# THE

# ARCHITECTS'



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#### CHRISTIAN BARMAN, Editor

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

WEDNESDAY, December 7, 1927. NUMBER 1716: VOLUME 66

### PRINCIPAL CONTENTS

|  |          |             |       |         |      |       | PAGE |
|--|----------|-------------|-------|---------|------|-------|------|
| Detail of the Staircase at                     | Me       | essrs. Cash | 's Pr | emises. | By H | lenry |      |
| H. Hill  |          |             |       |         |      |       | 731  |
| Builders as Clients?  This week's leading ar   |          |             |       |         |      |       | 733  |
| News and Topics Astragal's notes on cur        |          |             |       | • •     |      |       | 734  |
| A Sordid Story [By Nathaniel Lloyd]            |          |             |       |         |      |       | 737  |
| Some Copenhagen Hous [By L. Marnus]            | sing     | Schemes     | ••    | • •     |      |       | 739  |
| The Enterprising Mr. Sa                        | mar      | terly       |       |         |      |       | 749  |
| Karsher  | u        |             |       |         |      |       | 751  |
| Literature                                     |          |             |       |         |      |       | 752  |
| Gymnasia [By Edward R. Bill]                   |          |             |       |         |      | * *   | 755  |
| Law Reports                                    |          |             |       |         |      |       | 758  |
| Competition Calendar                           |          |             |       |         |      |       | 760  |
| London Squares  The Importance of Pr           |          |             |       | * *     |      |       | 760  |
| Architects' Certificates [By a Legal Correspon | <br>nden |             |       |         |      |       | 761  |
| The Week's Building Ne                         | ws       |             |       |         |      |       | 762  |
| Rates of Wages                                 |          |             |       |         |      |       | 764  |
| Prices Current                                 |          |             |       |         |      |       | 766  |

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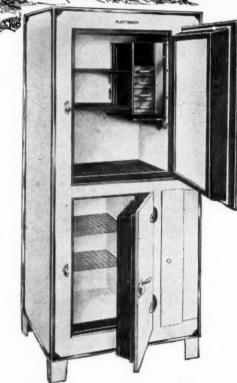
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[A working detail of this staircase appears on the following page]

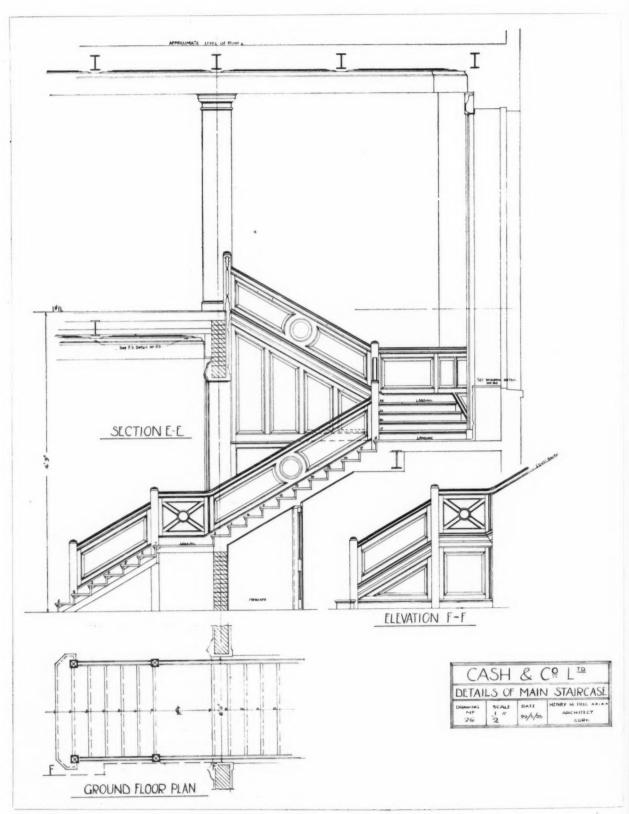
THE STAIRCASE AT MESSRS. CASH'S PREMISES, CORK.

[ BY HENRY H. HILL ]

# THE WEEK'S DETAIL

BY HENRY H. HILL ]

The chief problem governing the design of this staircase lay in having to make use of the space underneath it to provide a cloakroom for the use of the male staff; a fireproof ceiling had therefore to be provided to separate the cloakroom from the work above. This ceiling forms the half-landing and passes along, also, to form the bottoms of the stair wells, and through to the main walls under the upper flights. The wood panelling is painted green, and the panel mould (a simple ovolo) is gilded. The treads, risers, newel posts, outer strings, and handrails are finished in teak, and the window architrave, as well as that to the opening from the shop, is of the same material.



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



Wednesday, December 7, 1927

# BUILDERS AS CLIENTS

In June 1923 the R.I.B.A., after consultation with the National Federation of House Builders, the London House Builders' Association, and the National Federation of Building Trades Employers of Great Britain and Ireland, issued a scale of fees for architects for private enterprise housing work. The scale only applies where the services of the architect are limited to the preparation of drawings. The scale is 4 per cent. for the first unit, 2 per cent. for the second unit, £3 3s. each for the next twenty-five, and £,2 2s. for all others. Above two units the fees include for a lay-out plan, and two types for the first twenty houses, and one extra type for every additional twenty houses. The results of the scale have been negligible, certainly in the north-west of England, and, as far as we can ascertain, in the rest of the country. Its failure can be ascribed to various reasons. It may be unknown to builders, to those who finance builders, and to architects. It is unremunerative to architects, and it may be too high for builders.

Private enterprise in the north-west of England is at its best in regard to planning, materials and workmanship. It is at its worst in external composition and in the selection of appropriate materials. The standard of layout, on the other hand, is sometimes good and sometimes very bad. Before the war, the public who took an interest in design was limited to those who directly employed architects. But today nearly all who have any claim to culture are intensely interested. Unfortunately, the people who buy houses with assistance from building societies have never had a chance of getting even remotely in touch with architecture. They never see the very helpful propaganda in the great daily newspapers and weekly journals. They have increased to a miraculous extent since the war, and it is those we want to serve. The extraordinary difference between a subsidy housing scheme designed by an architect and a building estate developed by private enterprise jumps to the eye in suburb, village, and open country. As the builder will not go to the architect, the architect must go to the builder and to the building societies and their customers as well. The British public is sitting up and beginning to take notice. It is for architects to make the first move. In our opinion the R.I.B.A. scale tried to deal with a complicated subject in a simple way. It presumed that the scale would be remunerative and units numbered by the score. The

typical example given is for a job with sixty-five units. The average private enterpriser on the contrary works on a few houses at a time. He cannot outstrip his credit, and that has very definite limits. Until house buyers have been educated into appreciating the services of architects, we suggest that architects should work at cost price. Cooperation, which in the phraseology of the day means panels, appears the proper solution. The panels which tried to work the Addison Act were unhappy. They worked on the presumption that the Act was well thought out, financially sound, and would have a long run. All the presumptions proved to be mistaken. Our idea of a panel is a group of architects who are prepared to work in a certain definite area and nowhere else. All jobs should be in rotation; every architect should have access to all plans (layouts, eighth scales, and details) made by other members, and every member should be prepared to loan, wherever possible, one of his staff. It is only by complete co-operation and ungrudging mutual assistance that a very low scale of fees can be converted from a loss to a slender profit. Further, nothing today can succeed without propaganda: therefore it is imperative that panels should be allowed to advertise. The R.I.B.A. embargo on individual advertising probably does not, and should not, apply to panel advertising; but this point can easily be settled. There should be no question of copyright between members of the same panel. They should turn out designs at the cheapest possible rate and pass on the savings effected by standardization and co-operation to the private enterpriser.

The only people who could object to a panel are those who at present design speculative buildings. There may be here and there a properly trained architect who works fairly regularly for private enterprisers. A fairly extensive knowledge of the country inclines us to believe that no such architect exists. But if he does, he should join the panel.

The need today for improvements in that class of building which employs about 30 per cent. of the operatives is so desperate that we make this plea. It is only by enlisting the services of well-established architects that we can see any hope. It is for them to formulate some scheme, and their reward will be the knowledge that they have given to the country a lead which they alone can give, and at a time when it is most urgently wanted.

# NEWS AND TOPICS

"Then—Her"—The Industrial Museum—The late Hermann Muthesius—Unemployment in the Building Industry

For the first time since 1920 there is to be no A.A. pantomime. There is no doubt but that the loss will be felt by many people who have been privileged to see the "shows" in past years; many otherwise thoroughly respectable architects have abandoned themselves at Christmas time to enjoying openly and unashamed the stinging jibes at their equally respectable neighbours; and even those whose acquaintance with the architectural profession was slender found much to amuse and to entertain them. I cannot but regret the rebuilding operations in Bedford Square which have thus played havoc with the pantomime and have so ordered things there that there is no room to paint scenery or to rehearse on the scale necessary for the production of a first-rate show. I can only hope, with my neighbours, that this December's gap is but the lull before another storm.

But "there are more ways of killing a cat than by choking it with butter," and, since they cannot present a pantomime this year, the A.A. students are giving a cabaret instead. It is to be called "Then-Her," and takes place during the dance at the R.I.B.A. on Friday, December 16. Hitherto the pantomime has always been made the excuse for an all-night dance; this year it is difficult to know whether the dance is the excuse for the cabaret or the cabaret for the dance; in any case, the dance runs from 10 p.m. until five in the morning, and the cabaret is in two parts, beginning respectively at midnight and at 2 o'clock. I hear whispers that women students are made the subject of some amusing "leg-pulling," and Mr. Howard Robertson, as usual, will get the benefit of the accumulated wit of the year. And then there is to be the chariot race, with the discomfiture of the villain-all vastly reminiscent of a certain film of a similar name.

The visit of the King and Queen to the Home Office Industrial Museum in Horseferry Road, Westminster, has gained publicity for the exhibition of welfare and "safety first" appliances opened to the public last Monday. The ability to stop the whole of the machinery of a factory by the pressing of a button may certainly assist in saving life and limb, and the horrors of industrial disease ought to be appreciated in order that the costs imposed by legislation to avert it may be gladly paid. The whole exhibition is not entirely given over to nerve-racking objects, however, and such homely apparatus as electric potato peelers, self-stopping taps, and an experimental demonstration of the virtues and shortcomings of certain forms of artificial illuminants are also to be seen. While fool-proofing of devices and methods of industry is all to the good, a great deal must always remain in the hands of the individual. That honest work and self-possession in case of emergency are indispensable is illustrated by the following true story. The gasfitter leaves the job for finished. The householder then smells gas and cautiously searches for leaks and finds three. One is due to a plug not having been screwed home in a position inaccessible to an ordinary

screwdriver, others to faulty connections. So much for honest workmanship! The handy householder turns off the gas at the main and opens the taps of the fittings to relieve pressure while emergency repairs are being executed, and while dabs of paint are in process of drying. He then forgets to turn off the taps of fittings, and goes to bed. Turns on main in the morning, lights gas under the kettle, and proceeds absent-mindedly to lock himself in the bath-room while gas escapes! So much for self-possession!

From the correspondent who sent me news of the death in Berlin last month of Herr Hermann Muthesius, comes a slight correction of the account of the fatal accident. It was stated that Herr Muthesius stepped out of his car and, crossing the road without looking round, was knocked down by a tramcar and killed. The occurrence happened in a street which is known to be the most dangerous in Berlin, and was one which Herr Muthesius had always



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The late Herr Hermann Muthesius.

condemned. It was only upon his death that the authorities decided upon its alteration, although many fatal accidents had occurred before. No one on the spot seems to have seen or heard the oncoming tramcar, which was travelling at a great speed and was hidden by trees. There is, in the circumstances of the death of this well-known German architect, the rounding-off of great tragedy, which seems often to be as common in fact as in fiction. How many instances could be cited of men who have fallen victims at last to what they have for long condemned, and only by the sacrifice of their own lives brought their case to public notice and redress?

The discussion a few days ago at Harrogate under the auspices of the National Housing and Town Planning Council was remarkable for the number of dogmatic assertions on housing. Mr. F. M. Elgood, who has been designing so many admirable houses for the Church Army, presided, and urged the need of maintaining a continuous policy in housing and carrying out slum clearances. While continuity is desirable, the view taken by Mr. Neville

Chamberlain—and in this he will be supported by the majority of architects—is to reduce costs, so that houses may be built at a rent within the means of the unskilled artisan. If experience proves that the reduction of the subsidy has led to a reduction in cost, then the Ministry of Health's present policy is fully justified. The Minister estimates the fall of prices since the cut in the subsidy was reduced, to be £45 in the case of non-parlour houses. With a decrease in wages of a halfpenny next February, and the inevitable decrease next year in the price of certain building materials, we should see shortly further reductions in costs.

The Labour Party have been raising some discussion in the House of Commons over the recent increased amount of unemployment in the building industry. This may be a useful political weapon, but will not survive expert investigation. For although it is true that the number of men out of work in the building industry has increased, this regrettable unemployment has been far less than the steady growth of men entering the industry. An example may serve to illustrate the facts of the present position. The number of plasterers in one year has approximately increased from 18,000 to 21,000. But the number of unemployed is only 7 per cent. of the former figure. Accordingly, although the number of men looking for work in the plastering industry may be greater, on the other hand, there are now proportionately more men in regular employment. The intricacy of the industry makes it extremely difficult for politicians to talk of the building trade without making serious mistakes of fact.

Today the first conference in North Wales to consider regional planning will take place at Conway. Mr. G. L. Pepler, chief town-planning inspector at the Ministry of Health, who is indefatigable in his travels around Great Britain, inspiring local authorities to co-operate, and guiding them in their work, will address this. It is high time that the twenty-two local authorities concerned with this region should take steps to prevent it being entirely spoilt by speculative builders and tourists. Already some of the hills around Rhyl and Llandudno, two towns that are to be included in the proposed region, are blotched with unsightly bungalows. Ribbon development has been permitted along some of the most picturesque roads. If this desecration of one of the most beautiful regions in Britain is not checked, we shall find Conway and St. Asaph, and even the Swallow Falls at Bettws-y-Coed, becoming mere adjuncts to Blackpool, and fair-grounds for the Lancashire and Yorkshire trippers. The conference today will, it is hoped, decide to form a similar committee to that established for the Deeside, the region that lies just to the north. There will be no suggestion of trying to stop the remunerative flow of visitors, but rather to preserve the beauty of the district so that for centuries to come North Wales may continue to be a holiday resort of great beauty, with its historical associations unspoilt. It is interesting to recollect that through this region runs the historic road made by Telford, and one of the most difficult problems before the committee will be to decide how to provide or improve the main transport routes.

From a recently published book on lettering I give in the next column some remarkable examples. The captions under are my own.



Afforestation Scheme.

# ABCDEFGHJ KLMNOPQR STUVWXYZ

Scots Wha Hae.

Perspectibe Italian

ABCDEFGAII RLMWOPQRS TUVWAYZ

"Steward! . . .

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Mr. Charles Chaplin in "Shoulder Arms."

Ornamental Biband, Small.

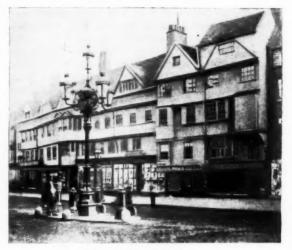


Ribbon development.

New regulations concerning the manufacture, handling, and storing of cinematograph films have just been issued by the Home Office, and the Home Secretary, Sir W. Joynson-Hicks, has promised still further safeguards in the future to deal with works in which waste film is manipulated. Recent conflagrations have shown in the most tragic manner how nearly the combustion of celluloid resembles a spontaneous explosion in its sudden spread from end to end of any building in which the material is exposed, and the rule that the workroom itself shall be of fire-resisting construction, though good in itself, hardly goes to the root of the matter. It is something gained that the furniture and apparatus must now be so arranged as to afford "unimpeded egress for every person in the room in case of fire," and that the room shall be "adequately equipped with fire-extinguishing appliances"; but those best acquainted with the behaviour of burning celluloid will wonder how "unimpeded egress" is to be maintained in a recognizable state amidst bewildering flares and fumes, and what constitutes "adequate" equipment with fireextinguishing appliances. Some substance akin to celluloid in all respects except inflammability is eminently desirable; it would be most valuable in architecture and the arts if it can be produced without involving risk in the early stages of its manufacture before the fire-resisting agent is effectively incorporated in its substance.

It is evident that the R.I.B.A. is determined to secure the Civil Service Commission building in Burlington Gardens as its new headquarters; the arrangements are, in fact, all but complete. There is certainly something impressive about Pennethorne's design, both inside and out, and the Council of the R.I.B.A. might undoubtedly have made a worse choice; it might also, one thinks, have made a better one; but it may be given credit for having decided upon the best existing building whose acquisition was open to it, so I confine myself to criticizing only its policy. The Civil Service building may, and probably does, just fulfil the requirements; I do not know what price is being paid for it, but I am sure that it must be a stiff one. Here we have the Royal Institute of British Architects taking over old premises, which can at best be only moderately well suited to their new purpose, because they were not designed for it; and this is an action of a body one of whose ostensible aims is to foster and encourage the art of good building in this country. The public is at best mildly interested in the doings of architects; what is it going to think of them now? Here is an opportunity to put up, by competitive selection, a new building, which instead of being a relic of a past age will be a symbol of architectural vitality in the present one, and (why not?) a recognized example of the best in modernist design; this chance the Institute is allowing to let slip. society of men whose chief aim in life is to encourage good building is itself refusing to build when occasion warrants! Certainly the world will laugh.

The present little photograph shows one of London's famous landmarks. I suppose everyone knows the picturesque old houses in Holborn which now seem so out of keeping with their environment, but which recall for us the city of Tudor days. These old houses, masking the no



The Old Houses in Holborn.

less picturesque (though it is that of a somewhat later date) Staple Inn, are the sole survivals of the domestic architecture of the London of Elizabethan times. Today they have a still greater affinity to their appearance in the sixteenth century, for the stucco here seen has been removed, with the result that the cross-beams on the front are exhibited. Another change is shown in the projecting portion on their west side, now removed; while the overhanging upper storeys have disappeared through the bringing forward of the lower part. When one passes under the archway, and seems in a moment to be in a harbour of quiet after the roar of Holborn's traffic, one is in the midst of romance. For here Johnson wrote Rasselas; here Isaac Reed, who is remembered as one of Shakespeare's eighteenth-century commentators, lived and died, and George Steevens came at unearthly hours to correct his friend's edition of the plays; and above all, here lived Mr. Grewgious, with his doorway marked by the initials P.I.T. and the date 1747, and was visited by Rosa; and here Tartar performed wonderful acrobatic feats, as readers of Edwin Drood will remember.

From a very special correspondent there comes the following report of an interview:

As a problem in ethics, I put the case of Mr. Smarterly to my friend Mr. Bernard Shaw. His little eyes gleamed for a moment, and then he said:

"If the lawyer or the medical man could get cases only by shouting, he would at once learn to shout. On the other hand, if the bookmaker could do business without bawling the odds, he would undoubtedly prefer to save his voice. The exigencies of our callings force their own line of conduct upon us."

He was silent, his magnificent beard resting profoundly upon his chest. And then again he spoke:

"If street vendors could sell their things without shouting, some would still shout, believing that the loudest voice will do the best trade."

"And ethically?" I reminded him.

"The ethics of the case," said Mr. Bernard Shaw (to my very special correspondent), "do not matter."

ASTRAGAL

# SORDID STORY

[BY NATHANIEL LLOYD]

MR. STANLEY J. WEARING'S unassuming little volume,1 the fruit of much research, presents to us in attractive fashion portraits of half a dozen eighteenth-century Norwich architects of the kind for whom Batty Langley and William Pain wrote their serviceable and eminently excellent builders' guides. No doubt Mr. Wearing has illustrated the best of their buildings, which reach only a moderate standard of merit, and neither the Octagon Chapel, the Assembly Rooms, nor the Artillery Barracks will bear comparison with the contemporary works of Bastard at Blandford, Dorset. Yet, how many have even heard of Bastard? His name does not appear in the Dictionary of National Biography, which includes notices of most of the Norwich architects of whom Mr. Wearing writes. In compiling this chronicle he has done his city and his countrymen good service, and one regrets that every town has not such a faithful historian.

Mr. Wearing regards Thomas Ivory as the architect of some of the finest buildings erected in Norwich during the third quarter of the eighteenth century. He is described in a document of date 1782, as "A publick spirited Man, with great activity of Mind and resolution, and great knowledge of his business as a Master builder, and employing at that time a considerable number of Workmen, and having always on his own premises, a large Assortment of Deals and Timber, being considerably employed in the profession of a Merchant in Exporting the Norwich Manufactory and other English Manufactories into the Northern Countries and Importing from thence large Quantities of Deals, Timber, Iron, &c., into this Country. Evidently he was a man of so many parts as scarcely now to meet with the approval of the Practice Committee of the R.I.B.A.

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All these Norwich men were builder-architects, being bricklayers, masons, carpenters or the like, who added

"the character of an Architect, in drawing plans and elevations, giving estimates or measuring up any sort of building for any Gentleman in the County." Matthew Brettingham, of whom Mr. Wearing first discourses, had the greatest pretensions to the style of "architect." He had received training under William Kent (whose undoubted abilities are now appreciated more than they were a few years ago), and, after the death of that master, he carried out his plans at Holkham Hall. publishing the Plans Elevations and Sections of Holkham in Norfork without reference to the authorship of Kent, he was unwise as well as ungenerous, for the structure itself is witness for its designer, the "handwriting" of Kent being all over it.

Matthew Brettingham's elder brother, Robert, was a bricklayer and (with Matthew) was admitted freeman of Norwich, as apprentice of his father. He carried on business as mason as well as bricklayer, but in 1753 he dicontinued these trades to devote himself to practice as an architect, and in that year the building of a new Methodist meeting-house was projected, the very human story of which is admirably developed by Mr. Wearing.

It started thus:

On the 17th October, 1753, a preliminary meeting of the Committee was held at which Robert Brettingham was present and promised to subscribe £30. On the 24th he was appointed architect by the Committee. Apparently "money had made the mare to go." On the 7th November he was ordered to produce within a fortnight two designs for laying before subscribers. Exactly what committees ask still. On the 21st November Brettingham produced only one plan and elevation, which the Committee considered. In this, Brettingham acted as most architects would in the same circumstances. On the 28th November a general meeting of subscribers was held, when a Select Committee was appointed to receive and select plans to lay before the general meeting, and it was resolved that the appointment

<sup>1</sup> Georgian Norwich: Its Builders, by Stanley J. Wearing, F.R.I.B.A. Jarrold and Sons, Norwich. Price 3s



The interior of the Octagon Chapel, Norwich. [From Georgian Norwich.]

of Robert Brettingham on the 24th October to the Select Committee's direction. From this it is clear that the Select Committee was appointed for the purpose of overriding the original Committee's appointment of Brettingham because the general meeting thought they could do better - a mean but not uncommon manœuvre. On the 30th November, the Select Committee met and inspected Brettingham's plans and offered to take over any bricks he might have ordered for the building; and, further, that he and

another person should supply lime equally for the new building. There is no record as to how these remarkable offers were received, but it transpires that ultimately he was paid £:0 10s. "for giving advice on building a New Chapple." His name is not again mentioned in the records, nor is the £30 subscription which he promised at the first meeting. On the 7th December, the Select Committee received a plan and two elevations from a carpenter named Lee; also, an anonymous plan and elevation. On the 10th December the Select Committee received a plan and section of the roof from Thomas Ivory (a carpenter by trade) "who is to bring an elevation of the South (entrance) front on Friday next." Mr. Wearing suggests that the anonymous plan, received on the 7th December, was Ivory's, and, from the reference to "section of the roof," and in the light of subsequent events, that probably this was the first occasion upon which the octagonal plan was suggested. On the 14th December Ivory presented himself with his plan and section of the roof with the desired elevation, and at the same meeting Rawlins (who ultimately did the stone:nason's work for the new building) also produced a plan and elevation. Further, the plan and elevations submitted by Lee were left with the Committee. On the 21st December the Committee, who were evidently impressed by Ivory's octagonal plan, instructed Lee to proceed with a drawing of an "octangular plan, elevation, section of roof and price for same." However, Ivory had not been idly waiting for the job, for at this meeting he produced a model of a roof for the "octangular" plan. As Mr. Wearing says: "We must admire Ivory's astuteness in appreciating the value that a model would be to a committee of laymen"; but what shall we say of the Committee who gave away one competitor's idea to a rival? On the 28th December Lee informed the Committee that he expected some drawings from Robert Morris, of London, with his remarks on the octagon plan, and that he deferred finishing his plans until he received these. Apparently Lee was not so capable nor so good a draughtsman as Ivory, so wished to fortify himself with Morris's drawings and opinion.



The Octagon Chapel, Norwich. [From Georgian Norwich.]

At this stage Rawlins exhibited a new front elevation; probably also for an octagon, though this is not stated. On the 7th January 1754, Morris's London effort was produced in the shape of two plans and elevations of a parallelogram and two plans and elevations of an octagon, with sections of roof, for which he charged £8 8s. od. On these, he was ordered to supply an estimate for the octagon plan. From the accounts it appears that the Committee paid Morris's charges, though ostensibly they were ordered by and

done for Lee. At subsequent meetings the competition to secure the order continued. Rawlins submitted a fresh elevation for the octagon, but Ivory outdid them all by producing a complete model of the proposed building, together with an estimate of cost made by a surveyor.

On the 20th February the Committee's proceedings were approved, the "moddle" was exhibited, approved and "ordered to be put in execution immediately."

Though Thomas Ivory won the competition, he received nothing for it but the honour; he was treated exactly as the other contractors and, ultimately, received less payment than his unsuccessful rival Lee, who became bankrupt in Iuly 1754.

The underhand and dishonourable conduct of the Committees and of the general meetings of subscribers to this Methodist chapel can scarcely be too severely condemned. It is apparent that the scheming in favour of Lee and Rawlins would have resulted in the ousting of Ivory, just as Brettingham had been supplanted, had he not been a man of capability and resource. We talk of the competition of our days and think of the placidity and easy ways of professional and business men in the eighteenth century; but this sordid story shows that it was just as hard to get work then as it is now or has been at any time.

Amongst a number of extracts relating to building which Mr. Wearing gives at the end of his book is one, dated 1757, relating to "the new sash frames." In commenting upon this, Mr. Wearing speaks of the sash window being "first used in England in the time of Inigo Jones." I think he must be mistaken, for Inigo Jones died in 1652, and the earliest of all references that we have to sash windows is that found by Mr. St. John Hope in records of Windsor Castle, where a charge of 70s. appears in accounts for a sash window about the year 1688. It is conceivable that earlier references may yet be traced, but not so much earlier as thirty-six years. Is it possible that Mr. Wearing supposed some old sash windows in houses attributed to Inigo Jones were contemporary?

# SOME COPENHAGEN HOUSING SCHEMES

[BY L. MARNUS]

To deal with justice with the housing schemes that have been carried out during different periods in and around Copenhagen we must begin with the scheme executed by King Chr. IV three hundred years ago. King Chr. IV occupied the throne for more than half a century, and achieved considerable distinction in architecture. To him Denmark owes a large number of its best buildings, and no fewer than five towns.

Among his work was Nyboder, which consisted of the layout of about 600 houses, built in rows, with accommodation for two families in each house. These houses were occupied by the naval staff, whom the king wanted near at hand and ready to answer the call to the fleet at any hour. Men were born, lived, and died in these dwellings, generation after generation.

The houses were one story high; the height from floor to ceiling being only about 6 ft. Outside the house the roof tiles came down to less than 6 ft. from the ground. The front door was of wide boards, in two pieces to open separately, and was so low that persons passing through had to bend their heads. Inside was a small entrance porch, 5 ft. by 5 ft. In front of this was the kitchen, which was shared by both families. It had no light unless the back door was opened. The remaining accommodation consisted of two flats, each comprising a large and a small room. One flat faced the street and the other the yard, both flats being entered through the kitchen. In the

ceiling of the entrance was a shutter which covered an opening leading to a loft. This could be gained by a ladder, or, in some cases, by a rope, which "gave the tenant a good opportunity of maintaining his nimbleness in the art of climbing." Although the houses were narrow and were only 18 ft. wide, the streets were 50 ft. wide. Between the rows of houses were spacious yards with small gardens of flowers and plants, and on the walls of the houses were vines.

During the eighteenth century Nyboder was considerably enlarged by the formation of a number of streets and the erection of two-storied houses having better and more commodious accommodation. Many houses of this type also displaced those of King Chr. IV, which, during the nineteenth century, had continuously to make room for more modern but, unfortunately, more ungainly-looking buildings. However, some of the old houses still exist, although they remain merely as curiosities.

Most of the Danish housing schemes have been carried out by co-operative societies, although in the beginning much was done by philanthropists to reduce the overcrowded population in the poor districts of Copenhagen, and to raise the standard of accommodation of people with small means. A case in point is Lageforeningens Boliger. These houses were built by a society of physicians who had 94,000 kroner (£5,000) to spare from a fund placed at the disposal of the society during the epidemic of cholera in



Nyboder. Houses of the seventeenth century.





Nyboder. Above, houses of the eighteenth century. Below, houses of about 1850.

1853. It is obvious, however, that undertakings of this kind will never meet with the exigencies of its time as the indigents of a large fast-growing city are always out of

proportion to the existing philanthropy.

The first co-operative society in Denmark, Arbejdernes Byggeforening (The Workmen's Building Association), was founded in Copenhagen in 1865 by a body of workmen who carried into effect the idea of a physician named Ulrik. The aims of the association were, and are still, partly to act as a savings bank for its members, and partly to build sound and well-arranged houses which become the property of the members on profitable terms. Each member contributes 2 kroner monthly for a period of ten years, after which he is at liberty either to withdraw his money with an accumulated interest, of 41 per cent. per annum, or he may leave his money standing, and be entitled to a continuous participation in the annual distribution of dividends, and in the drawing of lots for the houses. It may seem to be a disadvantage for the members to have to wait until they win the lottery before they secure a house, but the number of members waiting for houses far exceeds the building capacity of the society. It seems, therefore, that no other system would be more successful, as it is in the interest of the association always to have new members joining in the greatest numbers. Moreover, the members receive the highest rate of interest on their invested money that it is possible to obtain from any savings bank. A member is entitled to take part in the lottery when he has been a member for half a year and has paid in at least 20 kroner (about 22s.). The winner of a house becomes the owner after from twenty-five to thirty years. During that period he pays from 50 to 60 kroner (about  $f_{3}$ ) yearly in addition to the estimated rent of the house. The payments vary a few kroner, as well as the years vary in number, according to the cost of each group of houses. The estimated rent of the house, that is the sum at which the house would rent ordinarily, is always low, and less than the owner would have to pay for a similar dwelling anywhere else.

According to statements issued by the association a two-storied house, with a mansard roof and containing three flats, each of which consists of two rooms and a kitchen, has been built for 13,600 kroner (£750); and the owner is paying 56 kroner yearly for a period of twenty-eight years, amounting with interest to about 2,800 kroner. To this must then be added the first ten years' subscription of membership (2 kroner a month), which, with interest, amounts to about 300 kroner. Thus, this member will become the owner of his house for 3,100 kroner, or about £170, this being the actual price paid for a house worth £750. After twenty-eight years he occupies the house rent free, and in addition draws a good profit by letting out that part of the house he does not occupy himself.

The association, since its formation, has erected no fewer than 1,500 houses containing about 4,000 flats. The houses are mainly in rows. The earlier-built houses are mostly two-storied, having a flat on each floor, consisting of two rooms and a kitchen. In the attic are three rooms for common use, and there is a basement under the whole house for washing and storage. The later-built houses have a mansard roof in which is planned a third flat. The flats also have been increased in size, and consist of three rooms and a kitchen. All the houses have front and back gardens.

During the end of the last century and the beginning of the present many building societies came into existence in all parts of the country. Their activities were of a modest



Block of flats in Copenhagen. By Kay Fisher and C. Holst. [Premiated by the Copenhagen County Council.]





Blocks of flats in Copenhagen. Above, by Kay Fisker. Below, by Povl Baumann.

character and comprised the erection, from Government loans, of a limited number of small houses, each accommodating one or two families. In many of these societies the co-operative spirit was unfortunately lacking. No exception was taken to the possibilities of members using their property as a basis for speculation, with the result that the houses were sold and resold at ever-increasing prices, and eventually came into the possession of well-to-do people.

When the Dansk Havebolig-Forening (Danish Garden City Society) was founded in 1912, these difficulties were overcome. The object of the society was to build good and cheap houses for its members, but the society reserved the right to the increased value of the property should a member resign from the society and leave his house. An instance of this kind of co-operation is the garden city, Grondalsvange, at Copenhagen. A member of this society contributes 12 kroner a month until he has paid in 550 kroner (about £30). He is then entitled to a house, and has nothing more to pay before the rent of this comes into force. The members never become owners of their houses; still they find it an advantageous enterprise as they do not have to contend with a landlord's profit.

Moreover, an annual deduction of the mortgage is included in the rent, the latter diminishing gradually, and so much that in thirty years it is less than a pound a month. In this way, if the husband dies, the society acts practically as a kind of premium-free support for

the widow. The houses are either single or semi-detached. They consist mainly of a hall, two rooms, and a kitchen on the ground floor; three bedrooms on the top floor; and spacious rooms for washing and the storage of fuel and victuals in the basement. The gardens around the houses vary from 4,000 to 6,000 sq. ft.

Arbijdernes Andelsboligforening (The Workmen's Cooperative Housing Society) is the largest co-operative housing society in Denmark. It belongs to the rational housing societies, who do not permit their members to sell their shares, thus eliminating speculation. The principle upon which the society is built is mainly that of the Rochdale. A member subscribes a share of 40 kroner (about £2), and when he obtains a flat he pays in a deposit usually equivalent to a year's rent. This deposit and the share always belong to the member, and yield an interest of 4 per cent. They are returned in full if the member resigns from the society or moves. The society comprises a number of branches, and for each group of buildings built a branch is created. The branches have no economical responsibilities one for another, and are accountable only to the general society, which always has the right of possession to the plot and the buildings. The houses are built by means of loans from institutions and from the Government. Loans have been secured to as much as 90 per cent. of the cost of the building, the remaining 10 per cent. being acquired by the shares and the deposits of the members. The society has chiefly confined itself to the building of large groups of flats of from three to five stories high. The



Block of flats in Copenhagen. By Paul Baumann.



flats vary in size from two to five rooms, so as to meet any requirement.

The garden city at Brönshoj is beautifully situated on a site sloping towards a small lake, around which a garden has been designed as part of the layout. The co-operative ideas of the society, who owns this estate, are far in advance of those of any other society. The society owns two large brickworks, and executes the carpentry, joinery, painting, and other work in connection with the erection and repair of the buildings. In each group of buildings are all kinds of shops, which are also conducted on the co-operative principle.



Bakkehusem. By Ivar Bentsen and Th. Henningsen. Above, the entrance front. Below, the garden side.



Another large housing society is Köbenhavns Almindelige Boligselskab (The Copenhagen General Housing Association). This society, although its building activities have been extensive, acts merely as organizers for the building operations. Each branch is an independent co-operation as soon as its group of buildings is completed. From that moment the branch has no obligation, either to the administration or to other branches. Among the society's—or administration's—numerous undertakings is

Bakkehusem, a modern layout, with rows of houses built around a small park. The houses are built to nine different plans, and consist of four or six rooms besides a kitchen and scullery. They have large gardens front and back, and between the back gardens are alleys.

During the past ten years many efforts have been made in Copenhagen, both by architects and building societies, to produce small dwellings which shall be as cheap and comfortable as possible, and at the same time shall be



Studiebyen. By P. Nielsen, Aug. Rasmussen, and Rördam Jensen. Above, gateway to the garden city. Below, some typical houses.



designed to harmonize pleasantly with their surroundings. With this aim in view the society of the garden city, Studiebyen, invited architects to design small but well-

arranged and economical houses of various types for its garden cities. The experiment proved to be a great success, as no fewer than twenty-four architects contributed

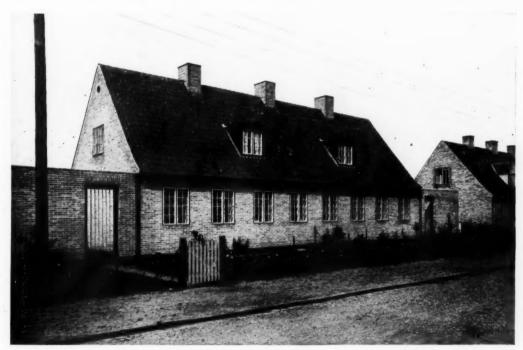


Studiebyen. Types of single houses in the garden city.

Above, by Henning Jörgensen. Below, by Henning Hansen.

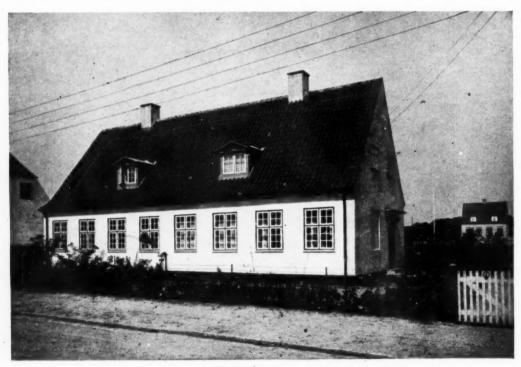


to the erection of about 200 houses. Many people semi-detached house is but little more expensive than might regard the small detached, one-family house the ideal home, yet it is the most expensive to build. The the house in a row, and it satisfies people's want of being able "to walk round their own house."



Studiebyen. Above, type of single house in the garden city. By Kay Fisher. Below, type of semi-detached houses. By Edvard Thomsen.





Above, Brônshôj. Semi-detached houses by N. Gotenborg. Below, Studiebyen. Type of semi-detached houses by Svend Möller and Ponsaing.

THE LAUDABLE ENTERPRISE OF MR. SMARTERLY

# THE ENTERPRISING MR. SMARTERLY

SMARTERLY SPEAKS UP

To the Editor of THE ARCHITECTS' JOURNAL

SIR,-May I be allowed a little of your space for some restrained remarks about your article "My First Job" and the correspondence it has evoked? The thoughts this subject has aroused in me, and no doubt in many, are wholly constructive. I would like to feel that the episode has pointed creatively to something

Part of an architect's business-I don't quite know what a profession is, by the way, and therefore I do not use the wordbeing self-expression in form and material, we are generally forgiven disabilities in verbal expression. That is a pity, for it is up to us to find spokesmen and authors who will speak and write for us. In appreciating the journalistic powers of your contributor and correspondents-not least, the satire of Norman Severell.

who certainly seems a "Smarterly"-I have been thinking what valuable literary forces lie in some of these minds for instructive propaganda and publicity about architecture, about the business of the architect, and, above all, about the houses we would like to live in.

In a golf club, of which I am a member partly, of course, Mr. Creswell, for business purposes-a bungalow between the rounds and a church after lunch), we put the suggestion-men, the men with ideas, the spokesmen (sometimes called the "grumblers") on the committee. That is the proper place for them. Cannot you, patient editor, put some of these bright writers, so to speak, on a committee for architectural propaganda? As one of your correspondents says: " . . when has there been a propaganda to teach the people what architecture is, and what an architect is for . . .?"

A friend who has just returned via Germany from a tour through Finland, Sweden, and Denmark with house planning in the front of his mind, has been reading your article, at my request, and the ensuing correspondence. After reminding me, not unkindly, that things like St. Pancras Station simply don't happen and never have happened in Finland, he urges me to insist, with his mind full of North-European architectural enthusiasm, that thus public examination and laundering of etiquette is eclipsed by the greater negative of British architectural unconsciousness.

If fruit and milk interests can support a many-faceted propaganda to teach the nation wiser dieting, surely the vast capital behind building and architectural interests can rouse and lead men to desire better living-fitness in their houses, more beauty and expression of purpose in the factories where they produce wealth

and in the establishments where they distribute it.

Light and air are good things. The revealing methods of M.L.A. and the surgery of Severell have laid bare much which needed sun and wind. In thus discovering the greater need for popular instruction toward a tomorrow which I have tried to indicate, cannot we forget these differences about what is "done" and what is "not done"? The time has come to spend our brains and money on something greener than the preservation of the static equilibrium of "keeping up appearances." We need the help and advice of your JOURNAL. Am I hoping too much to expect something on this subject in your editorial pages?

P. QUENTIN SMARTERLY

To the Editor of THE ARCHITECTS' JOURNAL

Sir,-How can Mr. Creswell or, indeed, anybody, comment on Mr. Smarterly without having seen the decoy house that he built, or, at any rate, its plans, specifications, and details, together with photographs and the audited accounts?

A talk with Mr. Smarterly would be helpful, too, as likewise

with one of his clients.

Why? Because adequate and relevant evidence is the only basis for a just judgment, and in this case the only questions that seem to me relevant are:

1: Were they good houses, structurally, architecturally, and economically?

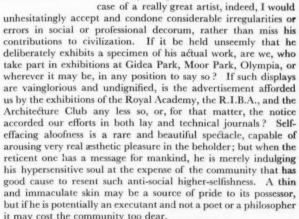
2: Were the several clients well and conscientiously served?

In short, is Mr. Smarterly a good architect? If he is, more power to him; may he prosper increasingly and build more, better, and larger buildings in a land where nine-tenths of the work is still architecturally contemptible. It seems to emerge from the original article that Mr. Smarterly is a good architect, and I take it therefore that the only subject to be debated is whether he is also a good citizen and professionally impeccable.

I figure Mr. Smarterly, persuaded of his own ability and potentialities, chafing at his lack of opportunity. Being a youth of

spirit, he is stung by the spectacle of opportunities being squandered by mediocrity and incompetence, and gallantly resolves to challenge fortune at considerable risk to himself and his small capital. He knows he has that within him of potential use to the community; he is bursting to express himself-a need that an architect can rarely satisfy without clients; he probably has the common human desire for professional and worldly success; and he determines on a stratagem that makes him and his talents effective, bringing him fulfilment, happiness, and a livelihood; whilst, far from harming anybody, it results in reasonable, decent and acceptable buildings instead of bad.

That, indeed, is the whole pith of the matter, and the only point; if he builds well he is justified in his methods, so long as these have not been harmful-I would almost say, unduly harmful-to others. In the



As to Mr. Smarterly's methods of establishing effective contact with his clients or of getting on easy terms with them-an essential factor in successful co-operation-what on earth do they matter? If he finds himself more effective in speech than in the written word, by all means let him seek them out. Is it any more or any less commendable to exploit one's gift for literary composition than to exploit a gift for clear and convincing extempore speech and an attractive personality? In either case it is,



Mr. Clough Williams-Ellis.

of course, assumed that one can actually deliver the goods. If, however curiously, he find the atmosphere of a cocktail bar more conducive to a good understanding than that of his office or his club, surely he does well and wisely to make it his rendezvous; and even if he had found that a dentist's waiting-room or a Turkish bath best fostered an entente cordiale-why in heaven's name should he deliberately handicap himself and obstruct his affairs by negotiating in some less stimulating setting? Whether he elects to communicate with his clients by interview, by telephone or by the written word is surely no one's concern but his own. I should hold it no more than an amiable oddity and utterly unimportant if he insisted that he and his clients must only confer at full moon on empty stomachs, wearing bathing costumes and spats, and facing the magnetic north. If in spite of this slightly tedious ritual he were none the less a really capable architect, one would be merely stupidly conventional not to fall in with the conditions favourable to his highest inspiration and efficiency. Many a perfectly ineffectual magician has had similar though far more exacting demands met with respectful alacrity by clients anxious for his best offices, yet giving nothing comparable with the architect's solid services in return. If, on the other hand, he found a less intimate contact more conducive to successful labours on his client's behalf, why should he not communicate solely by telegram or through the Agony Column of a newspaper,

or through his solicitor, or by way of some other equally impersonal channel? Undoubtedly one can imagine clients who would view such unusual proceedings with misgivings; but my point is merely that any harmless device that promotes and expedites the smooth execution of a good piece of work, and is therefore advantageous to all concerned, is thereby sufficiently vindicated.

It is merely impertinent and trivial solemnly to discuss the propriety of this or that method of approach or communication, as though it were an abstract question of fundamentals instead of merely one of expediency under infinitely varying conditions. What really matters is that there should be more decent, and fewer blackguard buildings; and, personally, I should hesitate long before I did or said anything that seemed to me likely to retard the architectural millennium.

If we are too professionally pernickety and virginally genteel, the thick-skinned, go-getting philistine will inherit the earth and nonchalantly rape what we were too well-bred and lily-minded even to accost. Briefly, the speculative builder will have kicked the architect downstairs, and it will have been his own silly fault.

CLOUGH WILLIAMS-ELLIS

#### SMARTERLY AND THE PUBLIC TASTE

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I have no special wish to take up cudgels on behalf of or against a fellow architect in a correspondence which purports to examine his methods of obtaining work. I do feel, however, that "Quoin's" criticisms of Smarterly are prejudicial to the latter without sufficient or specified cause.

"Quoin" does not appear to me to write with the directness of one burning under a sense of injustice, or even with the sincerity or logic of Mr. Creswell. "Quoin's" attack is lost in a mist of innuendoes, which are as vague as they are frequent. He admits that it may not be easy to point to any particular paragraph in the R.I.B.A. code that Smarterly has transgressed. There is the crux of the whole matter. If a breach of etiquette or whatnot had been committed, a very competent Practice Committee would deal adequately with the situation. As I see it, a prospective purchaser sees a house which she likes, but finds it not for sale with

possession. She inquires the name of the architect and finds him to be the owner. She commissions him to build her a bungalow, and finally alters it into a house. Those are the facts, apart from the matter of conscience mentioned by Mr. Creswell. The client is pleased, the architect benefits, and one has no reason to suppose that the countryside is spoilt by the addition of a house designed, by presumably a member of the R.I.B.A., instead of an unqualified person.

One is almost optimistic enough to believe that the public taste in architecture is awakening.

P. W. HUBBARD

#### CALLING THE KETTLE BLACK

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Mr. Creswell's vituperation has called forth all my sympathy on the side of the enterprising Mr. Smarterly. In the first place, I can see no ground for the assumption that Mr. Smarterly's buildings are any worse than those of Mr. Creswell. I am acquainted with neither, but on the face of it there seems nothing to indicate their quality unless Mr. Creswell has inside information. The domestic virtues are not the basis of true art, as Wilde pointed out, and because Mr. Creswell disapproves of Mr. Smarterly's morals there seems no reason to condemn his art out of hand. And

really it is on the quality of Mr. Smarterly's work that the whole thing turns. If Mr. Smarterly has built better and more comely houses than the garish, blatant, ill-conceived monstrosities which are the general fruits of "development," then Mr. Smarterly has earned the everlasting gratitude of the community, including, surely, that of the architectural profession.

I cannot help feeling that Mr. Creswell's horror at Mr. Smarterly's action is a pose, for he must know as well as you or I, Mr. Editor, that the procedure which he condemns with such a generous flow of invective is practised in a varied form by members of the profession who can scarcely be said to belong to an "underworld of architectural parasites." Personally, I cannot see that Mr. Smarterly has contravened any of the "suggestions governing the professional conduct and practice of architects" as laid down by the R. I.B.A. Practice Committee and

by the R.I.B.A. Practice Committee and published in the R.I.B.A. Calendar. There are a great many architects, amongst whom I include myself, who detest many of the modern commercial methods which are tending to degrade every aspect of life, but on the face of it—I won't make this qualification because we are given only the slenderest material from which to judge Mr. Smarterly's activities—I cannot see that Mr. Smarterly is adopting them.

And, after all, hypocrisy as ill becomes members of a profession as does commercialism.

H. J. BIRNSTINGL



SIR,—It would be a good thing if there were more of Mr. Smarterly's sort in architecture. There is "something rotten" in the state of architecture today. Personally, I am disgusted with our profession, and intend leaving it shortly for the profession of journalism. When I entered my father's office, four years ago, after leaving school, he warned me that it would not be "all honey," and I soon found the truth of that statement. Here I am, at the age of twenty-one, with as much hope of earning a remunerative livelihood from the practice of architecture as I have of flying to the moon. Surely Mr. Smarterly is to be commended on the attitude he took up in his early years. I only wish his methods were introduced into our sadly disorganized profession more frequently.



Mr. H. J. Birnstingl.

# THE HOUSE WE LIVE IN

[BY KARSHISH]

#### ii: THE HOUSE EXAMINED

Long before the war it was acknowledged upon the Continent, and admitted by the sincerest form of flattery in America, that English architects were pre-eminent in the field of domestic work; and since the war that distinctive capacity has been concentrated on the design of small houses. The ability of our architects to design according to their lights is not in question; it is their lights -the aspirations with which they identify themselves-that I arraign. I have first, then, to display the nature of the aspirations which are satisfied by modern small-house design, and I shall soonest get to the core of the matter if I describe the characteristics of the designs which satisfy those aspirations. As people live inside their homes-and not outside-and the inside of a house is embodied in its plan, and the plan is properly determined by the needs of those for whom the house is built, and constitutes the essential identity of the house, the plan first claims attention. This explanation will, I have no doubt, be regarded as superfluous, which proves that the designing of houses largely from the outside is not a reasoned choice, but an unthinking competitive habit. I shall have more to say on this point later on; we are now concerned with the plans of houses.

A design for a small house was lately published in plan and perspective in a leading newspaper to signalize the achievement of an architect eminent in that particular field. The house was of ample proportions and costly in construction, materials, and embellishments; there had evidently been no hampering financial restrictions, and the following were among the wellconsidered conveniences exhibited in the plan: A w.c. opening directly into a small entrance hall, with the door, to mark its importance, arranged on the main axis; a servery without direct light or ventilation and with two steps up at the door from it to the dining-room; a flight of two steps up to a 3 ft. 3 in. passage leading to the drawing-room, at the door of which were two steps down; a larder built into a corner of a combined kitchen and scullery, where the servants would have their meals among the dirty plates and buckets filled with fish-guts and other culinary debris, for there was no other room for them, and their w.c. was outside; stairs that were a kind of glorified rat-run, enclosed, and opening on to the 3 ft. 3 in. passage and landing, by winders, through an arch into the end of a long, narrow corridor upon which the bedrooms opened and which had no light or ventilation except, by way of the arch, from a window on the stairs; no lavatory basins in bedrooms, and a fireplace in one only, although another bedroom, 9 ft. by 10 ft., had a chimney shaft 2 ft. 3 in. wide standing out into the room some 4 ft. or more from near the middle of one wall; a bathroom over the drawing-room, with bath and lavatory fittings against the back wall and 10 ft. from the outside wall, and a w.c. with the fitting kept 5 ft. from the outside wall by the slope of the roof under which it harboured.

I am not adversely criticizing this plan; I am not criticizing it at all; I am merely reporting the fact of the botching and discomforts of a house which, I have no doubt, is the pride of its owners, and which, if it came into the market, would attract an eager crowd of buyers or tenants; a house which is regarded by experienced judgment to be not merely a competent, but a meritorious design, or it would not be held up to admiration in the pages of a newspaper among the readers of which are architects. The explanation of this is in the elevations; the house is a "sweetly pretty" house, and I do not say this ironically, but sincerely, for though sugary, and displaying costly features and embellishments, the design is tasteful and scholarly, and such as no one but an expert of unusual gifts could have conceived. It is a sweetly pretty house capable of holding its own, and even of making top score, on any building estate in the

country open to the competitive exploits of the British architect. It is a house which, modern aspirations being what they are, is conspicuous among desirable houses; for it is a house which would be likely anywhere to hit every other house in the eye and make it look insignificant.

It will be objected, perhaps, that the above is not a fair instance because it is not a typical example of the run of modern small houses-to which I answer that it is not offered as a typical example, but as an illustration. The house is exceptional alike for its remarkable inefficiency of plan and its no less remarkable graces of elevation, and it is here offered as an illustration only of the principles which dominate the design of small houses, and as pointing my contention that the aspirations which direct our choice and determine our taste in this matter are not rational, but fantastic. My apprehension of the matter is that this brincible is typical of all small-house design, and my expectation is that when I now proceed to substantiate my opinion by describing typical facts I shall be met with such comments as: "Well, of course!" "Quite right, too!" "What else would you have?" remind the reader that when any such objection rises in his mind it shows that he identifies himself with the aspiration which I indict and endorses my contention that those aspirations are general.

A number of books have been produced lusciously depicting, and aridly describing, small-house design; and I am aware of two popular periodicals, both edited with informed taste, designed to feed—and inflame—an appetite in the general public for prettiness in domestic architecture. My sense of the matter is that the appeal is exactly the same as that of fashion plates; people who have no hope or intention of building gloat over pictures of pretty houses, much as some women spend their mornings gloating over shop displays of hats and frocks which they can never hope to possess. I understand the condition of mind well, for, as a boy, I would spend hours poring over those pages of a stores catalogue which depicted-and priced to fractions of a penny-the gear of the fisher, and particularly of the salmon fisher, though my chances of engaging in that sport were then even more remote than they are today. The invasion of the field by commercial men, many of whom discern popular weaknesses as infallibly as a vulture does carrion, and by many exhibitors at exhibitions offering cats' meat to famished idealism, is also evidence of a doting fatuity in the public which involves, I can almost imagine, even the men who sell papers in the street. Do not tell me there is a pathos in this, for I feel it; admit merely that I represent the facts. Do I not also represent the facts when I say that any technically informed person-any architect-who examines the plans in many of the books, periodicals, advertisements, or exhibitions will be brought up short with the pottering inconveniences, fribbles, and impossible ambitions they exhibit? Let any conscientious architect, struggling to accommodate in a plan the needs of a client and his own sense of what is appropriate, turn to these records of expert achievement to see "how those other fellows manage it," and he will realize that in many cases the best brains and experience can show him nothing better than bad compromises: w.c.'s and kitchens unlobbied, overlapping doors, narrow passages, pokey entrance halls, and tiny rooms. He will return to his own planning and, whether reconciled or not, be compelled to adopt just such devices of compromise and compression as he deprecates in the plans of other designers. He is the servant of the public, the slave of a habit of thinking and living which overrides discretion and obscures realities which should properly direct discretion; and he is no less a slave to the conception which requires him to so model his plan as to give the house a very particular and arresting elevation.

I do not now say this is a wrong idea; I merely affirm that it is the special ambition and the careworn pre-occupation of the planner to give his design a striking appearance which will create a particular impression in the beholder of knowingness, of whathoness, of being thoroughly in the fashion or a touch beyond it, of being sweetly pretty, arresting, brainy, and so forth; and he will know, if he reflects, that he is aware that success in this matter of the appearance of the house is the most important part of it,

and that his success or failure as a practitioner depends upon his success in arresting the attention of the public and surpassing rivals in capturing its favour by appeals comparable to those

made by a milliner.

It may be complained that I am merely describing facts which are well understood and necessary and wholesome in an unfair way. All I want to get at is the facts, and if my way of presenting them may seem unfair it is because I look at the matter from a detached standpoint as a visitor from another planet might. So viewed, what is revealed by the outsides of the skilfully designed little houses we see on all sides? We observe that they display a wide variety of ideals, but that one principle governs all—namely, that every house shall affect to be something other than what it is. In a friend's office the other day I caught sight of elevations of a bungalow which puzzled me. "Why so?" The designer's answer was a proud justification. "A fisherman's cottage." He did not mean that the place was being built for a fisherman; he meant that someone who was not a fisherman wanted to live in a cottage which looked like a fisherman's cottage, but wasn't, and he seemed to consider this a perfectly natural and proper ambition, as I think most people would be likely to do, until they reflect upon the fantastic absurdity of such aspirations. Such aspirations are, however, not exceptional, but characteristic. It is even possible to catalogue some of them, the point for note being that the idea pursued has no relation to the realities of life, but is rooted in idle frivolity of mind or based on a fantastic conceit of some kind or other.

1: The Period House. This is common. The householder wishes to live in a house which looks as if it belonged to the past. Such people utter the word Georgian as though it were something

ice to eat.

2: The Mansionette. Here the effect aimed at is to represent the form of a mansion in the dimensions of the cottage. It shows up well next door to a good-sized house designed to pass itself off as a humble cottage home.

3: The Sweetly Pretty. The ideal is sound, but it is poisoned by vain emulations. The sweetly pretty will concern us later.

4: The Oh, My! This is an excruciating version of the "What Ho!" It scarcely falls into the field of my inquiry, for the vulgarity of its attempt to attract attention is an ignorant vulgarity.

5: The What Ho! This is the home, I imagine, of people who wear sandals and have "Do it now" carved on the hall mantelpiece. The motive is a shallow kind of intellectual snobbery;

a wish to appear brainy.

6: The Dear Old. This is a reconstruction, not a new house—an adaptation of a barn, or oast house, stable or range of piggeries. "That beam where you bumped your head is where the sheep-dip was. Isn't it all fascinating?" It is also typified in the passion for what is crooked and uncouth and in the pursuit of peasant discomforts. The people who live in such places are continually

playing a game of make-believe.

7: The Sham Dear Old. This is a new style, of which I have seen recent examples by experts. The effect is somewhat like Wendy's cottage in "Peter Pan," or the "old home" in the last act of a Drury Lane melodrama of past time. The materials are broken timbers from ships or barns, and the design exploits every conceivable kind of dilapidation. The walls, built of the thrown-out grizzles of a brickfield, have settled and bulged, the chimneys are twisted, roof sagging, and so on. The thing is well done and more utterly unbelievable than any description could represent it to be. I do not suppose that the floors are uneven and the ceilings sagging; the whole effect is probably confined to the outside. One would suppose that anyone who would desire to possess or live in such a house was mad; I find it impossible to imagine what their state of mind is, although I well understand and, in degree, sympathize with aspirants to all the other houses in this list. I am afraid, however, that the lovers of the Sham Dear Old are not mad, but merely represent one of many symptoms of a common obsession, which becomes more astonishing when we consider how these houses of our heart's desire are used-how they are lived in.

[To be continued]

# LITERATURE

THE BUILDING OF TWELVE THOUSAND HOUSES

I HIS is the story of a successful experiment on new lines in providing houses for the working classes. A large group of colliery owners formed themselves into what is practically a co-operative society of employers of labour, and raised some six million pounds. through the medium of a housing association, on share capital, debentures, and State loans. It should be noted that in the carrying out of these large schemes of colliery housing, there has been provided by the colliery companies concerned 10 per cent, of this expenditure in share capital, upon which no dividend has been or can be paid. This most generous contribution on the part of the colliery companies has enabled the layout of the villages and the type of houses erected to be carried out upon a scale that would not otherwise have been possible. The Public Works Loan Board have granted substantial repayable loans upon these houses, being fully secured against loss, not only by the value of the property concerned, but by leases entered into between the Industrial Housing Association, Ltd., and the colliery companies, for the full period during which the loans are being repaid.

The houses built by the Industrial Housing Association, Ltd., are leased to the various colliery companies upon thirty years' repairing leases at a rent sufficient to cover all the interest and sinking fund charges, and as no dividend can be paid, and therefore no profit is aimed at, it is only necessary to add to this rent a very small margin for administrative charges. In no case do the lessees make any profit as between the rent they pay to the Industrial Housing Association and the rents charged to the tenants, and, in addition, the lessees are responsible for the full repairs and maintenance of the property. The tenants, therefore, enjoy the full benefits as reflected in their rents of the favourable terms upon which the capital has been obtained, including 10 per cent. of the expenditure subscribed by the colliery companies in

ordinary shares upon which no dividend is payable.

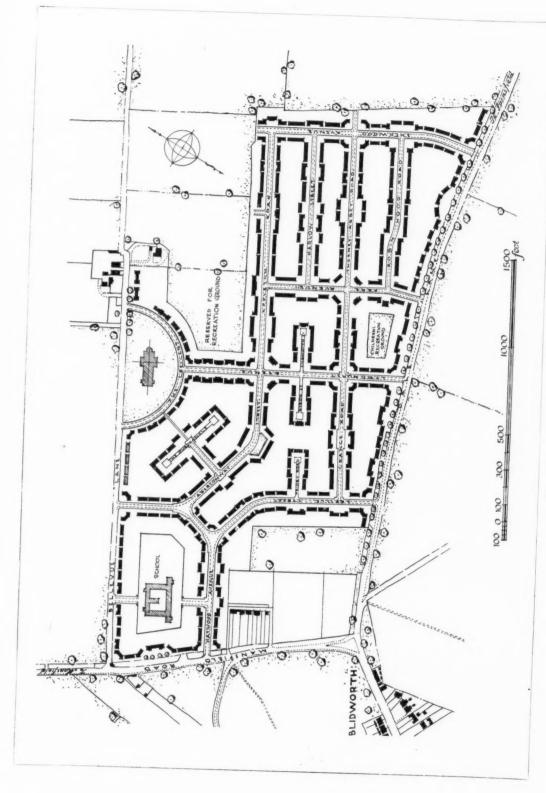
The advantages become even more apparent in the carrying out of building schemes. The placing of contracts for 12,000 houses means very different terms than can be secured in the placing of isolated contracts for small groups of houses, both in the purchase of materials and the contractors' profits, while the planning and supervision of a large scheme of this kind, and the general administration, mean an economy in working expenses which in the aggregate involves a saving of a very large sum of money. Part of the works was carried out by direct labour, and part under contracts. It is claimed that owing to the excellence of the staff secured, the first-named system compared favourably with the latter, but the opinion is expressed that as a general rule the employment of experienced contractors is best.

Reference is made to the bad influence on building undertakings of the present hard and fast lines of demarcation between some of the trades employed, making economical team work

difficult.

Among other points mentioned it is worthy of note that the late Mr. Charles Markham installed a system of hot-water supply in the cottages from his own design, and in the large number of houses provided for the Staveley Coal and Iron Company this provision has been made so that each house has from a tap in the bathroom, and over the sink in the kitchen, a constant supply of hot water. This is a very great boon to the housewife, and also a considerable advantage to men coming home from a night shift and desiring a hot bath at times when hot water from a kitchen fire would not be available. The hot water is supplied either from the colliery or, where the village is some distance from the colliery, from a main hot-water station in the centre of the village.

The pit-head baths have not as yet found favour in Yorkshire and the Midlands, but no doubt, as their advantages are realized, their adoption will become more general. Where the men live in fairly close proximity to the colliery, and where the houses are all provided with bathrooms, there is not the same urgent need for the pit-head baths as in districts where these conditions do not prevail. In several of these villages open-air swimming baths are



Blidworth Village. The Layout Plan. [From The Building of Twelve Thousand Houses].

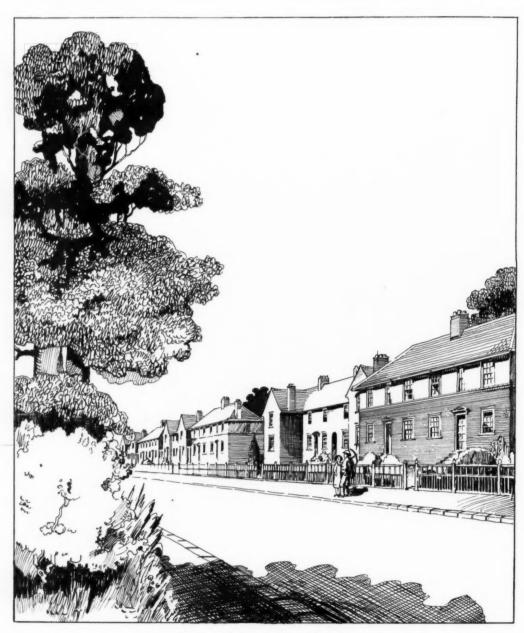
provided; these are well equipped with private dressing-boxes and other conveniences. They are very extensively used, and particularly in the hot weather are a great boon to the men, women, and children. The solution of the garden question appears to be that each house should have a moderate amount of land at the back, and that further garden ground should be provided as near to the houses as possible for those who seriously desire to undertake its cultivation. In some of the villages the men take a real interest in their gardens and make a very fine show, both of flowers and vegetables.

A comparison between brick and concrete construction does not offer a conclusive decision in favour of one or the other—costs are much the same, when bricks can be procured at reasonable prices, as in this case, though doubtless concrete has advantages where there is an abundant supply of suitable aggregate on the site.

There is one striking omission in this book. The illustrations are clear and well drawn, the designs for cottages are generally good, though in some cases rather trite, while the site planning shows different degrees of ability. This extensive range of work could only have been carried through by various expert planners and designers, but neither from the beginning to the end of the letterpress, nor on any drawings, does the name of a single one of these appear. This is obviously no accident. The directors and financial managers all receive recognition, so that the omission of the designers is deliberate, and is from every point of view an unfortunate failure in the sense of proportion on the part of those responsible for the issue of this book.

H. V. LANCHESTER

The Building of Twelve Thousand Houses. By the Rt. Hon. Sir J. Tudor Walters. Demy 4to. Benn. Price 21s. net.



Dale Lane, Blidworth Village. [From The Building of Twelve Thousand Houses]

# GYMNASIA

[BY EDWARD R. BILL]

In compiling the following notes the object has been to set down in synoptic form a record of the principal data relevant to gymnasia. Many of the points discussed have already been ventilated in extenso in the plethora of scattered references in articles, catalogues, and pamphlets, so that collation of extant knowledge, rather than original research, is all that is claimed for the following memoranda.

Gymnasia are divisible into three principal types, viz.: scholastic, recreational, and medical; and while there is no strict line of demarcation between the two former types, the equipment of the medical gymnasium is of a special character. The recommended size for a gymnasium floor is 60 ft. by 30 ft., and it should not be less than 50 ft. by 25 ft. The gymnasium at the Ladies' College, Cheltenham (one of the largest school gymnasiums in the country), has a floor area of 80 ft. by 40 ft. The construction of the floor is of paramount importance, and should consist of very thoroughly seasoned hardwood boards about 4 in. wide, tongued and grooved and secret nailed, with tongued heading joints; free from knots and sap, and having all the grain "rift sawn." The boards should run parallel with the short ends of the room in order to reduce the possibility of slipping when taking a run for jumping or vaulting.

The boards should be laid on wood joists which afford a certain amount of resiliency.

The complete avoidance of dust is essential, and open joints in the flooring due to shrinkage or faulty laying must not be permitted.

While the makers of gymnasium equipment sometimes recommend a floor preparation for preventing wear and eliminating dust, the Board of Education view such dressing with disfavour as it has a tendency to gather dust which comes off on clothing.

The best location for the gymnasium is generally on the ground floor, for, besides offering unique advantages for ventilation by means of wide double doors, this position is necessary for some classes of apparatus, such as the "socket" and "pivot" types of boom uprights. Another advantage of the ground-floor gymnasium is that the attached changing-rooms may often be utilized as dressing-rooms for other recreations when planned conveniently adjacent to the playing fields. A gallery is sometimes provided, and occasionally takes the form of a running track. At least 12 ft. of headroom is necessary under the gallery floor if bar stalls are to be fixed below it.

The Board of Education favours a flat ceiling, chiefly in order to avoid the dust which accumulates on the members of an open roof, but there are many splendid gymnasia in which the roof principals are exposed, as, for instance, in the Bellevue Technical School, Edinburgh, which is also lit from the top in opposition to much



Gymnasium, Harrow School. Size 70 ft. by 40 ft., and 18 ft. high.

expert opinion. The height of the ceiling should not be less than 16 ft. from the floor, and provision should be made in its construction for such fittings as ironwork for carrying the counterbalanced double beams, and the hooks from which climbing apparatus will be suspended. The walls should have an unbroken surface internally, and a continuous row of windows on each side for light and ventilation, the whole area of the windows being arranged to open as centre-hung casements operated by gearing manipulated from the floor. It used to be considered essential that there should be a blank wall space 9 ft. high up to the underside of the window-sills in order to provide space for fixing the apparatus, but the Board of Education now consider this unnecessary, as apparatus can, without inconvenience, be placed in front of the windows, and in the case of a ground-floor gymnasium, the lower half of the spaces between the piers carrying the trusses may be filled with roller or other shutters that can be thrown open for light and ventilation. Where shutters are not used, the Board suggests the window-sills may usefully come down to a distance of within 3 ft. of the floor.

It is most important that the gymnasium should be constructed so that it may be easily kept clean and form no lodgment for dust, and the ceiling and walls should be finished in a light colour. Changing rooms will be required for each sex, and they should be so arranged that access to the gymnasium from outside should be by way of the changing room, as by this means outdoor boots are more easily kept out of the exercising room. The changing rooms should provide a hat and coat hook for each user, together with sufficient seating accommodation, with lockers under, for storage of shoes, etc., used in the exercises. Shower baths and a foot bath will be required, and a w.c. and wash-basin are desirable additions. Where the gymnasium is used by men and women and their respective changing rooms are also used for changing clothes, there must be no direct access from the exercising room to the changing room, and the male and female apartments are best arranged at opposite ends of the gymnasium. An instructor's room is desirable in which weighing and measuring may be done and records filed for reference.

Heating by hot water is far preferable to open fires or stoves, but the pipes and radiators must be very carefully placed in order to avoid interference with the apparatus. Radiators may often be conveniently arranged in a recess in the wall beneath a window, and in this position they do not take up much space available for equipment purposes. The artificial lighting should be shadowless and without glare, and lamps with a diffusing shade should be employed, being protected by a wire guard where likely to suffer damage from apparatus, balls, etc.

It will rarely devolve upon the architect to decide the details

of equipment, but a provision of 2 ft. 10 in. of wall space per person should be arranged for wall bars, which measure oft. 2 in. in height and often have shelves fitted on the top of the uprights to receive the stools. The architect must also arrange for the fixing of the beams (or booms), which consist of two horizontal " beams " supported at the ends (and in the case of the doublespan beam, in the centre) by posts known as uprights. The chief constructional point concerns the type of upright selected. With a portable upright the whole piece of apparatus is taken down and removed when not in use, but this type is not recommended on account of the time and trouble involved in erecting and removing it on each occasion. Its chief advantage is that it permits of use in situations which could not otherwise be utilized for the purpose. A better type is the pivoted upright arranged to sink below the floor level and fitting with the beams into a recess in the floor. This arrangement was installed at the Speech Hall at Shrewsbury School by Messrs. Hunt and Son, of Winsor Street, Liverpool.

Another type is the sliding upright, which slides along a beam to the wall when not in use, and was the type fixed at Bellevue Technical School, Edinburgh, by Messrs. Spencer, George and

Heath, Ltd., of Ponders End, Middlesex.

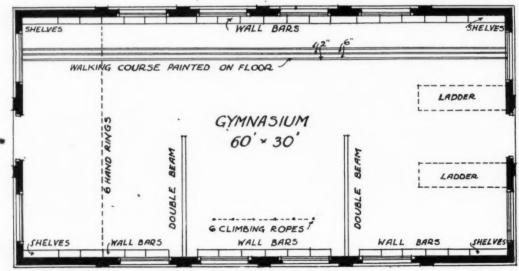
The socket upright is used in situations where the above types cannot be fitted and where interference with the floor is not permitted. The beams should be about 15 ft. span, and a double-span beam should reach across the 30 ft. width of the gymnasium.

The various other apparatus usually includes wall ladders, frame ladders, jumping stands, climbing-ropes, benches, etc., but no special constructional provision beyond fixing hooks and bolts for securing and supporting them where required is necessary.

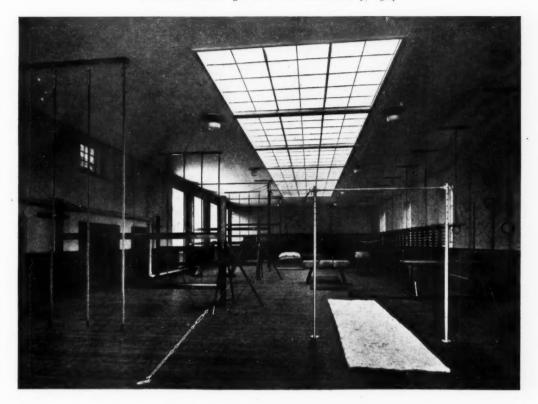
The equipment of medical gymnasia varies considerably with the type of work performed. Usually the apparatus will include beams, rope ladders, high or low plinths, massage couches, etc., while in the more important examples there will be intercostal and rowing machines, quarter curves, spinal ladders, cycle exercisers, etc.

For orthopædic work a mechano-therapy department may be planned in conjunction with the gymnasium proper for the application of the "Zander" or other system of treatment. If electric-therapy is to form part of the cure, provision will be required for ionization, diathermy, the leucodescent lamp, the Bristow coil, Bergonie treatment, ultra-violet rays, etc. For orthopædic work wood-block floors on concrete are usually preferred, as the apparatus is somewhat heavy and requires a firm and solid floor. Waiting rooms, "pack" stores, and stores for apparatus should be included in the scheme for treatment blocks.

[The equipment for the gymnasia illustrated on pages 755 and 757 was supplied by Niels Larsen.]



Orthopedic Gymnasium, Manchester. The plan.





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Above, gymnasium, Welfare Club, Pleasance Trust, Edinburgh. Size 98 ft. by 46 ft., and 16 ft. 6 in. high. The photograph shows type of apparatus in use where the old type of gymnastics is carried out, and the rules of the Amateur Gymnastic Association partly followed. Below, gymnasium, Cumnock Secondary School, Ayrshire. Size 50 ft. by 30 ft., and 16 ft. high.

# LAW REPORTS

ALLEGED NEGLIGENCE BY AN ARCHITECT. DECISION ON LIABILITY

Wisbech R.D.C. v. Ward. Court of Appeal. Before the Master of the Rolls and Lords Justices Atkin and Lawrence

This was an appeal by Mr. Frank Ward, an architect, from a decision of Mr. Justice Sankey, and raised a point of interest to

Mr. Schiller, K.C., for the appellant, said in the Court below the Council brought an action against Mr. Ward, who was the architect for the Council's housing scheme, to recover the sum of  $\pounds_{221}$ , which they said they had been compelled to pay twice owing to defendant's negligence in granting interim certificates. It appeared that after the war the Council decided to erect a number of houses under a housing scheme, and for that purpose they made a contract with Messrs. Wright and Wilson on September 30, 1920. The defendant was the architect under that contract. The Ministry of Health had rights in confection with the scheme by which they could compel war material which the Disposals Board had for sale to be used. The Ministry further had the right of revising the prices and making allowances in the event of the prices of labour or material rising or falling during the continuance of the contract. In the years 1920-21 the houses were in course of erection, and the defendant gave twelve interim certificates, the first on November 29, 1920, and the last on November 24, 1921, in pursuance of clause 29, which regulated the method of payment and which was as follows:

No certificate of the architect, except for the final balance, shall be considered conclusive evidence of any works or materials to which it relates nor of the value thereof, nor shall it relieve the contractor from his liability to make good any defects as provided by these conditions, nor shall it in any way prejudice the employers in the final settlement of the accounts in any case where the contractor has been overpaid during the progress

of the works.

The defendant also gave documents by virtue of which the plaintiffs paid the Disposals Board for certain articles, mainly baths. Unfortunately, he gave some interim certificates and documents under which the plaintiffs had to pay both the builders and the Board for the same material. The amount paid twice over was £221 3s. The mistake was discovered when, after considerable delay, which Mr. Justice Sankey declared to be the fault of the defendant, the accounts were gone through in 1923. It was then sought to get a refund from the builders. The latter, however, had dissolved partnership; one had gone bankrupt, and the money was not recovered. They therefore sued Mr. Ward. In reply, the appellant contended that the action was premature because there was power to rectify under a final certificate, and no final certificate had at present been issued. Should that final certificate be issued it would be found that the builders had not been overpaid, because a sum of £221 11s. 8d. was due to them in respect of sums they ought to be allowed for paying increased wages, and so, in effect, the plaintiffs had suffered no damage. Appellant further said, if the matter could not be rectified there had been a final certificate contained in a document known as Summary No. 4, which was the document gone into between the parties to find what the exact position was, and the defendant had issued his final certificate and could not be sued for negligence, and he further alleged negligence against the Council. Mr. Justice Sankey held that there was no power to issue a final certificate; that Summary No. 4 was not a final certificate; and that the plaintiffs had in no way been negligent, and entered judgment for the plaintiffs for the amount claimed.

Members of the profession are cordially invited to visit the Reading-Room at 9 Queen Anne's Gate, Westminster, S.W.I, where they can inspect at their leisure the books published by the Architectural Press. Any of these books will be sent on 5 days' approval on request. Counsel contended for the appellant that the judge had gone wrong in law in holding that the defendant had been negligent.

Sir M. Macnaghten, K.C., supported the decision in the Court below.

The Court allowed the appeal, with costs.

The Master of the Rolls, in giving judgment, said that by clause 29 of the contract the architect had to certify for the amount of work done and materials supplied. The payments contemplated were to be no more than interim payments, and the architect was to give his certificate each month. It seemed to him that the mistake made in the Court below was in misunderstanding the effect of the duty imposed on the architect under clause 29, and treating the payments made as if they had been a final adjustment between the parties. There had been no final adjustment, and in that sense the action was premature. As regarded the document known as Summary No. 4, that document, when produced, had been examined and corrected by the clerk to the Council. The effect of Summary No. 4 had been much misunderstood at the trial, but to him it seemed that the evidence of the defendant was justified when he called attention to the fact that, on the face of it, that document showed that a sum of £,270 to be paid was less the amount payable to the Disposals Board. The defendant, as architect, was clearly bound to certify for the full amounts, both of labour and material, and he had indicated that a certain amount was to be deducted. The appeal would be allowed, with costs.

Lords Justices Atkin and Lawrence agreed.

#### COVENANT TO REPAIR

Fulham and Hampstead Property Co., Ltd. v. Horne. King's Bench Divisional Court. Before Lords Justices Scrutton and Sargant

This was an appeal by the Fulham and Hampstead Property Co., Ltd., against a judgment of the deputy judge of the Greenwich County Court in favour of Mr. J. Horne in a claim for rent due in respect of a flat in Bellevue Mansions, Forest Hill, of which

the appellants were the landlords.

Mr. Hancock, for the appellants, stated that Mr. Horne became tenant of the flat in February 1924, for three years, at £95 per annum, undertaking to do internal decorations. He occupied the flat for fifteen months and he then asked permission under his lease to sublet or assign the tenancy. Mr. Livingstone, a director of the plaintiff company, agreed to Mr. Horne leaving the flat, as long as he became responsible for the rent until a new tenant took over, and Mr. Livingstone said he would find a new tenant. Mr. Horne paid the rent for two months after he left. He then ascertained that Mr. Livingstone had advertised the flat as being to let, mentioning in the advertisement that a sum would be charged for repairs, etc. No tenant was found till May 1926, and Mr. Horne was sued for five months' rent to that date. The defence he put up was that he was liable for the rent only until a new tenant was found on the same terms as he held, but as the plaintiffs had imposed an additional term as to repairs, etc., he was relieved of responsibility. The judge found in Mr. Horne's favour, holding that when the company advertised the flat for a "small consideration for repairs, etc.," they allowed Mr. Horne to repudiate the agreement he had made and they accepted the surrender of the flat to them at once. Counsel argued that the judge was wrong in the view he took.

Mr. Englebach, for the respondent, contended that the respondent surrendered his tenancy and that the plaintiffs took the flat over. Plaintiffs were only entitled to offer the flat on the same terms as his client held them. The plaintiffs, he submitted. advertised in terms liable to frighten off intending tenants.

The Court allowed the appeal, with costs.

Lord Justice Scrutton said it was contended that the plaintiffs broke their agreement with the defendant by asking for more money than under the existing lease. It was admitted that plaintiffs asked an incoming tenant to pay £20 for decorations. Plaintiffs asked no premium, but only an amount for decorations. Defendant was under an obligation to do interior decorations. There was no evidence that the plaintiffs did not personally endeavour to find another tenant.

Lord Justice Sargant concurred.

#### ALLEGED INTERFERENCE WITH LIGHT

Swinburne v. Goulden and another. King's Bench Division. Before Mr. Justice MacKinnon

This was an action by Florence Lady Swinburne against Mr. H. J. Goulden, of Cheriton Road, Folkestone, and Viscount Folkestone, for damages arising from the erection of a garage at Radnor Park West, Folkestone, and attached to the north wall of No. 6, of which Lady Swinburne is the leasehold holder.

Mr. Borodin, for the plaintiff, said Viscount Folkestone was the lessor of both Nos. 6 and 7 Radnor Park Road, the defendant being lessee of No. 7. In May 1926 defendant erected a garage and extension of the dining-room of the house between the two houses, Nos. 6 and 7, the garage being built on to the north wall of plaintiff's premises. Plaintiff contended this was a trespass, and she claimed further in respect of loss of light and air and annoyance caused by the garage. The claim against Viscount Folkestone was that in April 1926 he granted a licence to his codefendant to erect the garage, knowing that trespass would be committed. The garden wall was a party wall, and plaintiff had rights to the user of it, which were denied by the use to which it had been put by the defendant. The leases all contained similar covenants, which were for the benefit of the tenants on the estate, and should not be used to the injury of the landlord or his tenants. Viscount Folkestone was, therefore, under an obligation not to sanction any work that would infringe the rights of the tenants.

Plaintiff gave evidence, and Mr. E. A. Jackson, architect and surveyor, of Folkestone, said the garage had entirely covered the space between the two houses.

Mrs. L. Moffatt, the present tenant of No. 6, said the garage obstructed the light into her kitchen. Witness said she took the house as a detached house, and defendants had turned it into a semi-detached house.

Mr. James Moffatt said he appealed to the Folkestone Assessment Committee in the matter, and they reduced the assessment on the house from £84 to £72 in consequence of its depreciation in value through the garage.

His lordship: For that benefit you have to thank the defendants. After hearing the evidence, his lordship gave judgment for the defendants. He said that while there was no cause of action for trespass against Viscount Folkestone, Mr. Goulden had committed a technical trespass which, however, was covered by the nominal amount of 40s. paid into Court. In the result the 40s. would be paid out to the plaintiff, and there would be judgment in favour of both defendants, there being no interference with the plaintiff's light and air.

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### FLOODING: RIGHT TO ERECT CAMS

Enkel v. Sich. Official Referee's Court. Before Mr. Hansell, K.C.

This action arose out of the alleged flooding of the lands of the plaintiff, due to the erection of cams in a stream dividing the farm of the plaintiff, at Latchingdon, Essex, from that of the defendant. The action had been remitted to the Official Referee by the King's Bench Division. There was an alternative claim by the plaintiff for damages for alleged interference with an easement to the uninterrupted flow of surface water from his land, and for an injunction to restrain the defendant from continuing any interference with plaintiff's rights.

Defendant denied the plaintiff's allegations and denied that the cam constituted an obstruction to the flow of water from the plaintiff's farm.

Plaintiff's case was that owing to the defendant's acts his lands became waterlogged, with the result that his crops and farm suffered considerable loss.

Mr. J. S. Heath, F.R.I.B.A., and Mr. C. Tarr, surveyor, expressed the opinion that the cams were the cause of the flooding.

Defendant's evidence went to show that no damage was caused by the cams, and that defendant had in no way interfered with the rights of the plaintiff as to drainage. This view was supported by the evidence of Mr. A. H. Case, M.I.C.E., Mr. G. Eve (Alfred Savill and Sons), and Mr. A. H. Rumsey (Offin and Rumsey).

The Official Referee found in favour of the defendant on both

points, damage and interference, and gave judgment for the defendant, with costs. He said he came to the conclusion that the plaintiff had not made out his case. He acted on the evidence of Mr. Case and Mr. Eve, being satisfied there was no flooding due to the erection of defendant's cams. He could not see that the defendant had done anything wrongful. If, however, he were wrong in his decision and it was ultimately found that the defendant was liable to the plaintiff, he assessed the damages at £311 cdd.

Judgment for the defendant, with costs.

#### FAIR WEAR AND TEAR CONSTRUCTION

Morgan v. Bostock. King's Bench Division. Before Mr. Justice Wright

This case raised a point on a fair wear and tear clause in a lease, and came before the Court in the form of an arbitrator's award on construction of liability. The parties were lessee and

lessors of the Theatre Royal at Norwich. Sir Malcolm Macnaghten, k.c., for the appellants, stated that Messrs. Bostock and Fitt took a lease of the theatre from Mr. Morgan's predecessor in title for five years from March 1920, and under it they covenanted to keep it in good repair until the end of their term; structural repairs, damage by fire, etc., and reasonable wear and tear were excepted. The lease also stated that the lessees were to replace damaged articles with others of equal quality as well as all fittings and fixtures that were damaged, worn out or destroyed, fair wear and tear being excepted. There was a dispute at the termination of the lease as to the extent of the dilapidations. The lessees maintained that any article in the schedule that was not in good condition on account of reasonable wear and tear did not impose any liablility upon them. The lessor, on the other hand, argued that the fair wear and tear exemption did not remove the liability upon them to replace worn-out articles. The arbitrator had found that some of the articles in question were not in good repair and were worn out at the end of the lease. The causes for that were circumstances over which the lessees had no control or were fair wear and tear. He also found that the lessees were not liable to repair or replace those articles, which were reasonably fit for use, but they had to replace the articles which were so worn out or damaged that they were no longer reasonably fit for use. The dispute centred around carpets, linoleum, and other things which had worn out, and his contention was that the lessees were not liable to replace under the clause in question.

His lordship, after further legal argument, said he could not see how the arbitrator could draw the distinction he had drawn. If there was no other damage than reasonable wear and tear, as he had found, the lessees could not be responsible for the damage. In his opinion, the award could not stand and would be remitted to the arbitrator to amend in the way he had indicated.

#### AN ARCHITECT'S FINAL CERTIFICATE

P. and W. Anderson, Ltd. v. Bolsover Colliery Housing Co., Ltd. King's Bench Division. Before Mr. Justice MacKinnon

Arising out of a contract for the building of 100 houses for the Bolsover Colliery Housing Co., Ltd., the plaintiffs, P. and W. Anderson, Ltd. (in liquidation), building contractors, of Glasgow, sued the Bolsover Company for £600, which they alleged to be due under a contract dated November 7, 1924.

Mr. R. A. Wallis, for the plaintiffs, stated that the contract provided that at the conclusion of the work the builders were to take away all the unused material, but the building owners, who were to pay for it at prime cost or a certain reduction, should have the right to set off the value of such materials against any sum payable to the builder. Plaintiffs contended that the architects' final certificate must be deemed to have been adjusted so as to produce the final balance that was payable by the employers to the contractors.

Mr. W. Lewis, for the defendants, said his clients claimed the right to set off £600 which plaintiffs agreed was the value of unused materials taken back.

His lordship found for the defendants, with costs. He said the defendants were entitled to deduct the value of unused materials unless the architects had already made the deduction in their final certificate and he was satisfied the architects had not done so. He thought probably the plaintiffs were entitled to some balance for the value of the unused materials for which the defendants had not paid by the interim certificates, but as he was unable to form an opinion as to how much it was he hoped the parties would arrive at some settlement.

# COMPETITION CALENDAR

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

December 10. The Leeds Corporation invite architects in private practice willing to submit designs in a limited competition for a proposed colony for mental defectives at Meanwood Park, Leeds, to forward their names, addresses, and particulars of their executed works of a similar character to the Chairman of the Mental Deficiency Acts Committee, 38 Park Square, Leeds. A small panel of competitors will be selected from the applications received. Mr. John Kirkland, F.R.I.B.A., has been appointed to act as assessor. Premiums of £200, £150, and £100 will be paid to the author of the designs placed by the assessor in the first, second, and third places respectively. The authors of bona-fide designs unplaced will be paid the sum of £50 if they have complied with the conditions and instructions laid down.

December 15. The Portland Cement Selling and Distributing Co., Ltd., announce a competition for architects, with prize awards totalling £1,000. The President of the R.I.B.A. has appointed the following assessors: Messrs. Maxwell Ayrton, F.R.I.B.A.; William Edward Riley, F.R.I.B.A., M.I.C.E., R.B.A., member of the Council of the Royal Sanitary Institute, late superintending architect of Metropolitan Buildings and architect to the London County Council; Douglas G. Tanner (Douglas G. Tanner and Arthur L. Horsburgh), consulting architects to the Daily Mail Ideal Home Exhibition; and Baker and Mallett, quantity surveyors. There will be two sections of the competition. "A" and "B"; the prize awards in each being: first prize, £250; second prize, £150; third prize, £100. In section "A," designs for a house in concrete costing £1,750 are called for, and in section "B," for a house in concrete costing £7,50. The winning designs will be erected at Olympia for the Daily Mail Ideal Home Exhibition.

#### R.I.B.A. COUNCIL MEETING

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

Presentation of Drawings to the R.I.B.A. The Council passed a cordial vote of thanks to Mr. Sigismund Goetze for his kindness in presenting a selection of drawings and sketches by Alfred Stevens to the Institute.

International Congress at Amsterdam. A report was received from Lt.-Col. H. P. Cart de Lafontaine, A.R.I.B.A., the R.I.B.A. delegate at the recent International Congress of Architects held at Amsterdam. The hearty thanks of the Council were conveyed to Lt.-Col. Cart de Lafontaine.

The Architects', Engineers', and Surveyors' Defence Union. It was agreed that a letter signed by the President be sent to every member of the R.I.B.A. urging him to join the Architects', Engineers', and Surveyors' Defence Union if he has not already done so.

The Fellowship. The Council, by a unanimous vote, elected Mr. G. de C. Fraser of Liverpool to the Fellowship under the powers defined in the Supplemental Charter of 1925.

# "THEN——HER"

The students of the Architectural Association, being unable to present a pantomime this year, because of the rebuilding operations, are, instead, holding an all-night dance at the R.I.B.A. Galleries on December 16 (10 p.m. till 5.0 a.m.). An important part of this will be a cabaret entitled "Then—Her," which will be divided into two parts, the first being from 12.0 midnight till 12.30, and the second from 2.0 a.m. till 2.30. Tickets may be obtained from Mr. G. N. Lewis, 34 Bedford Square, W.C.1 (3s. 6d. single; 6s. double).

# LONDON SQUARES

THE IMPORTANCE OF PRESERVING THEM

A NUMBER of interesting points were put before the Royal Commission on London Squares, presided over by Lord Londonderry, by Sir Edgar Bonham Carter, who gave evidence on behalf of the Commons and Footpaths Perservation Society, the Garden Cities and Town Planning Association, the London Society, the London and Greater London Committee of the National Playing Fields Association, and the Metropolitan Public Gardens Association.

Sir Edgar said that these societies regarded the preservation of the square gardens and of the open spaces of a similar character as of the highest importance to London. They would consider the building over of any of them to be a public calamity. The square gardens of London were a very distinctive feature in the planning of London. Similar squares were not to be found, except to a limited extent, in other towns, whether in Great Britain or in Europe. They were especially valuable in London: for, compared with most important European towns, London was deficient in boulevards, in broad arterial roads, and in public open spaces forming part of the architectural layout of the town. From the point of view of public health, their value in admitting sun and air and providing vegetation in crowded streets was generally recognized, and, from the point of view of public amenity, they were perhaps the most admirable feature in the layout of the residential parts of London. Their preservation was of the highest importance, both on grounds of public health and on grounds of public amenity, as well as from the point of view of traffic, for, if they were built over, greatly increased traffic would result and would add seriously to the congestion of the squares themselves and of the neighbouring streets. Viewed from the point of view of town planning, the squares and similar open spaces were an integral part of the town plan of London, and in most cases constituted the essential factor in the town plan of the districts in which they were situated. If they were built over, the character of the neighbourhood would be altered.

The societies had considered the question as to whether the square gardens and similar open spaces should be preserved as private open spaces or acquired as public open spaces. As public societies, they were naturally desirous of increasing the public open spaces of London where this is practical, but they did not consider that any scheme for the general acquisition of the squares as public open spaces was practical. In their opinion the essential object was the preservation of the square gardens under their present conditions, that was to say, that the freehold should continue vested in the present owners, and the gardens should continue as private open spaces as the common amenity of the houses which now had rights over them. Any proposal to convert the gardens into public gardens would add to the difficulty of securing their preservation and would involve heavy expenditure in compensation to the landowners and leaseholders, to whom any public admission to the gardens would be in some cases an injustice. The preservation of the squares was one aspect of the town-planning problem, and a practical and fair method of preserving them was to be found in the application of town-planning principles to built-up areas. But legislation applying town-planning principles to built-up areas would be nugatory unless it was accompanied by a provision giving similar stability to the existing layout of the town as it would have if it had itself been laid out under the Town Planning Act. When a town-planning scheme was finally approved in respect of land which was not yet built over, no landowner could depart from the provisions of the scheme except with the consent of the town-planning authority. Similarly, owners of built-up areas should be prohibited from altering the essential features of the existing layout of a built-up area, and especially as regarded the density of buildings, except in accordance with a town-planning scheme or with the consent of the town-planning authority.

The central districts of London were already too overcrowded for health and for traffic. Any considerable increase in the density of buildings could not fail to be injurious not only to persons residing or carrying on business in those districts and to the community in general, but to landowners themselves as a general class. The existing London Building Acts were totally inadequate to protect the public. If landowners were allowed to build over their land to the extent and height permitted by those Acts, the result would be extremely injurious to health and would increase the congestion of traffic in the streets to an appalling extent. The resulting congestion would cause great loss of time and money to the public, while the local authorities would be involved in heavy expenditure in street improvements. If, for instance, the City of London were built up to the full height allowed by the Building Acts, it would increase the traffic in the City from 30 per cent. to 40 per cent., and add enormously to the congestion. Hence, both on grounds of health and traffic, restriction on the increase of the density of buildings in London had become a

The societies did not consider that the landowners would have any claim to compensation on account of legislation requiring them to preserve their square gardens and similar open spaces as private open spaces. Compensation should only be given in the exceptional case, if such existed, of an owner who, relying on the right which the existing law gave him to build, had bought an estate containing a square garden at a price in excess of the value which the estate had if the garden was preserved as a private open space.

Sir Edgar summed up the main conclusions arrived at by the societies as follows:

- $\scriptstyle\rm I$ : They were strongly in favour of the squares and similar open spaces being preserved in their present condition.
- 2: They were of opinion that town planning principles must be extended to built-up areas.
- 3: They realized that that was likely to take a long time to achieve, and therefore suggested immediate legislation specially dealing with the squares and similar open spaces which they considered was fully justified independently of town planning legislation.
- 4: Such legislation should provide that the London squares and similar open spaces must be preserved as private open spaces. It would safeguard the landowners' right to the freehold and the tenants' rights over such squares and open spaces.
- 5: They thought that in order to enable the present layout to be improved, it would be reasonable to give power to the London County Council, under proper safeguards and with the sanction of the Minister of Health, to consent to an exchange of the existing garden for an equal or greater area, provided that the land dedicated in exchange was appropriated as a private or public open space. Landowners should be authorized, if they wished, subject to the rights of the residents in the squares, to hand over the management and maintenance of the gardens to a local authority.

Sir Willoughby Dickinson, representing the London Council of Social Service, also gave evidence and stated that unless Parliament intervened now, it was by no means improbable that the squares of London would be gradually absorbed, even in cases where there had been Acts of Parliament to regulate their use. These garden squares constituted a special feature of London, and no other capital city was equally favoured in that respect. London needed to be protected against the speculative builders, rather than against the original ground landlords, most of whom would never think of depriving London of its garden squares. The main object was the prevention of building, and, in his view, the necessary requirements would be absolutely met by an Act of Parliament that merely sterilized these particular plots of ground in the future. His proposal was that the squares should be sterilized without compensation. If any question of compensation were brought in, no result would be achieved at all.

The Commission adjourned.

# ARCHITECTS' CERTIFICATES

[ BY A LEGAL CORRESPONDENT ]

The difficulties confronting architects in the giving of interim and other certificates and in construing building contracts were fully illustrated in the Court of Appeal upon an appeal from a judgment of Mr. Justice Sankey in the action brought by the Wisbech Rural District Council against Francis Burdett Ward, when the Court of Appeal unanimously came to the conclusion that in this case the architect's position in giving such certificates had not been fully appreciated in the Court below.

In this case, which is of considerable import to architects generally, whilst Mr. Justice Sankey held the architect to be negligent in the giving of certain interim certificates in connection with a housing scheme, the Court of Appeal held there was no evidence of negligence, that the architect had conformed strictly to the terms of the contract, and that if he had acted in the way which the Council say and Mr. Justice Sankey held he should have acted, he would not have been carrying out his duties under the contract.

In all these cases, of course, the particular contract must be looked at, but it can now be taken as settled law that where by the contract the architect in giving interim certificates is to certify at the rate fixed by the contract of the value of the work, including extras, etc., and materials delivered on the site, he must include in such certificates the value of (inter alia) all the materials on the site at the date of such certificate, including p.c. items which are supplied by a sub-contractor nominated by the architect under the power given him in the contract, notwithstanding the fact that in consequence thereof the building owner must pay. The Court of Appeal stated it made no difference as to who was to pay for these goods, i.e. whether the building owner is bound to pay or whether he elects to pay. The question then arises, Is the architect, where the building owner is bound to pay, under a duty to show on the face of such interim certificates that he has included such items, and upon this point again the Court were unanimous that no such duty lies upon him.

The point further arose that in the event of an architect who, receiving an account for such p.c. items from the building owner, thereon places his rubber stamp, intitials, and marks the same (correct, debit . . . account) is he in such a case certifying? The Court of Appeal came to the decision he was merely checking, as his duty was, the value of such goods included in the p.c. items and testifying his approval thereof.

Again, can an action for negligence lie against the architect for giving such interim certificates before the final certificate has been given, and in such an event is the architect liable or is he in the position of a quasi arbitrator? In the first place, the Court of Appeal came to the conclusion that an action would not so lie until after the issue of the final certificate, as there would be power to rectify, and it is a well-known rule of law that damage is the gist of an action for negligence, and until the giving of the final certificate there is nothing to show that damage has arisen. In the latter case the writer has always held the opinion that, subject to the contract, there is no difference as to the position of the architect in giving an interim certificate than in giving a final certificate, and in both cases the law, as laid down in the cases of Stevenson and Watson and Chambers and Goldthorpe, applies.

In the Court below Mr. Justice Sankey held this was not so, but Lord Justice Atkin, in the Court of Appeal, stated he did not desire to express any opinion about it except to say that it was obvious that the case of Chambers and Goldthorpe would have to be very carefully considered before they came to a conclusion in favour of the building owner, supposing that negligence was otherwise proved. It should be clearly noted the above propositions only apply in the giving of certificates, and then when there is no question of male fides.

# THE WEEK'S BUILDING NEWS

The CROYDON Corporation is to proceed with the development of the Mitcham Road housing estate, and tenders are to be invited for the crection of ninety-six houses.

Plans passed by the CROYDON Corporation: Alterations and additions, 73 North End, for Barclays Bank, Ltd.; eleven houses, Lavender Road, for Mr. Smith Wilkinson; alterations and additions, "Half Moon" public-house, London Road, for Messrs. Nalder, Collyer & Co., Ltd.; additions to hall, Brighton Road, for Mr. W. B. Booth; thirteen houses, Galpins Road, for Mr. H. Macintosh; forty-four houses, Biggin Wood Road, for Messrs. Thomas and Sons; thirty-three houses, Shirley Avenue, for Messrs. Paish, Tyler and Crump; mission hall, Whitehorse Lane, for Messrs. W. A. Everitt and Sons; shops and offices, 79-81 High Street, for Mr. C. H. Ridge.

Plans passed by the BEXHILL Corporation: Two houses, De La Warr Road, for Harrison Smith Buildings, Ltd.; schoolroom, Station Road, for Mr. Bramwell Booth; six cottages, Little Twitten, for Mr. C. H. Bennett; additions, Collington Rise School, Collington Rise, for Mr. Marshall Wood.

The WEYMOUTH Corporation has decided in favour of the provision of a public library and asked the Estates Committee to suggest a site.

Plans passed by the WEYMOUTH Corporation: Three shops and houses, Chapelhay Street, for Messrs. S. Jackson and Sons; stores, Newstead Road, for Messrs. Roles and Curtis; flats, Trinity Road, for Mr. R. D. T. George; fourteen houses, Roman Road, for Mr. E. W. Puffett; alterations, 34-35 St. Mary Street, for Messrs. G. Baines and Son.

Plans passed by the CHORLEY Corporation: Alterations, 4 Fazakerley Street, for Messrs. Freeman, Hardy and Willis, Ltd.; additions, dance hall, Duke Street, for Mr. H. Martin; alterations, Eagle and Child Hotel, Pall Mall, for Threlfall's Brewery, Ltd.; bungalow, Canterbury Street, for Messrs. Gardiner and Son.

The CHORLEY Corporation is acquiring a site of  $3\frac{1}{2}$  acres in Marlborough Road for another housing scheme.

The Surrey Education Committee has prepared sketch plans for the extension of the WIMBLEDON Technical Institute at an estimated cost of £13,500.

The MARYLEBONE B.C. has made arrangements for the L.C.C. to carry out the Carlisle Street improvement schemes, estimated to involve an outlay of over £1,250,000.

The Surrey Education Committee has prepared revised plans for extensions at the KINGSTON Technical Institute.

The Hampshire Education Committee is to borrow £14,500 for adapting premises in Andover Road, WINCHESTER, for school purposes.

The HAMPSHIRE C.C. has voted £14,000 for the erection of police houses in various districts.

The Hampshire Education Committee has approved expenditure of £23,000 for the provision of secondary school accommodation at ANDOVER. •

The Hampshire Education Committee is to erect a senior girls' school to accommodate 330 at EASTLEIGH, at a cost of £14,500.

The Hampshire Education Committee is acquiring a site on the Chamberlayne estate, EASTLEIGH, for the erection of an elementary school.

The GRIMSBY Corporation is purchasing land in Victoria Street for the erection of a tramways depot.

Flats are to be erected on the site of 47-57 Church Street, KENSINGTON.

Plans passed by the MARYLEBONE B.C.: Buildings, sites of 508-510 Edgware Road, and 2-4 Lyons Place, for Messrs. Hall-Jones and Dewhurst; two houses, Elm Tree Road, for Central London Building Company.

The Surrey Standing Joint Committee is to discuss with the Guildford Corporation proposals for improving the Assize Courts at GUILDFORD.

The Surrey Education Committee is seeking sanction to borrow £26,000 for extensions at King's College School, WIMBLEDON.

The governors of the FARNHAM Girls' Grammar School have obtained a site of 7 acres in Tilford Road for the erection of a new school.

The Y.M.C.A. is to erect new premises in Eden Street, KINGSTON.

Plans passed by the PRESTWICH U.D.C.: Houses, Greengate Lane, for Co-operative and Industrial Society, Ltd.; garages, St. Margaret's Road, for Mr. G. E. Barlow; two houses, Polefield Road, for Mr. E. Timewell; garages, Church Drive, for Mr. J. Eastwood; house, Sheepfoot Lane, for Mr. D. M. Dunn.

The PRESTWICH U.D.C. has asked the surveyor to prepare layout and plans for houses on the Polefield estate.

The MARYLEBONE B.C. is acquiring a site in the Lisson Grove district for the erection of new baths and washhouses.

The Ministry of Health is to hold an inquiry into the proposal of the MARYLE-BONE B.C. for acquiring property adjoining the Town Hall in Marylebone Road for the erection of a public library.

The STOKE-ON-TRENT Corporation is in negotiation with the Ministry of Health regarding proposals for scheduling John Street, Longton, as an unhealthy area.

The 214th Field Company, R.E., is to erect a drill hall in Scotia Road, BURSLEM.

The Stoke-on-Trent Watch Committee has approved plans submitted by Provincial Cinematograph Theatres, Ltd., for the erection of a new cinema at Piccadilly, HANLEY.

The STOKE-ON-TRENT Watch Committee has approved plans for the reconstruction of the Alexandra Picture Palace, Longton.

Plans passed by the GRAVESEND Corporation: Two new roads off Cecil Road, for Mr. W. Gould; bungalow, Malvena Avenue, for Messrs. Barton and Burles; shop, Windmill Street, for Messrs. Dumbrill and Son; shop, Harmer Street, for Messrs. Robert Hopkins and Sons.

The NEWCASTLE Corporation has approved the layout of the new housing estate at Lonnen, providing for the erection of 820 houses, and decided to proceed with the scheme in three sections.

The NEWCASTLE Corporation has selected the site in Great North Road for the proposed municipal buildings and given instructions for the preparation of a preliminary scheme.

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Plans passed by the POPLAR B.C.: Rebuilding 270 High Street, for London Cooperative Society, Ltd.; garage, Preston's Row and Yabsley Street, for Messrs. Pickfords, Ltd.; rebuilding "White Horse," High Street, for Mr. A. E. Sewell; additions, "Prince Albert," St. Stephen's Row, Bow, for Mr. E. Lancaster.

The TYNEMOUTH Corporation housing architect has prepared plans for the erection of twenty-four three-roomed, twenty-four four-roomed, and four five-roomed houses at Cullercoats.

The POPLAR B.C. is acquiring two sites in River Street, Bromley, and Naval Row, Blackwall, for the erection of eighty flats.

The borough engineer of POPLAR has prepared a layout of land in British Street, Millwall, for the erection of 108 cottages at an estimated cost of £60,000.

The city architect of HULL is to prepare plans for the erection of a second block of flats in the New George Street area.

The Hull Corporation has obtained sanction to borrow £10,000 for further housing subsidies.

The HULL Corporation Libraries Committee is considering a site in Cottingham Road for the erection of a branch library.

Plans passed by the BEDFORD Corporation: Two houses, Beverley Crescent, for Messrs. Usher and Anthony; two flats, St. Michael's Road, for Messrs. C. Negus, Ltd.; two houses, Cutcliffe Avenue, for Mr. W. B. Stonebridge; fifteen garages, Grafton Road, for Mr. G. P. Allen; three houses, Winifred Road, for Messrs. H. Young and Son; alterations, 35 High Street, for Mr. E. H. C. Inskip; stores, Queen's Engineering Works, for Messrs. W. H. Allen, Sons & Co., Ltd.

The BEDFORD Board of Guardians is to erect a nurses' home in Kimbolton Road in accordance with plans of Mr. E. H. C. Inskip, which have now been passed.

Plans passed by the GUILDFORD Corporation: Additions, White Horse Hotel, High Street, for Friary, Holroyd and Healy's Breweries, Ltd.; two cottages, Stoughton Road, for Mr. F. Smith; shop and house, Madrid Road, for Mr. A. Gostelow; alterations, 91 High Street, for Messrs. Ayres and Sons; factory, Bury Street, for Guildford Glass Works; showroom, Station Approach, for Messrs. A. W. Allard & Co., Ltd.; two houses, Deer Barn Road, for Mr. H. T. Holford.

On behalf of the Tyne Improvement Commissioners, Messrs. Marshall and Tweedy are to creet a power station at Albert Edward Dock, TYNEMOUTH.

The LEIGESTER Corporation has appointed Colonel J. C. Baines, D.S.O., A.R.I.B.A., as architect for the erection of new police buildings in Charles Street, at an estimated cost of £26,000.

The Postmaster-General is obtaining a site in Briton Hill Road, SANDERSTEAD, for the erection of a telephone exchange.

The COULSDON U.D.C. has acquired a housing site in Farleigh Road, Sanderstead, and asked the surveyor to prepare plans for the erection of twenty houses.

The Postmaster-General has obtained a site in Brighton Road, coulspon, for the erection of a telephone exchange.

Plans passed by the COULSDON U.D.C.: Three houses, Coulsdon Street, for Mr. A. W. Dawson; two houses, Marlpit Lane, for Messrs. Edwards & Co.; two houses, Riddlesdown Avenue, for Mr. A. E. Stent; six houses, Green Lane, Purley, for Mr. F. J. Webb; five houses, Chipstead Valley Road, for Mr. V. Shire; new street off Smitham Downs Road, for British Land Company; additions, St. Mary's Church Hall, Sanderstead, for Ecclesiastical Commissioners; six shops and flats, Brighton Road, Purley, for Messrs. Price and Taylor.

The managers have prepared plans for the erection of new premises for the Our Lady of Grace Roman Catholic School, GREENWICH.

The BECKENHAM Education Committee is to erect an elementary school for about 1,200 children on the Elmers End housing estate.

The BEDFORD Corporation is seeking sanction to grant another fifty housing subsidies.

The city engineer of GLASGOW is to prepare plans and estimates for the construction of a bridge and approaches over the railway from Scotstounhill to the Knightswood housing estate.

The SEAHAM HARBOUR U.D.C. is to consider the acquisition of another housing site.

The HULL Corporation has approved the layout plan of the city architect for the erection of an additional 400 houses of non-parlour type on the western housing

Plans passed by the HULL Corporation: Six houses, Dundee Street, for Mr. A. T. Lison; nineteen houses, Belgrave Drive, for Mr. A. Sash; four houses, Belgrave Drive, for Messrs. A. H. Evans & Co., Ltd.; nine houses, Claremont Avenue, for Mr. W. Garbutt.

The city architect of HULL has prepared amended plans for the erection of an admission hospital and nurses' home at the mental hospital, and been instructed to forward them for approval to the Board of Control.

On behalf of the Church Extension Committee of the Presbyterian Church of England, the Rev. J. Mitchell, of Harrogate, is obtaining a site for a church at Chanterlands Avenue, HULL.

The portsmouth Corporation is seeking sanction to borrow £100,000 for further housing advances.

The Surrey Education Committee has obtained a site on the L.c.c. Castelnau estate, BARNES, for the erection of an elementary school.

Mr. J. H. Ryder is to advise the L.C.C. as to the suitability and sufficiency of a scheme, to cost over £70,000, for the provision of a new switch-house at the GREENWICH power station.

The DOVER Education Committee has now passed the final plans for the new elementary school to be erected in Astor Avenue, the cost being estimated at £15,000. Tenders are shortly to be invited.

Plans passed by the STOKE-ON-TRENT Corporation: Extensions, tile works, Boothen Road, for Messrs. Barrett & Co.; five cottages, Ash Green, for Mr. A. C. H. Wenger; alterations, Old Plough Inn, Sideway Terrace, for Michelin Tyre Company; four houses, Trent Vale, for Messrs. Ball and Robinson; eight houses, Waterloo Road, Hartshill, for Messrs. J. Holloway & Co.; four houses, Nelson Road, Hartshill, for Mr. B. James.

Plans passed by the Burslem Corporation: Church institute, St. Andrew's, Sneyd Street, for Rev. Canon Hadwen; workshops, office, and stores, Leek New Road, for Messrs. Shenton Bros.; war memorial hospital, High Lane, for New Haywood and Tunstall Hospital Committee; oven and engine-house, Bournes Bank, for Crown Pottery Company; alterations, Eaterloo Road, for Freemasons Hall; shop, Hanley Road, for Co-operative Society, Ltd.

The ESSEX C.C. has approved the scheme of the Ministry of Transport for the construction of a new road to the docks involving an outlay of three millions, towards which the Government will contribute £2,250,000.

Plans passed by the GLASGOW Corporation: Seventy-four houses, Meikle-Aikenhead, for Messrs. Breeze, Paterson and Chapman; ten bungalows, Crookstown Drive, for Messrs. Lauder and Shaw; buildings, corner of Wallace Street and Centre Street, for Messrs. Campbell, Achnach & Co.

The STOKE-ON-TRENT Corporation is to discuss with the Board of Guardians the proposal for the expenditure of £185,000 on hospital accommodation.

The CROYDON Corporation has obtained sanction to borrow £50,000 for further housing advances.

The city architect of HULL has been asked to prepare a scheme for rehousing 256 families who will be displaced by the construction of the new street from Paragon Street to Beverley Road.

# RATES OF WAGES

|  | CATES OF WAGE  | 5  |        |
|--|--|--|--------|
| I II s. d. s. d.   | I II s. d. s. d.   | I II s. d. s. d.   |        |
| A ABERDARE S. Wales & M. 1 8 1 3‡ A. Abergavenny S. Wales & M. 1 7‡ 1 2‡ B. Abingdon . S. Counties 1 6 1 1‡ A. Accrington N. W. Counties 1 6 1 1‡ A. Addlestone S. Counties 1 6‡ 1 2 A. Addlestone S. Counties 1 6‡ 1 2 A. Addlestone S. Counties 1 8 1 3‡ | A E. Glamor- S. Wales & M. 1 8 1 3‡ ganshire & Monmouthshire B Exeter S.W. Counties 1 7 1 2‡ B <sub>2</sub> Exmouth S.W. Counties 1 5 1 1  | A, NATWICH N.W. Countles 1 6 1 2 2 A Neath . S. Wales & M. 1 8 1 3 3 A Nelson N.W. Countles 1 8 1 3 4 Newcastle . N.E. Coast 1 8 1 3 4 Newport . S. Wales & M. 1 8 1 3 1 3 4 Newport . S. Wales & M. 1 8 1 3 4 New |        |
| A Airdrie . Scotland *1 8 1 3 2 C  | B Felixsrowe E. Counties 1 6 1 14 A, Filey Yorks 1 6 1 2 A Fleetwood N.W. Counties 1 8 1 3 1 B, Folkestone S. Counties 1 5 1 1.  | A Normanton Yorkshire 1 8 1 3 A Northampton Mid. Counties 1 7 1 2 A North Staffs. Mid. Counties 1 8 1 3 A North Staffs. N.E. Coast 1 8 1 3 A Norwich . E. Counties 1 6 1 2 A Nottingham Mid. Counties 1 8 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3  |        |
| don T was  | A Frodsham N.W. Countles 1 8 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   | B OAKHAM Mid. Counties 1 5 1 1 1   | i<br>i |
| B. Bangor S. Counties 1 4 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  | B <sub>1</sub> Gillingham       S. Counties       1 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  | As Oswestry Mid. Counties 1 6 1 1 2<br>B Oxford S. Counties 1 6 1 1 1  |        |
| A Barnsley . Yorkshire 1 8 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   | $ \begin{array}{cccccccccccccccccccccccccccccccccccc$  | A Paisley . Scotland . 1 8 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3   | 1      |
| B Bath S.W. Counties 1 6 1 1 8 A Batley Yorkshire 1 8 1 3 1  | A Halifax. Yorkshire 18 131  | A Pontefract Yorkshire 1 8 1 3;<br>A Pontypridd S. Wales & M. 1 8 1 3;<br>B Portsmouth S. Counties 1 6 1 1;<br>A Preston . N.W. Counties 1 8 1 3;  | i      |
| Tweed $\Delta_a$ Bewdley Mid. Counties 1 7 1 2 1 Ba Bleester Mid. Counties 1 4 1 0   | A Hartlepools N.E. Coast 1 8 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   | A Queens-<br>Ferry N.W. Counties 18 13   | ł      |
| A Birmingham Mid. Counties 1 8 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3   | R <sub>1</sub>   Hatfield   S. Counties   1 5  | B Relating S. Counties 1 6 1 1;<br>B Reigate S. Counties 1 5 1 1;<br>A <sub>3</sub> Retford Mid. Counties 1 6 1 12<br>A Rhondda S. Wales & M. 1 8 1 3;   |        |
| A Blackpool N.W. Countles 1 8 1 3 4 Blyth . N.E. Coast 1 8 1 3 4 B B Bognor . S. Countles 1 4 1 0 6  | A Huddersfield Yorkshire 1 8 1 34<br>A Hull Yorkshire 1 8 1 34   | Valley       A. Ripon       Yorkshire       1 6 1 2         A. Rochdale       N.W. Counties       1 8 1 3         B. Rochester       S. Counties       1 5 1 1   | 1      |
| A <sub>B</sub> Boston . Mid. Counties 1 6 1 2<br>B <sub>1</sub> Bournemouth S. Counties 1 6 1 1 2<br>B <sub>2</sub> Bovey Tracey S.W. Counties 1 5 1 1<br>A Bradford . Yorkshire 1 8 1 3 2   | The initial letter opposite each entry indicates the grade under the Ministry of Labour schedule. The district is that to  | B Rochester S. Counties 1 5 1 1 A, Rusbon . N.W. Counties 1 7 1 1 A, Rugby . Mid. Counties 1 8 1 3 A, Rugeley . Mid. Counties 1 6 1 3 A Runcoru . N.W. Counties 1 8 1 3  | *      |
| A Bridgend . S. Wales & M. 1 8 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   | which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; column II for labourers; the rate for craftsmen working at trades in a   | A. St. Helens N.W. Counties 1 6 1 1 2 N.W. Counties 1 8 1 3 S.W. Counties 1 4 1 1 0 A. Scarborough Yorkshire 1 7 1 1 2   | à      |
| A Brighouse Yorkshire 18 1 3‡ B. Brighton . S. Counties 1 6 1 1‡ A Bristol . S.W. Counties 1 8 1 3‡ B <sub>a</sub> Brixham . S.W. Counties 1 4‡ 1 0‡ A <sub>0</sub> Bromsgrove Mid. Counties 1 7 1 2‡  | which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included  | A Scunthorpe Mid. Counties 1 8 1 3 A Sheffield . Yorkshire 1 8 1 3 A Shipley . Yorkshire 1 8 1 3 A Shrewsbury Mid. Counties 1 6 1 2  | 1      |
| O Bromyard . Mid. Counties 1 4 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   | may be obtained upon application in writing.   | A <sub>3</sub> Skipton       Yorkshire       1       7       1       2         B Slough       S. Counties       1       5       1       1       3       1       1       2       1       2       1       2       1       2       1       2       1       2       1       2       1       2       1       2       1       2       1       2       1       2       1       2       1       2 <td></td>  |        |
| A Bury N.W. Counties 1 8 1 3 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2   | A ILKLEY . Yorkshire 1 8 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   | B <sub>1</sub> Southend on- E. Counties 1 5 1 1 1 2 2 2 2 2 3 2 3 2 3 2 3 2 3 2 3 2  | 1      |
| A Cardiff S. Wales & M. 1 8 1 3 4 A Carlisle N.W. Counties 1 8 1 3 4   | A Keighley Yorkshire 18 13‡  | A Stockport N.W. Counties 1 8 1 3 A Stockbor-on- N.E. Coast 1 8 1 3 Tees A Stoke-on- Mid. Counties 1 8 1 3   | Ī      |
| Ba Carnarvon N.W. Counties 1 5 1 1 A1 Carnforth N.W. Counties 1 7 1 2 2 A Castleford Yorkshire 1 8 1 3 2   | A Kendal . N.W. Counties 1 54 1 12 1 12 1 12 1 12 1 12 1 12 1 12   | Trent B Stroud . S.W. Countles 1 5 1 1 1 A Sunderland N.E. Coast 1 8 1 3; A Swadlincote Mid. Countles 1 8 1 3; A Swansea . S. Wales & M. 1 8 1 3;  | į.     |
| B <sub>1</sub> Chelmsford E. Counties 1 5 1 1 1 2 A <sub>3</sub> Cheltenham S.W. Counties 1 6 1 2 A Chester N.W. Counties 1 8 1 3 1  | B. King's Lynn E. Counties 1 5 1 1  A Lancaster N.W. Counties 1 8 1 31   | B Swindon S.W. Counties 1 6 1 1  | •      |
| B <sub>a</sub> Chichester S. Counties 1 4 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  | A₂         Leamington         Mid. Counties         1 7         1 2 1           A         Leeds         .         Vorkshire         1 8         1 3 2           A         Leek         .         Mid. Counties         1 8         1 3 2           A         Leicester         .         Mid. Counties         1 8         1 3 2 | B <sub>1</sub> Taunton S.W. Counties 1 5 1 1 1 A Teeside Dist. N.E. Counties 1 8 1 3 B Teignmouth S.W. Coast 1 6 1 1 A Todmorden Yorkshire 1 8 1 3 A Toquay S.W. Counties 1 7 1 2 3  | 1      |
| A Clydebank Scotland 1 8 1 3 4 A Coalville . Mid. Counties 1 8 1 3 4 B Colchester . E. Counties 1 5 1 1 1 4 A Coine . N.W. Counties 1 8 1 3 4 3 4 A Colony Bay N.W. Counties 1 6 1 2 2   | A Leigh N.W. Counties 1 8 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  | C Truro . S.W. Countles 1 4 1 0;<br>B <sub>1</sub> Tunbridge S. Countles 1 5 1 1 1;<br>Wells   | 1      |
| A Consett . N.E. Coast 1 8 1 3 4 A Conway . N.W. Counties 1 6 1 1 2 A Coventry . Mid. Counties 1 8 1 3 4   | A Lincoln . Mid. Counties 1 8 1 3 4 A Liverpool . N.W. Counties 1 10 1 4 4 A 3 Llandudno N.W. Counties 1 6 1 2 A Llanelly . S. Wales & M. 1 8 1 3 2 London (12 miles radius) 1 9 1 4 1 4 1 5 Do. (12-15 miles radius) 1 9 1 4  | A Tyne District N.E. Coast 1 8 1 3;  A Wake- Yorkshire 1 8 1 3;  |        |
| n  | A Long Eaton Mid. Counties 1 8 1 3 1   | FIELD   A   Walsall   . Mid. Counties   1 7 1 2 2   A   Warrington   N.W. Counties   1 8   1 3   A   Warwick   . Mid. Counties   1 7 1 2 2   Mid. Counties   1 7 1 2 2   Mid. Counties   1 6   1 1 1 2   Mid. Counties   1 6   1 1 1 2   Mid. Counties   1 6   1 1 1 2   Mid. Counties   1 6   1 2   Mid. Counties   1 6   Mid. Counties   1 7 1 2   Mid. Counties   1 7 1 2   Mid. Counties   1 8   Mid. Coun   |        |
| A Darwen . N.W. Countles 1 8 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   | B Luton E. Counties 1 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  | borough A West Mid. Counties 1 8 1 3 Bromwich B Weston-s-MareS.W. Counties 1 6 1 1   |        |
| A Derby . Mid. Counties 1 8 1 3 4 A Dewbury . Yorkshire 1 8 1 3 4 B Didcot . S. Counties 1 6 1 1 4 A Doncaster Yorkshire 1 8 1 3 4 1 0 4 1 0 4   | B Maidstone S. Counties 1 5 1 1 1 A. Malyern Mid. Counties 1 6 1 2   | Neston - 3 and - 5 a   |        |
| A <sub>2</sub> Driffield . Yorks 1 6 1 2<br>A <sub>3</sub> Droitwich . Mid. Counties 1 6 1 2<br>A <sub>1</sub> Dudley . Mid. Counties 1 7 1 2 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1  | A Mansfield Mid. Counties 1 8 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  | B Windsor . S. Counties 1 6 1 1 1 A Wolver . Mid. Counties 1 8 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   | 1      |
| A Durham N.E. Coast 18 134   | brough As Middlewich N.W. Counties 1 6 1 2 B. Minehead. S.W. Counties 1 5 1 1  | A <sub>3</sub> Worksop . Yorkshire 1 6 1 2<br>A <sub>1</sub> Wrexham . N.W. Counties 1 7 1 2 2<br>B Wycombe . S. Counties 1 6 1 1  |        |
| A Ebbw Vale S. Wales & M. 1 8 1 3 1 A Edinburgh Scotland 1 8 1 3 1   | S. and E. Gla-<br>morganshire<br>A <sub>1</sub> Morecambe N.W. Counties 1 7 1 2 2  | B, Yeovil . S.W. Counties 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  | i      |
|  | s for certain trades (usually Painters and Plasters<br>s for each trade in any given area will be sent on  |  |        |

EXC per 18. (19. 18.

LAI 1s. (PLUI per Proper Storm proper Proper Storm proper Proper Storm proper Storm

BR:

# PRICES CURRENT

| EXCAVATOR AND CONC  | RE         | T         | OR                |
|---|------------|-----------|-------------------|
| EXCAVATOR, 18. 4½d. per hour: LABOURI<br>per hour; NAVVY, 18. 4½d. per hour; TI<br>18. 6d. per hour; SCAFFOLDER, 18. 5½d.<br>WAICHMAN, 78. 6d. per shift.               | MBI<br>per | ERM<br>ho | lid.<br>AN,<br>ur |
| Broken brick or stone, 2 in., per yd  |            | 11        | 6                 |
| Thames ballast, per yd  |            | 11        | 0                 |
| Pit gravel, per yd  |            | 18        |                   |
| Washed sand   | 0          | 15        | 0                 |
| Screened ballast or gravel, add 10 per c  | ent.       | per       | yd.               |
| Clinker, breeze, etc., prices according to<br>Portland cement, per ton  | 22         | 19        | . 0               |
| lige lime ner ton   | - 2        | 10        | U                 |
| Sacks charged extra at 1s. 9d. each a<br>when returned at 1s. 6d.<br>Transport hire per day:<br>Carl and horse \$1 3 0 Trailer<br>3-ton motor larry 3 15 0 Steam roller | nd e       | red       | ised              |
| Cart and horse £1 3 0 Trailer .   | £0         | 15        | 0                 |
| 3-ton motor lorry 3 15 0 Steam roller   | 4          | 5         |                   |
| Steam lorry, 5-ton 4 0 0 Water cart   | 1          | Э         | 0                 |
| EXCAVATING and throwing out in or-  |            |           |                   |
| dinary earth not exceeding 6 ft.  |            | _         |                   |
| deep, basis price, per yd. cube.<br>Exceeding 6 ft., but under 12 ft., a  | a a 0      | 3         | 0                 |
| ent.  | aa         | 30        | per               |
| In stiff clay, add 30 per cent.   |            |           |                   |
| In underninging add 100 per cent.   |            |           |                   |
| In rock, including blasting, add 225 per  | 0 pe       | r ce      | ent.              |
| If basketed out, add 80 per cent. to 15<br>Headings, including timbering, add 40  | 0 pe       | r ce      | ent.              |
| RETURN, fill, and ram, ordinary earth,  | £0         | 1         | 6                 |
| per yd.<br>SPREAD and level, including wheeling,  |            |           |                   |
| per yd  | 0          | 1         | 6                 |
| FILLING into carts and carting away to a shoot or deposit, per yd. cube.  | 0          | 10        | 6                 |
| TRIMMING earth to slopes, per yd. sup.  | 0          | 0         | 6                 |
| TRIMMING earth to slopes, per yd. sup.<br>Hacking up old grano. or similar  | 0          | 1         | 3                 |
| paving, per yd. sup. PLANKING to excavations, per ft. sup   | 0          | 0         | 5                 |
| no arount of the door add for each 5 ft   |            |           | -                 |
| in depth, 30 per cent.  |            |           |                   |
| Ir left in, add to above prices, per ft.  | 0          | 2         | 0                 |
| HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup. Do. 6 in. thick, per yd. sup.  |            | -         | -                 |
| rammed, 4 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                 |
| po. 6-2-1, per yd. cube<br>po. in upper floors, add 15 per cent.  | 1          | 18        | 0                 |
| Do. in reinforced-concrete work, add 2  | ) pe       | r ce      | nt.               |
| no. in underpinning, add 60 per cent.   |            |           | 0                 |
| LIAS-LIME CONCRETE, per yd. cube .  | £1         | 7         | 0                 |
| LIAS-LIME CONCRETE, per yd. cube BREEZE CONCRETE, per yd. cube Do. in lintels, etc., per ft. cube   | ô          | i         | 6                 |
| CEMENT concrete 4-2-1 in lintels  |            |           |                   |
| packed around reinforcement, per<br>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                 |
| race, per yu. sup   | 9          | 0         |                   |

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#### DRAINER

LABOURER. 1s. 4\frac{1}{4}d. per hour; TIMBERMAN, 1s. 6d. per hour; BRICKLAYER, 1s. 9\frac{1}{4}d. per hour; WATCHMAN, 7s. 6d. per shift.

| Stoneware pipes, tested quality, 4 in per ft.   | 0 8<br>r" a<br>2 5 | 6         |
|---|--------------------|-----------|
| per ft  | 0 8<br>r" a<br>2 5 | 6         |
| Do. 6 in., per ft.  | 0 8<br>r" a<br>2 5 | 6         |
| DO. 9 in., per ft. coated, 9 ft. lengths, 4 in., per yd. 0 5 6 5 0 8 6 10., per yd. 0 8 6 Porlland cement and sand, see "Excavator" above Lead for caulking, per cut. 22 5 6 Gaskin, per lb. 20 0 4 3 5 0 0 0 4 5 0 0 0 6 10., per ft. 0 5 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  | 0 8<br>r" a<br>2 5 | 6         |
| Cast-iron pipes, coated, 9 ft. lengths, 4 im., per yd. DO 6 in., per tb.  **STONEWARE DRAINS, Jointed in cement, tested pipes, 4 in., per ft. DO 6 in., per tc. CAST-IRON DRAINS, jointed in lead, 4 in., per tc. DO 6 in., per tc. DO 10 0   | 0 8<br>r" a<br>2 5 | 6         |
| 4 in., per yd. 0 5 6 8 6 100 6 in., per yd. 0 8 6 6 00 6 in., per yd. 0 8 6 6 100 6 in., per yd. 0 8 6 6 100 6 in., per yd. 0 10 4 20 5 6 6 6 6 10 10 10 10 10 10 10 10 10 10 10 10 10  | 0 8<br>r" a<br>2 5 | 6         |
| DO. 6 in., per yd.   0   8   6  | 0 8<br>r" a<br>2 5 | 6         |
| Portland cement and sand, see "Excavator" above Lead for caulking, per cut  | 2 5                | 6         |
| Lead for caulking, per cut.       £2       5       6         Gaskin, per lb.       .       0       0       4         STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft.       .       0       4       3         Do. 6 in., per ft.       .       0       5       5       0       5       0       7       9         Cast-iron Drains, jointed in lead, 4 in., per ft.       .       0       8       0 | 2 5                | 6         |
| Gaskin, per lb.   0 0 4   |                    |           |
| **************************************  | 0 0                | 4         |
| STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft  |                    |           |
| tested pipes, 4 in., per ft   |                    |           |
| DO. 6 in., per ft. 0 5 0<br>DO. 9 in., per ft. 0 7 9<br>CAST-IRON DRAINS, jointed in lead,<br>4 in. per ft. 0 8 0<br>DO. 6 in., per ft. 0 10 0  |                    | _         |
| DO. 9 in., per ft   | 9 4                | 3         |
| CAST-IRON DRAINS, jointed in lead, 4 in., per ft  | ) 5                | 0         |
| CAST-IRON DRAINS, jointed in lead, 4 in., per ft  | 7                  | 9         |
| 4 in., per ft 0 8 0 10 0  |                    |           |
| Do. 6 in., per ft 0 10 0  | 8                  | 0         |
|   | 10                 | 0         |
|   |                    | -         |
|   | ave                | rage      |
| bed and filling for normal depths, and are average  |                    |           |
|   | rdin               | g to      |
| prices.   |                    |           |
| Note.—These prices include digging  |                    | conce ave |

| BRI  | CKL       | AYE     | R      |      |      |     |
|--|-----------|---------|--------|------|------|-----|
| BRICKLAYER, 1s. 9<br>1s. 41d. per hour; so | d. pe     | er hor  | ur;    | LABO | r ho | er. |
|  | *         |         |        |      |      |     |
| London stocks, per M.                      |           |         |        | £4   | 15   | 0   |
| Flettons, per M                            |           |         |        | 2    | 18   | 0   |
| Staffordshire blue, per                    | M.        |         |        | 9    | 10   | 0   |
| Firebricks, 24 in., per                    | M.        |         |        | 11   | 3    | 0   |
| Glazed salt, white, and                    | livory    | stretch | iers.  |      |      |     |
| per M                                      |           |         |        | 24   | 10   | 0   |
| Do. headers, per M.                        |           |         |        | 24   | 0    | Ö   |
| Colours, extra, per M.                     |           |         |        | 5    | 10   | 0   |
| Seconds, less, per M.                      |           |         |        | 1    | 0    | 0   |
| Cement and sand, see                       | "Exce     | mater'  | " abor | oe.  |      |     |
| Lime, grey stone. per to                   | 072       |         |        | 2    | 17   | 0   |
| Mixed lime mortar, pe                      | rud.      |         |        | 7    | 6    | n   |
| Damp course, in rolls                      |           | ner     | roll   | ō    | 9    | 6   |
| Do. 9 in. per roll                         | 0, 28 010 | ., 2001 |        | 0    | A    | 9   |
| Do. 14 in. per roll                        |           |         |        | ő    | 7    | 6   |
| Do. 18 in. per roll                        |           |         | •      | 0    | ó    | 6   |
|  |           |         |        |      |      |     |

| Brickwork in stone lime mortar,<br>Flettons or equal, per rod   | £33   |        |     |
|---|-------|--------|-----|
| Do. in cement do., per rod<br>Do. in stocks, add 25 per cent. per rod.                                  | 36    | 0      |     |
| Do. in blues, add 100 per cent. per rod.<br>Do. circular on plan, add 121 per cen                       |       |        |     |
| Do. circular on plan, add 12½ per cer<br>Do. in backing to masonry, add 12½ per                         | it. p | er i   | ne  |
| rod.  |       |        |     |
| Do. in raising on old walls, etc., add 15 per rod.  |       |        |     |
| Do. in underpinning, add 20 per cen   | t. p  | er i   | rod |
| HALF-BRICK walls in stocks in cement mortar (1-3), per ft. sup.   | 20    | 1      | (   |
| BEDDING plates in cement mortar, per<br>ft. run   | 0     | 0      | 2   |
| BEDDING window or door frames, per  |       | _      |     |
| It. run<br>LEAVING chases 21 in. deep for edges of  | 0     | 0      | 6   |
| concrete floors not exceeding 6 in.<br>thick, per ft. run   | 0     | 0      | 6   |
| CUTTING do. in old walls in cement, per   |       | -      | -   |
| ft. run<br>CUTTING, toothing and bonding new  | 0     | 0      | 4   |
| work to old (labour and materials),   |       |        |     |
| per ft. sup. TERRA-COTTA flue pipes 9 in. diameter,   | 0     | 0      | 7   |
| jointed in fireclay, including all cut-   |       |        |     |
| Do. 14 ft. by 9 in. do., per ft. run  | 0     | 3<br>6 | 0   |
| FLAUNCHING chimney pots, each .   | 0     | 2      | 0   |
| CUTTING and pinning ends of timbers,<br>etc., in cement   | 0     | 1      | 0   |
| FACINGS fair. per ft. sup. extra  | 0     | 0      | 3   |
| Do. picked stocks, per ft. sup. extra .<br>Do. red rubbers gauged and set in                            | 0     | 0      | 7   |
| putty, per ft. sup. extra   | 0     | 4      | 9   |
| DO. in salt white or ivory glazed, per<br>ft. sup. extra  | 0     | 5      | 6   |
| TUCK pointing, per ft. sup. extra<br>WEATHER pointing, do. do.  | 0     | 0      | 10  |
| TILE creasing with cement fillet each   |       |        |     |
| GRANOLITHIC PAVING, 1 in., per yd.  | 0     | 0      | 6   |
| sup.  | 0     | 5      | 0   |
| sup. Do. 1 in., per yd. sup Do. 2 in., per yd. sup.   | 0     | 6      | 0   |
| il coloured with red oxide, per yd.   |       |        |     |
| sup.<br>If finished with carborundum, per yd.   | 0     | 1      | 0   |
| sup   | 0     | 0      | 6   |
| If in small quantities in finishing to<br>steps, etc., per ft. sup.                                     | 0     | 1      | 4   |
| Jointing new grano, paving to old,<br>per ft. run   | 0     | 0      | 4   |
| Extra for dishing grano, or cement  | U     | U      |     |
| paving around gullies, each BITUMINOUS DAMP COURSE, ex rolls,   | 0     | 1      | 6   |
| per ft. sup   | 0     | 0      | 7   |
| ASPHALT (MASTIC) DAMP COURSE, 1 in.,  | 0     | 8      | 0   |
| per yd. sup. Do. vertical, per yd. sup. SLATE DAMP COURSE, per ft. sup. ARPHALT ROOFING (MASSIC) in the | 0     | 11     | 0   |
| ASPHALT ROOFING (MASTIC) in two   | 0     | 0      | 10  |
| thicknesses. # in., per yd  | 0     | 8      | 6   |
| DO. SKIRTING, 6 in. BREEZE PARTITION BLOCKS, set in   | 0     | 0      | 11  |
| cement, 14 in. per yd. sup  | 0     | 5      | 3   |
| DO. DO. 3 in<br>Breeze fixing bricks, extra for each  | 0     | 6      | 6   |
|   |       | au     | 20  |

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. and are intended to cover delivery at works, wharf, station, or yard as custom-sary, 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. 9\d. per hour; Do. fixer, 1s. 10\d. per hour; LABOURER, 1s. 4\d. per hour; SCAFFOLDER, 1s. 5\d. per hour. \*

|   | -      |                    |        |        |        |     |
|---|--------|--------------------|--------|--------|--------|-----|
| Portland Stone:   |        |                    |        |        |        |     |
| Whitbed, per ft, cube   |        |                    |        | £0     | 4      | 6   |
| Basebed, per ft. cube   |        |                    | -      | 0      | ā      | 7   |
| Bath stone, per ft. cube  |        |                    |        | 0      | 3      | 0   |
| Usual trade extras for  | large  | blocks             | t      | -      |        | -   |
| York naving, av. 24 in.,  |        |                    |        | 0      | 6      | 6   |
| York templates sawn, pe   | rft. c | ube                |        | 0      | 6      | 9   |
| Slate shelves, rubbed, 1 in   | 1 pe   | r ft. su           | m.     | 0      | 2      | 6   |
| Cement and sand, see  | "Exc   | avator             | "." et | c., ab | ore    |     |
|   | *      |                    | ,      | ,      |        |     |
| Hoisting and setting  | stone  | e, per             | ft.    |        |        |     |
| cube  |        |                    |        | £0     | 2      | 2   |
| Do. for every 10 ft. ab   | ove :  | ou it.             | add 1  |        | . ce   | nt. |
| PLAIN face Portland bas   |        | er it. 8           | up.    | £0     | - 2    | - 8 |
| Do. circular, per ft. sup   |        |                    |        | 0      | - 4    |     |
| SUNK FACE, per ft. sup.   |        |                    |        |        |        | U   |
|   |        |                    |        | 0      | 3      | 9   |
| Do. circular, per ft. sup   | to .   |                    |        | 0      | 4      | 10  |
| Do. circular, per ft. sup   | to .   | :                  | :      | 0      | 4      |     |
| DO. circular, per ft. sup<br>JOINTS, arch, per ft. sup<br>DO. sunk, per ft. sup.  |        | :                  | :      | 0      | 4      | 10  |
| DO. circular, per ft. sup<br>JOINTS, arch, per ft. sup<br>DO. sunk, per ft. sup.  |        |                    | :      |        | 349994 | 10  |
| Do. circular, per ft. sup<br>Joints, arch, per ft. sup<br>Do. sunk, per ft. sup.<br>Do. Do. circular, per ft.                         | sup.   | erit.s             | up.    | 0      | 4      | 10  |
| Do. circular, per ft. sup<br>Joints, arch, per ft. sup<br>Do. sunk, per ft. sup.<br>Do. Do. circular, per ft.<br>Circular-circular wo | sup.   | erit.s             | up.    | 0      | 4      | 10  |
| Do. circular, per ft. sup<br>Joints, arch, per ft. sup<br>Do. sunk, per ft. sup.  | sup.   | er ft. s<br>per in | up.    | 0      | 4      | 10  |

| HALF SAWING, per ft. sup. Add to the foregoing prices, if in 35 per cent.                       | ¥0<br>York | sto | ne, |
|---|------------|-----|-----|
| Do. Mansfield, 12‡ per cent.<br>Deduct for Bath, 33‡ per cent.<br>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.   | 0          | 0   | 6   |
| YORK STEPS, rubbed T. & R., ft. cub. fixed YORK SILIS, W. & T., ft. cub. fixed                  | 1          | 9   | 0   |
| ARTIFICIAL stone paving, 2 in. thick, per ft. sup Do. 2 in. thick, per ft. sup.                 | . 0        | 1   | 6   |

#### SLATER AND TILER

SLATER, 1s. 9\daggedd per hour; TILER, 1s. 9\daggedd per hour; SCAFFOLDER, 1s. 5\daggedd per hour; LABOURER, 1s. 4\daggedd per hour, N.B.—Tiling is often executed as plecework.

|     |                      | -           |           |         | *    |       |        |        |        |      |      |
|-----|----------------------|-------------|-----------|---------|------|-------|--------|--------|--------|------|------|
|     | Slates, 1s           | t qua       | litu. p   | er 1    | 1.20 | 00:   |        |        |        |      |      |
|     | Portmac              | loc Lo      | idies .   |         |      |       |        |        | £14    |      |      |
|     | Countes              |             |           |         |      |       |        |        | 27     |      |      |
|     | Duchess              |             |           |         |      |       |        |        | 32     |      |      |
|     | Old Del              |             |           | M       | red  | . G   | reu    |        | Med    | . G  | reen |
|     | 24 in. ×             |             |           |         |      | 11    | 3      |        | ₽45    |      |      |
|     | 20 in. ×             | 10 ir       | 1.        | -       | 31   | 4     | 3      |        | 33     | - 0  | 6    |
|     | 16 in. ×             | 10.ir       | 1.        |         | 20   | 18    | 0      |        | 22     |      |      |
|     | 14 in. ×             | 8 ir        | 1.        |         | 12   | 1     | 0      |        | 12     |      |      |
| -   | Green Ra             | ndom        | s per     | ton     |      | -     |        |        | 8      | 3    |      |
| 4   | Grey-gree            | n do        | per to    | 192     |      |       |        |        | 7      | 3    |      |
| -   | Green peg            | mies.       | 12 in.    | to      | 3 in | 1. lo | mg. 1  | per to | on 6   | 3    |      |
|     | In 4-ton             | truck       | loads     | , de    | liv  | erec  | l Ni   | ne I   | Clms ! | stat | ion. |
|     | Clips, lea           | d, per      | lb        |         |      |       |        |        | #0     | - 0  | 6    |
|     | Clips, cop           |             |           |         |      |       |        |        | 0      | 2    | 0    |
|     | Nails, con           | npo. 1      | per cwi   |         |      |       |        |        | 1      | - 6  | 0    |
|     | Nails, con<br>Cement | per,        | per lb.   |         |      |       |        |        | 0      | 1    | 10   |
|     | Cement               | and s       | and, s    | see     | "E   | xca   | valor  | r," e  | tc., a | bove | e.   |
|     | Hand-ma              | de tile     | es, per   | M.      |      |       |        |        | £5     |      | 0    |
|     | Machine-             | made        | tiles, 1  | per     | M.   |       |        |        | 5      | 8    |      |
|     | Westmort             | and si      | lates, l  | ara     | e. p | ert   | on     |        | 9      | 0    |      |
|     | Do. Peg              | gies. 1     | per ton   |         |      |       |        |        | 7      | 5    | 0    |
|     |                      |             |           |         | 40   |       |        |        |        |      |      |
| 5   | SLATING,             | 3 in.       | lan.      | co      | mn   | 0 1   | ails   | . Po   | rtma   | doc  | OF   |
|     | equal:               |             | . mp,     | vo      | an p |       | ****** | ,      |        |      |      |
|     | Ladies,              |             | 1110 PO   |         |      |       |        |        | £4     | 0    | 0    |
|     | Countes              | s. Der      | SOURF     | 0       |      |       |        | -      | 4      | 5    | 0    |
|     | Duchess              | Der !       | RODAR     |         |      |       |        |        | 4      | 10   | 0    |
| 1   | WESTMOR              |             |           |         | nial | hine  | COL    | TROS   |        |      |      |
|     | per squ              |             | y 222 (62 | 2.2.2.0 |      |       | ,      |        | 6      | - 5  | 0    |
| -   | CORNISH              |             | erson     | are     |      |       |        | -      | 6      | 3    | 0    |
|     | Add, if ve           |             |           |         |      | ant   | rox    |        | 0      | 13   | 0    |
|     | Add, if w            | ith ce      | opper     | nai     | 18.  | per   | sau    | are    |        |      |      |
|     | approx               |             |           |         |      | 8     |        |        | 0      | 2    | 6    |
| 1   | Double co            |             | at eav    | es.     | Der  | ft.   | app    | rox.   | 0      | 1    | 0    |
| 5   | SLATING              | with        | Old I     | ela     | bo   | le s  | late   | a to   | a 3    | in.  | lap  |
|     | with co              |             |           |         |      |       |        |        |        |      |      |
|     |                      |             |           |         | Me   | d. (  | Frey   |        | Med.   |      |      |
|     | 24 in.               | $\times$ 12 | in.       |         | 25   | 0     | 0      |        | £5     |      | 0    |
|     | 20 in.               | $\times 10$ | in.       |         | 5    | 5     | 0      |        |        | 10   |      |
|     | 16 in.               |             |           |         | 4    | 15    | 0      |        | 5      | 1    | 0    |
|     | 14 in.               | × 8         | in.       |         | 4    | 10    | 0      |        | 4      | 15   | 0    |
| - ( | Green ran            | dom         | в .       |         |      |       |        |        | 6      |      | 0    |
| - ( | Grey-gree            | en do.      |           |         |      |       |        |        | 5      | 9    | 0    |
| - ( | Green per            | gies,       | 12 in.    | to      | 8 in | . lo  | ng     |        | 4      | 17   | 0    |
| - 5 | filing, 4            | in. g       | auge,     | eve     | PV   | 4th   | cou    | rse    |        |      |      |
|     | nailed,              | in ha       | nd-ma     | ade     | till | es, a | aver   | age    | _      | _    | -    |
|     | persqu               | are.        |           |         |      |       |        |        | 5      | - 6  | 0    |
|     | Do., mac             | hine-       | made      | do.     | , pe | er se | quar   | e.     |        | 17   | 0    |
|     | Vertical             | Tilin       | g, inc    | lud     | ing  | po    | inti   | ng, e  | idd 1  | 88.  | 0d.  |
|     | per squ              | are.        |           |         | _    |       |        |        |        |      |      |
|     | TIXING le            |             |           |         |      |       |        |        | 20     | 0    | 10   |
| 2   | TRIPPING             | old:        | slates    | an      | d st | ack   | dng    | for    |        |      |      |
|     | re-use,              | and         | clearii   | ng :    | aw   | ay    | surp   | lus    | -      |      |      |
| _   | and rub              | bish,       | perso     | ua      | re   |       |        |        | 0      | 10   | 0    |
| 1   | ABOUR O              | nly i       | n layir   | ng s    | slat | 08,   | but    | in-    | -      |      |      |
|     | cluding              | nails       | , per s   | qua     | re   | _     |        |        | 1      | 0    | 0    |
| 2   | See "Sun             | dries       | for A     | 8be     | esto | 8 7   | uing   | Z. "   |        |      |      |
|     |                      |             |           |         |      |       |        |        |        |      |      |

#### CARPENTER AND JOINER

CARPENTER, 1s. 91d. per hour; JOINER, 1s. 91d. per hour; LABOURER, 1s. 41d. per hour.

| per nour; LABOURER, 18. 41a. per l       | wu    | T.    |      |           |
|--|-------|-------|------|-----------|
| *  |       |       |      |           |
| Timber, average prices at Docks, Lo      | md    | on S  | tand | ard       |
| Scandinavian. etc. (equal to 2nds):      |       |       |      |           |
| 7×3, perstd                              |       | £20   | 0    | 0         |
| 11×4. per std                            |       | 30    | 0    | 0         |
| Memel or Equal. Slightly less than       | fo    | regoi | ng.  |           |
| Flooring, P.E., 1 in., per sq            |       | 21    | - 5  | 0         |
| DO. T. and G., 1 in., per sq             |       | 1     | - 5  | 0         |
| Planed boards, 1 in. × 11 in., per std   |       | 30    | 0    | 0         |
| Wainscot oak, per ft. sup. of 1 in.      |       | 0     | 1    | 6 4 6 3 6 |
| Mahogany, Honduras, per ft. sup. of      | 110   | a. 0  | 1    | 4         |
| DO. Cuha, per ft. sup. of 1 in           |       | 0     | 2    | 6         |
| DO., African, per ft. sup                |       | 0     | 1    | 3         |
| Teak, per ft. sup. of 1 in               |       | 0     | 1    | 6         |
| DO., ft. cube                            |       | 0     | 15   | 0         |
| *  |       |       |      |           |
| FIR fixed in wall plates, lintels, sleep | er    | 9     |      |           |
| etc., per ft. cube                       | ,01   | 0     | 5    | 6         |
| Do. framed in floors, roofs, etc., p     | OF    |       |      | 0         |
| ft. cube                                 | · ·   | 0     | 6    | 6         |
| po. framed in trusses, etc., including   | 10    | v     |      |           |
| ironwork, per ft. cube .                 | -6    | 0     | 7    | 6         |
| PITCH PINE, add 334 per cent.            | •     | 0     |      |           |
| FIXING only boarding in floors, roo      | fa.   |       |      |           |
| etc., per sq.                            | ,     | 0     | 13   | 6         |
| SARKING FELT laid, 1-ply, per yd.        |       | Ö     | 1    | 6         |
| Do. 3-ply, per yd.                       |       | 0     | î    | 9         |
| CENTERING for concrete, etc., inclu      | d-    |       | •    |           |
| ing horsing and striking, per sq.        | -     | 9     | 10   | 0         |
| TURNING pieces to flat or segmen         | ta    | -     | -0   | -         |
| soffits, 4 in. wide, per ft. run         | . 000 | 0     | 0    | 43        |
| po. 9 in. wide and over per ft. sup.     |       | 0     | 1    | 9         |
| po. o m. wide and over per ic. sup.      |       |       |      | -         |

continued overleaf

| CARPENTER AND JOINER: continued.   | PLUMBER   | GLAZING in beads, 21 oz., per ft £0 1 1  |
|--|---|--|
| SHUTTERING to face of concrete, per square . £1 10 0   | PLUMBER, 1s. 9\flackdd. per hour; MATE OR LABOURER, 1s. 4\flackdd. per hour.                                    | Do. 26 oz., per ft 0 1 4<br>Small sizes slightly less (under 3 ft. sup.).  |
| Do. in narrow widths to beams, etc.,   | Lead, milled sheet, per cwt £1 13 6   | Patent glazing in rough plate, normal span<br>1s. 6d. to 2s. per ft.<br>Lead Lights, plain, med. sqs. 21 oz.,  |
| Use and waste of timbers, allow 25 per cent. of above prices.  | DO. drawn pipes, per cwt 1 14 0<br>DO. soil pipe. per cwt 1 17 0  | usual domestic sizes, fixed, per ft.   |
| SLATE BATTENING, per sq &0 12 6 DEAL boarding to flats, 1 in, thick and  | Do. scrap, per cwt 1 5 6  | Glazing only, polished plate, 61d. to 8d. per ft. according to size.   |
| STOUT feather-edged tilting fillet to  | Cast-iron nines etc   | PAINTER AND PAPERHANGER  |
| FEATHER-edged springer to trimmer  | DO, 4 in, per yd 0 4 0  | PAINTER, 1s. 84d. per hour; LABOURER, 1s. 44d.   |
| Stour herringbone strutting (joists measured in), per ft. run  |   | per hour; FRENCH POLISHER, 1s. 9d. per hour; PAPERHANGER, 1s. 8 d. per hour.   |
| nailed to sides of joists (joists  | Fig. 4 in., per $yd$ 0 3 64 Gutter, 4 in. H.R., per $yd$ 0 1 64   | Genuine white lead, per cwt £2 7 6   |
| measured over), per square 2 0 0 RUBEROID or similar quality roofing,  | *   | Linseed oil, raw, per gall. 0 3 6<br>DO., boiled, per gall. 0 3 8<br>Turpentine, per gall. 0 4 0   |
| one-ply pervd sup 0 2 3  | MILLED LEAD and labour in gutters, flashings, etc. 3 2 6  | Liquid driers, per gall 0 8 6 Knotting, per gall 0 18 0  |
| DO., two-ply, per yd. sup. 0 2 6 DO., three-ply, per yd. sup. 0 3 0 TONGUED and grooved flooring, 1 in. thick ledd complete with subsyde         | LEAD PIPE, fixed, including running joints, bends, and tacks, in., per ft. 0 2 0                                | Instemner, mashable in ordinary col-   |
| thick, laid complete with splayed  | Do. 1 in., per ft   | Double size, per firkin 0 3 6  |
| headings, per square   | DO. 1 in., per ft 0 4 0 LEAD WASTE or soil, fixed as above,   | Single gold leaf (transferable), per<br>book   |
| TONGUED and mitred angles to do 0 0 6 WOOD block flooring standard blocks  |   | Varnish, copal, per gall. and up 0 14 0  |
| laid herringhone in mastic :   | Wiped soldered joint, in each . 0 2 6   | DO., paper, per gall. 0 16 0<br>French polish, per gall. 0 17 6<br>Ready mixed paints, per gall. and up 0 15 0   |
| Deal 1 in. thick, per yd. sup 0 10 0 0 Do. 1 in. thick, per yd. sup 0 12 0 Maple 1 in. thick, per yd. sup 0 15 0 DEAL moulded sashes, 1 in. with | Do. 1 in., each 0 3 8 Brass screw-down stop cock and two  | *  |
| ft. sun. 0 2 6   | soldered joints, in., each 0 11 0   | LIME WHITING, per yd. sup. 0 0 3<br>WASH, stop, and whiten, per yd. sup. 0 0 6<br>DO., and 2 coats distemper with pro-   |
| ft. sup. 0 2 6 Do. 2 in. do., per ft. sup. 0 2 9 DEAL cased frames, oak sills and 2 in.  | Cast-iron rainwater pipe, jointed in red lead, 2 in., per ft. run. 0 1 7  | prietary distemper, per vd. sup. 0 0 9   |
| moulded sashes, brass-faced pulleys<br>and fron weights, per ft. sup 0 4 6   | DO. 4 In., Der It. run  | PLAIN PAINTING, including mouldings,<br>and on plaster or joinery, 1st coat,   |
| MOULDED horns, extra each . 0 0 3  | 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           | per yd. sup 0 0 10   |
| thick, per ft. sup 0 2 6 Do. moulded both sides, per ft. sup 0 2 9   | Cast-iron soil pipe, fixed with caulked joints and all ears, etc.,  | Brush-Grain, and 2 coats varnish,  |
| ft. sup  | 4 in., per ft 0 4 6 Do. 3 in., per ft 0 3 c   | FIGURED DO., DO., Der vd. sup. 0 5 6   |
| Do. moulded both sides, per ft. sup 0 3 0 Do. in 3 panels, moulded both sides, upper panel with diminished stiles                                | Fixing only: W.C. PANS and all joints, P. or S.,  | STRIPPING old popon and proposing  |
| with moulded bars for glass, per ft.   | and including joints to water waste preventers, each 2 5 0  | per piece 0 1 7  |
| If in oak, mahogany or teak, multiply 3 times. Deal frames, 4 in. × 3 in., rebated and   | BATHS, with all joints  | HANGING PAPER, Ordinary, per piece 0 1 10 DO., fine, per piece, and upwards 0 2 4 VARNISHING PAPER, 1 coat, per piece 0 9 0  |
| Add for extra labours, per ft. run . 0 0 1   | PLASTERER   | CANVAS, strained and fixed, per yd.  |
| STAIRCASE work: DEAL treads 11 in, and risers 1 in   | PLASTERER, 1s. 9\flactrice d. per hour (plus allowances in London only); LABOURER, 1s. 4\flactrice d. per hour. | VARNISHING, hard oak, 1st coat, yd.  |
| tongued and grooved including fir  | Chalk lime, per ton £2 17 0   | DO., each subsequent coat, per yd. sup 0 0 11  |
| ded, per ft. run 0 2 6   | Hair, per cwt   | SUNDRIES   |
| SHORT ramps, extra each 0 7 6<br>ENDS of treads and risers housed to   | Lime putty, per cut £0 2 9 Hair mortar, per yd  | Fibre or wood pulp boardings, according to quality and quantity.   |
| strings, each . 0 1 0 2 in. deal mopstick handrail fixed to  | Sawn laths, per bdl   | The measured work price is on the same basis per ft. sup. £0 0 21  |
| brackets, per ft. run 0 1 6  | Keene's cement, per ton 5 15 0 Siranite, per ton 3 10 0   | FIBRE BOARDINGS, including cutting<br>and waste, fixed on, but not in-   |
| handrail, per ft. run 0 5 6  | Plaster per ton   | and waste, fixed on, but not in-<br>cluding studs or grounds per ft.<br>sup from 3d. to 0 0 6  |
| SHELVES and bearers, 1 in., cross-   | DO. per ton   | Plaster board, per yd. sup from 0 1 7  |
| tongued, per ft. sup 0 1 6   | Lain naits, per in 0 0 4  | PLASTER BOARD, fixed as last, per yd.  |
| ded and square, per ft. sup 0 2 9 TEAK grooved draining boards, 11 in.   | LATHING with sawn laths, per yd. 0 1 7<br>METAL LATHING, per yd. 0 2 3  | sup from 0 2 8   |
| thick and bedding, per ft. sup 0 4 6   | FLOATING in Cement and Sand, 1 to 3, for tiling or woodblock. ‡ in.,  | Asbestos sheeting, fig in., grey flat, per yd. sup. 0 2 3  |
| Fixing only (including providing screws):  | per yd  | DO., corrugated, per yd. sup   |
| Hinges to sashes, per pair 0 1 2   | RENDER in Portland and set in fine  | flat, per yd. sup 0 4 0 Do., corrugated, per yd. sup 0 5 0   |
| Do. to doors, per pair 0 1 7 Barrel bolts, 9 in., iron, each 0 1 0 Sash fasteners, each  | stuff, per yd. 0 3 3 RENDER, float, and set, trowelled, per yd. 0 2 9   | Assestos slating or tiling on, but not including battens; or boards, plain   |
| Rim locks, each 0 1 9  Mortice locks, each 0 4 0   | RENDER and set in Sirapite, per yd. 0 2 5<br>Do. in Thistle plaster, per yd. 0 2 5                              | "diamond" per square, grey . 2 15 0  |
| MOLIUC LUCEO, Carrie   | EXTRA, if on but not including lathing, any of foregoing, per vd. 0 0 5   | Asbestos cement slates or tiles, \$\frac{1}{32}\$ in.  punched per M. grey 16 0 0  |
| SMITH  | EXTRA, if on ceilings, per yd 0 0 5 ANGLES, rounded Keene's on Port-  | ASBESTOS COMPOSITION FLOORING:   |
| SMITH, weekly rale equals 1s. 94d. per hour;<br>MATE, do. 1s. 4d. per hour; ERECTOR, 1s. 94d.  | land, per ft. lin 0 0 6   | Laid in two coats, average ‡ in.<br>thick, in plain colour, per yd. sup. 0 7 0   |
| mate, do. 18. 4a. per hour; ERECTOR, 18. 94d. per hour; Fitter, 1s. 94d. per hour; LABOURER, 1s. 4d. per hour.                                   | girth, including dubbing out, etc.,<br>per ft. lin. 0 0 3<br>White glazed tiling set in Portland                | DO., in thick, suitable for domestic work, unpolished, per yd 0 6 6  |
| **   | and jointed in Parian, per yd., from  | Metal casements for wood frames,   |
| Mild Steel in British standard sections,<br>per ton £12 10 0<br>Sheet Steel :  | FIBROUS PLASTER SLABS, per yd 0 1 10  | domestic sizes, per ft. sup 0 1 6 DO., in metal frames, per ft. sup 0 1 9  |
| Flat sheets, black, per ton 19 0 0   | GLAZIER<br>GLAZIER, 1s. 8 d. per hour.  | Hanging only metal casement in, but not including wood frames, each . 0 2 10   |
| Corrugated sheets, galvd., per ton . 20 0 0 Driving screws, galvd., per grs 0 1 10   | Glass: 4ths in crates:  | Building in metal casement frames, per ft. sup. 0 0 7  |
| Washers, galvd., per grs 0 1 1 Bolts and nuts per cwt. and up1 18 0  | Clear, 21 oz  | Waterproofing compounds for cement.  |
| MILD STEEL in trusses, etc., erected,  | Cathedral white, per ft. 0 0 7 Polished plate, British 1 in., up to   | Add about 75 per cent. to 100 per cent. to the cost of cement used.  |
| per ton  | Do. 4 ft. sup   | <b>10</b> 11   |
| ment, per ton  | DO. 6 ft. sup. 0 3 7<br>DO. 20 ft. sup. 0 3 7<br>DO. 45 ft. sup. 0 3 9  | PLYWOOD, per ft. sup.  Thickness   \frac{2}{10} in.   \frac{2}{2} in.   \frac{2}{3} in.   \frac{2}{3} in.  |
| Do., in bar or rod reinforcement, per ton 20 0 0 WROT-IRON in chimney bars, etc.,  | DO. 65 ft. sup 0 3 11   | Qualities       . AA. A. B. AA. A. B. AA. A. B. AA. A. B. A. A. B. B. A. A. A. B. A. A. B. B. A. A. B. B. A. A. A. B. A. A. B. B. A. A. A. B. B. A. A. A. B. B. A. A. B. B. A. A. B. B. A. A |
| including building in, per cwt. 2 0 0 po., in light railings and balusters,  | Rough plate, \$\frac{1}{28}\$ in., per ft 0 0 6\frac{1}{2}\$  |  |
| per cwt. 2 5 0 Fixing only corrugated sheeting, in-  | Linseed oil putty, per cut 0 15 0   | Manogany 4 3 3 6 5 4 9 7 7 -1 0 10 10 -  |
| cluding washers and driving screws,<br>per yd. 0 2 0   | GLAZING in putty, clear sheet, 21 oz. 0 0 11 00. 26 oz 0 1 0  | Plain Oak  1 side 6  |
|  |   | thegon Plat / 0 4 - / og og  |

