# ANOTHER HAMPSTEAD CASE



#### I. The Site.

"An application is before the L.C.C. to build three new houses in reinforced concrete on the site of the old cottages Nos. 1 to 4, Willow Road, facing the Heath and close to the corner of Downshire Hill ....



#### 2. Adjoining Property.

... the Hampstead Heath and Old Hampstead Protection Society has addressed a letter to the County Council urging most strongly that the Council should exercise its powers to prevent any building so disastrously out of keeping ...



#### 3. Concrete in Downshire Hill.

... with its present character as a 'modern' angular house in reinforced concrete would be. The erection of a building of this kind, even if faced with brick in the upper storeys as this is proposed to be, would . . .



#### 4. Neighbours in Willow Road.

... damage irretrievably the 'atmosphere' of the approach from the Heath to Downshire Hill, one of the most beautiful roads in Hampstead."—From a letter to the Press by Mr. Henry Brooke, Hon. Secretary of the Society.



#### 5. Round the Corner.

To this attack Mr. Ernö Goldfinger has replied that the proposed houses are a modern version of the seventeenth and eighteenth century houses in Downshire Hill. He says . . .



#### 6. " Angular."

". . . The houses I want to build are no more 'angular' than their Georgian and Regency neighbours." The matter will come before the L.C.C. on January 17. That body will doubtless recall . . .



#### 7. Ye Olde New Pub-Next Door.

. that it has permitted building of the type proposed elsewhere in Hampstead, that if Downshire Hill is beautiful, Willow Road is certainly not even interesting, though it faces the Heath and contributes to the

#### 8. Facing the Heath.

..., 'atmsphere of the approach from the Heath' from which the prospect notably includes the Victorian-Edwardian untidiness here pictured. Controversy in the public Press has produced an encouraging volume of support for the architects.



Perspective of the proposed house. Architects : Ernö Goldfinger and Gerald Flower.



### SEVENTEENTH-CENTURY ART IN EUROPE

A section of the Exhibition of "Seventeenth-Century Art in Europe" at the Burlington Galleries which was opened to the public on Monday last. The tapestry, lent to the Exhibition by the Earl of Jersey, represents "Earth," one of the Four Elements, with Ceres and Rhea in a car surrounded by animals. Late seventeenth century; after a cartoon by Charles Le Brun). The mirrors on either side are of the period of William III, executed in walnut, with marquetry of ebony, ivory, etc.



# NEW YEAR

THE first issue of a professional journal in a new year ought to have something special to say. It can express good wishes, and this JOURNAL does so now; it can summarize what has happened in the past year; and it ought, whatever the dangers of prophecy, to discuss in some fashion what may happen in the next twelve months.

The Press, daily, weekly or professional, has a sensible inclination to go slow on forecasts. Hearty good wishes, light relief, lavish illustrations of last year—these are the bricks of New Year issues, well and truly laid in a mortar of suggestion that we are all steadily doing better in a country much more fortunate than others.

The Press is very wise. With quarter-day, income tax demands, public service bills and private celebration bills competing for our attention against a feeling of lassitude, we want some reassurance and some congratulation. Next week the JOURNAL'3 New Year Issue will come into line with competitors.

Engagingly compressed 1937 will be there in its buildings and competitions, its events and publications. An extraordinary discovery in Norfolk will be described with every detail necessary to verisimilitude ; drawings (specially commissioned) will bespangle its pages ; and a half-dozen outstanding buildings will be subjected to a style of criticism with which another art has enlivened the English language. The JOURNAL, in short, has decided not to be left too far behind in the exciting race of New Year Issues.

But all this, unfortunately, will happen next week. And since next week prophecy may be rather cramped by other New Year subjects, it ought to make some appearance today—thankless and unnerving business though it is.

So far as one can see, foreign affairs remaining much as they are now, architecture ought not to have a year which is much worse—or to any great extent less good—than 1937. House building volumes have fallen in the last few months. For the architect this is to a large degree fortunate; it means that builders will begin to want work, that smaller house prices will cease to wobble fantastically from 1s. 6d. to 1s. 9d. and will come back to reality at 1s. 2d., and that quite a number of clients who have been waiting may decide to build.

One can also assume that re-armament pressure on the building industry will slowly lessen during the year and that in consequence those clients considering larger schemes who refuse to take part in the absurd game of "when boom says build we all build together" will decide to go ahead. And this will apply, one hopes, to housing and slum clearance and school building with particular force.

Thus, just as in any kind of forecast, an attempt to look ahead in building comes back to booms and slumps; in short, to speculating about whether public confidence will increase, diminish, or stay as it is. The building industry has been said often enough to be a particularly sensitive index to public confidence. It is also, directly and indirectly, one of the largest of industries, and therefore stability of turnover achieved in it would help enormously in stabilizing conditions in all other industries. But the industry can, unfortunately, do almost nothing to stabilize itself by itself. With all its internal efficiency and desire for a steady volume of work rather than record high volumes alternating with record inactivity, it is dependent on the confidence of Government and public departments on the one hand and on several hundred thousand private building owners on the other.

In turn the attitude of these public and private clients is dependent on political and financial factors, which may sometimes be more truly called scares, which are entirely unpredictable. The building industry in consequence, as well as architects, has no power to arrange its own future and cannot even foretell it for more than six months ahead. And since public confidence may fail from the slightest causes, or no cause at all, *John Bull's* recent objection to the next Informal Meeting at the R.I.B.A., on January 19, being called "Architecture and the Next Slump" might seem at first to be justifiable.

But only at first. Architecture ought to have a reasonably good year ahead of it. And that being so now is the best time for discussing what architects can do to stop themselves and the building industry being helplessly tied to the see-saw of booms and slumps. And anyone who doubts the chaos produced by that see-saw ought to recall the case of the northern city which a few months ago was refused a loan for a housing programme on the grounds that prices were too high, having been refused a loan for the same scheme in 1932 in consequence of the Government's retrenchment policy. Slumps and booms must seem much the same to the slum-dwellers involved.

Nor is this the only case. In 1935-36 schemes which were equally necessary in 1932 were being put in hand by one Government Department at 10-15 per cent. higher prices than could have been obtained three years earlier. When one adds to this difference the cost of the dole to those who would have been employed on the schemes, a position is reached by which the Government may be spending 50 per cent. more than it need on its buildings; which is hardly good business.

The remedy which has been suggested by the building industry is that public authorities should prepare a list of necessary but not vitally urgent works and put these out to tender during periods of slackness in the industry, withcut any regard for talk of slump and retrenchment, and thus at least begin to stabilize building volumes.

By supporting this scheme architects can also begin to free their livelihood from the evils of slumps.



#### A HAPPY CHRISTMAS . . .

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HRISTMAS, as someone once said somewhere about something else, is a great leveller. With the exception of postmen, dynamo men, telegraphists, telephonists and chefs, I suppose that there is no day in the year when so many people are doing and eating the same things at the same moment. If Christmas day in the workhouse is a little different from Christmas day at Sandringham, Eaton Hall, Welbeck or Gleneagles, the rough idea is similar in all cases—varying developments, so to speak, of the same *parti*.

These remarks do not apply, of course, to non-Christian countries. Christmas day in Shanghai or Tel-aviv must be quite different, especially since such places have received western enlightenment. What I am really getting at, of course, is that the average architect is less an architect on December 25 than at any other time—he becomes almost human, and except for a certain chaste restraint in the arrangement of the holly his fireside is much as that of other men.

Not so his mantelpiece (or whatever substitute he may use for a mantelpiece). I did well this year, receiving almost every conceivable variety of card between the two extremes of a charming missive published by the Communist Society and sent to me, oddly enough, by a dear old lady—on the one hand—and a faintly scented daguerreo-type of a robin in a paper-lace à la Valentine frame.

An analysis reveals a curious trait. Nearly everyone who sent me a comic or light-hearted effort in 1936 was extraordinarily gentlemanly and artistic in 1937. This suggests that the Christmas card is not so much a reflection of character as an outward symbol of a self-conscious complex regarding one's neighbour's possible reactions to one's creative output. My mantelpiece-full, were it to be analysed either by Freud or John Madge, would probably tell one more about the architectural profession than one could learn by other means in a month of Sundays.

. . . AND A MERRY NEW YEAR

By January I we are back to normal and are merely slightly bothered by having to put '38 instead of '37 on our belated quarter-day cheques. I very much regret that I embarked upon the tercentenary of *le roi Soleil* in a state of deep sleep, but I gather that Sir Christopher Wren, Gilbert and Mr. Gerald Moira provided the usual sort of settings at the three salient points in the town.

However, the past year at any rate deserves more space than can be given to it here, so I will reserve what I have to say about it until next week. The world may remember 1937, from the point of view of significant design, as the year of the Paris Exhibition—significant if not so significant as 1850. Let me hasten to add that no doubt it will remember 1938 as the year of the Empire Exhibition, Scotland.

GLASGOW AGAIN

I have already been in trouble over the Glasgow Exhibition, but I refuse to be daunted. Glasgow should give us a fair chance. Last week I wanted some information on the subject. I thought that such a big affair would have a London office and sure enough I was right. I expected a temporary but smart window in Piccadilly or Regent Street; Mr. Tait, I thought, might have been allowed a hand. I looked forward to  $\pi$  display of fine British poster work—to a small foretaste of the real thing.

In one of the shabbier purlieus of Covent Garden I found one of the dingiest office buildings that I have ever been in, ascended in one of the slowest lifts I have ever been in, to one of the dreariest offices I have ever been in, where the, apparently, one and only typist gave me all the literature there was—one leaflet which forgot to give the Exhibition's date and a small scale plan of Bellahouston Park. A bad show. London may only be Sassenach but it is after all the capital of the Empire, and this is an Empire Exhibition.

However, I am, perhaps, being unfair. Mr. Tait is a great man and he will probably pull the chestnuts out of the fire yet. Moreover, as the *Glasgow Evening News* reminds me, the Palace of Engineering is to cover  $3\frac{1}{2}$  acres—and if that isn't good architecture I'll eat my hat. PLANNING SCHOOL CONFERENCE

The conference which was held at the R.I.B.A. a few days before Christmas to "discuss the future reorganization of the Architectural Association School of Planning and Research for National Development and the best means whereby it may extend its usefulness and obtain wider support," was a success.

A motion supporting the general idea for which the conference was held was carried unanimously by a representative gathering and a powerful committee formed to inquire into ways and means. Many views were expressed after Sir Raymond Unwin had explained the work of the school, and Mr. Frank Pick and Lord Balfour of Burleigh showed a very full understanding of the school's ideas ideas and ideals which are most inadequately expressed by that overworked and *démodé* phrase, "town-planning."

It is to be hoped that the whole conference will justify itself and that the School will not only continue to exist but that it will be able to extend its valuable—if sometimes misunderstood—work. It may or may not become necessary ultimately to attach the School to a body such as a University which can provide full facilities for research and



A small cinema at Mittenwald, in Bavaria, which uses a free rendering of the local timber construction in larch and fir. The architect is Lois Welzenbacher. Photograph by E. F. Linssen.

travel in wide fields. It was encouraging that both Professor Adshead and the Vice-Chancellor of Liverpool should have written to the Conference expressing general agreement with some such line of action.

#### REGISTRATION AFTERMATH

In a long letter to *The Times* Mr. Williams-Ellis seems generally to approve of the Registration Bill, though he doubts whether education alone can turn out a real architect. But of course it can't : it can only ensure the "certain minimum of technical knowledge" upon which Mr. Goodhart-Rendel is so insistent.

And more than that you cannot do, for I have no doubt that there will always be bad architects, just as there will always be doctors capable of giving you castor oil when you've really got appendicitis. But Mr. Williams-Ellis sums it all up very frankly in his final sentence—" Such ignorance as mine when I first gaily called myself ' architect ' was a real danger to the public, and nothing but the most rare good luck in zealous contractors and saintly clients can account for my not having stumbled into early and serious disaster."

And talking of zealous contractors, do the schools nowadays tell students the habits of contractors not so zealous? I seem to remember being told to visit the job unannounced, and there was also a trick of cutting out a square of 13 instead of 12-inch side when you were trying to check up on the weight of sheet lead used. I've never met this trick in actual practice, but there are plenty of others. Are our students armed with all the low-downs they will almost certainly need?

#### BLEEDING HANDS

I hear fabulous stories about Highpoint 2, now rising alongside its famous neighbour. Not only is brick being used as a structural material but the top flat will be roofed with saucer domes, grouped round a MOBILE, which is being specially designed by Alexander Calder. Stranger still is the rumour that the canopy over the entrance doors is to be supported by plaster casts of the Erechtheum Caryatids. Mr. Lubetkin is perhaps the only man who could get away with this, and I hope it will not be as widely imitated as the piano-shaped partition, the polygonal masonry wall, and the wedge-shaped garage, which have become the clichés of the architectural schools.

It will be interesting to see how the Architectural Review explains away this new and unexpected contribution to modern architecture

#### PALLADIO

Ten years ago the Villa Malcontenta, built in 1555 by Palladio, was rescued from ruin by Mr. A. C. Landsberg. This famous house, which was the inspiration of Mereworth and the ancestor of many other English country houses, has had a varied history. It has been in succession an Austrian barracks, a blacksmith's shop and (in 1917) a military hospital. The present owner has found it impossible to continue the work of restoration, begun by Queen Marguerita of Italy, at his own expense, and has turned it, appropriately enough, into an English country club, for the benefit of visitors to Italy. It will be administered by a committee, which includes among its members Sir Hugh Walpole, Mr. Osbert Sitwell and Lady Diana Cooper, and the work of restoration will be continued under the supervision of Mr. Landsberg himself.

ASTRAGAL

Next week the JOURNAL will publish a Special New Year Double Issue which will contain, in addition to reviews 0, the principal events, buildings and publications of 1937, an example of a new departure in architectural criticism, and the story of an antiquarian discovery in Norfolk of unusual interest. 6

THE ARCHITECTS' JOURNAL for January 6, 1938

## NEWS POINTS FROM THIS ISSUE Another Hampstead Case ... I Analysis of a Building ... 8 . .

The appropriate salary for an architect in local government employment . . . . . .

The Reports of the Rent Restrictions Act Committee ... 30 . .

NEW YEAR HONOURS

Only one architect was included in the Only one architect was included in the New Year Honours List; he is Mr. Christo-pher Bristow, A.R.I.B.A., of H.M. Office of Works and Public Buildings, upon whom was conferred a C.B.E. Other names in the List included: Mr. Henry Alexander, LL.D., J.P., Chairman of the Scottish Housing Advisory Committee (Knight Bachelor); Mr. Thomas Franklin, D.S., LL D. Member of the Advisory Council LL.D., Member of the Advisory Council of the Department of Scientific and In-dustrial Research (Knight Bachelor); Mr. Arthur Hetherington Lonsdale, Assistant Secretary of the Department of Scientific and Industrial Research (C.B.E.); and Mr. Kenneth Clarke, Director of the National Gallery (K.C.B.)

# NEW TECHNICAL COLLEGE, ST. HELEN'S

The St. Helen's Town Council has confirmed the appointment of the Liverpool architects, Messrs. H. S. Silcock and H. Thearle, of Rodney Street, as architects for a new municipal technical school.

#### MUNICIPAL BUILDINGS, SOUTHALL

The Southall Corporation is to invite Mr. R. H. Uren, A.R.I.B.A., to meet the new town hall sub-committee for the purpose of discussing the Council's proposals for the providing of a new town hall and municipal buildings.

#### CINEMA INSTALLATION FOR PALACE OF SOVIETS

A project for the installation of cinema apparatus in the Great Hall of the Palace Soviets has recently been approved by the authorities. The Great Hall, which will be circular, with a diameter of 100 metres, will have seating accommodation (in the form of an amphitheatre) for 20,000 persons. It is intended to put up four large screens in the central parts of the hall-three for the public and one for the platform. Four cinema apparatuses (one of which will be a sound apparatus), installed in different parts of the hall, will project the same film on to all four screens at once.

### THE ARCHITECTS' DIARY

#### Thursday, January 6

HOUSING CENTRE, 13 Suffolk Street, S.W.I. Exhibition : "Rural Housing," Until the end

HOUSING CENTRE, 13 Sufford Street, S.W.1. Enhibition : "Rural Housing." Until the end of January. "NEWS CHRONICLE "SCHOOLS EXHIBITION. At Dorland Hall, Lower Regent Street, S.W.1. Until January 12. BUILDING CENTRE, New Bond Street, W.1. Erkübütion of Interior Design by students of the LO.C.C. Central School of Aris and Crafts. Until January 8, 10 a.m. Be 6 p.m. LONDON SOCIETY. The Children's New Year Party. Lancoster House, St. Janue's, S.W.1. A.15 p.m. Bu 6 p.m. ROYAL ACADEXY, Burlington House, W.1. Enkibütion of European Art of the Serenteenth Century. Until March 12.

#### Monday, January 10

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R.I.B.A., 66 Portland Place, W.I. Award of Prizes and Studentships. Criticism by Mr. Fernand Billerey on works submitted for Prizes and Studentships. Announcement of the Council's nomination for the Royal Gold Medal, 1938.

ROMINATOR J. SCHOOLS EXHIBITION. "NEWS-CHRONICLE" SCHOOLS EXHIBITION. At Dorland Hall, S.W.1. "The Heating of Schools." By W. E. Fretwell. 5 p.m. "Progress in the Design of Schools." 6.30 p.m.

#### Tuesday, January II

INSTITUTION OF CIVIL ENGINEERS, Great George Street, S.W.1. "Recent Engineering Develop-ments in the General Post Office." By Sir George

ments in the General Post Office." By Sir George Lee, 6 p.m. ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. "Chinese Art." By Arnold Silcock, 8.30 p.m. ROYAL SANTRARY ISSTITUTE, 90 Buckingham Palace Road, S.W.1. Discussion: "Recent Advances in Methods of Bed-bug Disinfestation." 5.30 p.m.

#### Wednesday, January 12

Concessar, January 12 INSTITUTION OF CIVIL ENGINEERS, Great George Street, S.W.I. "The Purchase and Use of Concrete in a Pre-mixed Form." By R. H. Stanger, 6 p.m. LiveEPOOL ARCHITECTURAL SOCIETY, Bluecoat Chambers, Liverpool, Students' Night, 6 p.m.

#### R.I.A.I.

At the annual meeting of the Royal Institute of Architects of Ireland, Mr. H. Allbery, the President, announced that the following members had been elected to serve on the Council for 1938 : Messrs. W. H. Howard Cooke, C. A. Harrington, J. V. Downes, H. V. Millar, R. C. Keefe, T. F. Strahan, L. F. Giron, R. H. Byrne and Vincent Kelly. and Vincent Kelly.

#### PRESERVATION OF ROTTINGDEAN

The Rottingdean Ratepayers' Association, in a letter to the Minister of Health, point out that the beauty of Rottingdean and its downland scenery may be imperilled by Brighton's town-planning scheme. The Association urges that to preserve the village a by-pass road should be built for the growing traffic from the north, and the High Street should be protected against through traffic from the growing town of Saltdean. The Association recognizes that if building takes place on either side of a widened Falmer Road it will become necessary to build a Rottingdean by-pass. But the inhabitants " regard with consternation the contemplated encroachment upon the Beacon Hill," whose summit and slopes form a favourite walk.

The Association does not think that the by-pass suggested in the scheme would be adequate ; and, considering it desirable to keep traffic from the east off Rottingdean High Street, they press for the provision of a by-pass road to the east of Rottingdean, which should be linked with the western

by-pass to form a continuous road round the village.

#### STUDENTS' COMPETITION RESULT

The result of the competition for a divisional police station in Hanley, organized by the Associates and Students' Section of the North Staffordshire Architectural Association, is as follows : First prize ( $\pounds_2$  2s.) : E. A. Mountford. Second prize ( $\pounds_1$  1s.) : D. E. Paul. Consolation prize (10s.) : F. Moate. Scheme by G. M. Vickers, prize £1 1s., for best design submitted by a student who had not been articled or at the School of Art, Burslem, for more than two years on September 1,

The assessors were : Messrs. Harold Goldstraw, R. T. Longden and E. T. Watkin.

#### **ANNOUNCEMENT**

Mr. E. H. A. Barron, architect and surveyor, has taken into partnership his senior assistants, Mr. P. W. T. Elford, L.R.I.B.A., Mr. R. J. Evans, F.I.A.S., and Mr. H. J. Sleggett, M.INST.R.A., all of whom have been with him for many years past. The practice will continue to be carried on at I Sussex Terrace, Princess Square, Plymouth, under the style of Barron and Rooke as hitherto.

#### CHANGES OF ADDRESS

Mr. Kenneth Bayes, A.R.I.B.A., has changed his address to 4 Bedford Square, W.C.1. The telephone number, Museum 4307, remains unchanged.

Mr. Harold E. Todd, A.R.I.B.A., has removed his office to 27 Orchard Street, Bristol, W.1.

#### THE LATE J. H. ELDER-DUNCAN

It is with deep regret we record the death, at the age of sixty, of Mr. John Hudson Elder-Duncan, Secretary of the Architecture Club, who for ten years (1900-10) was associated with the Architectural Review.

Born at Wolverhampton in 1877, Mr. Elder-Duncan was the only son of Mr. Alexander Elder-Duncan. He was educated at the Norfolk County School and received his technical training in the offices of Mr. John Hudson, A.R.I.B.A., and Mr. J. Grant Browning, A.M.I.C.E. He was engaged on public engineering works between 1894–98 and, later, joined the staff of the Architectural Press, for whose publications Architectural Press, for whose publications he wrote numerous articles. Mr. Elder-Duncan was the author of the following books: "Country Cottages and Week-end Homes" (1906); "The House Beautiful and Useful" (1907). Last August Mr. Elder-Duncan retired from the staff of the Minister of Arribulture and Fichering. to Minister of Agriculture and Fisheries, to which he was appointed in 1919.

Following is an appreciation by Mr. Randal Phillips :

My association with Elder-Duncan goes back to long years before the war, when we were both working in the same offices where the Architectural Review, the Builders' Journal and Specification were produced. At one time in its career the *Review*, I remember, was edited by a committee consisting of Mr. J. S. MacColl, Sir (then Mr.) Reginald Blom-field, Ernest Newton, and others, and it was their practice to have a lunch at the Savoy to decide on the following month's issue. Elder-Duncan acted as the secretary, and



Mr. A. F. E. Gott (left) and Mr. Roger A. P. Pinckney, winners of the competition for the extension of St. Andrew's Cathedral, Sydney.

had the job of carrying out the committee's proposals.

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He was always an excellent man at getting things together, and putting them shipshape, and he had a very facile pen in dealing with matters of general public interest as well as technical details. The last time I met him was at the R.I.B.A. reception, and I then learnt that some little time before he had had a very serious illness so serious indeed that he barely survived. Yet he seemed to be once again his old self, always cheery and merry, and an enter-taining talker. He was one of those men who do a lot of solid work which is not generally acknowledged.

In connection with the Architecture Club he slaved away for years, and always with good humour. It is a great shock to me to learn of his death, and I am sure I am only one of a very wide circle who would like to pay some small tribute to his memory.

#### R.I.B.A.

#### NEWS BULLETIN

Royal Gold Medal .- At a General Meeting on Monday next, January 10, the Council's nomination for the Royal Gold Medal, 1938, will be announced.

Nonlination for the Koya Cola Victal, 1950, will be announced. *R.I.B.A. Prizes and Studentships.*—The Council's award of prizes and studentships will be announced at the General Meeting on Monday next and Mr. Fernand Billerey will give the criticism. On Monday, January 24, the medals and prizes will be presented and the President will deliver his address to the students. The drawings submitted for the prizes and studentships will be on exhibition at the R.I.B.A. from Tuesday, January 11, to Monday, January 31, from 10 a.m. to 8 p.m. (Saturdays, 10 a.m. to 5 p.m.). *R.I.B.A. Party.*—Further details of the party to be held on February 7 are now available. There will be a nominal charge of 2s. 6d. per head for admission, and members wishing to

There will be a nominal charge of 2s. 6d, per head for admission, and members wishing to attend are asked to apply to the Secretary, R.I.B.A., as soon as possible and in any case not later than Thursday, February 3. Accom-modation is limited and only two tickets can be allotted to any one member. No application for additional tickets can be considered until after January 21. The programme will include the following entertainments :— 8.30 p.m. to 1 a.m. : An Exhibition by the

Camera Club, the subject of which is " Mixed

Bag 1937." 9 p.m. and 10 p.m. : A one-act play entitled "Lucrezia Borgia's Little Party," by A. J. Talbot.

Io p.m. to I a.m.: A dance in the Henry Florence Hall arranged by the Dance Club. II p.m.: A cabaret arranged by the Music Club and the Dramatic Society.

Club and the Dramatic Society. Christmas Holiday Lečtures.—Mr. G. A. Jellicoe's Christmas lečtures to children were a great success and were attended by large and enthusiastic audiences. Exhibition of Chinese Art.—The R.I.B.A. has lent No. 9 Conduit Street for an Exhibition of Chinese Art in aid of Chinese medical relief from Saturday Longery 8, to Friday Longery 8,

from Saturday, January 8, to Friday, January 28. Prices of admission to the Exhibition are as follows : 10 a.m. to 4 p.m., 2s. 6d. ; 4 p.m. to 8 p.m., 1s. (except Thursdays and Saturdays, to 8 p.m., is. (except 1 hursdays and Saturdays, when explanatory talks will be given during these hours and admission will be 6d.); Sundays, 2.30 p.m. to 6 p.m., 2s. 6d. *Exhibitions.*—" Modern Schools" closes at Dor-land Hall on January 12 and opens at the Museum and Art Gallery, Reading, on Lanuary 12

January 17.

"Airports and Airways" opens at the Museum and Art Gallery, Leicester, on January 15. "Civic Centres" opens at Blackpool Art Gallery on January 17.

#### COUNCIL MEETING

Following are some notes from a recent meeting

Following are some notes from a recent meeting of the Council of the Institute : Partial Exemption from the R.I.B.A. Intermediate Examination.—On the recommendation of the Board of Architectural Education, the regulation regarding partial exemption from the Interdiate Examination was amended to read as follows

"Partial exemption may be granted to : (1) Students of Recognized Schools of Archi-

tecture :

Dominion Students ; in very special circumstances other students, (3) in very

who produce evidence of having passed approved examinations of a standard equivalent to the R.I.B.A. Intermediate Examination in certain subjects, viz., The General and Special-ized History of Architecture ; The Calculations

of Simple Structural Members." The School of Architecture, University College, Dublin .- On the recommendation of the Board, it was decided :

(1) That the three years' full-time course be recognized under the usual conditions for ex-emption from the R.I.B.A. Intermediate Examination.

(2) That the five years' course leading to the B.Arch. Degree be recognized under the usual conditions for exemption from the R.I.B.A. Final Examination except that portion relating to Professional Practice. (3) That the School be allowed to hold the

examinations in Professional Practice with the examinations in Professional Practice with the other examinations in the final year instead of at the R.I.B.A., provided that the examination in Professional Practice is conducted by senior independent practising architects, and not as part of the ordinary examinations of the School. The School of Architecture, Dundee College of Art.— On the recommendation of the Board, it was decided that the recognition of the four years' the part-time course for exemption from the R.I.B.A. Intermediate Examination be con-

R.I.B.A. Intermentate Examination be con-tinued for another year. *The Department of Architecture, University of Sheffield.*—On the recommendation of the Board, it was decided that the recognition of the three years' full-time Certificate Course for exemption from the R.I.B.A. Intermediate Examination, and of the five years' Degree and Diploma

Courses for exemption from the R.I.B.A. Final Examination, be continued. The School of Architecture, Hull College of Art and Crafts.—On the recommendation of the Board, it was decided that the three years' full-time day course be recognized for exemption from the R.I.B.A. Intermediate Examination.

University of London Architettural Education Committee. — Mr. Hubert Lidbetter (F) and Professor A. B. Knapp-Fisher (F) were nomi-nated to represent the R.I.B.A. on the Univer-sity of London Architectural Education Committee for the twelve months beginning March 1, 1938.

National Association of Water Users, Ltd.—On the recommendation of the Science Standing Committee, Mr. Percy V. Burnett (F) was appointed as a representative of the R.I.B.A. on the Council of the National Association in place of Mr. P. M. Fraser, who has recently resigned from his representation.

Royal Sanitary Institute and Sanitary Inspectors Examination Joint Board .- Mr. Thomas E. Scott was re-nominated as a representative of the .B.A. on the Royal Sanitary Institute and R.I.B.A. Sanitary Inspectors Examination Joint Board.

Fifth Glass Convention.—On the recommendation of the Science Standing Committee, Mr. Raymond McGrath (A) and Mr. G. Grey Wornum (F) were appointed to represent the R.I.B.A. on the Council of the Convention.

R.I.B.A. on the Council of the Convention. International Federation for Housing and Town Planning,—The following members were re-appointed as the R.I.B.A. representatives on the Council of the International Federation for Housing and Town Planning: Professor Patrick Abercrombie (F), Professor S. D. Adshead (F), Mr. H. T. Buckland (F), Mr. W. Alexander Harvey (F), and Mr. W. Harding Thompson (F). Thompson (F).

The R.I.B.A. Architeitural Bronze Medals : The Birmingham and Five Counties Architeitural Associa-tion.—Mr. Stephen Welsh (F) was appointed as the R.I.B.A. representative on the Jury for the award of the Medal in the area of the Birming-ham and Five Counties Architectural Associa-tion. tion.

tion. Housing Standards.—The Town Planning, Housing and Slum Clearance Committee re-ported that it had appointed Mr. E. Maxwell Fry (A) (Chairman of the Slum Clearance, Replanning of Blighted Areas and Housing Standards Sub-Committee), Mr. Arthur W. Kenyon (F), Mr. R. T. F. Skinner (A), and Miss M. J. Blanco White (Stud.) (Convener of the Sub-Committee) to represent it on the joint committee of the Committee and the Housing Centre, set up to control the preparation of the Centre, set up to control the preparation of the pamphlet on Housing Standards.

Foreign Relations Committee,—Mr. G. H. Jones, M.C. (A) and Mr. F. R. Yerbury (Hon.A) were appointed as members of the Foreign Relations Committee.

Reinstatements,—The following ex-members were reinstated : As Associates—Messrs. John Fred-erick Fogerty (Retd.A), Thomas Cressey Hamilton, Arthur Gerald Johnson, Cecil James Scott, and Henry George Warren. As Licen-tiate : Mr. Donald John Cameron.

# ANALYSIS OF A BUILDING HOUSE AT MILVIL ROAD, LEE-ON-SOLENT



8

COLL STOR

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**REQUIREMENTS**—Large living space with dining space having direct access to service pantry and kitchen. Large owner's bedroom with dressing and bath room. Double and single guests' bedrooms *en suite* with bathroom. Study. Self-contained care-taker's flat (marked play-room on plan). Garage. Kennel. Open-air plunge pool. Terraces for out-of-door living and sleeping.

COST—House, £2,510. Pool, £120. Built-in furniture, £300. Garden with wall and gates, £70. Total cost, £3,000.

West elevation (1): External walls are finished against wood board shuttering and painted a pinkish cream with soffits of projections light blue. Diagrams (2 and 3) on right show method of fixing trellis to allow creeper to grow round members, and columns to canopy over west terrace.



FIRST FLOOR PLAN





# JILDING EE-ON-SOLENT DESIGNED BY F.R.S.YORKE AND E.MARCEL BREUER





#### SPECIFICATION NOTES

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CONSTRUCTION—1—Reinforced concrete. Walls : 5 ins. thick weight-carrying monolithic construction. Ground floor : 6 ins. waterproofed reinforced concrete I : 2 : 4 mix. First floor and roof : 5 ins. thick reinforced concrete. Foundations and walls waterproofed to a height of 12 ins. above ground level.

INSULATION—External walls cast against  $\frac{1}{2}$ -in. fibre board as permanent shuttering. Roof,  $\frac{1}{2}$ -in. fibre board as permanent shuttering on underside,  $\frac{1}{2}$  in. fibre board on top held down by screed. Impact noises from first floors are deadened by either cork or carpet finishes.

PARTITIONS—5 ins. and 4 ins. reinforced concrete monolithic weight-carrying cross walls, and 3 ins. breeze partitions.

WINDOWS—Living-room : south window medium universal section, size 16 ft. by 9 ft. 6 ins., with pivot-hung top lights and sliding bottom lights, and 6 ins. deep blind box at head. West window medium universal section, size 7 ft. high by 9 ft. wide; one acts as a door, coupled to standard window. West clerestory window, 13 ft. 6 ins. by 4 ft. 4 ins., pre-fabricated in three sections, reinforced concrete and glass window  $l\frac{1}{2}$  ins. thick, bars at 12 ins. centres, cross reeded glass. Bedroom I : medium universal section, size 7 ft.10 ins. high by 9 ft.  $6\frac{1}{2}$  ins. wide, sliding folding giving access to terrace, with 10 ins. deep fanlights. Windows generally standard opening lights with special sizes for fixed ports only.

ports only. DOORS—Entrance door : 7 ft. by 3 ft. medium universal section steel, with side lights, overall width 5 ft., glazed with clear polished plate. Equipped with metal cill, latch lever handles, lock and bolts, and bronze letter plate ; painted finish. Kitchen : framed, ledged and braced deal. Garage and tank room : standard wood roller shutter. Landing and caretaker's flat to terrace : medium universal section steel, glazed. Internal : 6 ft. 6 ins. by 2 ft. 6 ins. or 2 ft. by 1 in. thick columbian pine flush faced alder ply, lock edge, veneered 2 mm. thick. DOOR EURNITURE — Generally : 3 ins.

DOOR FURNITURE — Generally : 3 ins. mortice locks with pairs of sprung lever handles matt chromium plate finish. Bathrooms lever handles, cream "Doverite" finish. Kitchen to service pantry and to dining-room : 5 ins. helical spring hinges with 12 ins. by 3 ins. finger-plates.

PLUMBING—The main stacks are grouped in an internal duct, formed by two 3 ins. breeze partitions 12 ins. apart, carried the full height of the building. Cold-water tank is housed in reinforced concrete tank room on roof, with roller shutter access door, space between tank and walls being packed with slag wool for insulation.

SANITARY FITTINGS—Baths 6 ft.  $2\frac{1}{2}$  ins. overall long,  $3\frac{1}{2}$  ins. roll, pink or blue porcelain enamelied; chromium-plated overhead shower fitting, down pipe, hot and cold breeches piece, chromium-plated curtain rail.

Lavatory basins : Four earthenware pedestal basins 22 ins. by 16 ins., two white glazed fireclay basins 22 ins. by 16 ins., with white porcelain enamelled brackets.

W.c.s.: two blue or pink earthenware closet pan, two-gallon high level fireclay cistern, chromium-plated flush pipe, cellulose hinged seat and cover ; two glazed fireclay closet pan, two-gallon painted iron cistern, galvanized steel flush pipe 12 ins. by 6 ins. ; glazed recess soap and sponge holders are fitted to bathrooms and recess toilet roll holders to w.c.s.

ELECTRICAL—Wiring on the "looping-in" system, heavy gauge welded, screwed and enamelled steel conduit ; switches sunk pattern, quick-make quick-break action with bakelite or copper cover plates. Plugs three-pin interlocking type, 5 amp. 15 amp. and one 30 amp. cooker point. Bells to entrance doors and principal rooms with transformer and indicator in kitchen.

Continued on page 10]





4 : South-west corner, column and terrace, 16 ft. by 9 ft. 6 ins., window with sunblind box at head to living-room. 5 : North-west corner, dog pen, tradesmen's entrance under dressing-room, staircase to caretaker's terrace and flat.









HEATING-Low-pressure hot water heating on two-pipe principle, combined with a domes-tic hot water supply apparatus. Plant com-prises sectional boiler fitted in recess near kitchen with mains carried to serve a total of kitchen with mains carried to serve a total of eleven radiators and heating coil under upper window to living-room, and the domestic apparatus arranged on the indirect calorifier system. Temperatures maintained : 60 deg. F. living-room, 55 deg. F. bedrooms, hall and landing. Excepting to the garage the radiators are flush surface hospital pattern. A coal fire, and a three-bank electric tubular heater under the main window for summer use, are provided in the living-room.

are provided in the living-room.

ROOF FINISH-Two-ply bituminous composition, gravel finishes, except to first floor terraces, which are finished with 20 ins. by 20 ins. pre-cast concrete slabs laid with 1/2 in. joints.

EXTERNAL WALL FINISH-Two coats of special flat paint direct to smooth concrete surfaces.

INTERNAL WALL FINISH—Hard plaster to walls and ceilings ; walls to living space, dining recess, landing, two bathrooms, bedroom one, and study painted three coats. Other surfaces twice distempered. Woodwork and ironwork primed and painted three coats. Interior of garage painted direct to concrete as exterior.

FLOOR FINISHES — Hall, w.c.s and kitchen 6 ins. by 6 ins. buff tiles. Living space, squares of birch ply pinned to sub-floor. Study and bed-rooms, carpet let into a surround of birch ply. Staircase, landing and bathrooms, cork tiles.







8,9 and 10: South-east corner showing the sleeping terrace, an extension of the owner's bedroom, with its cantilevered staircase down to the garden. The diagrams (11 and 12) and the illustration (8) show the staircase in detail with method of fixing the patent flush jointed steel barrel handrail.

14

13







II

The dog kennel (13 and 16) is formed of 4-in. reinforced concrete walls finished against wood board shuttering and painted; spade finish concrete floor; and painted iron railing. 14 and 17: Details of the flat roof terraces. 15: South wall, reinforcement diagram.







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COPPER ON PLASTER DUALL LIVING RM. CLOCK 20



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18: Looking down into the living-room from the first floor landing. The heating coil, top right, avoids heat losses through the glass and concrete window. 20: Detail of the living-room clock.

**19, 21** and **23**: The staircase and solid fuel burning fire in the living-room. The staircase is constructed in reinforced concrete, with treads and risers finished in cork and walls plastered and painted. **22**: Section.







3

25

THE ARCHITECTS' JOURNAL for January 6, 1938



24, 26 and 27: The end wall of the dining space is covered in  $\frac{1}{4}$  in. mirror glass, increasing the apparent size of the area. The door on the right to the service pantry is hung on helical springs and has 12 ins. by 3 ins. polished copper finger-plates, so that it can be easily pushed open when holding a loaded tray.

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25 and 28: The living space window is medium universal section, steel, size 16 ft. by 9 ft. 6 ins., with pivot-hung top lights, sliding bottom lights, and 6 ins. deep external blind box at head. To take the chill off this window in summer evenings a three-bank electric tubular heater the full length of the window is mounted on wall brackets above the skirting.

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29, 30, and 33 : The guests' bedroom, 3; hospital type radia-tor, dressing-table and wardrobe are in white wood, painted. 31 and 34 : The study on the ground floor is furnished with built-in divans, cupboards, hanging wall-fitting, and mirror, so that it can be used as a spare bed-

room. 32: Owner's bedroom, door to bathroom, and sliding folding door to sleeping terrace; the floor covering consists of a pile carpet let into a surround of polished birch ply squares pinned to a wood sub-floor.

BOLT - L BALLCATCH



CHROMIUM ROD MIRROR SLOPES 2'-1" 3 A BOW HANDLES WARDROBE 2 0' DEEP BOLT TIS BALL CATCH DRESSING TABLE & WARDDOBE BED 3 33 MIRROR 5 0 14" PLATE C P BRACI 1 ROULER SHUTTER IT > 14" PLATE ISLIDING 5 FITTING HUNC ON 2'SI' BATTENS TOP & BOTTOM DUNLOPILLO DIVAN FURNITURE IN STUDY SPARE BED

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40 : Ground floor bathroom. The end wall to the bath 40 : Ground floor bathroom. The end wall to the bath forms the side of the service pipe duct and a recess for the lavatory basin and mirror. The floor and casing to the bath are in cork tiles. The hot-towel rail airers (41) are 30 ins. by 30 ins. by  $1\frac{1}{2}$  ins. chromium-plate finish. The duct takes all plumbing pipes from the bathrooms and a lavatory in the guests' bedroom, in addition to rainwater from the roof and bedroom terrace (see plan, page 8). 35 : Standard flush doors. 36 : Cork tile skirting. 37 : Drive gates. 38 : Door frames. 39 : Deal skirting.



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The illustration and drawings on this page show the garden plunge pool. The construction is 5 ins. thick reinforced concrete, side and bottom finished with smooth waterproofed rendering and two coats of flat blue paint.



## LETTERS

## FROM

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# READERS

The President and Official Architects

SIR,—An inaugural speech by the president of any responsible professional organization is a speech of great political and general import. It behoves, therefore, the president of such body to curb his tongue when tempted to give expression to personal criticism which is directed against a particular section of such organization. That in a nutshell is the nature of Mr. Goodhart-Rendel's indiscretion.

My sympathy is extended to him in his illness and I am sure all members of the R.I.B.A. wish him a speedy recovery. This fact makes it more difficult to criticize, savouring as it does of hitting a man when he is down, but loyalty to the R.I.B.A., and to my fellow official architects, demands that derogatory statements directed against the professional ability of architects holding official appointments as compared with their brethren in private practice must be withdrawn and withdrawn without equivocation.

drawn without equivocation. Believe it or not, as "Ripley" would say, official architects are one of the mainstays of the R.I.B.A., a loyal, tolerant, long-suffering lot, who have been snubbed and treated abominably in the past. That they are now showing their displeasure in terms quite unmistakable savours of the "writing on the wall."

It is evident from Mr. Fletcher's letter that the Executive Committee are alarmed by this righteous indignation and it is to be hoped that drastic action will be taken at the meeting of this, and the Official Architects' Committee, to resolve the contretemps to the mutual advantage of both sections, otherwise cleavage is not far distant.

Contrary to Mr. Fletcher's belief, most official architects are quite well aware that they now have a committee of their own and are pleased with its construction. Unfortunately, this committee is not an executive committee; consequently its recommendations are not likely to carry much weight with the Council, membership of which is confined in the main to architects in private practice. Official architects should note this for future elections, when efforts should be made to adjust the balance of power on the Council.

Furthermore, I commend the attention of the President and Council of the R.I.B.A. to the manner in which JOHNSON BLACKETT HAROLD B. ROWE JOHN L. MORGAN (City Architect's Department, Portsmouth) IVAN F. ROBERTS OFFICER R.E. SUPPLEMENTARY RESERVE AND ARCHITECT

the B.M.A. upholds and furthers the interests, influence and status of those of its members who happen to be medical officers holding full time official appointments with the Government or local authorities. Let it be noted that authorities which refuse to conform to the B.M.A. scale of salaries cannot obtain medical officers. As to status, it would be unthinkable for a medical officer of health or any of his assistants to work under the control of, say, a dental surgeon. By inverse ratio we find numbers of official architects working on the staffs of engineers, surveyors, or land agents, who direct the policy architectural, and take credit for such work.

No doubt the Official Architects' Committee are alive to this condition and I hope they will work unceasingly to end what can only be described as an intolerable situation.

JOHNSON BLACKETT, A.R.I.B.A.

SIR,—For years, belittling of official architects has been the "professional conduct" practised by many free lance architects, for no other reason than a hope for more grist to the private mill. The R.I.B.A. has allowed, and thereby condoned, this bickering in the past, and now would appear to foster this antagonism through the public inaugural address of the President.

However, recent letters of protest show that official architects are now accepting the challenge. This gives the Council the opportunity of proving whether or not it has a common interest in the welfare of *all* sections of its members. Unity is more essential than ever if the R.I.B.A. hopes to maintain its position as the mother Institute, and an earnest endeavour should be made to establish a more constructive policy.

For obvious reasons, the members of the R.I.B.A. councils of the past (composed chiefly or solely of private architects) have practically ignored the humiliating fact that numbers of official architects are compelled to practise as unrecognized appendages on the staffs of engineers, land stewards, and even parks superintendents.

This policy of the Institute, coupled with prolonged and destructive hostility by individual private architects, has reaped the obvious results—the opposition by the Institution of Municipal and County Engineers to the Architects Registration Bill.

Had the R.I.B.A. endeavoured to safeguard the interests of its "official" members, and helped to gain professional recognition where it was due, the status of such architects might now be such that no reasonable opposition could be made by the civil engineering profession.

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Will the R.I.B.A. have the courage to face this issue? If so, it would be of vital interest to know the total percentage of architects dependent on some form of official employment. I challenge the Institute to furnish a complete census of its members, including all members of the allied societies (not members of the R.I.B.A.) and all registered architects, so that the following information can be obtained :—

1: The total number of architects permanently or temporarily employed as principals, deputies, sectional heads or assistants in any whole-time appointments under every Government or Local Government authority.

2: The total number of architects and assistants temporarily employed in whole-time appointments by private business firms, etc., including private estate architects, and so on.

3 : The total number of architects in private practice as principals or partners—including salaried partners.

4: The total number of assistants employed by private architects under heading No. 3.

In conclusion, it is ridiculous for private architects to sneer at the architectural work of official architects —or vice versa. Good architecture is the result of personal and individual attainment, regardless of whether an architect is employed officially or privately. Destructive criticism can only undermine the status of the profession as a whole.

Nothing can stop the majority of authorities from having the greater part of their architectural services carried out by salaried officials of one sort or another. Therefore it behoves the architectural profession to do all in its power to see that this work is carried out by qualified architects and architectural staffs, and to see that their work and services are duly recognized and established on a basis worthy of the profession, equal in status to the other professions serving authorities in official capacities.

HAROLD B. ROWE

#### Registration

SIR, — Now that the Architects Registration Bill has gone "through" —mainly through interest stimulated solely by your columns setting out matters straightforwardly to the average man, could you please publish in your next issue a rćsumé of the past stages and the future stages (in brief) before

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the Bill can become law, with dates. I think you will agree that now one's interest has been awakened by your recent articles, it will be continued by a detail of the future programme for the Bill.

This office got up a general "round robin" in support of the Bill, and everyone in the office was approached as also did other large offices of my acquaintance—and it was sent to the five M.P.'s for the Borough and City and District of all members from all parts, now engaged in the office.

Will anything like this be needed for a future reading of the Bill, or is it now reasonably sure?

JOHN L. MORGAN, City Architect's Dept., Portsmouth

The past stages of the Bill are a long story. The future stages, although no definite dates can be given, were mentioned in the leading article in the JOURNAL for December 23. —Ed., A.J.

SIR,—I would like to thank you for the most excellent articles and notes on the above subject that were published in the last two numbers of your paper. After reading these articles, I was able really to understand the various arguments for and against registration for the first time. I only wish that they had been published earlier as I had an opportunity of seeing one or two Members of Parliament personally on the matter, and I am afraid I had to plead ignorance on many of the points raised by them.

It seems to me a great pity similar articles could not have been published in the Daily Press, which is more widely read by the *general* public than your own excellent and interesting publication.

Like all other architects, I received an Open Letter from Mr. Athoe, who is opposing the Bill, and it is astounding to me that the Secretary of a public society was responsible for such a document.

#### IVAN F. ROBERTS

#### Air Raid Precautions

SIR.—Many readers of the JOURNAL will have noticed the alarming apathy which exists towards Air Raid Precautions among the majority of people, even in London's suburbs.

I attribute some of this feeling to local authorities who are not sufficiently enthusiastic, probably because the financial question remains unsettled. Can anyone afford to lose time with so much at stake? Warplanes travel at tremendous speeds these days, we all know, and there can be no question of advance warnings. "Be Prepared" is the only solution.

Therefore this letter has been written

not with the object of describing how an architect can provide easily and cheaply an efficient Air Raid Shelter that is not feasible—but to show how important it is for trained technical men such as architects and surveyors to offer their knowledge and services to local A.R.P. Committees, if they are not already engaged elsewhere upon Defence training.

The advantage of having the assistance of architects and surveyors in A.R.P. work cannot be estimated too greatly. Their expert knowledge of roads, buildings and the various vital, vulnerable services connected to same, must be extremely valuable always.

The state of affairs which exists was made evident at a recent meeting in one small London suburban district last week, where a meeting considered A.R.P. I talked to a man who attended and he told me less than one per cent. per head of population attended. Those who were present were all middle-aged people.

The Government will be justified in taking extreme measures if things do not improve, for it is their duty to preserve the lives of the people, if the people will not do something to help preserve themselves.

The few unselfish volunteers who have come forward to date are only a fraction of those who will be needed. Surely it is better to be *active* in doing good work than being *passive* upon principle as an excuse.

This may sound like propaganda, but if one thinks about things, is it not "common sense"?

After all an hour or so each week training for a specific task would make everyone feel more confident to meet an emergency and this would tend to help push back the menace of war, which is hampering work and trade.

Our leisure, so occupied, would be well spent and undoubtedly we should meet new people and make new friends at the same time.

Therefore, I ask you to worry your local Council for a job, and show them that the residents want definite action without further delay.

OFFICER R.E. SUPPLEMENTARY RESERVE AND ARCHITECT

#### LAW REPORT OFFICIAL ARCHITECT

A LEGAL case of considerable interest and importance to all salaried architects was recently before Mr. Justice Humphreys,  $\kappa.c.$ , in the High Court at Cardiff. Mr. A. W. Barr, Secretary of the Association of Architects, Surveyors and Technical Assistants, was called upon to give evidence as to the appropriate salary for an architect in local government employ.

Was called upon to give evidence as to the appropriate salary for an architect in local government employ. Mr. E. D. Jones, F.R.I.B.A., Architect to the Pontardawe Rural District Council, alleged that in a letter, signed "Unemployed," appearing in the West Wales Observer for July 9, a libel appeared which suggested that he had recently obtained an increase in salary from the Council which was excessive and unreasonable, and that he had obtained the increase corruptly through currying favour with some of the Councillors by letting them ride about in the motor car which he used for his work.

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As the result of an application to the Council for an increase in salary, supported by the A.A.S.T.A., of which Mr, Jones was a member, he had in June this year received an increase of  $\pounds$ 75 a year, making his present salary  $\pounds$ 425. This was the first increase he had received for twelve years, during which time his work had been nearly doubled in volume. He was responsible to the Council for an average annual turnover of new work of  $\pounds$ 25,000, and for maintenance work to the extent of  $\pounds$ 2,500- $\pounds$ 3,000. He was also responsible for town planning and the development of over 20 estates, including nearly 1,000 houses, for the administration of all the Housing Acts, and, in addition, since the Surveyor was only a parttime official, for the construction of new roads and severs. It was only recently that he had been given the assistance of an architectural assistant and a nuantities clerk.

assistant and a quantities clerk. Mr. Barr stated that the new R.I.B.A. Scale (which had been recognized by the A.A.S.T.A. in so far as it applied to architects but not to architectural assistants) recommended a figure of  $\pounds_{500}$  as a minimum annual salary for an architect (i.e., "one who functions in an executive capacity in the same way as a partner in a private firm."). The A.A.S.T.A. had made a further application to the Pontardawe Rural District Council, since Mr. Jones had received his increase of  $\pounds_{75}$ , for his salary to be related to the new R.I.B.A. Scale, i.e., to be raised to  $\pounds_{500}$ . So far from being excessively paid, Mr. Jones was in fact considerably underpaid. In view of the volume of architectural work which he undertook, and the considerable amount of non-architectural work for which he was responsible in addition,  $\pounds_{500}$  was the minimum salary to which he was entitled.

salary to which he was entitled. Mr. Hopkins, editor, owner and publisher of the *West Wales Observer*, was cross-examined as to the source from which the letter came, and as to what he thought was the intended meaning of the alleged libel. He contended that the letter was an attack on the Council and fair comment on a matter of public interest. The sentences chiefly complained of were : "They (the Council) would have liked to give the architect that large increase in salary without the ratepayers knowing anything about it . . . What have the ratepayers to say about that ? . . . Are they going to be silent when our councillors are voting these increases so freely— $\pounds75$  a year increase for a man who already receives  $\pounds350$  thirty shillings a week increase? . . And I am told there is a substantial car allowance on top. No wonder certain councillors are always seen iding in this car. . . ."

Mr. Jones stated that in 1934 he had bought himself a private car, which he used for much the greater part of the time on Council business. He estimated that, excluding depreciation, his running expenses in this connection were  $\pounds 8_5$  a year, but his allowance from the Council was only  $\pounds 3_5$  a year. He admitted that his salary, if paid out of rates, would amount to approximately a penny rate.

In part our offacts, would amount to approximately a penny rate. Summing up, the Judge referred to the letter as a "scurrilous" attack. A newspaper owed a duty to its readers to criticize public affairs, but one had to avoid publishing, under the veil of criticism, slander against public officials. Mr. Jones did not ask for excessive damages. He had stated in Court, at the commencement of the case, that, had the defendants cared even at that late hour to make a complete withdrawal and apology, he would have asked for no damages at all

The special jury found in favour of Mr. Jones, and awarded £125 damages, with costs, against the editor, owner, and publisher and the printers of the paper. The Architects' Journal Library of Planned Information

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# SUPPLEMENT

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590 Heating



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- 588 : Roof, Floor and Wall Tiling







INFORMATION SHEET: UNDERFEED STOKERS FOR SMALL BITUMINOUS COAL SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WOI. Orac a. Burg

Information from Ashwell & Nesbit Ltd.

STOKER SIZE	A SHORT	LONG.	B. MIN.	C.	D.	E.	F.	G.	н.	J	B.T.U.S. PER HOUR.	Κ.
RF 20.	45%4!	571/4"	60"	47%8"	221/49	201/2"	211/21	1142"	123/4"	9!	160,000.	18!
RF 30.	451/4!	571/4"	60"	47%	221/4!	201/2 !!	211/2!	11//2 !!	123/4"	9!	200,000	184
RF.40.	45%a"	57%4	60"	47%e	221/4!	201/2 !!	211/2!	13 !!	123/4"	9!	325,000.	18!
RF.60.	45 1/4 !	57%	60"	47%	221/4	20424	211/2"	137/8!	43/4 <sup>!!</sup>	9!	410,000.	18!
RF. 75A.	493/8"	97 3/1	72"	53%	18	•	24*	1.0	163/8!	12!	550,000.	219
RF. 75 .	493/8"	973/9"	72"	53%8"	14-2		24"	1.	163/8"	12"	625,000	21"
RF. 100.	493/8!	973/8"	72!	53% <b>s</b> "		1.	24!!		14%8"	12"	825,000.	21"
RF.150A.	473/8	953/8!	72"	53%8	1		24"		151/4"	12"	1,000,000.	21
RF 150.	473/8"	953/8"	72"	53%"		160	24!	1.	15 1/4!!	12!	1,200,000.	21!
RF. 1508.	473/8!	953/8	72:	53%:	1.0		244	1.5	1544	12"	1,400,000.	21
	and the second second	and the second sec										

OPERATION: (typical). The bituminous

coal is conveyed by a motor driven spiral conveyed by a motor driven retort fixed in the boiler furnace. In the retort the coal is forced upwards by the pressure from below. As it approaches from the tuyeres the heat from the unbroken incandescent layer of fuel drives off the hydro-carbons which are mixed with the our entering

which are mixed with the air entering through the air ports. All mechanism is thermo-

statically controlled.

EVEN FIRING: The continuous even firing provided (by the IRON FIREMAN) prevents fluctuations in temperature and boiler pressure.

HANDFIRING : With hand firing it is impossible to maintain even heat or boiler pressure. Temperatures fluctuate.





DIAGRAMMATIC TYPICAL LONGITUDINAL SECTION OF BOILER AND STOKER. D.



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NOTE: The iron Fireman

IRON FIREMAN . COAL FLOW AUTOMATIC STOKER :

Castiron sectional

holler.

F.

736

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# • 589 • AUTOMATIC STOKERS

#### General :

The illustrations on the front of this Sheet show the typical arrangement and sizes of the Iron Fireman "Coal Flow" Automatic Underfeed Stoker for use with any type of heating and hot water boiler and many types of steam boiler.

#### **Operation**:

All sizes of stoker are designed to burn small bituminous coal. This type of stoker eliminates the unnecessary handling of fuel in filling the hopper, the fuel being automatically conveyed direct from the coal store into the firebox of the furnace. The distance of the nearer wall of the coal store can be as much as 20 ft. from the centre line of the fire pot. The only operating mechanism between the two is the tube through which the coal flows to the fire, and which may be installed below the floor level. At the back or side of the furnace away from the coal bin is a motor rated at  $\frac{1}{6}$  to  $\frac{3}{4}$  h.p. according to the size of the stoker. This motor operates the conveyor and at the same time supplies forced draught to the plenum chamber of the retort. The correct amount of air required for complete combustion of the fuel is regulated by means of a damper situated in the Air Duct.

#### **Capacities :**

Iron Fireman "Coal Flow" stokers are obtainable in a wide range of capacities varying from an output of 160,000 up to 1,400,000 B.T.U.s per hour. Controls :

Operation by electric control box and time switch is standard for all models, governed either thermostatically or by boiler pressure. The time switch is designed to operate at predetermined intervals to prevent the fire from going out when the stoker has been cut out for long periods by the room thermostat. It is also used to operate the stoker intermittently when the normal or maximum capacity of the boiler or furnace is not required, i.e. during the night or during week ends.

#### Safety Device :

To protect the mechanism and electrical equipment, a safety shear pin is provided in the event of foreign objects being caught in the feed worm. It is easily accessible and can be replaced in a few minutes. The foreign object causing the stoppage can then be removed through the clean-out door situated at the beginning of the worm tube, the machine being designed so as to direct such objects to this point.

#### **Clinker Removal:**

The incombustible minerals in the coal, which are usually raked out as ash, and carry away considerable quantities of unconsumed carbon, are allowed to remain in the combustion chamber where they fuse and form into clinker around the firepot, being removed at intervals of 24 hours or more.

#### Costs :

Prices of Coal Flow Stokers vary from £85 to £240, depending on capacity.

Manufacturers :	Ashwell and Nesbit Ltd.	
Registered Office and	Works : Barkby Lane Leicester	
Telephone :	Leicester 2715	
London Office :	12 Great James Street, W.C.I	,
Telephone :	Holborn 9105	5





THE ARCHITECTS' JOURNAL for January 6, 1933

750

FILING REFERENCE:



Information from Charles Portway & Son.

INFORMATION SHEET : SOLID FUEL BURNING FREE-STANDING HEATING STOVES. SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE' BEDFORD SQUARE LONDON WCI-OSCA. G. Bayne.

INFORMATION SHEET . 590 . HEATING

V

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#### INFORMATION SHEET

· 590 ·

# HEATING

Product :

Solid Fuel Burning Stoves

#### **Description**:

Tortoisette free-standing heating stoves are designed to burn anthracite small peas ( $\frac{1}{16}$  in. to  $\frac{1}{16}$  in. diam.) on the gravity feed hopper principle, and, if necessary, may be readily installed in front of, or inside existing fireplace openings. This type of heater is specifically intended for use during the whole 24 hours, very little attention being required save daily, or twice daily experient the store the section of the store the refuelling, and, occasional cleaning out of ash from the grate and ash tray.

#### Flues :

The stoves are fitted with a flue nozzle at the back, fixed horizontally as standard, but reversible to assist in fixing where space behind the heater is restricted. In such cases the use of a standard  $112^{\circ}$  elbow will enable the flue to be erected in a truly vertical position close to the stove. The outside diameter of the nozzle is 3 ins. for Nos. 2 and 4 stoves, and  $3\frac{1}{2}$  ins. for Nos. 5 and 6.

The diagrams at the head of the Sheet show typical The diagrams at the head of the Sheet show typical flue arrangements for various types of installation, and it will be noticed that when fitting the heater into or in front of new or existing flue openings, a carefully sealed plate is used to prevent any access of air into the flue other than that normally flowing inwards through the fire. When placed vertically, this plate is utilized to carry the weight of the short length of flue pipe connecting the heater to the main flue ; but if in any other position, a stand pipe is provided for this purpose.

but if in any other position, a stand pipe is provided for this purpose. Where a full height brick flue does not exist, it is necessary to extend the circular flue pipe to terminate at or above ridge level with a suitable baffle, and iron stays if necessary. It is recommended that flue pipes running externally or in draughty situations should be provided with an outer casing about 1 in. larger in diameter as this prevents the cooling and concurse diameter, as this prevents the cooling and consequent sluggish action of the gases. Asbestos-cement or cast iron is advocated for the flue piping with an outer casing of the same material.

Horizontal flue runs should be avoided, while bends, if necessary, should be obtuse rather than right angled, and provided with soot doors for cleaning purposes. Bends need not be encased.

As with the flues previously described, the weight of circular flue pipes must be carried by stand pipes, unless taken by the brickwork at the base of externally run types.

#### **Capacity** :

The approximate heating capacities of the various models in cubic ft. are: No. 2: 2,500; No. 4: 5,000; No. 5: 7,500; No. 6: 10,000.

#### Lighting :

It is advisable to warm the flue if the fire has been in disuse during the summer months, and this is best done by removing the summer months, and this is best done by removing the ash recess door and placing a firelighter or paper in the ashpan, lighting it, and pushing the pan back into place. Lighting the stove itself is normally done by laying dry and small chopped wood on the firebars, and also a further handful or

two inside the empty hopper, till the narrow throat at the bottom is filled. This wood will then support the fuel poured into the hopper, and when the flue-warming fire in the ashpan is nearly out the whole of the kindling wood may be ignited by means of a fire lighter or paper placed in front on the preheater plate. The ash recess door must be firmly closed, and the top plate seating squarely on the asbestos joints. With normal draught, the fire will now take care of itself,

and in about 20 minutes, when the area over the grate is glowing red, the hopper may be filled to capacity. An alternative method of lighting is to place a shovel-full of glowing coals or coke on the firebars. Sufficient anthracite to feed this can then be poured into the hopper, and, when well alight, supplemented by the

normal supply as before. The simplest method of putting the fire out is by removal of the ash recess door.

#### **Operation**:

The firing of the stove is completely automatic, and thermostatic temperature control is provided. As can be seen on the section, the thermostat is of the bimetallic strip type, upon which increased flue temperatures act so that contact occurs between the strip and the thermostat valve operating bar. The opening of the valve permits cold air to enter at the opening of the valve permits cold air to enter at the base of the flue, thus reducing the rate of flow of the hot gases, and at the same time cutting down the amount of air received, through the front air ports for combustion. The thermostat lever at the rear of the stove is adjustable to cause this operation at any pre-determined temperature, and for average heat conditions should be set horizontally.

#### **Cleaning**:

After several hours unattended burning, the ash will be found to have crept up the grate. A special slice tool is provided for remedying this condition without interference with the firing, and is inserted between either of the two pairs of studs at each side of the grate -the doors having been previously opened. This cuts off the hopper fuel from the grate, and upon withdrawal of the hearth plate ashes fall down into the ashpan and the firebars may be cleaned with the stoking tools. When the hearth plate is returned to its position the slice tool is removed, and the temporarily-supported burning fuel permitted to resume its normal position on the firebars. This operation may be made as frequently as desired, but should be carried out at least twice a day. Ash removal from the pan should be carried out once in 24 hours by removal of the ash recess door

The base of the flue should be cleaned at least once during the season by means of the raking tool, access being by way of a removable cast-iron plug inside the stove hopper near the top back. If a pipe flue is used, a brush should be also run through this.

#### **Finishes**:

Tortoisette stoves are obtainable in four standard shaded vitreous colours—grey, brown, red and green— and in vitreous black. Surfaces are permanent and will not chip or stain. Other shades and mottled colour-ings can be supplied at small extra charge.

#### Prices :

Prices (including all necessary tools) range between  $\pounds 5$  10s. and  $\pounds 12$  for plain black stoves,  $\pounds 7$  10s. and  $\pounds 15$  10s. for vitreous enamelled stoves, and between  $\pounds 6$  5s. and  $\pounds 17$  10s. for stoves vitreous enamelled to any specified shade.

Fittings such as base trays, stand pipes and cast iron flue pipes and fittings, trivets, etc., are supplied in any of the above finishes at slight extra cost.

Manufacturers :	Charles Portway and Son
Address :	The Tortoise Stove Works, Halstead, Essex
Telephone :	Halstead, Essex 40

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of

Planning

# SCHOOLS

The

Architects'

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# Senior Schools

Journal



#### THE PRESENT POSITION

THE Senior School as it will be considered here has had a separate and special place in state education only since the Hadow Report of 1926.

That Report divided state education into Primary (up to the age of 11 +) and Post-Primary (after 11 +). (See Chart on page 5, Nov. 4.)

It was recommended that Post-Primary education should be subdivided into four types :

(1) Secondary Schools recruited by examination, keeping children up to 16 + and pursuing a predominantly literary or scientific curriculum.

(2) Selective Senior or Central Schools, recruited by examination or selection, keeping children up to 15 +, with a practical trend in curriculum during the last two years, but not a vocational training.

(3) Non-Selective Senior Schools, keeping children until 14 + (or up to 15 + when the school leaving age is eventually raised), with generally the same curriculum as (2), making provision for different mental capacities by "parallel classes," and in every respect equal in

Architecture well ordered and gay: a Senior School at Condorcet, by Dubreuil and Hummel. equipment to Secondary Schools. It is intended that all children who do not enter the first two types shall eventually pass at 11 + to a separate school of this type.

(4) Senior Classes or Departments in an all-age school where it is impossible to provide separate schools of type 3.

This planning section is confined to schools of type 3 (non-selective Senior Schools) because the great majority of elementary school children are destined to complete their education in such schools, and because the planning of them is a new problem, few of the number needed having yet been built. The Board of Education recognizes that an intelligent advance in school planning and equipment is needed if this huge venture is to justify itself.

#### Aims

The present aim is that as soon as possible all normal children shall move on, at the age of 11, to 4 or even 5 years of broad and practical education in new surroundings—which for most children will be in the new non-selective Senior Schools.

In these schools the Hadow Report intends that individual tastes and interests shall be



Multi-storey planning in a built-up area : a bold attempt to make best possible use of an inadequate site. Ground and first floor plan of a school in Belfast. Architect, R. S. Wilshere.



eultivated, that opportunities for practical work closely related to living interests shall be provided, psychological development watched and character strengthened.

In well populated areas Selective and Non-Selective Senior Schools should be in separate buildings, but in districts where this is difficult the two may be combined, parallel classes catering for differences in intelligence. Most important is separation of Senior from Primary Schools.

#### The Children

The desire to make a new stage in education coincide with a natural stage in development is one of the reasons for the move to  $\pi$  Senior School in fresh surroundings.

By the age of 11 or 12 children begin to show

differences in abilities and interests. With the transition from childhood to adolescence these differences become more marked. Individual powers develop. Social sense and appreciation of communal activities develop also, sufficiently to overcome the dwarfing effects of large numbers. The Senior School must therefore be equipped for the activities of children with different powers, and to justify itself must be large—a 3-stream school of 420 to 480 children being an efficient size.

The children's powers of concentration have much increased at this stage, and during the first two years the real groundwork of their education will be complete. They are at an age to benefit by organized games and physical training and to take special interest in the practical work



Single-storey planning on a generous site : projected scheme for a Senior School for 480 girls at Frindsbury, Kent. Designed for the Board of Education by Read and McDermott.

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SCHOOLS which will play a specially important part in their last year or two years at School.

#### Co-education

The Hadow Report is not in favour of mixed (co-educational) Senior Schools, and generally local education authorities appear to hold the same opinion. Difficulties in staffing mixed schools, the need for an occasional strong hand with boys, and difficulties of games, physical training and adolescence all appear to play a part in their decision.

Against this opinion must be balanced the experience of nearly all other countries,\* successful mixed schools here, the economies possible in districts which could afford one school for 480 but not two for 240, and the value of mixed schools in social training.

As an indication of future trends, it may be remembered that the recent News Chronicle Competition, sponsored by the Board of Education, was for two co-educational schools.

#### Training

The general aim of the training in Senior Schools is to take advantage of a new phase of life (the period of adolescence) by presenting opportunities in new surroundings for the development of every kind of talent - for organization, literature, practical work, games and cultural interests. It also aims at giving the children a sense of playing a part in the community by making the school at appropriate

\* In the United States over 90 per cent. of public (elementary) schools are co-educational.

times a social centre for parents, past pupils and the local community generally.

Activities fall into a few main divisions which might reasonably find expression in the plan of a school :

(1) Classroom Work .- In the ordinary classrooms of a Senior School children will spend about two-thirds of their school day during the first two years, about half during the last two years. English, History, Mathematics and one foreign language will be the main subjects studied. Rigid "lesson hour" methods are now thought undesirable. Newspapers, periodicals, works of reference and debates are used to relate "English" to adult life and problems of local interest. "Informal group experiments" are beginning to take the place of "lessons.'

Geography. The extreme importance of an international outlook makes this study, treated broadly and stimulatingly, of special consequence to-day. Where possible all classes should be taken in a special geography room as this gives opportunity for using the full range of equipment. Schools now use a wide variety of equipment including maps, globes, posters, picture postcards, projectors and sometimes radio, as well as reference books such as Whitaker's Almanac. The virtues of centralization are therefore obvious.

(2) Practical Work .- Practical work of many kinds is now regarded as enormously important in Senior Schools. It aims at stimulating the children's creative interests, at explaining " how things work" from the solar system to chairmaking, and at preparing the children for later



Importance of practical training. Close-up of training. Close-up of some of the excellent equipment provided in the boys' wood and metalwork room at Linton School, Cambridgeshire. S.E. Urwin, architect.



occupation and leisure. No attempt, however, is made to give vocational training in ordinary Senior Schools though it is often wise for schools in certain industrial or agricultural districts to give what is called an industrial or agricultural "bias" in their practical training. Practical work includes Science, Housecraft, Art, Wood and Metalwork, Gardening. Careful planning and a wide range of equipment are now required for these activities.

(3) Communal Activities. — The desire to introduce children to the more intelligent pursuits of adults, to the idea of being members of a community, is causing the school assembly hall to become more and more important. It is useful for choral or individual singing, concerts, debates, plays, dancing, cinema and lantern shows, educational broadcasts, television. Whenever possible the arrangement of these activities is left to the children so that their interest in them is increased.

In addition the hall is used for semi-public or entirely public entertainments such as prizegivings, old pupils' shows or other local events.

The objective is to make the children feel that they are not merely "at school" but in the preparatory section of adult life and closely linked with it.

A well-equipped *library* or reading room is an essential part of this scheme, children being encouraged to prepare for debates, read newspapers and hold committees for communal events in surroundings which encourage a sense of responsibility. (4) Physical Activities.—Under this heading come organized games, informal games, physical training, folk dancing, swimming and other activities. Hitherto this aspect of the Senior School has not been taken very seriously although the Hadow Report, 13 years ago, said (in italics) of the wider objects of communal activities: "... there will be no future for them at all unless from the first the necessity for adequate playing fields is recognized."

Now, however, poor national physique is in the news and more liberal sites and playing fields, even gymnasia, will perhaps become the rule in Senior Schools. L

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The planning of Senior Schools in which these four main forms of training can be carried out effectively will be the chief work of education architects during the next 10 years. While the present reforms in educational methods are still on trial all architectural solutions and recommendations must be tentative. But at least the right *lines of approach* are definite and obvious.

In 1926 the Hadow Report stressed the importance of "simplifying School buildings and reducing their cost"; and from that point onwards the unsuitability of "courtyard" plans and heavy brick and stone buildings has become generally recognized. The finding of more satisfactory alternatives has been difficult, but very slowly progress has been made. The chief purpose of this Section is to illustrate the stage now reached and to suggest greater improvements.



Map showing the location of L.C.C. tenement dwellings and cottage estates. Reproduced from "London Housing" by permission of the Controller of the London County Council.

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# LITERATUR

## HOUSING

### [By PHILIP H. MASSEY]

London Housing. Issued by the L.C.C. London : P. S. King. Price 3s. 6d. net.

on the subject; the previous volume, which covered the years 1928 to 1930, was merely a supplementary; the new one is complete in itself, though the earlier periods are treated very briefly. It may be regarded as in one sense an official report—it deals mainly with the Council's housing work and it does not criticize—but space is also given to the work of the City of London Corporation and the Metropolitan Borough Councils, and to the more important philanthropic trusts, semi-philanthropic societies, and housing companies providing workingclass dwellings for letting, but organized on commercial lines.

The post-war development of housing and rehousing by the County Council is related to the legislation of the period and special attention is given to work under the 1930 (slum clearance) Act and to the overcrowding and redevelopment area provisions of the 1935 Act.

London's slum problem is considered under the heads of insanitary houses and insanitary areas. Four types of insanitary houses are distinguished : first, the two-storey terrace-type houses erected in large numbers in the early years of the nineteenth century secondly, cottages which originally stood in semi-rural surroundings and which have been swallowed up by the growth of London ; thirdly, the tenement house originally built for one family and now occupied by several; fourthly, the insanitary mews. Insanitary areas, it is pointed out, are made up of these units, with the added factor of the intermixing of industrial premises. The methods of dealing with such areas are admirably summarized, and the description of the stages through which it is necessary to go before bad houses can be replaced

by good ones will, as is suggested, "give some idea of the complexity of the problem which awaits the Council in connection with each individual clearance area." These stages, it is pointed out, "are inherent in our legal system, which provides that the rights of property shall be respected and that no man's property shall be taken from him without full consideration being given to his case."

The chapter on redevelopment areas contains a full description, with an excellent aerial photograph, of the proposed Bethnal Green scheme, and that on overcrowding provides a very useful summary of the Census and 1935 Act overcrowding statistics relating to the L.C.C. area. It is pleasing to notice attention given to the fact that the more pronounced forms of overcrowding (at more than three persons per room) increased between 1921 and 1931, although the overcrowding at more than two persons per room declined considerably, and to the quotation from the Minister of Health's explanatory memorandum on the 1935 Act that "this standard (the 1935 Act standard) does not represent any ideal



Layout plan of the Becontree estate. Reproduced from "London Housing" by permission of the Controller of the London County Council.

standard of housing, but the minimum which is in the view of Parliament tolerable while at the same time capable of immediate or early enforce-This statement is in some ment." danger of being forgotten.

The work of the Council is dealt with mainly in two lengthy chapters devoted to block dwellings and cottage estates respectively. Some general remarks on the subject of the layout of estates developed by the erection of block dwellings will raise in the mind of the reader the vital importance of adopting the redevelopment area procedure in places where piecemeal treatment would perpetuate bad planning.

Plans of typical dwellings and blocks of dwellings are followed by detailed descriptions of estates developed by the erection of block dwellings, includ-ing a considerable number of "before and after " site plans and photographs.

The development of cottage estates is treated, so far as applicable, in the same manner-first, a brief description, with illustrations, of the standard plans now in use, and secondly, details of the principal cottage estates, profusely illustrated with site plans and photographs.

The next three chapters deal with the work of other bodies mentioned in the opening paragraph of this review, and the last three are devoted to the question of lettings and management of the County Council's estates, to the financial side of housing, and to the question of transport in relation to housing. It is important that those engaged in the technique of house-construction should have some knowledge at least (the more the better) of the economic and administrative sides of the question, and of the connection between the dwelling-place and the working-place. They can get a useful introductory knowledge from these chapters.

whole book is excellently The illustrated and the proportion of statistical matter is sufficient to give a full picture, while not so great as to become wearisome to the more casual reader. A coloured sketch map in a pocket at the end of the volume shows the location of all the cottage estates, block dwellings and lodging houses belonging to the County Council, with a key

A splendid three-and-sixpennyworth !

#### RENT RESTRICTIONS TWO REPORTS ACT :

HE Reports of the Rent Restrictions Act Committee published a fortnight ago consist of a Majority Report signed by the chairman and eleven members, subject to a reservation by two members, and a Minority Report signed by three members.

#### Majority Report

The Majority Report is based on the principles that "the question of continuing control of any particular class of house must be regarded as dependent on whether the shortage of houses in dependent on whether the shortage of houses in that class is at an end or is likely to end within a reasonable period," and that " the restrictions should at once be lifted from any class of property as soon as it can be shown that they are longer needed in the general interests

no longer needed in the general interests." The Majority Report recommends that houses in the upper range of the present controlled Class  $\mathbb{I}$  (i.e. houses with a rateable value between £35 and £45 in the Metropolitan Police District and Scotland and between £20 and £35 elsewhere, which at present become decontrolled on change of tenancy) shall be decontrolled throughout Great Britain in 1938. This recommendation would involve the de-control of approximately 450,000 houses, but is subject to the reservation that, where such houses are occupied by two or more families, the house should continue to be controlled as a present until the owner obtains vacant possession. The Majority Report says "the general conclusion which might be drawn from the various facts is that as regards Class B houses, of which there That is regardly charge the set of the method of the work at the end of the war, there is not now such  $\pi$  shortage that if control were renewed scarcity most south he smaller and  $2^{12}$ rents could be exacted.

rents could be exacted." It is recommended that the remainder of the houses in the present Class **B** should be com-bined with the present Class **C** to form one controlled class in which control should be continuous notwithstanding that the landlord may obtain vacant possession. This recom-mendation involves an added measure of control for an environment for one house in Excland mendation involves an added measure of control for approximately 650,000 houses in England, Scotland and Wales, i.e. they would no longer be decontrolled on change of tenancy. Thus the new upper limit of rateable value of the houses remaining in control would be £35 in the Metropolitan Police District and Scotland and £20 elsewhere.

#### Decontrol by Areas

Decontrol by Areas For England and Wales only, the Majority Report also recommends a scheme for the gradual reduction and eventual termination of control over a period of years varying as between different areas based on the degree of over-crowding in the area. This scheme would be brought into operation in two distinct stages, in teaco and toos in 1940 and 1942. In 1940 the Minister of Health would settle

In 1940 the Minister of Health would settle the areas to be treated as single units for control purposes, and the upper rateable value limit of the controlled class would be reduced by  $\pounds_5$  in all areas where there was less than 4 per cent. of overcrowding. In all other areas the limits of the controlled class would remain unchanged and in this way differentiation between different areas would be begun.



White City Site : part of proposed elevation, facing Westway. Reproduced from "London Housing" by permission of the Controller of the London County Council.

In 1942 the time-tablef or the eventual termina-tion of control would be settled on the following hasis '.

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ercentage of Overcrowding	of control
Over 4 per cent	1950
Between 3 and 4 per cent	1948
Between 2 and 3 per cent	1946
Between 1 and 2 per cent	1945
Under I per cent	1944

The time-table would be fixed by orders to be issued by the Minister of Health in 1942, which in the normal case would provide for the upper limit of rateable value of the controlled class to be reduced by successive stages of  $\pounds 5$ unit control had here finally brought to an until control had been finally brought to an end by the date shown in the table. The advantages which the majority of the Committee claim for this scheme are, among

others, that :-

(1) All houses in the present Class C, i.e. houses with a rateable value of  $\pounds_{20}$  or under in London and  $\pounds_{13}$  or under elsewhere would remain controlled until after 1942, the smallest houses thus being protected for the longest time.

(2) The scheme would greatly reduce the uncertainty as to the future of the Acls, which has in the past created difficulties for landlords and tenants alike.

#### Scotland

The housing shortage in Scotland is considered so much more acute than in England and Wales that no change is recommended apart from the decontrol of the larger Class B houses. It is thought that a further investigation may have to be made later on before any further measure of decontrol is introduced.

#### Rural Housing

In view of forthcoming legislation to deal further with the problem of the housing of the agricultural population the Majority Report does not recommend special provisions for control for agricultural cottages after it has been terminated for working class houses generally.

### Minor Recommendations

Various useful minor amendments are recommended some of which would be of assistance to landlords and others to tenants.

The onus of proving in Court proceedings that the house is decontrolled to be placed on the landlord.

The full name and address of both the landlord and his agent to be inserted in rent-books, while, with leave of the Court, service of any notice with leave of the Court, service of any notice required to be served on the tenant by the land-lord is to be deemed to be good service if served at the address of the agent. It is also recommended that rent books should be provided for all working class houses. The right to apply for an Order for possession of a house required by the owner for his own occupation without proving the existence of alternative accommodation which is now only enjoyed by owners who acquired their houses.

enjoyed by owners who acquired their houses before July, 1931, to be extended to owners who acquired their property before the date of the Committee's report. Decontrolled Class B houses in the lower range

of rateable values to be registered in the same way as the present decontrolled Class C houses ; no further registration of decontrolled Class C houses , houses after three months from amending registers to be finally closed within a year of amending legislation.

The benefit of the compounding allowance for rates to go to the landlord.

The period for recovering over-payments of rent to be extended from the present six months one year.

It is recommended that the Rent Restrictions Acts should be consolidated.

#### Minority Report

The Minority Report The Minority Report recommends: that "control of some kind is desirable as a permanent feature of the housing service." It suggests that the present statutory standard of overcrowding represents too low a standard of accommodation to serve as a basis for the reduction and termination of control and may conceal a substantial increase of bad housing. It states that it would be most underirable if It states that it would be most undesirable if as a result of decontrol tenants were forced into as a result of a less desirable type and suggests that any measure of decontrol based on average conditions may occasion much hardship in individual cases. The Report points out that

the automatic time-table for the termination of control proposed in the Majority Report is based on the assumption that housing conditions will continue to improve. The members signing the Minority Report do not consider that this is by any means certain to be the case and think that in the circumstances any fixed period for the termination of control is undesirable. The Minority Report recommends period for the termination of control is undesirable. The Minority Report recommends that "control in some form should be both general and permanent" and should include agricultural and other service cottages, that so long as the provision of housing accommodation is left to private enterprise its management should be subject to public utility principles, and that Tenancy Courts should be set up to deal with all cases of dispute. The Signatories of the Minority Report are opposed to the decontrol of houses in the upper range of the present Class B on the grounds that the "black-coated" worker by whom these houses are often occupied requires protection just as much as the manual worker. The three signatories of this Report, while dissenting from the main recommendation of the Majority Report, state that the scheme recommended in that Report is preferable to one involving immediate decontrol of Class C or the lower Class B houses. In addition, the Minority Report urges that the period for recovery of over-payments of rent should be subject only to the Statute of Limita-tions, that distress should in all cases be levide only by Lawar of the Court that it chould he should be subject only to the Statute of Limita-tions, that distress should in all cases be levied only by leave of the Court, that it should be made the duty of local authorities to exercise their powers to supply information to landlords and tenants and that the right of an owner desiring his house for his own occupation to apply for an Order for possession without proving the exitence of alternative accommodation the existence of alternative accommodation ought not to be extended to owners who who ought not to be extended to owners who acquired their property after 1931 (the date in the present Acts). In conclusion the view is recorded that consideration of the question of rent control ought not to be limited to the narrow field of housing implied by the use of the term " working class," as the real housing shortage is much greater than would appear from figures relating solely to this limited field and is not confined to the working class so narrowly defined. so narrowly defined.



#### N Т R D E A E Т EDITED BY PHILIP SCHOLBERG]

#### Garden Fountains

OW that so many water boards have developed the unpleasant habit of metering and charging so much a thousand gallons for all water not used for purely domestic purposes, most clients are frightened at the idea of a fountain, regardless of the fact that it need not necessarily mean anything outrageous in the way of water costs. Admittedly, the fountains in Trafalgar Square are always turned off to reinforce appeals for saving water, but this is mere propaganda, for the jets are fed by a motor and pump unit drawing from the basin of the fountain and the only water supply needed is the small amount necessary to make good evaporation losses.

There is, of course, not the slightest reason why the same method should not be used for the private house, and one firm has been enterprising enough to produce a series of standardized fountains with bowls ranging from 3 ft. to 8 ft. diameter, all complete with pump and fractional horse-power motor, the prices ranging from  $\pounds_{15}$  upwards, including installation. The fountain basins are precast concrete and the pump is generally housed in a separate box, a typical lay-out being shown in the diagrammatic sketch above, though there is also a type with a high curb which has the motor and pump unit under the basin.—(Fountains, Ltd., Court Chambers, 173 Marylebone Road, Seymour Place, London, N.W.1.)

#### Propaganda for Timber

The steel shortage has already been seized upon by the brick interests as a very good reason for sticking to straightforward weightcarrying walls, and now timber\* is being pushed for the same reason. At least assume that the timber interests are responsible, for there is nowhere any indication of the author, and the 1s. net on the cover seems more a polite gesture than anything else, for it is comparatively simple to get one given to you, presumably on the principle that you get a slight sense of

\* Timber as Alternative to Steel. Ivor Nicholson and Watson. Price 15.

importance if you are given something that other people have to pay for. The whys and wherefores of this publication, however, need not concern us here, for however much Fowler might shudder at the title, this little booklet puts the case for timber quite fairly, and the illustrations, of large span timber bridges from Canada and the Paris Exhibition, of timber Belfast trusses and Lamella roofs, and of Alvar Aalto's Finnish pavilion, tell the story well enough without the necessity for too much written matter. On the subject of domestic work, it suggested that its modern type of flexible plan form is equally suitable for timber or concrete, and it is quite certainly easy enough to cantilever out a balcony almost anywhere it may be needed.

One would perhaps have welcomed a few explanatory drawings to show how all these things are done, the laminated trusses of the Paris Exhibition bridges being parti-cularly interesting; but once one starts with drawings it is difficult to know where to stop, and anyway not many architects are capable of stressing bridges of this type.

The development of the modern type of timber bridge, with spans of 200 ft. and over, seems to be due largely to German and American engineers, who have evolved a system of metal connectors, cast iron and hardwood bearing and joint blocks, and improved types of splice joint which will withstand nearly the full tensile stress of the timber section. The photographs, too, show several composite trusses with steel ties and timber struts, this method taking advantage of the virtues of both materials.

Towards the end of the peroration we find " the major points to bear in mind are that steel must now be diverted to its proper uses . . . that timber on big jobs is no longer experimental ... etc." For "proper" I take it that you should read "armaments" -a depressing thought-but it seems a pity to rely on an artificial demand which cannot in the nature of things go on indefinitely at its present speed. Timber is a material good enough to stand on its own grain without secondary arguments of this kind.

#### Industrial Lighting

A new list from the Benjamin people has plenty to say about the advantages of a proper lighting system, naturally so since they make reflectors in large quantities, but they are perfectly right when they say that lighting is no longer the simple matter that it used to be. The days when lighting points could be dotted about and the fitting of conical porcelain shades left to the works electrician are gone long ago, probably because it was discovered that good lighting pays. Good lighting as an amenity for the worker may be an argument that tells in a few cases, but show an output increase of 2 per cent. and in it goes straight away. Yet, as the Benjamin people realized, there is no point in high intensities everywhere, hence the apparently bewildering number of reflector designs now on the market for, looking through the first thirty odd pages of this catalogue where a series of typical problems are set out, one realizes that hardly any two jobs are quite the same, and that different types of reflector are necessary if light is not to be wasted.

On the more practical side this firm has recently introduced a range of reflectors to take discharge lamps, and there is also a duplex fitting arranged to take a single discharge lamp and a pair of ordinary tungsten filament lamps, the result giving a softer light by toning down the yellow green predominance of the discharge lamp. This method of lighting should also over-come the stroboscopic effect of ordinary discharge lamps as a result of which moving objects may appear to be stationary. Nothing is said about this in the catalogue, but then I have seen nothing about it in lamp manufacturers' lists either, perhaps it is a point to which attention should not be drawn, though this is not Benjamin's fault.

This list, by the way, is called "Planned Lighting for Industry and Commerce," and is worth having if only to discover how much there is one doesn't know that one ought to.—(The Benjamin Electric, Ltd., Brantwood Works, Tariff Road, Tottenham, London, N.17.)

#### Two-way Switches

The provision of a looping in terminal on ordinary switches is common enough nowadays, but some of the advantages of loop wiring have been negatived by the fact that it is difficult to find two-way switches with an independent looping terminal. Tuckers, however, have now produced the answer and are marketing a two-way switch for use on alternating circuits which incorporates the necessary loop terminals.

## And while we are on the subject of two-way switches, I was rather surprised, a month or two ago, to find an architect wondering why you couldn't control a lamp from more than two points. But, good gracious, of course you can—ask any good electrician ask Tuckers if you like, they'll send wiring diagrams and everything.—(J. H. Tucker & Co., Ltd., Kings Road, Tyseley, Birming-ham II.)





### LONDON & DISTRICT (15 miles radius)

HACKNEY. Hospital Block. The L.C.C. is to erect a maternity block at Hackney Hospital at

erect a maternity block at Hackney Hospital at a cost of £71,000. ISLINGTON. Housing. The Islington B.C. is to erect 75 dwellings at Hillrise Road at a cost of £65,000, and has appointed Mr. E. C. P. Monson as architect. LEWISHAM. Flats, etc. Plans passed by the Lewisham B.C. : Flats, Loampit Hill, Mr. C. A. Jones ; flats, Bromley Road, Wates, Ltd. ; houses, Bexhill Road, Brockley, and shops and flats, Stanstead Road, Brockley, and shops and flats, Stanstead Road, Brockley Rise, Pearsons ; houses. Swdenham Vale Estate. Southend Lane. hats, Stanstead Road, Brockley Rise, Fearsons; houses, Sydenham Vale Estate, Southend Lane, Bellingham, Spencer Bright & Co.; block of flats, Gillian Street, G. T. and E. J. Harman; flats and block of flats at rear, abutting on Belmont Grove, M. J. Gleeson, Ltd.; three blocks of maisonettes Chinbrook Road, Lincoln Derby, & Co., et al. Aurola Crosse

blocks of maisonettes Chinbrook Road, Lincoln Darby & Co.; six flats, Myrtle Grove, Mr. W. T. Heath. PADDINGTON. Houses, etc. Plans passed by the Paddington B.C.: Houses and flats, 9–12, Gloucester Square, and 24–25 Radnor Mews, and shops, flats and houses, 170–186 Queen's Road, and 69–85 Bishop's Bridge Road and Nos. 121–141 Inverness Terrace, T. P. Bennett and Sons; flats and underground garage, 100–103 Lancaster Gate, Howard Leicester and Partners. POPLAR. Cinema, 127–133 Bow Road, Mr. Andrew Mather.

FORMAL THIS passed by the volume for the second of the second se

Shorediten, and control of £393,000. cost of £393,000. The Walthamstow

WALTHAMSTOW, School. The Walthamstow Education Committee is to erect an elementary school in Handsworth Avenue at a cost of £55,215.

WESTMINSTER. Offices. Messrs. Wimperis, Simpson and Guthrie, are to erect a block of shops and offices at 103 Mount Street Westminster. shops

WESTMINSTER. Airway Terminus. The West-minster City Council has approved plans of the airway terminus for Imperial Airways, Ltd., in Buckingham Palace Road. WOOD GREEN. School, etc. The Wood Green

WOOD GREEN. School, etc. The Wood Green Corporation has approved plans for the crection of a day nursery and school clinic in White Hart Lane, at an estimated cost of £15,550.

#### SOUTHERN COUNTIES

BOURNEMOUTH. Schools, etc. The Bournemouth BOCKNEMOUTH, Statous, etc. The Bountenbour Education Committee has approved the follow-ing school programme: Erection of new senior schools at Boscombe; extension of Stourfield Council School; Erection of new infants' department at East Howe Council School; Erection of new infants' department at

School; Erection of new infants department at Hill View Road Council School. GUILDFORD, *Public Offices*, etc. The Guildford Corporation has purchased property at a cost of £13,000 as a site for the new public offices and assembly hall.

HANLEY. Houses. Plans passed at Hanley: Eight houses off Fellbrook Lane for Northmere Building Co. OSSETT. School.

The Ossett Education

ossert School. The Ossett Education Committee has purchased a site for a central school in Station Road. REDHILL. Art school. The Surrey Education Committee is to adapt premises at "The Chilterns," Redhill, for art school purposes, at

Chilterns," Redhill, for art school purposes, at a cost of £5544. REDHILL, Hospital Wards. The Surrey C.C. is to construct casual wards at St. Anne's, Redhill, at an estimated cost of £5,250. STANMORE. School. The Middlesex Education Committee is to make a grant to the governors of the North London Collegiate School to provide a new girls' secondary school on the Canon's Park Estate, Stanmore. WORTHING. Beach Development. The Worthing Corporation has obtained sanction to borrow  $\pounds33,372$  for the Beach House development which includes gardens and bathing facilities.

#### SOUTH-WESTERN COUNTIES

CHELTENHAM, School, The Gloucestershire Education Committee is to erect new premises for the Pate's Grammar School for Girls, Cheltenham, at a cost of  $\pounds77,889$ .

EXETER. Houses. The Exeter Corporation has instructed the city architect to prepare plans for the erection of 64 houses on the Bowhay Estate.

Estate, swindon. Houses, Plans passed by the Swindon Corporation : 18 houses, Church Walk, Mr. T. Burrington ; 26 houses, West of Croft Road, Colborne's Estates, Ltd.; six houses, Scotby

Avenue, E. H. Bradley and Sons, swindow, School Extension. The Swindon Education Committee has obtained sanction for a loan of £36,756 for extensions at Pinehurst School.

WEYMOUTH Market Premises The Weymouth Corporation is to reconstruct the market premises

wonrord, School, The Exeter Education Committee has obtained a site at Wonford for the erection of a senior school for girls.

#### EASTERN COUNTIES

LOWESTOFT. Houses. Plans passed by the Lowestoft Corporation : Four blocks of houses, Higher Drive, Mr. S. C. King; four houses, Kimberley Road, J. A. Gaze and Sons; eight houses, St. Margaret's Estate, Warnes and Sons. eight

#### MIDLAND COUNTIES

HUNTINGDON, School. The Huntingdon Education Committee is to erect new premises for the Grammar School, Huntingdon, at a cost of £36,345.

The Rawtenstall Houses RAWTENSTALL. Corporation has approved plans by the Borough

Corporation has approved plans by the Borough Surveyor, for the erection of 112 houses on the Booth Road Estate. STOKE-ON-TRENT. Houses, etc. Plans passed by the Stoke-on-Trent Corporation: 52 houses off Blurton Road for Messrs. H. Leese and Co., Ltd.; eight houses New Street, Longton for Mr. H. Haskins; 12 houses off Drubbery Lane for Mr. A. Lilley; 48 houses off Ashwood Terrace, Longton, for Messrs. Lockwood and Sproston; 12 houses, Hunters-croft for Mr. J. Thompson; nine houses, Clifton Street, Fenton, for Mr. W. C. Beech; 40 houses off Wheldon Road, Fenton, for Mr. A. Bates; 12 houses off Locketts Lane, for 40 houses off Wheldon Koau, Felica, Mr. A. Bates; 12 houses off Locketts Lane, for Messrs. Simcock and Clewes.

Messrs, Simcock and Clewes, stoke-on-treent, Swimming Pool. The Stoke-on-Trent Corporation has approved a plan for the construction of a swimming pool at the Newcastle High School, Lancaster Road, Harpfields.

#### NORTHERN COUNTIES

School. The Northumberland ALNWICK. Education Committee is to erect an elementary

Education Committee is to effect an elementary school in Alnwick at a cost of  $\pounds 0.217$ , BLACON. School. The Chester Education Committee has approved revised plans for the proposed new council school at Blacon. BOLTON, Technical College. The Bolton Corpora-tion has obtained sanction to borrow  $\pounds 283,100$ for the services of technical college

for the crection of a technical college. CHESTER. Cemetery, etc. The Chester Corpora-tion has approved plans by the City Surveyor for the layout of a new cemetery at Blacon, and plans of the various buildings and other works including two chapels, crematorium, lodge, offices, gates and greenhouses at a cost of

£28,140. CREWE. Civic Aerodrome. The Crewe Corpora-CREWE. Civic Aerodrome. The Crewe Corporation has acquired land at a cost of £21,000 for the purpose of a civic aerodrome.

DUMBARTON, Houses. The Dumbarton C.C., has acquired four acres on the Balloch Estate

for a housing scheme. KENDAL. County Offices. The Westmorland C.C. to erect county offices at Kendal at a cost of £54,818.

 $\pounds$  54, 518. LIVERPOOL. Failories. The Liverpool Corpora-tion has obtained sanction to borrow  $\pounds$  66,666 for the purpose of making advances for the erection of factory buildings. MARKET HARBOROUGH. Houses. Plans passed by the Market Harborough U.D.C.: Ten

houses, Station Road, H. Marlow and Son. School. The Flintshire Education

MOLD. School. The Flintshire Education Committee is to crect a senior school at Mold at

Committee is to erect a senior school at Mold at a cost of £37,908. MORECAMBE. Houses, etc. Plans passed by the Morecambe Corporation : 23 houses, Burling-ton Avenue, Mr. J. Westwell; six houses, South Grove, Mr. L. Robinson; 28 houses, Clevelands Estate, Mr. F. Armistead. MORECAMBE. Café, etc. The Morecambe Corporation recommends an amended scheme providing for a café and sun colonnade in Happy Mount Park, at a cost of £7,260. SMETHWICK. Houses. The Smethwick Corpora-

SMETHWICK. Houses. The Smethwick Corporation has approved plans for the erection of 46 dwellings in Londonderry Road and Manor Road, at a cost of £20,507. south shields. School. The South Shields

Education Committee has obtained sanction to borrow £57,898 for the erection of an elementary school at Prince Edward Road.

SOUTH SHIELDS. Flats. The South Shields Corporation has authorised the borough engineer to prepare a scheme for the erection of flats on the Brunswick Street area.

South shields School, The South Shields Education Committee is to obtain a site in Wenlock Road, for the erection of a junior school.

school. SUTTON COLDFIELD. Houses, etc. Plans passed by the Sutton Coldfield Corporation : Seven houses, Chester Road, Welland Estates; six houses, Fernwood Grange Road, Mr. I. Cohen; eight houses, George Frederick Road, Mr. Hough; 16 houses, Maney Hill Estate, Mr. R. Shaw; 12 houses, Westwood Road, Mr. H. R. Oldham; seven houses, Whitehouse Common Road, R. Burfell, Ltd. SUTTON COLDFIELD. School. The Sutton Cold-field Education Committee has approved plans

field Education Committee has approved plans for a senior school at Holland Road.

TYNEMOUTH. Hospital Extensions. The Tyne-mouth Corporation has approved amended plans for extensions at Moor Park Hospital at a

plans for extensions at Moor Park Hospital at a cost of  $\pounds 24,220$ . TYNEMOUTH. Shelters, etc. The Tynemouth Corporation is to crect shelters and 10 bungalows at the North End of the Long Sands, at a total cost of £2,710.

#### WALES

WALES SWANSEA. Houses, etc. Plans passed by the Swansea Corporation: 14 houses, Plough Road, Mynydd Terrace, etc., Mr. A. J. Anthony; six houses, Higher Lane, Mr. A. E. Wright; 12 houses, Glanyrafon Gardens, T. & G. Spragg, Ltd.; six houses, Glen Road, West Cross, Mr. B. Edwards; 22 houses, Heol Gwyrosydd, Mr. W. A. Lodwig.

#### SCOTLAND

GLASGOW. Housing. The Glasgow Corporation is negotiating for 250 acres at Garteraig and Cranhill for housing schemes.

GLASGOW, Community Centre, The Glasgow Corporation is to crect a community centre at Alderman Road, Knightswood, at a cost of £.120.000.

4,120,000. GLASGOW. Houses. The Glasgow Corporation is to ered 36 houses in Copland Road. GLASGOW. School Extensions. Messrs. B. Caufield and M'Gowan are to extend Our Lady and St. Francis' School, Glasgow.

#### Manufacturer's Item

Arrangements have been completed whereby from January 1, 1938, the distribution of Cuprinol products will be controlled in the United Kingdom by Messrs. Jenson and Nicholson, Ltd., the manufacturers of "Robbialac" and other well-known enamels and unamisher and varnishes.

The completion of these distribution arrangements conforms with the firm's original policy to place the marketing of Cuprinol products in the hands of sole distributors who have facilities for wider and better distribution.

The manufacture of Cuprinol products will be continued by Cuprinol, Ltd., at their Avonmouth Works.

## RATES OF WAGES

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

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								A2	Kidderminster Mid. Counties	1	6	1 11	A	Stirling Scotland	1	7	1	ALC: N
Δ,	CAMBRIDGE		E. Counties	1	61	1	2	DI	1 Aing s Lynn D. Counces	L.	x 8	1 03	A	Stockport N.W. Counties Stockton-on- N.E. Coast	1	7	1 3	22
B	Canterbury	***	S. Counties S. Wales & M.	1	41	1	01	A	LANCASTER N.W. Counties	1	7	1 21	Δ	Tees Stoke-on-Trent Mid Counties	1	7	1 .	
A	Carlisle		N.W. Counties	1	7	1	m1	A	Learnington Mid. Counties	1	61	1 2	III	Stroud S.W. Counties	î	5	1 (	j
B	Carnartnen	***	N.W. Counties	1	5	1	01	A	Leek Mid. Counties	î	7	1 21	A	Swansea S. Wales & M.	1	7	1 1	100
A	Carnforth	•••	N.W. Counties	1	7	1	21	A	Leicester Mid. Counties	1	7	1 21	A3	Swindon S.W. Counties	1	51	1 1	I,
A.	Chatham		S. Counties	1	51	1	11	B	Lewes S. Counties	î	5	1 03		Т				
A	Chelmsford	•••	E. Counties S.W. Counties	1	51	1	11	A2 A	Lichfield Mid. Counties	1	67	1 15	A1 B	L AMWORTH N.W. Counties	1	61	1 1	2
A	Chester	***	N.W. Counties	1	7	1	24		Liverpool N.W. Counties	01	81	1 31	A	Teeside Dist N.E. Coast	1	7	1 5	100
AB	Chesterfield	***	Mid. Counties S. Counties	1	5	1	21	A:	Llanelly S. Wales & M.	1	7	1 12	As	Teignmouth S.W. Counties Todmorden Yorkshine	1	67	1 1	i a
A	Chorley		N.W. Counties	1	7	1	24		London (12-miles radius)	1	81	1 31	A1	Torquay S.W. Counties	î	61	1 5	and a
A	Clitheroe	***	N.W. Counties	1	4± 7	1	21	A	Long Eaton Mid. Counties	i	7	1 21	Ba Aa	Tunbridge S. W. Counties	1	4 51	1 1	l
A	Clydebank		Scotland Mid. Countier	1	7	1	241	A	Loughborough Mid. Counties	1	7	1 01		Wells				1
Â,	Colchester	***	E. Counties	1	6	1	11	A	Lytham N.W. Counties	i	7	1 21	A	Tyne District N.E. Coast	1	7	1 1	22
A	Colme Colwyn Bay	•••	N.W. Counties	1	61	1	2		3.6					TAT				
A	Consett		N.E. Coast	î	61	î	2	A1	MACCLESFIELD N.W. Counties	1	61	1 2	A	WAKEFIELD Yorkshire	1	7	1 :	2
A	Conway	***	N.W. Counties Mid. Counties	1	67	1	15	As As	Maidstone S. Counties	1	05 51	1 11	A	Walsall Mid. Counties	1	7	1 5	200
A	Crewe		N.W. Counties	1	6	1	1	A	Manchester N.W. Counties	1	7	1 21	A1	Warwick Mid. Counties	î	61	î	ŝ
A.8	oumperiand	•••	N.W. Counties	1	01	1	18	B <sub>1</sub>	Margate S. Counties	1	41	1 01	A1 A	West Bromwich Mid. Counties	1	6±	1 :	2
	DARLINGTON	N	N.E. Coast	1	7	Ŧ	91	A3	Matlock Mid. Counties	1	51	1 11	As	Weston-sMare S.W. Counties	1	6	1 1	l
A	Darwen	***	N.W. Counties	î	7	1	24	A	Middlesbrough N.E. Coast	1	7	1 21	A	Widnes N.W. Counties	1	7	1 5	2
B1	Deal Denbigh		S. Counties N.W. Counties	1	44	1	01	As Be	Minchead S.W. Counties	1	64	1	AB	Wigan N.W. Counties	1	7 5	1 5	200
A	Derby		Mid. Counties	1	7	1	21	Ba	Monmouth S. Wales & M.	1	4	1 0	As	Windsor S. Counties	î	6	1 1	i
B	Didcot	***	S. Counties	1	5	1	01		Glamorganshire				A A,	Worcester Mid. Counties	1	6	1 1	ŝ
A	Doncaster	••••	Yorkshire S.W. Counties	1	7	1	21	A	Morecambe N.W. Counties	1	7	1 21	A3	Worksop Yorkshire	1	51	1 1	i
·A3	Driffield	***	Yorkshire	1	5	1	11		N				A1 A3	Wycombe S. Counties	1	51	1 1	í
A	Dudley	***	Mid. Counties	1	67	1	11	A: A	Neath N.W. Counties	1	67	1 11		37				
A	Dumfries	***	Scotland	1	6	1	11	A	Nelson N.W. Counties	1	7	1 24	B	Y ARMOUTH E. Counties	1	5	1 0	k
A	Dundee	***	N.E. Coast	1	7	1	224	A	Newport S. Wales & M.	1	7	1 21	A	York S.W. Counties	1	5	1 0	Hi a

• In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request. The rates of wages have been revised consequent upon the increase in wages which came into operation on February 1, together with all revisions following authorised annual regradings.

V

# CURRENT PRICES

The wages are the standard Union rates of wages payable in London at the time of publication. The prices given below are for materials of good quality and include delivery to site in Central London area, unless otherwise stated. For delivery outside this area, adjust-

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ment should be made for the cost of transport. 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. The whole of the information given is copyright.

WAGES	SLATER AND TILER	SMITH AND FOUNDER-continued s. d.
£ s. d.	First quality Bangor or Portmadoc slates	Mild steel reinforcing rods, 7
Bricklayer per nour I of	d/d F.O R. London station :	······································
Joiner	24" × 12" Duchesses per M. 28 17 6	·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ··
Machinist	22" × 12" Marchionesses	3 <sup>", 4"</sup>
(Fixer)	$10^{\circ} \times 10^{\circ}$ Countesses	Cast-iron rain-water pipes of ordi- s. d. s. d.
Plumber	18" × 9" Ladies	Shoes each 2 0 3 C
Paperhanger	Old Delabole slates d/d in full truck	Anti-splash shoes " 4 6 8 0
Glazier	loads to Nine Elms Station :	Bends
Scaffolder	$20^{\circ} \times 10^{\circ}$ medium grey , per 1,000 (actual) 21 11 0	" with access door " — 6 3
Timberman ,, I 4	Best machine roofing tiles . " " 4 5 0	Swan-necks up to 9" offsets . " 3 9 6 0
General Labourer	Best hand-made do , , 4 17 b Hips and valleys	Plinth bends, 41 to 6"
Lorryman	,, hand-made	ordinary thickness metal , F.R. 5 6
Crane Driver	Nails, compo per lb. I 4	Stop ends each 6 6
Waterman 1	" copper "	Angles
MATERIALS	CARPENTER AND JOINER	Outlets
EXCAVATOR AND CONCRETOR	f. s. d.	PLUMBER £ s. d.
Grey Stone Lime per ton 2 2 0	Birch	Lead, milled sheets Cwt. 1 7 3
Blue Lias Line	Deal, Joiner's	" soil pipes
Portland Cement, in 4-ton lots (d/d	Mahogany Honduras	, scrap
site, including Paper Bags)	"African " " I I	fine do.
(d/d site, including Paper Bags) 2 8 0	Oak plain American	Copper, sheet ,, I of
White Portland Cement, in 1-ton lots 8 15 0	"Figured " " " I 3	LCC soil and waste pipes : 3" 4" 6"
Thames Ballast per Y.C. 6 0	,, plain Japanese , ,, ,, I 2	Plain cast F.R. 1 0 1 2 2 6
Building Sand	" Austrian wainscot	Coated n I I I 3 3 8 Galvanized
Washed Sand	"English " " I II	Holderbats each 3 10 4 0 4 9
2" " " 10 3	Pine, Yellow	Bends
Pan Breeze	"British Columbian " " 4	Heads
Coke Breeze	Teak, Moulmein ,, ,, I 3	PLASTERER & s. d.
DRAINLAYER	Walnut, American	Lime, chalk per ton 2 0 0
BEST STONEWARE DRAIN PIPES AND FIFTINGS	Whitewood American	Plaster, coarse
s. d. s. d.	Deal floorings, 2"	Hydrated lime " 309
Straight Pipes per F.K. 0 9 I I Bends each I 0 2 6	" I I G	Sirapite
Taper Bends	, I , I 2 0	Gothite plaster
Rest Bends	" " I IO O	Pioneer plaster
Double	Deal matchings, #" ,, 14 0	Sand, washed.
Straight channels per F.R. 1 6 2 6	" I" n I 4 0	Hair
Channel junctions	Rough boarding, <sup>4</sup> " ,, 16 o	Laths, sawn Dundle 2 4
Channel tapers 2 9 4 0	" I <sup>1</sup> "	Lath nails Ib. 3
Interceptors IG 0 10 6	Plywood per ft. sup. :	GLAZIER s. d. s. d.
IRON DRAINS :	Oualities A B BB A B BB A B BB A B BB	Sheet glass, 24 oz., squares n/e 2 ft. s. F.S. 22
Iron drain pipe per F.R. m 3 3 8 Bonde	d. d	Flemish, Arctic, figured (white)*
Inspection bends	Birch 60 X 48 4 $2\frac{1}{2}$ 2 5 3 $2\frac{1}{2}$ 7 5 4 8 0 5 Cheap Alder - 2 $1\frac{1}{2}$ - $2\frac{1}{2}$ - $-$	Blazoned glasses
Single junctions II 2 22 IO	Oregon Pine . $-2\frac{1}{2}$ - $32\frac{3}{2}$ - $43\frac{1}{2}$ - $54\frac{1}{2}$ -	Reeded : Cross Reeded
Lead Wool	Gaboon Mahogany 4 21 - 5 41 - 7 61 - 8 7 -	plain, hammered, rimpled, waterwite " 6
Gaskin	Figured Oak . 64 5 - 7 53 - 10 8 - 1/- 9 -	Crown sheet glass (n/e 12" × 10") " 2 0 Flashed opals (white and coloured) " 1 0 and 2 0
BRICKLAYER	d.	Plastice opais (white and coloured) in a o und a o
	backeb allia	a rolled plate 6
£ s. d.	Scotch glue	" rolled plate " 6
Flettons per M. 2 12 0 Grooved do	Scotch glue	1 <sup>st</sup> rolled plate     9     6       1 <sup>st</sup> wired cast;     9     10       1 <sup>st</sup> Georgian wired cast     11     11       1 <sup>st</sup> Polished plate, n/e i ft.     11     1
flettons         .         .         per M.         2 I2 0           Grooved do.         .         .         .         .         .         2 I4 0           Phorpres bricks         .	Scotch giue	$ \begin{array}{c} & f & \text{rolled plate} \\ f^{\text{wired cast; wired rolled}} & & & & & & & & & & & & & & & & & & $
Flettons per M. 2 12 0 Grooved do	Scotch guie	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Flettons         .<	Scotch gue	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
Flettons           per M.         2 12 0           Grooved do.             2 14 0           Phorpres bricks             2 15 0  .	Scotch gue	$ \begin{array}{c} a^{h} \ {\rm rolled} \ {\rm plate} \ {\rm ,} \  \   \    } \ {\rm ,} \ {\rm ,} \ {\rm $
Flettons         .<	Scotch gue	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
Flettons         .         .         per M.         2 12 0           Grooved do.         .         .         .         .         2 14 0           Phorpres bricks         .         .         .         .         2 15 0           .	Scotch guie	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
f s. d.         f s. d.           Flettons         .         .         per M.         2 12 0           Grooved do.         .         .         .         2 14 0           Phorpres bricks         .         .         .         2 15 0           .         .         .         .         .         2 15 0           .         .         .         .         .         2 15 0           .         .         .         .         .         .         .           Stocks, rst quality         .	<ul> <li>Scotch gue</li></ul>	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Flettons         f s. d.           Grooved do.         2 12 0           Phorpres bricks         " 2 15 0           ", Cellular bricks         " 2 15 0           ", and ", " " 4 11 0         " 4 11 0           ", and ", " " 4 14 0         " 7 12 6           ", Brindles         " 7 0 0           ", Bullnose         " 7 0 0           Red Rubbers for Arches         " 12 0           Multicoleured Facings         " 12 0	Scotch gue	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
f s. d.         f s. d.           Flettons         .         .         per M.         2 12 0           Grooved do.         .         .         .         2 12 0           Phorpres bricks         .         .         .         2 15 0           Stocks, strat quality         .         .         .         2 15 0           Stocks, strat quality         .         .         .         2 15 0           Blue Bricks, Pressed         .         .         .         .         .           Blue Bricks, Pressed         .	Scotch gue	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
f s. d.         f s. d.           Grooved do.         .         .         .         2 12 0           Phorpres bricks         .         .         .         2 15 0           .         .         .         .         .         2 15 0           .         .         .         .         .         2 15 0           .         .         .         .         .         .         11 0           Stocks, 1st quality         .	Scotch gue	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Flettons	Scotch gue	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Scotch gue	a* orioled plate
Flettons	Scotch gue	
Flettons	Scotch gue	
Flettons	Scotch gue	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Scotch gue	
Flettons	Scotch gue	$\begin{array}{c} 1 \\ 1 \\ 2 \\ 1 \\ 2 \\ 1 \\ 1 \\ 1 \\ 1 \\ 2 \\ 1 \\ 1$
Flettons	Scotch gue	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Scotch gue	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Flettons	Scotch gue	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Flettons	Scotch gule	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Flettons	Scotch gue	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Flettons $f$ s. d.         Grooved do. $2$ 12 0         Phorpres bricks $2$ 14 0         Phorpres bricks $2$ 15 0         Stocks, 1st quality $2$ 15 0         Stocks, 1st quality $1$ 4 11 0 $2$ 15 0 $2$ 15 0         Stocks, 1st quality $1$ 4 11 0 $2$ 15 0 $1$ 4 11 0 $2$ 16 $1$ 4 11 0 $1$ 7 10 $1$ 7 10 0 $1$ 8 Builnose $1$ 7 0 0         Red Sand-faced Facings $1$ 7 10 0         Luton Facings $1$ 7 10 0         Luton Facings $1$ 7 10 0         Clazed Stricks, Ivory, White or Salt       glazed, 1st quality:         Stretchers $2$ 10 0         Builnose $2$ 10 0         Builnose $2$ 10 0         Glazed Stretchers $2$ 10 0         Double Headers $2$ 10 0         Builnose $2$ 10 0         Glazed Stretchers $2$ 10 0         Double Stretchers $2$ 10 0         Builnose $2$ 10 0         Glazed Stricks, Ivory, White or Salt         glazed, so and Quality, Less       1 0 0         Builnose	Scotch gue	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Flettons	Scotch gue	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Flettons	Scotch gue	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Flettons	Scotch guie	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

#### PRICES FOR MEASURED CURRENT WORK

The following prices are for work to new buildings of average size, executed under normal conditions in the London area. They include establishment charges and

EXCAVATO	R AN	D O	CON	CRE	TO	R						£	s.	d.
Digging over s	urface n uce leve	/e 12	deep	p and deer	l car	t away l cart	away		:	:	Y.S. Y.C.		20 12	96
n to for	m basen	aent i	n/e 5	o" a	ind c	art aw	ay	-			3.6		9	0
21	22		10'	o d	eep a	and cal	rt away		:		2.5		10	0
If in stiff clay								+		add	2.1			6
Planking and s	strutting	to si	ides o	fexc	avat	ion	:	2	:	25	F.S		4	0
**	22	top	bier ho	oles							23			5
22	## **	ext	rench	es lv if l	left i	n .		:	*		**			5 3
Hardcore, filled	d in and	ram	med	·	• ,						Y.C.		IO	0
Portland ceine	nt concr	ete II	n Iour	idatio	ons (	0-I) 4-2-I	:	-	:		**	I	12	6
			,		1	underp	inning				11	I	10	0
r misning surfa	ice or co	ncret	e, spa	ice ra	ice		*	*	•		1.3.			1
											."		6"	
DRAINLAY	ER										4 s. d.		s.	d.
Stoneware dra	ins, laid	l con	aplete	(dig	ging	and o	concrete	e to l	be	FD	. 6		-	
Extra, only for	bends									Each	2 8		3	3
Culling and me	junctio	ons			*	*		*			3 9		4	6
Cast iron drain	is, and I	aying	and	joint	ing					F.R.	5 9		8	3
Extra, only for	r bends	(cast	iron)							Each	12 3		18	4
BRICKLAY	ER											£	s.	d.
Brickwork, Fle	ettons in	lime	mort	tar	•					. I	'er Rod	26	10	0
" Sto	ocks in c	emen	it		:					*	25	34	0	0
Extra colu for	ues in ce	ement	t				*		*		**	50	0	0
Latra Only for	backing	g to p	nason	ry	:						22	I	IO	0
99	rising o	on old	I walls	s				*	•		2.5	2	0	0
Fair Face and	pointing	g inte	g	,	:	:	:	:	:		F.S.	5	10	I
Extra over flet	ton brid	kwor	k for	picke	ed st	ock fa	cings ar	nd poi	intin	ıg .				8
27	21	**		blue	bric	k facir	igs and j	point	ting	*	**		I	4
Tuck Pointing		2.2		glaze	ed br	rick fac	ings an	nd poi	ntin	g .	*1		3	6
Weather points	ing in ce	ement	i								**			3
Slate dampcou	rse .		•					*	*					IO
vertical damps	course .												*	*
ASPHALTE	R	ITSP									VS		S.	d.
" Vertical dar	npcours	e									25		7	9
" paving or fl	at .		•		•	•		•	•		22		6	36
$\mathbf{I}'' \times 6''$ skirtin	ig .			•							F.R.		ï	0
Angle fillet				•							**			2
Cesspools .								:			Each		5	6
MASON												ſ	8	d.
Portland stone	e, includ	ling	all la	bour,	, hoi	sting,	fixing	and o	clear	ning		R.	-	
down, comp	d do al	laci	act		•				*		F.C.		17	96
Artificial stone	and do										23		13	6
York stone ter	nplates,	fixed	l com	plete				•	*	•	22		10	0
sill	ls .										27	I	10	6
SLATER A	ND TI	LEF	3									£	s.	d.
Slating, Bang	or or e	qual	to a	a 3″	lap,	and	fixing	with	COI	mpo	Car			
Do., 18" × 0	9"		•	:	:	:	:	-		*	our.	20 00	10	0
Do., 24" ×	12"		in a								22	3	17	0
Tiling, best ha	and-mad	le sar	nd-fac	ed, la	aid t	o a 4"	gauge.	naile	d et	very	22	0	0	0
fourth cours	e.		hina n	·	*:100					*	2.2	3	0	0
20" × 10" me	dium Ol	d De	labole	slati	ing, l	laid to	a 3" la	p (gre	ey)		22	2	16	0
23 1			**	53		22		(gre	een)		22	4	15	0
CARPENTE	R AN	DJ	OIN	ER							0	£	5.	d.
Flat boarded of Shuttering to	sides an	d sof	fits of	bear	ns	includ	ing all	strutt	ing		Sqr. F.S.	2	2	07
" to	stanchio	ons									93.			7
Fir and fixing	in wall	es plate	. lint	iols.	etc.	•			1	•	F.C.		1 2	6
Fir framed in	floors										21		4	6
P2 22	trusses	•	•	*	*	•	•	*	*	•	21		6	6
Ar	partition	ns .	·	•							C.11		8	6
f" deal sawn t	boarding	and	inxing	5 10 ]	oists		:		•		Sqr.	I	14	6
11" "		1. 0		22	410-						22	2	3	0
Do., for 4" gau	uge tilin	g	ounte:	ss sla	ung	:		:	:	:	22		9	0
Stout feather-	edged ti	İting	fillet								F.R.			4
ratent modor	ous telt,	I ply	y	:	:	:	:	:	:	:	1.5.		2 2	3
C4111 1 19	11	3	- 4						*		E 12		3	3
1" deal gutter	boards	and h	g to 9 bearer	JOIS	sts	:	:	:	*	:	F.S.		I	10
I	17	13	-11 72	-							T 12		I	6
2" deal wrough	nt round	i tor	ugued	floo	ring	laid	comple	ete, in	nclu	ding	F.R.			8
cleaning off		+	*		+				•	*	Sqr.	2	I	0
I do.	*	•	*	*	•					*	32	2 2	10	0
1 <sup>8</sup> deal mould	led skir	ting	fixed	on,	and	includ	ing gro	unds	plug	gged	TA	-		3
to wall .			*		•	•	*	•	•	٠	r S.		I	0

profit. While every care has been taken in its compilation, no responsibility can be accepted for the accuracy of the list. The whole of the information given is copyright.

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CARPENTER AND JOINER-continued	EC		s.	d.
i a deal moulded sashes of average size	F.5.		I	9全 11本
1 <sup>1</sup> / <sub>4</sub> " deal cased frames, double hung, of 6" × 3" oak sills, 1 <sup>4</sup> / <sub>4</sub> " pulley stilles, 1 <sup>4</sup> / <sub>4</sub> " heads, 1" inside and outside linings, <sup>4</sup> / <sub>4</sub> " parting beads, and with breach for a pulley of a first open pulley.			2	-
2"	3.0		3	IO
Extra only for moulded horns	Each			6
2" deal four-panel square, both sides, door .	27		2	8
112" ", but moulded both sides	22		2	4
2" " " deal related and moulded frames	FR		3	0
$4\frac{1}{2}\times3\frac{1}{2}$			ĩ	4
il" deal tongued and moulded window board, on and including	DC			~
1 <sup>4</sup> deal treads, 1" risers in staircases, and tongued and grooved	K		*	9
together on and including strong fir carriages	**		2	6.
1 <sup>1</sup> / <sub>1</sub> " deal moulded wall strings			2	I
Ends of treads and risers housed to string	Each		ï	9
$3'' \times 2''$ deal moulded handrail	F.R.		I	3
$1 \times 1$ deal balusters and housing each end	Eath		2	9
$3'' \times 3''$ deal wrought framed newels	F.R.		I	3
Extra only for newel caps	Each		6	0
Doi, pendants	55			
SMITH AND FOUNDER		£	8.	d.
Rolled steel joists, cut to length, and hoisting and fixing in	Dor owt		*8	6.
Riveted plate or compound girders, and hoisting and fixing in	Ter core.		20	0.
position	21	I	6	6
Do, stanchions with riveted caps and bases and do,	**	I	Z	6
Corrugated iron sheeting fixed to wood framing, including all	29	~	-	
bolts and nuts 20 g	F.S.			II
Wrot-iron caulked and cambered chimney bars	Per cwt.	1	10	0
PLUMBER		c	S.	d.
Milled lead and labour in flats	cwt.	ĩ	18	0
Do. in flashings		2	I	6
Do, in soakers		ĩ	12	10
Labour to welted edge	F.R.			3\$
Open copper nailing	3.8			3
1050 , , , , , , , , , , , , , , , , , , ,	" 2"		4	"**
Lead service pipe and s. d. s. d. s. d.	1. s. d.		s.	d.
hooks F.R. 12 14 18k 2	7 3 6			_
Do. soil pipe and				
fixing with cast lead			~	2
Extra only to bends . Each	2 3		7	6
Do. to stop ends . ,, 62 8 9 1	IIO			-
Houler scretter and				
	0 -			-
unions. $3339508$ Lead traps $3339508$	o o 11 6			_
unions	0 11 6			-
unions	0 11 6 F.R.		X	
unions $\cdot$	o II 6 F.R. Each		I	00
Junions       3     3     9     5     0     8       Laditraps       6     9     9     1     0     8       Screw down bib valves      6     9     9     1     0     -     8       Do. stop cocks       7     0     9     6     12     6       Extra, only stop ends.	o II 6 F.R. Each			0000
unions	0 11 6 F.R. Each F.R.			006 97
unions	6 11 6 F.R. Each " F.R. Each			000 07 34
unions	F.R. F.R. Each F.R. Each		M H H 2 H H 5	006 97 36
Domin solves and       " 3 3 3 9 5 0 8         Lead traps       " 6 9 9 6 11 0         Do. stop cocks       " 7 0 9 6 12 6         Po. stop cocks       " 7 0 9 6 12 6         Do. angles       " 6 9 10 12 6         Do. angles       " 6 9 10 12 6         Do. outlets       " 6 10 10 10 10 10 10 10 10 10 10 10 10 10	0 - 11 6 F.R. Each " F.R. Each "	6		1111 000 07 00 0
Dotate       Set ws       and       "       3       3       9       5       0       8         Lead traps       "       "       6       9       6       II       0       -         Do. stop cocks       "       7       0       6       II       0       -       -         Do. angles       .	0	£		000007300 00
Dotate       Safews       and       3       3       9       5       8         Lead traps       n       6       9       6       IX       0         Do. stop cocks       n       7       0       9       6       IX       0         Po. stop cocks       n       7       0       9       6       IX       0         A <sup>*</sup> cast-iron iron iron       rend fixing       .       .       .       .       .         Do. angles       .       .       .       .       .       .       .         Do. angles       .       .       .       .       .       .       .       .         Do. outlets       .       .       .       .       .       .       .       .       .       .         Ztra, only for shoes       . <td< td=""><td>0</td><td>£</td><td></td><td>1 1 000 07 30 0.00</td></td<>	0	£		1 1 000 07 30 0.00
Domin solves and       " 3 3 3 9 5 0 8         Lad traps       " 6 9 9 6 11 0 -         Do. stop cocks       " 7 0 9 6 12 6 -         A <sup>*</sup> cast-iron 1 -d. gutter and fixing          Do. angles          Do. outlets          Do. outlets          Do. outlets          Do. angles          Do. outlets          Do. outlets          Do. outlets          Do. outlets          Do. for plain heads          Do. in plw to beams, stanchions, etc.          Lathing with sawn laths to ceilings          4" screeding in Portal cerment and sand or tiling, wood block	0	£		1110000730 0003
Dotational softways and unitons       , , , , , , , , , , , , , , , , , , ,	o 11 6 F.R. Each F.R. Each Y.S. "	£		1110000730 0.003 5
Dotation solves and unitons.       ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0	£	111121115 S.2.2.1 HHF	0000730 0003 572
Down in solvers and humans       , , , , , , , , , , , , , , , , , , ,	0	£	1 1 1 1 2 1 1 5 S. 2 2 1 1 1 1 1 1	0069736 d.093 5729
Dotation solvers and unitons       "       3       3       9       5       8         Lead traps       "       6       9       6       II       0         Do. stop cocks       "       7       0       9       6       II       0         A <sup>*</sup> cast-iron rain-water pipe and fixing       .       .       .       .       .       .         Do. angles       . </td <td>0 - 11 6 F.R. Each " F.R. Each " Y.S. " "</td> <td>£</td> <td></td> <td>0069736 d.093 57291</td>	0 - 11 6 F.R. Each " F.R. Each " Y.S. " "	£		0069736 d.093 57291
Dotting solvers and       ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0	£		0069736 d.093 57291.94
Dotation solves and unitors       , , , , , , , , , , , , , , , , , , ,	•	£		0069736 d.093 57291.946
Dotation solvers and unitons       , , , , , , , , , , , , , , , , , , ,	•	£		0069736 d.093 57291.94613
Dotation solvers and unitons       , , , , , , , , , , , , , , , , , , ,	•	£		0069736 d.093 57291.946131
Dotation solves and unitors       , , , , , , , , , , , , , , , , , , ,	•	£		0069736 d.093 57291.9461316
Dotation solvers and unitons       , , , , , , , , , , , , , , , , , , ,	•	£	347	0069736 d.093 57291.946131666
Dotation solvers and unitons solvers and Lead traps       " 3 3 3 9 5 0 8 Screw down bib values "       6 9 9 6 11 0 - - Do. stop cocks, 7 0 9 6 12 6 - - d cast-iron rain-water pipe and fixing with ears cast on Extra, only stop ends. Do. outlets         Do. angles 'd cast-iron rain-water pipe and fixing with ears cast on Extra, only for shoes . Do. outlets       -         PLASTERER AND TILING Expanded metal lathing.small mesh Do. in n/w to beams, stanchions, etc. Lathing with sawn laths to ceilings       -         ** cast-iron rain-water pipe and fixing with ears cast on Extra, only for shoes . Do. or plain heads       -         PLASTERER AND TILING Expanded metal lathing.small mesh Do. in n/w to beams, stanchions, etc. Lathing with sawn laths to ceilings       -         Rough under on walls Render, refloat and set in lime and hair Render and set in sizer; Arris Rounded age in sizer; Rouge under on walls Render backing in cement and sand, and set in Keene's cement Extra, only if on lathing Arris Rounded angle, small Plain cornices in plaster, including dubbing out, per 1" girth " granolithic pavings "if" 6" × 6" white gizzed wall tiling and fixing on prepared screed 9" × 3"	•	£		d.093 57291,9461316656
bolin in solvers and unions	•	£	1 1 1 1 2 1 1 5 S. 2 2 1 1 1 1 1 1 2 3 4 7 2	0069736 d.093 57291.94613166568
Down in solvers and       in 3 3 3 9 5 0 8         Lad traps       in 6 9 9 6 11 0         Screw down bib values       in 6 9 9 6 11 0         - cast-iron + rd. gitter and fixing       in 7 0 9 6 12 6         - cast-iron + rd. gitter and fixing       in 7 0 9 6 12 6         - cast-iron + rd. gitter and fixing       in 7 0 9 6 12 6         - cast-iron + rd. gitter and fixing       in 7 0 9 6 12 6         - cast-iron + rd. gitter and fixing       in 7 0 9 6 12 6         - cast-iron + rd. gitter and fixing       in 7 0 9 6 12 6         - cast-iron + rd. gitter and fixing with ears cast on       in 7 0 9 6 12 6         - dia cast-iron rain-water pipe and fixing with ears cast on       in 7 0 9 6 12 6         - bo. angles       in 7 0 9 6 12 6         - Do. angly to beams, stanchions, etc.       in 7 0 9 6 10 0         - Do, in n/w to beams, stanchions, etc.       in 7 0 0         - Lathing with sawn laths to ceilings       in 7 0 0         * screeding in Portland cement and sand, or tiling, wood block foor, etc.       in 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	•	£	1 HHH2HH5 S22H HHHHH2 3472	0069736 d093 5729194613166868
Dotation solvers and unitons solvers and Lad traps       "       3       3       9       5       0       8         Lad traps       "       6       9       6       17       0       -       -         Do. stop cocks       "       7       0       9       6       17       0         A' cast-iron #-rd. gutter and fixing       .       .       .       .       .       .       .       .         Do. stop cocks       .	•	£		0069736 d.093 57291.94613166868 d.1
Dotation solvers and unitons solvers and Lead traps       " 3 3 3 9 5 0 8 Screw down bib values "       6 9 9 6 11 0 - - Do. stop cocks       " 7 0 9 6 12 6 - - Cock to cocks         Do. angles       - Do. angles       - Do. angles       - Do. angles         Do. angles       - Cock to cocks       - Do. angles       - Do. angles         Do. angles       - Do. outlets       - Cock to cocks       - Do. angles         Do. angles       - Do. outlets       - Do. for plain heads       - Do. for plain heads         PLASTERER AND TILING       - Expanded metal lathing, small mesh       - Do. for plain heads       - Do. for plain heads         PLASTERER AND TILING       - Expanded metal lathing, small mesh       - Do. for plain heads       - Do. for plain heads         PLASTERER AND TILING       - Expanded metal lathing, small mesh       - Do. for plain heads       - Do. for plain heads         Rough under on walls       - Render and set in Sirapite - Arris       - Render and set in Sirapite - Arris       - Render angle, small         Render angle, small       - Plain cornices in plaster, including dubbing out, per 1" girth 1" granolithic pavings       - Ti " and set in Sirapite - Arris         GLAZIER       - A oz. sheet glass and glazing with putty       - Zo oz, on and do.       -	• - 6 • 11 6 F.R. Each * Y.S. * * * * * * * * * * * * * * * * * *	£	3472 s.	0069736 d.093 57291.946131666668 d.28
Dotation solvers and unitors       "       3       3       9       5       0         Lead traps       "       6       9       6       11       0         Do. stop cocks       "       7       0       9       6       12       6         Do. stop cocks       "       7       0       9       6       12       6         Do. angles       Do. oulets       "       7       0       9       6       12       6         Do. angles       Do. oulets       "       7       0       9       6       12       6         Zo. angles       Do. oulets       "       14       7       0       9       6       12       6         Zo. oulets       "       7       0       9       6       12       6       12       6       12       6       12       6       12       6       12       6       12       6       12       6       12       6       12       6       12       6       12       6       12       6       12       6       12       6       12       6       12       6       12       6       12       6       <	•	£		0069736 d.093 57291946131666668 d.28 10
Dotation solvers and unitons       , , , , , , , , , , , , , , , , , , ,	•	£	инызны5 S22н нымын2 3472 5. н	0069736 d.093 57291946131666668 d.28097
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Dotter a set ws and unions, "       3       3       9       5       0       8         Lead traps       "       6       9       6       11       0         Do. stop cocks       "       7       0       9       6       12       6         Do. stop cocks       "       7       0       9       6       12       6         A <sup>+</sup> cast-iron rain-water pipe and fixing with ears cast on 4 <sup>+</sup> cast-iron rain-water pipe and fixing with ears cast on 4 <sup>+</sup> dia. cast-iron rain-water pipe and fixing with ears cast on 4 <sup>+</sup> dia. cast-iron rain-water pipe and fixing with ears cast on 4 <sup>+</sup> dia. cast-iron rain-water pipe and fixing with ears cast on 4 <sup>+</sup> dia. cast-iron rain-water pipe and fixing with ears cast on 4 <sup>+</sup> dia. cast-iron rain-water pipe and fixing with ears cast on 4 <sup>+</sup> dia. cast-iron rain-water pipe and fixing with ears cast on 4 <sup>+</sup> dia. cast-iron rain-water pipe and fixing with ears cast on 4 <sup>+</sup> dia. cast-iron rain-water pipe and fixing with ears cast on 4 <sup>+</sup> dia. cast-iron rain-water pipe and fixing with ears cast on 4 <sup>+</sup> dia. cast-iron rain-water pipe and fixing with ears cast on 4 <sup>+</sup> dia. cast-iron rain-water pipe and fixing on tilling, wood block floor, etc.         Do. vertical	•	£	1 HHH2HH5 S22H HHMHH2 3472 S. H	0069736 d.093 57291,946131666668 d.2809724
Down on solvers and       " 3 3 3 9 5 0 8         Lad traps       " 6 9 9 6 11 0         Cast traps       " 7 0 9 6 12 6         Po. stop cocks       " 7 0 9 6 12 6         Cast trans + rd. gutter and fixing	• 11 6 • 11 6 F.R. Each " F.R. Each " Y.S. " " F.R. " F.R. F.S. " " F.R.	3		0069736 d.093 57291946131666668 d.t. 09724 d
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Dotation solvers and unitons       ,"       3       3       9       5       0         Lead traps       ,"       6       9       6       11       0         Do. stop cocks       ,"       7       0       9       6       12       6         A <sup>+</sup> cast-iron rain-water pipe and fixing with ears cast on 4 <sup>+</sup> cast-iron rain-water pipe and fixing with ears cast on 4 <sup>+</sup> dia. cast-iron rain-water pipe and fixing with ears cast on 5.       4 <sup>+</sup> <td>•</td> <td>3</td> <td></td> <td>0069736 d093 5729194613166568 d7809724 d691 3606</td>	•	3		0069736 d093 5729194613166568 d7809724 d691 3606
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