coats varnish,			
per yd. sup.	0	3	8
FIGURED DO., do., per yd. sup.	0	5	6
FRENCH POLISHING, per ft. sup.	0	1	2
WAX POLISHING, per ft. sup.	0	0	6
STRIPPING old paper and preparing,			
per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	2
do., fine, per piece, and upwards	0	2	4
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd.			
sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd.			
sup.	0	1	2
do., each subsequent coat, per yd.			
sup.	0	0	11
SUNDRIES			
Fibre or wood pulp boardings, accord-			
ing to quality and quantity.			
The measured work price is on the			
same basis	£0	0	2½
per ft. sup.			
FIBRE BOARDINGS, including cutting			
and waste, fixed on, but not in-			
cluding studs or grounds, per ft.			
sup.	0	0	6
do., from 3d. to			
Plaster board, per yd. sup.	0	1	7
PLASTER BOARD, fixed as last, per yd.			
sup.	0	2	8
Asbestos sheeting, ½ 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, ½ in.			
punched per M. grey	16	0	0
do., red	18	0	0
ASBESTOS COMPOSITION FLOORING:			
Laid in two coats, average ½ in.			
thick, in plain colour, per yd. sup.	0	7	0
do., ½ in. thick, suitable for domestic			
work, unpainted, per yd.	0	6	6
Metal casements for wood frames,			
domestic sizes, per ft. sup.	0	1	6
do., in metal frames, per ft. sup.	0	1	9
HANGING only metal casement in, but			
not including wood frames, each	0	2	10
BUILDING in metal casement frames,			
per ft. sup.	0	0	7
Waterproofing compounds for cement.			
Add about 75 per cent. to 100 per			
cent. to the cost of cement used.			
PLYWOOD, per ft. sup.:			
Thickness	¾ in.	1 in.	1½ in.
Qualities	A. A. A. B.	A. A. A. B.	A. A. A. B.
Gibber ..	4 3 3 5	4 3 3 5	4 3 3 5
Birch ..	4 3 3 5	4 3 3 5	4 3 3 5
Alder ..	4 3 3 5	4 3 3 5	4 3 3 5
Mahogany	4 3 3 5	4 3 3 5	4 3 3 5
Figured Oak	8 7 7 10	8 7 7 10	8 7 7 10
Plain Oak	8 7 7 10	8 7 7 10	8 7 7 10

1
4
pan

0
r ft.

ER
41d.
ur:

0
7
10
2
6
0

0
6
4

11
0
0
0
0
6

3
6

9
7

10
9
21

8
6
2
6

7
10
4
0

0

2

11

21

6

7

8

3
3

0
0

0
0

0
0

0

6

6
9

10

7

1.
B.
1.
7
6

0 -

- -

- -

- -