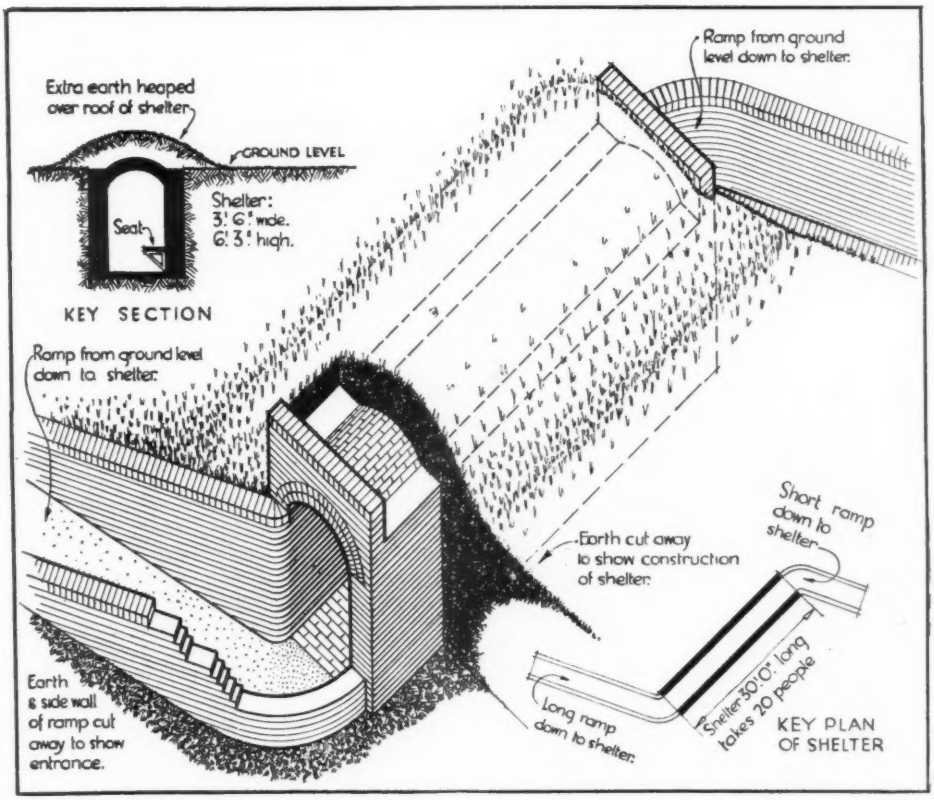

Economical Trench Shelters

Above is shown a typical brick trench air raid shelter providing generous accommodation for 20 people at the low cost of 54/6d. per person. Brick shelters can be constructed speedily without shuttering or special plant and, since brickwork is load bearing within a matter of hours, there are no delays. This is but one of the many types of brick shelters described in our booklet "Brick Air Raid Shelters", copies of which are freely obtainable from the Head Office address.

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THE ARCHITECTS' JOURNAL

THE ARCHITECTS' JOURNAL
WITH WHICH IS INCORPORATED THE BUILDERS' JOURNAL AND THE ARCHITECTURAL ENGINEER IS PUBLISHED EVERY THURSDAY BY THE ARCHITECTURAL PRESS (PUBLISHERS OF THE ARCHITECTS' JOURNAL, THE ARCHITECTURAL REVIEW, SPECIFICATION, AND WHO'S WHO IN ARCHITECTURE) FROM 45 THE AVENUE, CHEAM, SURREY

*

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

THURSDAY, SEPTEMBER 7, 1939. NUMBER 2329 : VOLUME 90

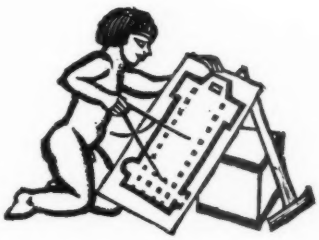
PRINCIPAL CONTENTS

NEARING COMPLETION

Commonwealth House, an office building now nearing completion in High Holborn, W.C.

JUTLAND

The new public library in Molle Park, Aarhaus, a brick structure with windows set in concrete surrounds. The fountains in the foreground are of bronze.



DO SOMETHING

IN August, 1914, an architect watched official notices being posted up in a small village in Northumberland with the comment: "There goes architecture for six months . . . and another six months to recover." He was wrong, though less wrong than most, about the period during which architectural practice would be at an end. Today, facing the same suspension, it is better only to hope that the interruption will be short.

Today, fifteen thousand architects must for a period abandon their usual work. And we can be thankful that, save for their powers of imagination, architects are as well-placed for surmounting the present catastrophe as any body of civilians.

In a state of war anyone who wants to retain calmness of mind must, largely, narrow down events to their personal effect upon him and to the contribution which he can make to the execution of national plans. And, in weighing up both of these, architects are the more likely to come to calm and encouraging conclusions just because they are architects.

Except for the most fortunate of private and salaried men all architects have known periods of no work and exceptionally small incomes in which they have done many kinds of other work to keep their minds occupied and themselves cheerful.

So that for architects one of the biggest terrors of the present situation shrinks at once to a small affair. No architect (or architect's wife) is easily frightened of being hard-up.

Nor is that all. In the lean periods like that of the slump of 1932–34, architects, as we have said, did many kinds of work outside their normal practice. And not only did they learn much by so doing that was later useful in that practice: they also obtained a wide knowledge of the organization and technique of other callings. The knowledge gained then showed many men that they could usefully carry out work of a type quite far removed from architecture with a very short training.

This experience is certain just now to give the profession confidence that it can be useful in war. But there is a much greater source of confidence for all architects just now.

Either the war on which Britain has now entered is not going to be nearly so disruptive of ordinary civil life as has sometimes been supposed *or* architects will be needed as they have never before been needed. If the effects of aerial bombing have been exaggerated, architects will share the certainty that the objects for which Britain went to war will be so much the more easily gained. If the effects are severe, the dispersal of population and industry throughout the country, the provision of shelters and the repair of important buildings will soon ensure for every architect work very similar to his everyday work.

It remains to be seen—and it will not be seen with certainty for a month or eight weeks—how the efforts of the nation must be divided between the Home Front and theatres of war.

As we stated in our last issue, the next six weeks may be a period of great depression for architects who do not keep this unavoidable uncertainty firmly in mind.

For these weeks those who are at work on A.R.P. or on buildings of importance will certainly be the most enviable members of the profession. A proportion of the remainder will be engaged on war work for which they had arranged before last Friday.

Those in neither of these categories may at present be disconsolate in having services of a valuable kind to offer and no one to accept them. Depressing though this situation is, the JOURNAL is certain all such architects will realize that it is absolutely unavoidable.

The Government cannot be expected to call on the architects on the Central Register in any appreciable numbers until the effects of bombing and other major factors on the conduct of the war can be estimated with a tolerable degree of accuracy. At the same time, the strain on Local Governments and A.R.P. organizations during the past week has left their members incapable of doing more than registering the names of volunteers.

The Architects' Journal
45 The Avenue, Cheam, Surrey
Telephone : Vigilant 5762

NOTES & TOPICS

CONVERSATION PIECE

TIME : 10.30 p.m. Scene : Architect looking for a pillar-box in a black-out in a street he didn't know. Two figures approaching.

*

A. (*hopefully*) : " Are you a policeman by any chance ? "
Voice : " Vot's dat ? "
A. (*crestfallen*) : " You are not a policeman, I gather ? "
Voice : " No, I am Cherman."
A. : " Ah . . . not, I presume, a friend of Hitler. Who's your friend ? "
Voice : " Hitler ! Hitler, that madman you say (*checks himself*) . . . my friend is Itallyan."
A. : " What a war. . . ."

WHERE WE ALL ARE—NO. 2

Here, I think, is a counter-weight to the letter published last week from an architect who by now is happily at Capetown :

Somewhere in London, September 2.

A work of art is good or bad, we have often been told, according to the degree to which it promotes a good state of mind. The Great West Road Brighter Concrete school of architecture is not everyone's cup of tea. In the past it has not been mine : in the future there will be one more heart that beats a shade more bravely for the sight of that stained streamlining.

*

Before 9 p.m. on September 1 I had accustomed myself to doing what I could for the Fire Service in surroundings of gloom and passable stability at King's Cross. At 9.15 p.m., a member of a different crew, I arrived at a large garage not very far from Russell Square. It was a five-floored garage, a new garage, full of reinforced concrete columns lovely in their strength and ramps beautiful in their twistings. It was a jewel among garages for any man of strong imagination and architectural training. All the Great West Road stuff might be on the outside—but I was in the basement.

*

It may be that the sub-officer is right in his view that at the first *loud* noise of a bomb I will be outside and not inside. That is in the future. At the moment I can pat a column at any moment and, with the best kind of British courage, realize that we will stay together for a bit.

*

Mobilization (*pace* the Ministry of Information) also showed the best kind of British courage. It was believed that those trailer pumps which hadn't *ad hoc* Fordsons to tow them would be towed by taxis—admirably suited for the necessary manœuvring. And they are being so towed, although the first time our driver let in his clutch he disappeared in thick smoke clearly arranged to come up from the floorboards through gaps left for the purpose. On reappearing in mood verging on the fretful, he was given his gasmask and asked to get on with it.

*

It was also believed that all A.F.S. taxis would be equipped with a proper towing coupling at the rear. I have no doubt at all that every taxi bar one—ours—was so equipped. But let no one imagine this oversight caused any serious trouble. Its discovery was followed at once by the revival of the well-known war-time verb, *to win*, i.e. to acquire some useful article expeditiously and in a manner which does not give rise to unnecessary discussion.

*

Baulks of timber, several saws and several other things which, perhaps, owed their presence to being near the article immediately acquired when it was found, appeared in satisfactory quantities. At 2.30 a.m., when a well-groomed A.R.P. girl in skiing trousers and a steel hat popped in to ask whether a light was *really* necessary, we were as good as finished.

*

If we had a bell on our cab a more resolute architect, barrister, garage hand, unemployed clothing packer and (thank Heaven) ex-Navy sub-officer of the London Fire Brigade could not be found everywhere.

WAR DAMAGE

The Government has lost no time in introducing legislation to empower local authorities to deal with buildings damaged by war. Bills, for the repair of buildings for housing purposes, and for essential buildings and plant have been passed by the House of Commons.

*

Essential buildings are divided into three categories. A : buildings owned or occupied by local authorities, such as hospitals, first-aid posts and schools ; B : buildings of the same class as A but in private ownership ; C. buildings not directly connected with the normal activities of a local authority, for example bakeries.

*

As regards class A the appropriate Minister may direct repairs to be carried out, lending the necessary money

for the purpose. As regards B and C, if the owner is willing but financially unable to have the repairs done the following arrangements have been made. B: the appropriate Minister may require the housing authority either to lend the necessary money or do the repairs; C: either the housing authority or the appropriate Minister may lend the necessary money. Any expenses incurred by local authorities to property not belonging to them will remain as registered charges on the property, but no demand for repayment will be made until after the emergency.

*

It is gratifying to learn that there is not likely to be any shortage of normal building materials for repair. Certain materials for temporary repairs may be in great demand. Accordingly the Government is taking steps to see that supplies are available and is buying stores and setting up stores in selected places throughout the country.

FOORD ALMSHOUSES AND—

For the *first time* an order for the preservation of a new building has been approved by the Minister of Health. It has been made by the Rochester City Council under Section 17 of the Town and Country Planning Act, 1932, and refers to the Foord Almshouses, at Priestfields, built in 1927 and 1932 by the late Sir Guy Dawber.

—ANOTHER NEW BUILDING

It was only last week that the Society for the Preservation of Ancient Buildings, for the first time in its history, included an illustration, and mention of a *new building* in its annual report. This was of the new elevation to the Playhouse at Oxford designed by Mr. Edward Maufe. The Society paid tribute to the great care and ingenuity taken to keep the new front on the same scale and proportion as the existing adjoining work in Beaumont Street, which by now most of us know.

IN SPITE OF WAR

The Chapter and Council of Sheffield Cathedral is not allowing the war to interfere with the Cathedral extensions. The building of the nave is to start at once.

FUNKTIONALISM

These black-outs (as by the way, a maiden aunt coyly referred to my Simpson-tailored sun glasses) have, by a simple reversal of their function, brought into their own once more the internal folding shutters which have nestled into the reveals of most Georgian windows, for many years unused except as spider-incubators and possible hiding-places for historic documents. It is, however, a curious thought that the modern totalitarian smash-and-grab artist is best foiled by the absence rather than the presence of light.

SANDBAG

It is interesting to notice the improvements that have been made to many municipal buildings by the application of sandbags. Perhaps they will be retained after the war, thus serving the purpose of the old-fashioned ivy.

ASTRAGAL

NEWS

IN FUTURE

In future all official statements concerning architects will be featured on this page.

OFFICIAL NOTICES

IRON AND STEEL CONTROL ORDER

Under the provision of the Defence Regulations, the Minister of Supply has established a control of the Iron and Steel Industry. Licences are required to acquire iron and steel goods and certain raw materials, but provision is made for exemption, by notice, from the necessity to obtain a licence in favour of certain classes of purchasers and/or certain purposes. A notice is being issued concurrently with the Order providing for the exemption of the main classes of first priority users, namely, Government Departments, and purchasers requiring goods for Civil Defence purposes, and railway, shipbuilding and coal-mining undertakings. Goods forming the subject of existing contracts are also exempt from licensing but may be subject to certain priorities. All purchasers of small quantities of goods (not exceeding 10 cwts.) and purchasers from stock-holding merchants (during a period of 14 days from the date of the Order) are also exempt from licensing. No licences are required for dealing in scrap iron and steel.

Maximum prices are established for the principal iron and steel products. Prices are given in the second schedule to the Order and are basis prices only, extras, rebates, etc., being in accordance with the scales of "extra" at present ruling. The prices scheduled are those current in the industry, and it is contemplated that they will remain unchanged until October 31.

Further information may be obtained on application in writing to the Iron and Steel Control, Ministry of Supply, Steel House, Tothill Street, London, S.W.1. Envelopes and letters to be marked "Licensing."

CONTROL OF TIMBER SUPPLIES

In pursuance of Orders made under the Defence Regulations, the Minister of Supply announces that he has undertaken the control of supplies of timber and that such control will be exercised by a Department of the Ministry entitled the "Timber Control."

2. The control will be introduced in two stages. The first stage is not expected to last more than a few days, during which time the organization of the Control will be set up. The Orders relating to this stage are the following :—

(a) *The Order relating to growing trees directs that no person shall sell growing trees for felling in excess of 1,000 cubic feet during the currency of the Order.*

(b) *The order relating to timber prohibits the sale or purchase of timber for consumption with the following exceptions :*

(i) *Timber required by Government Departments in accordance with any general or special directions issued by the Minister of Supply.*

(ii) *Timber required by a public or other authority responsible under the Civil Defence Act for the protection of persons and property (e.g. for A.R.P. purposes).*

(iii) *Sales for consumption up to a maximum of 10 per cent. of stock in the hands of merchants, or coming into their possession during the currency of the Order, of each of the following timbers :*

Ash,
Mahogany,
Walnut,
Lignum vitæ,
Silver spruce,
All other kinds of timber taken together.

(iv) *Individual sales not exceeding 100 cubic feet of constructional timber falling within the category "All other kinds of timber taken together" where such timber is required for the protection of the purchaser or the members of his household (e.g. for A.R.P. purposes) or for effecting the essential repairs to premises in the ownership or possession of the purchaser.*

3. Transactions between dealers in timber in the ordinary course of their businesses (e.g. sales by importers to inland merchants) as distinct from sales for consumption are not subject to restriction as regards quantity, but all sales and purchases of timber, whether between dealers or for consumption, must be made within the maximum prices which are set out in the Schedule to the Order. Such prices will not be raised in favour of holders of stocks of timber at the time of the Order or in respect of stocks coming into their possession during the currency of the Order.

4. The Timber Order further provides that the Minister of Supply may call for such returns as may be required from time to time as to stocks of timber in the possession of stockholders whether in the United Kingdom or elsewhere and to require the keeping of such records as may be prescribed of all transactions relating to the acquisition or disposal of timber and to produce for inspection when required all such records, books and documents relating to such transactions.

5. "Timber" is defined by the Order as meaning "Wood or timber of any kind which is not further prepared than hewn, sawn, planed, dressed, tongued, grooved and matched, and includes plywood and the articles commonly known in the timber trade as laminboard, block-board and batten-board, but does not include boxboards."

6. As soon as the Control organization has been set up the second stage of control will be introduced by the issue of two further Orders. One of these Orders will rescind the temporary limitation on the sale of growing trees for felling contained in the first Growing Trees Order and will substitute therefore a system of licences in respect of the sale and felling of growing trees. Such licences when operative will be obtainable from local Timber Control Divisional Officers whose addresses will be published as soon as possible. The other Order will rescind those parts of the first Timber Order relating to the prohibition of sales into consumption and will substitute therefor a system of consumers' licences which in the case of all timber other than pitprops and other mining timber will be obtainable from the local Timber Control Area Officers, and in the case of pitprops and other mining timber will be obtainable from the local Timber Control Pitwood District Officers. The addresses of the local Area and Pitwood District Officers will be published as soon as possible.

7. Further Orders will be issued as necessary, and while every effort will be made to ensure adequate publicity, members of the timber trades and all consumers of timber are urged in their own interests to keep abreast of developments in the Control, e.g. by keeping in touch with their respective Associations, watching the Trade Press, etc.

8. Attention is drawn to the fact that export of timber, as defined above, and boxboards, is being prohibited except under licence from the Export Licensing Department of the Board of Trade.

BUILDING IN CANADA

Well up to half of the work done in the Canadian construction industry last year was, according to preliminary returns, in the nature of buildings. A closer proportion is 48 per cent. Engineering, harbours, rivers and similar works, accounted for 34 per cent. and building trades jobbing for 18 per cent. The total value covered by the preliminary returns was $209,443,000. The returns cover only reports received up to the end of May and are not comparable with the complete report for 1937. The complete report for 1937, which was not issued until December, showed a total value of construction for that year of $351,874,000.

The number of reports received by the Dominion statistical office up to the end of May was 10,325 and related to work done by general, trade and sub-contractors. Of the total work reported, $209,443,000, new construction accounted for $151,149,000 and additions and alterations for $58,294,000. The capital reported amounted to $103,370,000; the number of employees was 72,044 and the salaries and wages paid $77,889,000; while the cost of materials used was $111,178,000.

Building construction reported in the preliminary return was valued at $101,470,000. Of this total $36,269,000 was residential, $45,900,000 commercial and industrial, $15,866,000 churches and institutions, and $3,432,000 other buildings. Included in the building construction were single dwellings $24,150,000, semi-detached or double dwellings $2,458,000, duplexes $3,744,000 and apartment houses $5,915,000. Stores were valued at $8,382,000, office buildings at $6,008,000, factories, warehouses and storehouses $18,028,000, grain elevators, $3,184,000 and mine buildings $4,183,000.

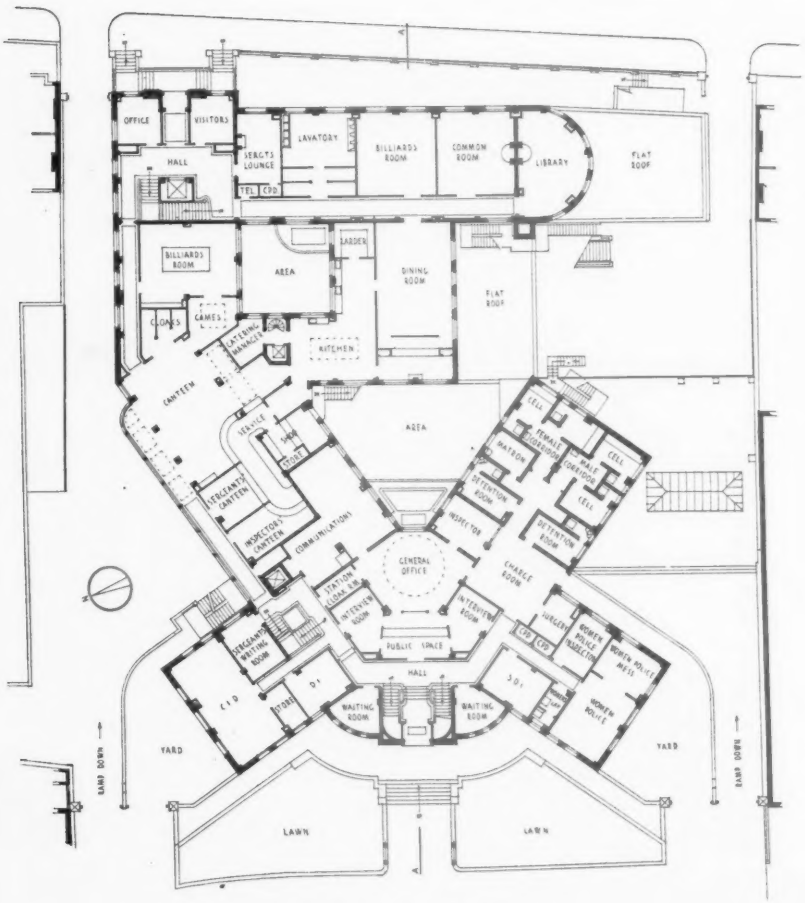
POLICE STATION AND SECTION HOUSE, TOOTING

DESIGNED BY G. MACKENZIE TRENCH

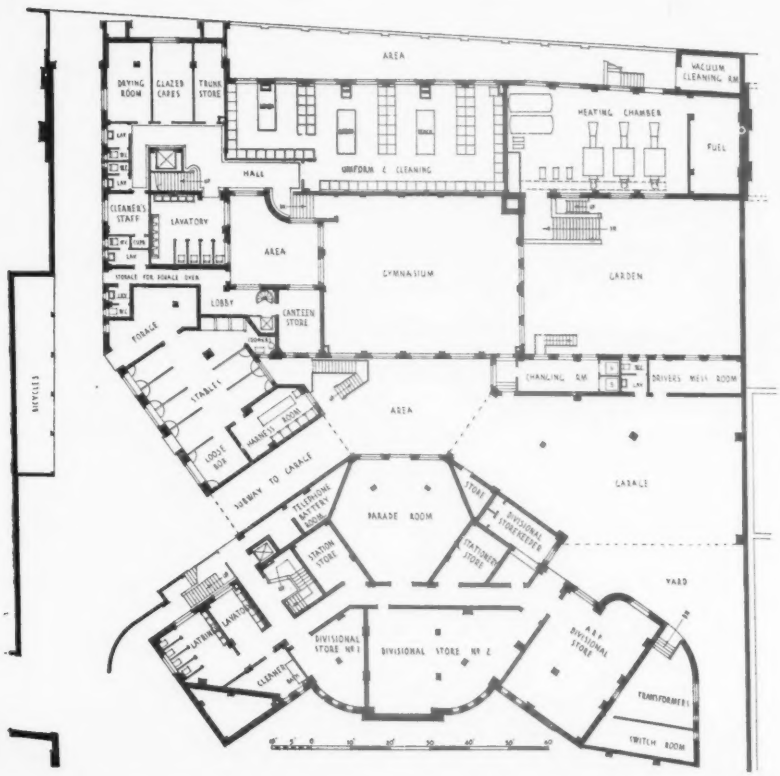
ABOVE, MAIN POLICE STATION ENTRANCE ; RIGHT, THE MITCHAM ROAD FRONT.

PROBLEM—*The general scheme consists of a station with divisional offices, a section house for 80 men including recreational facilities, and twelve sets of married quarters for senior officers, each with an independent access.*

SITE—*With 175 ft. frontages to Mitcham Road and Ascot Road, the rectangular site is 215 ft. in depth. The L.C.C. culvert taking the river Graveney runs across the west corner of the site, round which a steel frame with reinforced concrete raft has been erected. Access for cars, etc., in and out of the premises is provided both from Mitcham and Ascot Roads.*



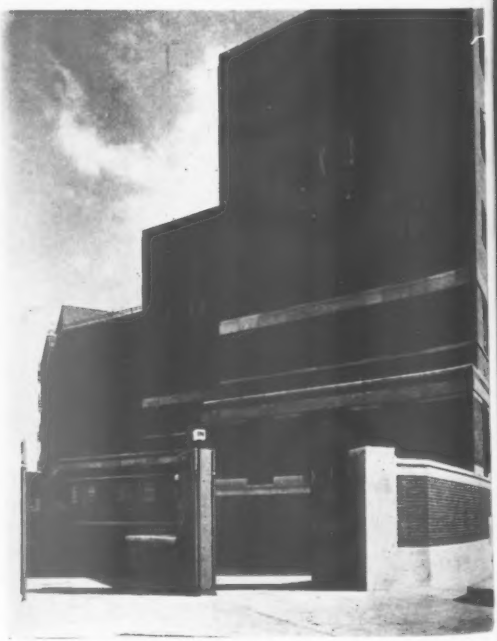
GROUND FLOOR PLAN



BASEMENT PLAN

PLAN—*The main road to the police station and the back road to the section house enabled the provision of separate entrances to the two units. Both of these roads are connected on the north side of the site by a service roadway which, by means of a ramp, leads to the stables on the basement floor.*

CONSTRUCTION AND EXTERNAL FINISHES—*Steel framed with concrete casings and solid slab floors, the lower ground floor is asphalt tanked throughout. External walls are 14 in. brick panels up to first floor level, and thence 9 in. brick with 2 in. moler block cavity wall panels. Internal partitions are also of moler blocks. The flat roofs are covered with 2 in. cork insulation, finished in either asphalt or patent tile roofings. The building is faced with machine-made buff bricks up to ground-floor level and in hand-made sand-faced buffs above. Plinths, strings and copings etc., are in Portland stone, the carved coat-of-arms over the main entrance door being by E. R. Broadbent. All windows are metal casements in wood frames throughout.*

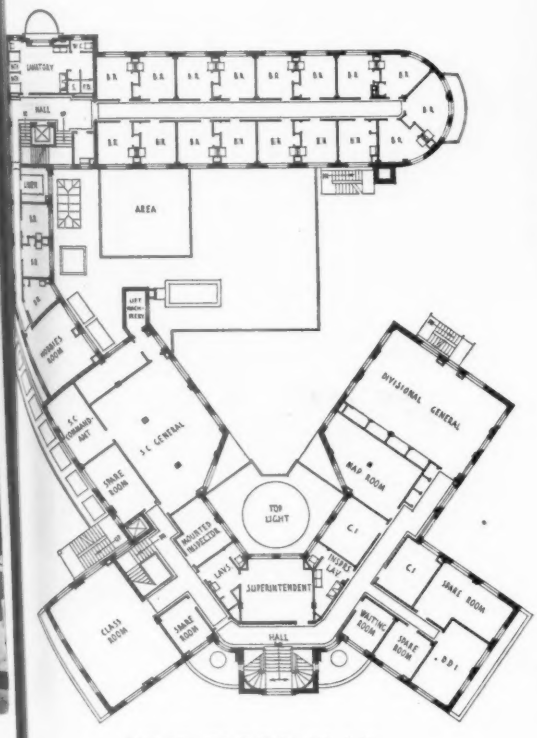


ENTRANCE TO YARD FROM MITCHAM ROAD

POLICE STATION AND SECTION HOUSE,

TYPICAL UPPER FLOOR PLAN

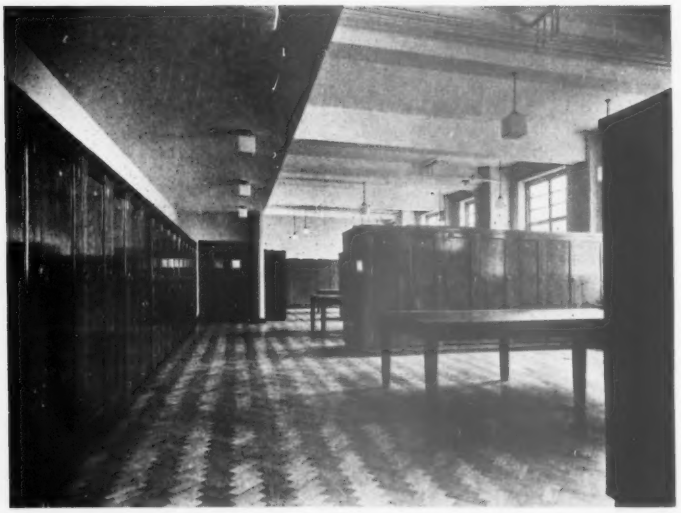
MAIN STAIRCASE IN THE POLICE STATION



FIRST FLOOR PLAN

SECTION

TOOTING • DESIGNED BY G. MACKENZIE TRENCH

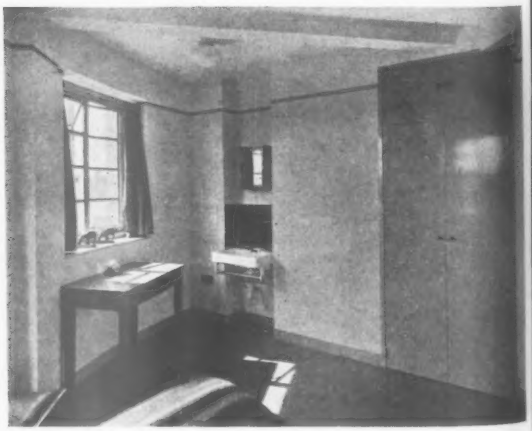


TOP, THE LIBRARY; CENTRE, THE LOCKER ROOM; BOTTOM, THE HEATING CHAMBER

INTERNAL FINISHES—*The station offices generally have distempered walls and boarded floors covered with linoleum. Corridors have terrazzo dadoes and margins with rubber floors, the staircases being terrazzo to match, with black non-slip tile treads, whilst lavatories, kitchens and larders have tiled walls and terrazzo quarry tile floors. The section house library is flush panelled in veneered Makore with frames, rails, etc., in English white oak. The gymnasium has cork tile dado and acoustic tile panelling to walls, with maple block floor. Rubber dadoes are used in the canteens and dining room, with woodwork in oak and Gurjun respectively.*

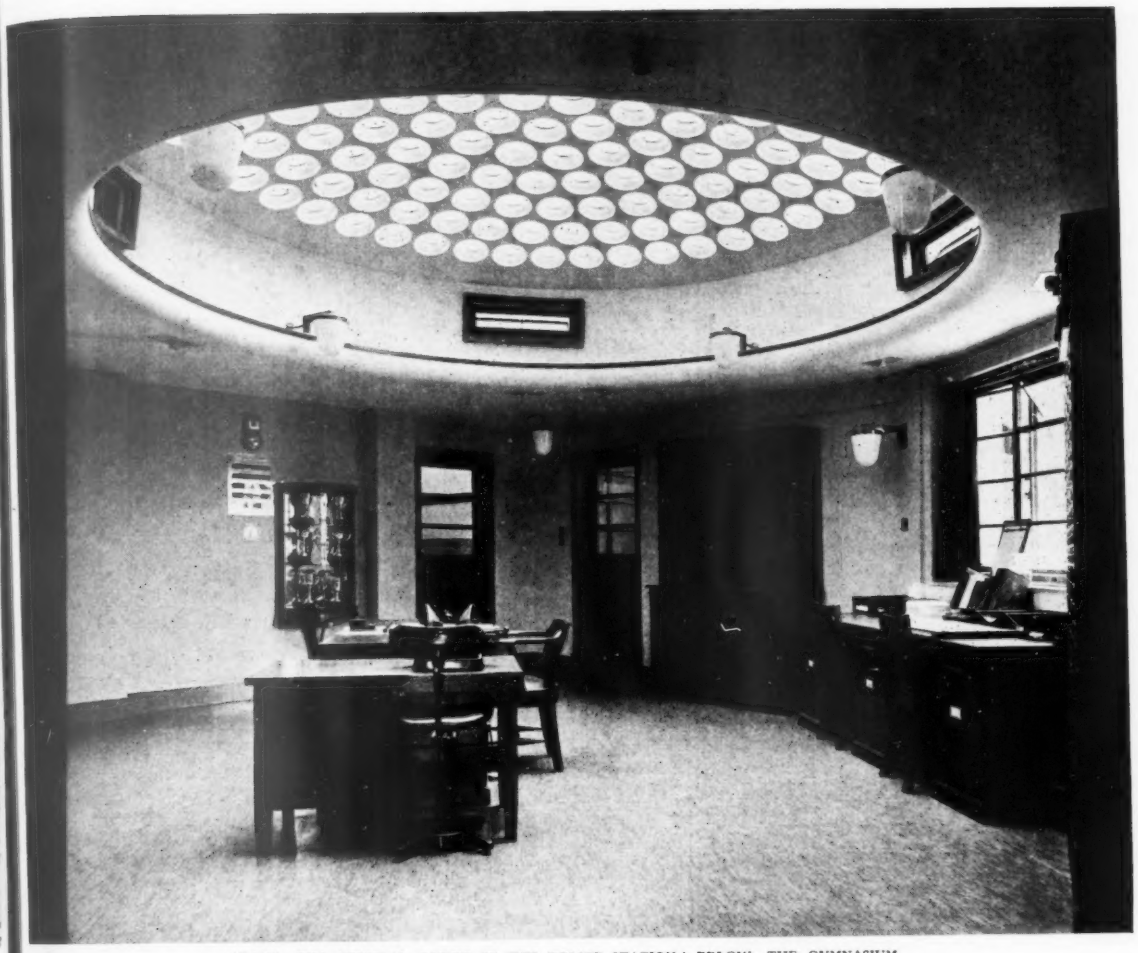
SERVICES—*The canteens provide an all-night service, and there is a separate dining room and cafeteria service in the section house for normal use; a shop is also provided with separate external access for the use of the married quarters tenants. Panel heating and hot-water systems, coal-fired with automatic stokers, extract fans to kitchen and cells, vacuum-cleaning plant, official and recreational wireless and electric clocks, are also installed.*

The general contractors were Walter Laurence and Son, Ltd., and Prestige & Co., Ltd.; for a list of sub-contractors, see page 348.

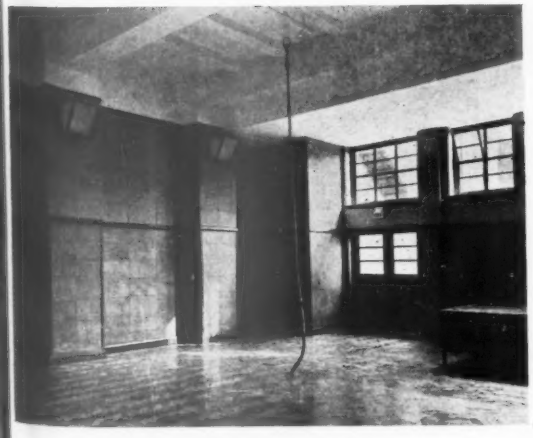


A BEDROOM

POLICE STATION AND SECTION HOUSE, TOO



ABOVE, THE GENERAL OFFICE IN THE POLICE STATION; BELOW, THE GYMNASIUM



TOOTING. BY G. MACKENZIE TRENCH

GOVERNMENT CIRCULAR

WAR DAMAGE TO ESSENTIAL BUILDINGS

Mr. Walter Elliot, Minister of Health, is about to issue a circular to local authorities informing them of certain steps which the Government propose to take to ensure that, if an emergency arose, buildings whose maintenance is essential shall be kept in being in sufficient number. The circular does not deal with housing accommodation—that was dealt with separately in a recent circular. The arrangements set out in the circular will apply to buildings which, in the opinion of the appropriate Minister (*a*) are essential to the welfare of the civil population, (*b*) have become wholly or partly incapable of use by reason of war damage, (*c*) can be repaired at a reasonable cost, and (*d*) whose repair is essential owing to the lack of similar buildings available.

The appropriate Minister will be, in relation to any building or undertaking, the Minister in charge of the Government Department concerned with the purposes for which the building is used or the

undertaking carried on and in an appendix to the circular some examples are given, e.g. Ministry of Health for hospitals, Board of Trade for gasworks.

Loans for repairs to buildings

The buildings are divided into three categories :—

(*a*) Buildings owned or occupied by local authorities, e.g. hospitals, first-aid posts, schools ;

(*b*) Buildings of the same class as at (*a*), but in private ownership ;

(*c*) Buildings not directly connected with the normal activities of a local authority, e.g. bakeries.

As regards class (*a*) the appropriate Minister may direct repairs to be carried out, lending the necessary money for the purpose ;

As regards class (*b*), if the owner is willing but financially unable to have repairs done, the appropriate Minister may require the housing authority either to lend the money or to do the repairs ;

As regards class (*c*), if the owner is willing but financially unable to have repairs done, either the housing authority or the appropriate Minister may lend the necessary money.

Any loans made either by the housing authority or a Minister, and any expenses incurred by a local authority in carrying out repairs to property not belonging to them will remain as registered charges on the property, and no demand for repayment will be made until after the emergency.

Loans for reinstatement of plant

The appropriate Minister may lend money for the reinstatement of plant when conditions, similar to those specified in the case of loans for buildings, are satisfied.

Conditions attaching to loans

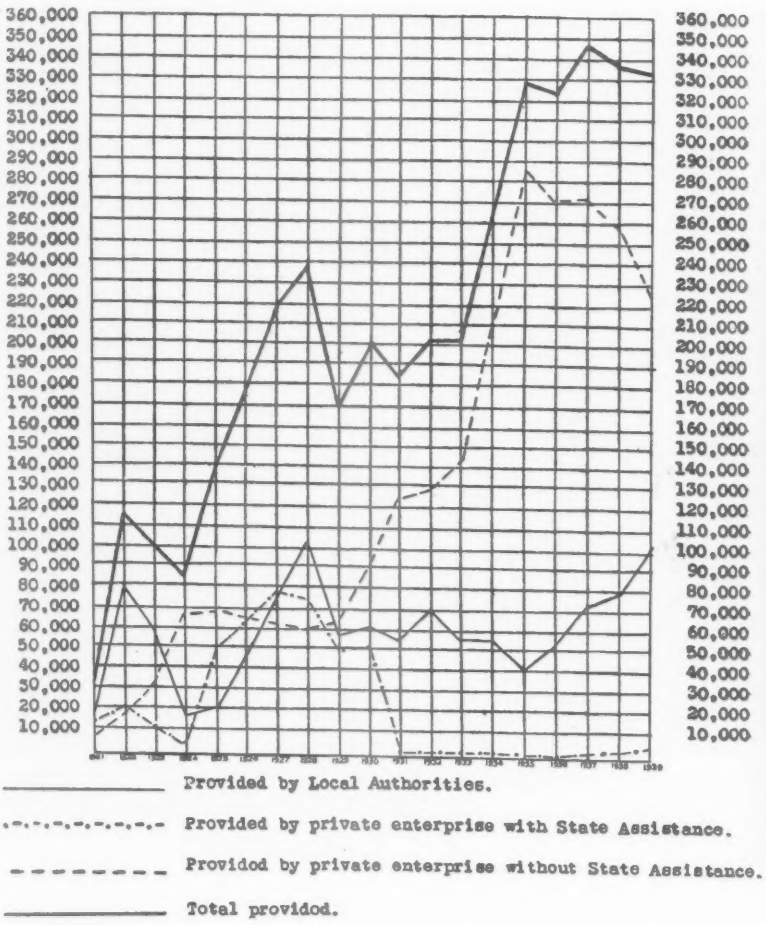
As regards buildings, they provide for no repayment of capital or payment of interest during the emergency. As regards plant, the loans will be secured on the rates in the case of local authorities, by a debenture in the case of a company, and in other cases by a floating charge under special conditions to be laid down.

Carrying out of repairs

The circular states that there is not likely to be any shortage of normal building materials for purposes of repair but that certain materials required for temporary repairs, e.g., corrugated iron sheets, asbestos sheets, roofing felt, etc., may be in great demand and that accordingly the Government are taking steps to see that supplies will be available to meet any such demand. In particular, the Government are themselves purchasing stocks of such materials and are setting up stores in a number of selected places throughout the country.

If local authorities or others requiring materials for temporary repairs cannot obtain them through the ordinary channels, these stores will be available.

Although the circular is addressed to local authorities, it will be seen that it is also of vital interest to public utility undertakings, firms and private individuals who are running essential buildings and industries. It outlines the conditions under which such people may obtain money when necessary to restore damaged undertakings. The circular also intimates that the Government anticipate that many such undertakings will themselves lay in small stores of materials for carrying out emergency repairs.



Sketch showing the houses built in England and Wales from March 31, 1921, to March 31, 1939

SHORTER NOTICES

R.I.B.A.

The R.I.B.A. Library is officially closed until further notice. For as long as possible readers will be allowed to use the periodical room, where current issues will be kept available, but no service can be expected from the staff.

Readers who have books from the loan library are asked to return them without delay.

ANNOUNCEMENT

Owing to War Emergency involving Mr. T. Hansford White and Mr. Roy H. White in Military and Government Services, Messrs. W. Henry White and Sons have been obliged to close their London office until further notice. Letters should now be addressed to the firm at Mr. W. Henry White's private house, "Elmhurst," Bourne End-on-Thames, Bucks, where they will be attended to and if necessary forwarded to the partner concerned.

DUNDEE COLLEGE OF ART

The Governors of the Dundee Institute of Art and Technology invite applications for the position of Full-time Assistant Instructor in Design and Lecturer in Architectural Construction in the School of Architecture, Dundee College of Art.

Salary scale—£250 by £10 to £300, with placing according to qualifications and experience.

Candidates must hold a degree or diploma of a recognised School of Architecture and must be Fellows or Associates of the R.I.B.A. Applications should be lodged not later than October 7, 1939, on the prescribed form, copies of which, with full particulars, may be obtained from Mr. James Keay, Clerk and Treasurer, Bell Street, Dundee.

A.R.P. SHELTERS

One of the difficult problems that has had to be faced in connection with A.R.P. systems has been the provision of suitable sanitation in the shelters and trenches. The A.R.P. Department of the Home Office referred the question to the British Standards Institution who set up a committee of experts to draft a Standard Specification for Chemical Closets.

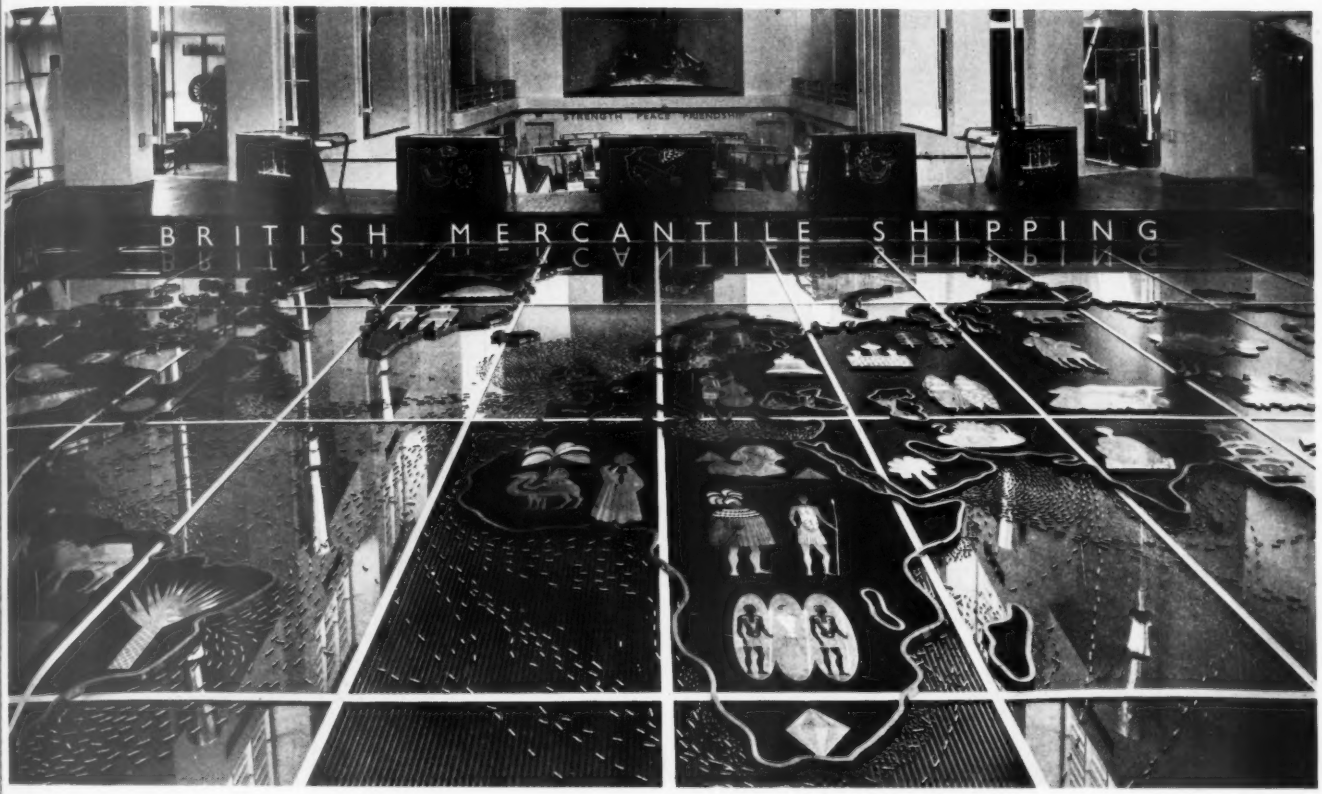
The committee was representative of all interests concerned, manufacturers as well as sanitary and health authorities. The work has now been completed and a British Standard (A.R.P. Series) has just been published (No. BS/ARP/5).

The principal requirements which are covered by the Standard relate to safety and efficiency in use, capacity, handiness, and the essential qualities of the chemical used.

Copies may be obtained from the Publications Department, British Standards Institution, 28 Victoria Street, London, S.W.1, price 3d., post free.

WORKING DETAILS : 777

MERCANTILE SHIPPING MAP • BRITISH PAVILION, NEW YORK WORLD'S FAIR • MISHA BLACK; ASSOCIATE, KENNETH BAYES



The Mercantile Shipping map forms the central feature of the Maritime Hall, and is designed to show, by means of small models, the distribution and extent of British mercantile shipping throughout the world.

The map surface is made up of two thicknesses of glass, the upper sheets being clear plate on which is painted the land in opaque green. The under sheets are hammered glass with the moulded surface upwards to give a brilliant effect when illuminated by a bank of thirty-six one-thousand-watt focus lamps under the top edge. The lamps are divided into white, blue-white and sea green banks which are controlled by an automatic dimming machine to give a colour change and a sense of movement.

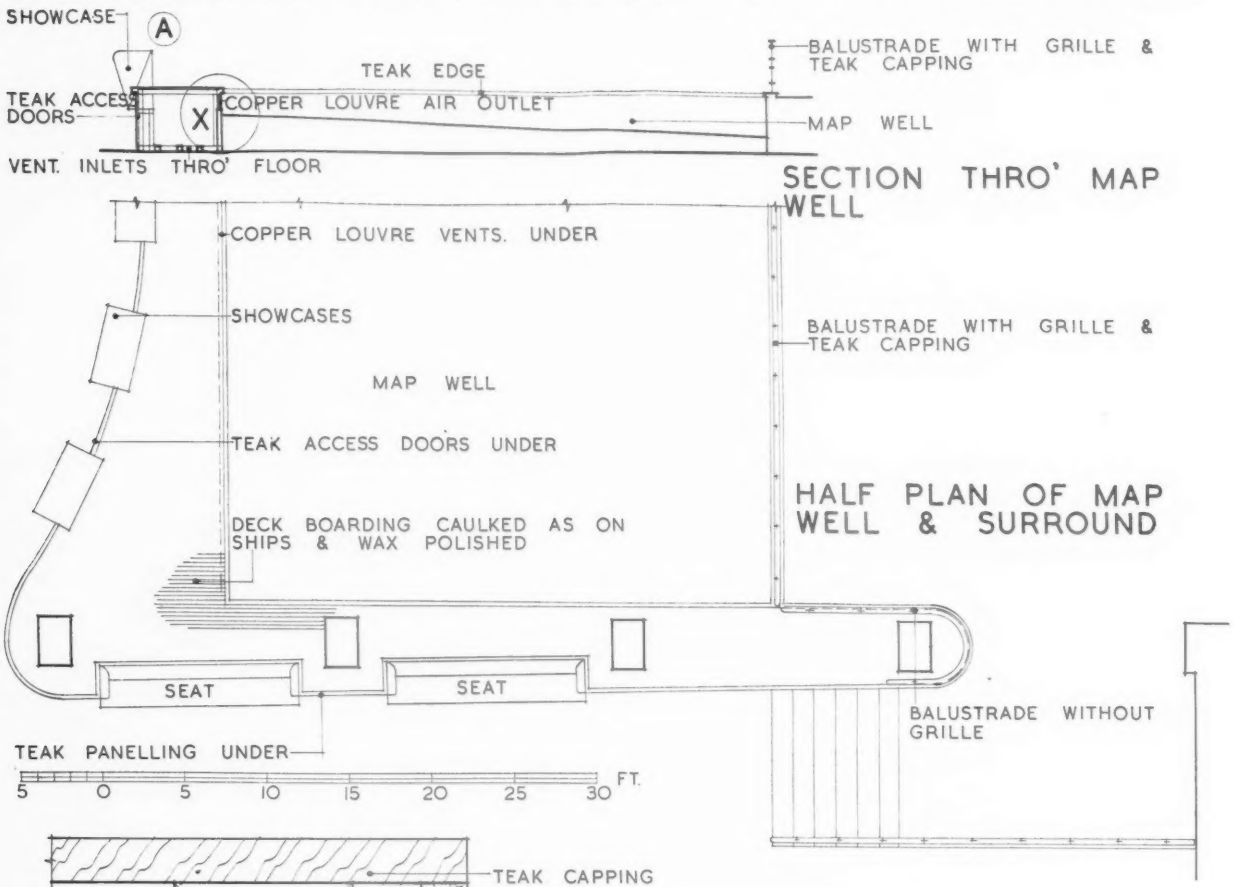
The outline of the map is of wood, covered copper. The symbols for the countries are raised away from the surface on short legs and are of copper with various decorative treatments. The glazing strips are of anodized aluminium. The whole map is supported on a T steel frame. The 9,638 model ships are individually cemented to the plate glass.

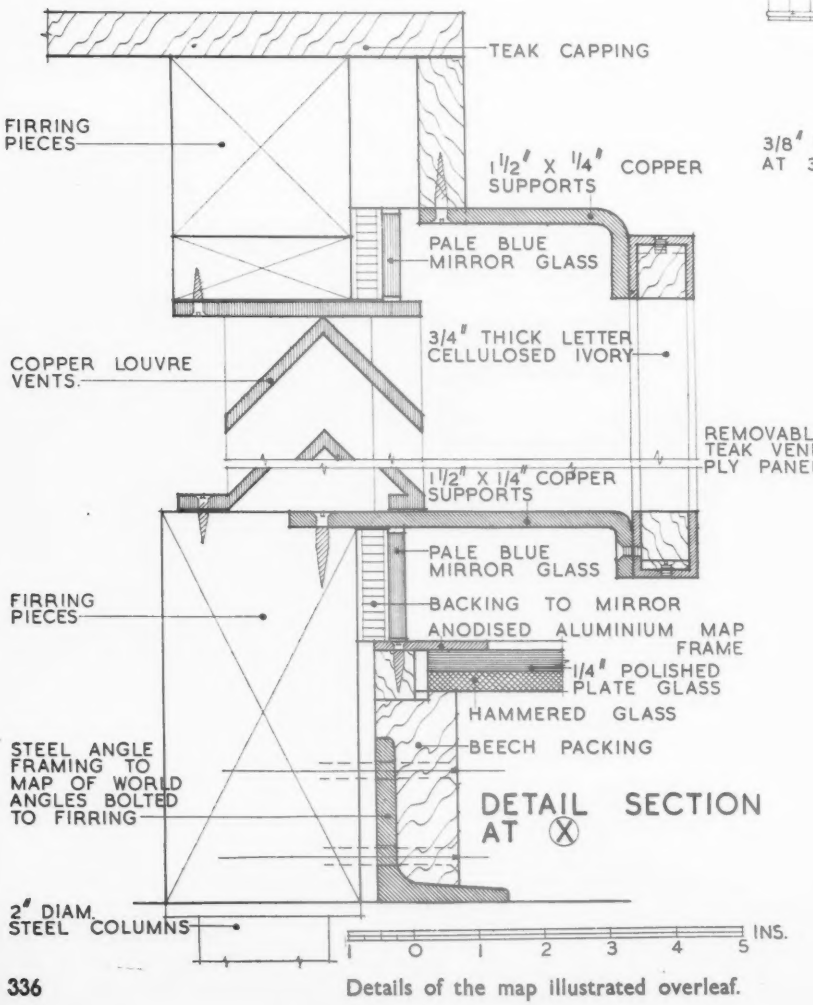
The decorative symbols of copper were engraved by Eric Ravilious; the incised wood carvings at the rear of the map, on the backs of the document showcases, were designed by Milner Gray ; and the consultant for the illumination device was Thomas Gray.

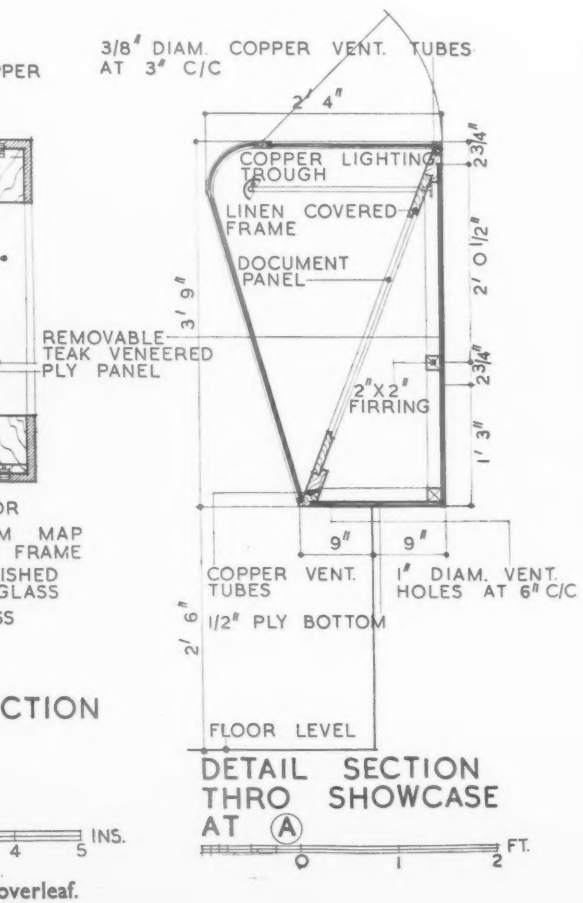
Details are shown overleaf.

WORKING DETAILS : 778

MERCANTILE SHIPPING MAP • BRITISH PAVILION, NEW YORK WORLD'S FAIR • MISHA BLACK; ASSOCIATE, KENNETH BAYES







Details of the map illustrated overleaf.

The Architects' Journal Library of Planned Information

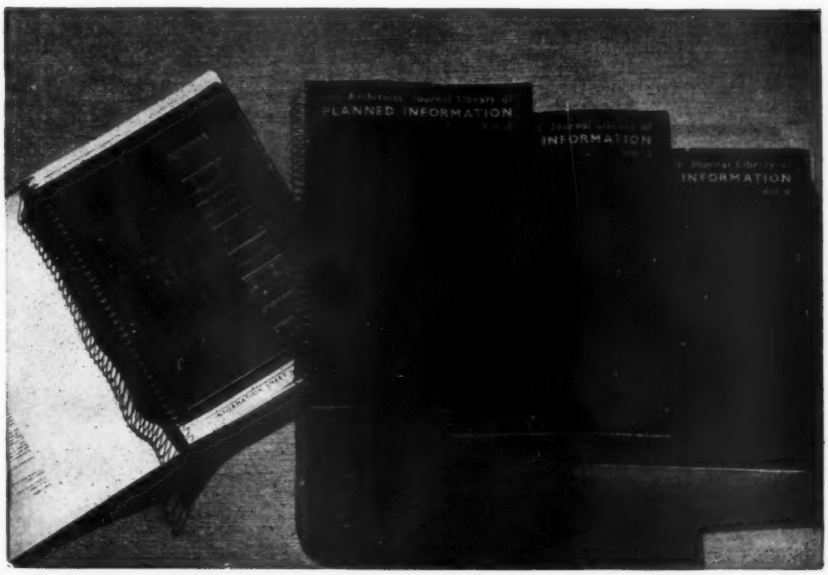
INFORMATION SHEET

SUPPLEMENT

SHEETS IN THIS ISSUE

761 Automatic Stokers

762 (483 revised) Flue Linings



All the Information Sheets published in The Architects' Journal Library of Planned Information since the inception of the series to the end of 1938 have been reprinted and are available in five volumes. Price 21s. each.

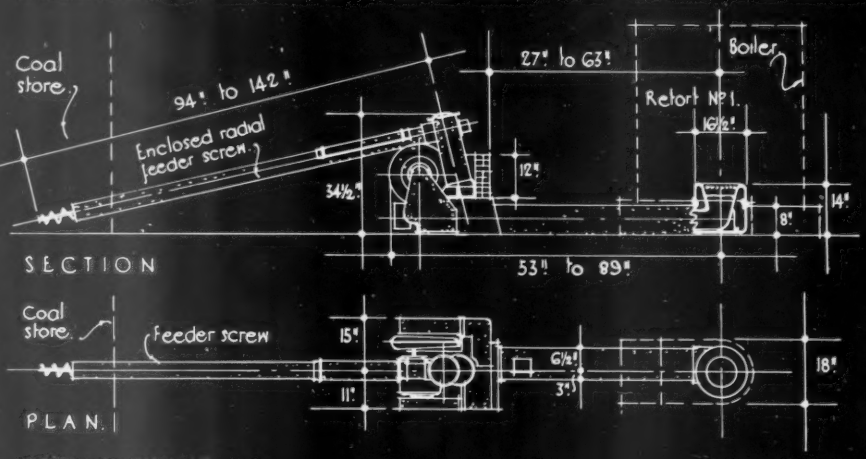
Sheets issued since index :

701 : Tile Hanging
702 (420 revised) : Fixing Insulating Board
703 : Sheet Metals
704 : Plan Elements
705 : Metal Work
706 : Plan Elements
707 : Furniture Layout
708 : Plan Elements
709 : Flue Construction
710 : Natural Lighting
711 : Glass and Glazing
712 (109 revised) : Quarry Tiles
713 : Glass and Glazing
714 : Metalwork
715 (106 revised) : Hot Water Radiators. (Pressed Steel)
716 : Furniture Layout
717 : Metalwork
718 : Flooring Materials
719 : Plumbing
720 : Water Heating
721 : Wall Facing Materials and Wallboards
722 : Roofing
723 : Metalwork
724 : Timber Construction
725 : Sanitary Fittings
726 : Metalwork
727 : Waterproof Jointing and Bedding
728 : Timber Construction
729 : Steelwork
730 : Wall Facing Materials and Wallboards
731 : Metalwork
732 : Concrete Construction
733 : Structural Steelwork
734 : Metalwork
735 : Plumbing
736 : Structural Steelwork
737 : Structural Steelwork
738 : Metalwork
739 : Plan Elements
740 : Timber Construction
741 : Structural Steelwork
742 : Metalwork
743 : Wall Finishes
744 : Waterproofing and Damp-proofing
745 : Structural Steelwork
746 : Metalwork
747 : A. R. P.
748 : Waterproofing and Damp-proofing
749 : Metalwork
750 : Wall Facing Materials and Wallboards
751 : Structural Steelwork
752 : A.R.P.
753 : Hardware and Ironmongery
754 : Carpentry and Joinery
755 : Structural Steelwork
756 : Metalwork
757 : Carpentry and Joinery
758 : Roofing
759 : Structural Steelwork
760 : Carpentry and Joinery

344.

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

DIMENSIONED DETAILS OF RADIAL FEED TYPE AUTOMATIC COAL STOKERS FOR DOMESTIC USE:



RADIAL FEED MODEL:
type F, is made in two sizes up to a maximum of 325,000 B.T.U's. per hour capacity. The feeder tube is pivoted to connect to the fuel store situated anywhere within its radius.

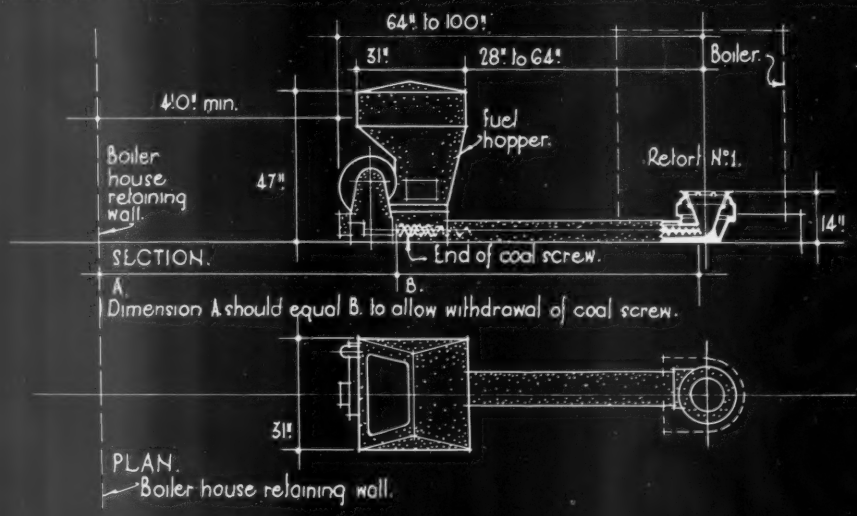
NOTE. The stoker illustrated and described above conveys coal by feeder screw direct from coal store to boiler without handling. There are no hoppers to fill, and the installation will continue to supply heat thermostatically controlled as long as there is coal available.

MODELS AVAILABLE:

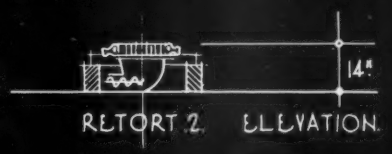
STOKER SIZE	CAPACITY IN B.T.U's.	EQUIV. LBS. COAL PER HR.	SIZE OF RETORT.	H.P. OF MOTOR.
No. F.1.	200,000	25	No.1.	¼
No. F.2.	325,000	40	No.1.	½

for notes on application, coal storage space and dimensions of boiler houses, see back of this Sheet.

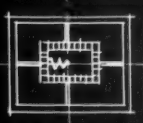
DIMENSIONED DETAILS OF HOPPER TYPE AUTOMATIC COAL STOKERS FOR DOMESTIC USE:



The retort shown below is for use with stoker N° H.4.



RETORT 2. ELEVATION.



RETORT 2. PLAN.

MODELS AVAILABLE:

STOKER SIZE	CAPACITY IN B.T.U's.	EQUIV. LBS. COAL PER HR.	SIZE OF RETORT.	H.P. OF MOTOR.
No. H.1.	200,000	25	No. 1.	¼
No. H.2.	325,000	40	No. 1.	½
No. H.3.	410,000	50	No. 1.	½
No. H.4.	625,000	75	No. 2.	½

for notes on application, coal storage space and dimensions of boiler house, see back of this Sheet.

HOPPER MODEL, type H.
Hoppers of these models are usually filled by hand but automatic feeding apparatus can be supplied when required.

The hopper type stokers can be provided to cover a wide range of capacities up to 10,000,000 B.T.U's. per hour.

Information from Hope's Heating & Lighting Ltd.

INFORMATION SHEET : HEATING : AUTOMATIC COAL STOKERS.
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1

THE ARCHITECTS' JOURNAL
LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET
• 761 •
AUTOMATIC STOKERS

Subject : Automatic Firing of Heating and Hot Water Supply Boilers with Coal

General :

The stokers shown on the front of this Sheet are designed to burn a cheap grade of bituminous coal efficiently and economically.

They require little attention beyond keeping a supply of coal and removing ash or clinker occasionally.

Controls :

Special automatic controls can be fitted so that one boiler and stoker installation can supply central heating and domestic hot water during the winter months, and domestic hot water only during the summer, to meet all requirements at minimum cost.

Ratings :

The ratings of the type F fully automatic stoker are from 25 to 40 lb. of coal per hour, i.e. up to 325,000 B.T.U.s per hour capacity. The hopper type H is made in ratings from 200,000 to 10,000,000 B.T.U.s per hour.

Details of machines suitable for internal fire-tube boilers on application.

Sizes :

The table below sets out the principal dimensions of these two types of stoker.

Application :

(*a*) Radial feed model, type F.

A house of 6 to 10 rooms is heated and supplied with hot water by radial feed stoker No. F1.

A house of 10 to 15 rooms is heated and supplied with hot water by radial feed stoker No. F2.

(*b*) Hopper model, type H.

A house of 6 to 10 rooms is heated and supplied with hot water by stoker No. H1.

A house of 10 to 15 rooms is heated and supplied with hot water by stoker No. H2.

A house of 15 to 20 rooms is heated and supplied with hot water by stoker No. H3.

A house of 20 to 25 rooms is heated and supplied with hot water by stoker No. H4.

Coal Storage Space :

(*a*) Radial feed model, type F.

The coal storage space required for the radial feed stoker No. F1 is, approximately, 60 cub. ft., and for the radial feed stoker No. F2, approximately, 80 cub. ft.

(*b*) Hopper model, type H.

The coal storage space required for stoker No. H1 is, approximately, 60 cub. ft., for No. H2 approximately 80 cub. ft., for No. H3 approximately 120 cub. ft., and for stoker No. H4 approximately 160 cub. ft.

Boiler House :

(*a*) Radial feed model, type F.

The minimum width of the boiler house for radial feed stokers, Nos. F1 and F2, should be, approximately, 5 feet.

(*b*) Hopper model, type H.

The minimum width of the boiler house for stokers H1 and H2 should be, approximately, 5 ft., and for stokers H3 and H4, approximately, 6 ft.

Replacements :

Between the boiler-house wall and hopper, a distance is required equal to the length of coal screw (and in line with) to allow the screw to be withdrawn for inspection or replacement.

Cost :

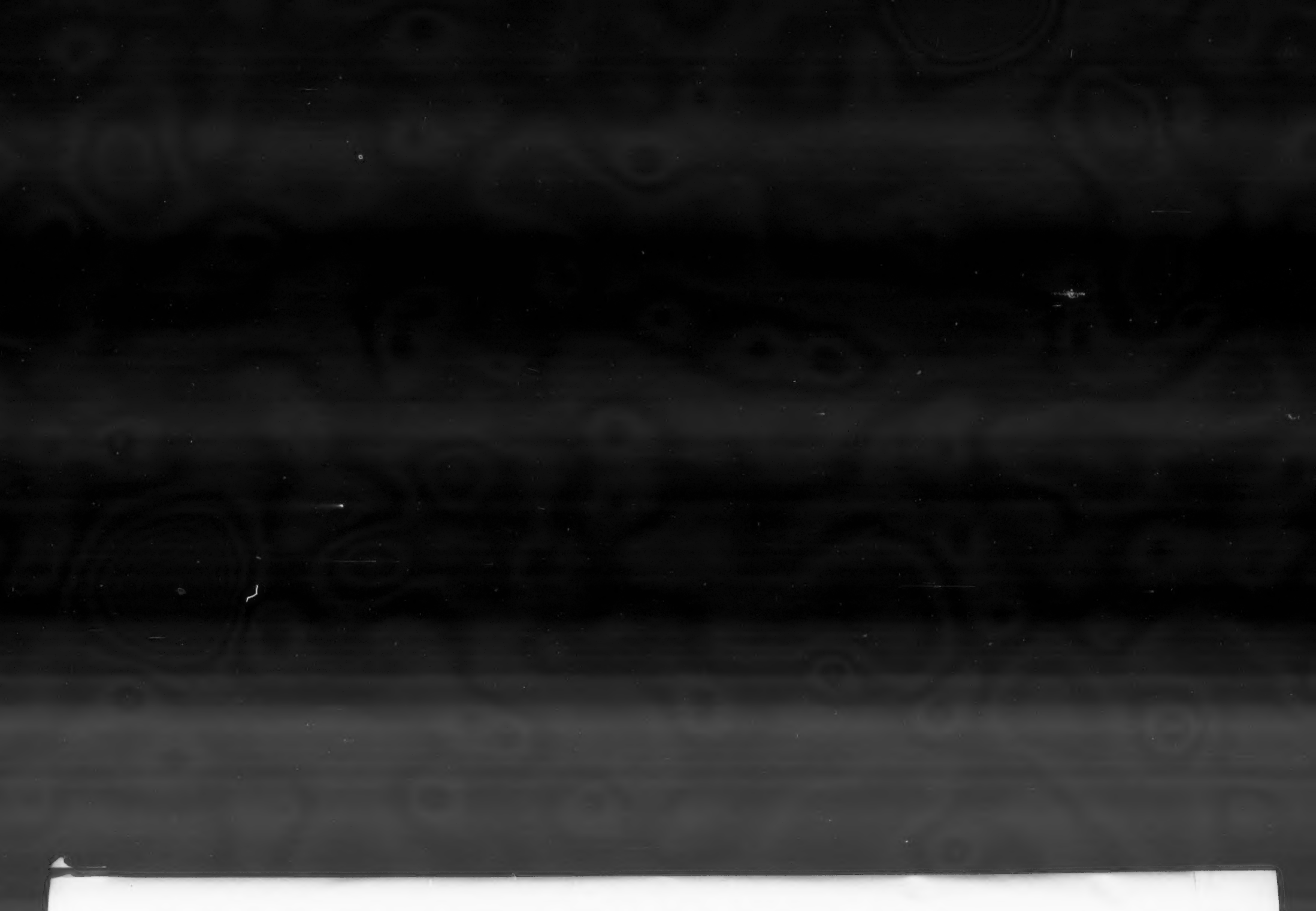
The cost of the stokers varies from £90 to £425, depending upon the capacity of the boiler.

Manufacturers : Hope's Heating and Lighting, Ltd.
Address : Halford Works, Smethwick, Birmingham
Telephone : Smethwick 0891
London Office : 17 Berners Street, W.1
Telephone : Museum 8412
Manchester Office : 3 York Street
Telephone : Deansgate 3991
Leeds Office : Leeds 20708
Newcastle-on-Tyne Office : Newcastle-on-Tyne 21273

TABLE OF SIZES

	Overall Length (back of stoker to centre line of retort)		Clearance (front of stoker to centre line of retort)		Length of Pick-up Screw for Type F		Height of Retort	Width of Stoker	Height, including Hopper if fitted	Hopper capacity *
	Min.	Max.	Min.	Max.	Min.	Max.				
F1, F2	53″	89″	27″	63″	94″	144″	14″	26″	34½″	—
H1	64″	100″	27″	63″	—		14″	31″	37″	350 lb.
H2, H3	64″	100″	27″	63″	—		14″	31″	47″	600 lb.
H4	64″	100″	28″	64″	—		14″	31″	47″	600 lb.

* Can be increased in capacity by multiples of 250 lb.



THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

PHYSICAL PROPERTIES OF FOSALSIL BRICKS:

CRUSHING STRENGTH: The crushing strength of all shapes of Fosalsil flue lining bricks is in excess of 1000 lbs. per sq. in.

EXPANSION: The coefficient of expansion of a Fosalsil brick from 0° to 500° F is 0·0000014.

HEAT RESISTANCE: The resistance to the passage of heat by Fosalsil bricks is approximately ten times that of firebrick. Bricks may be used in temperatures up to 1600° F. in furnaces, boilers, kilns, stoves etc.

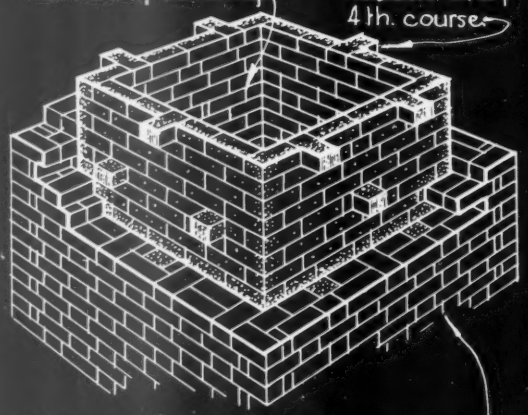
STACK DRAUGHT: A 14" x 14" stack 60 ft. high lined with Fosalsil has a floor area approximately one half & provides a draught equal to that of a cavity constructed stack approximately 90 ft high.

STANDARD SHAPES, SIZES AND WEIGHTS OF FOSALSIL FLUE LINING BRICKS:

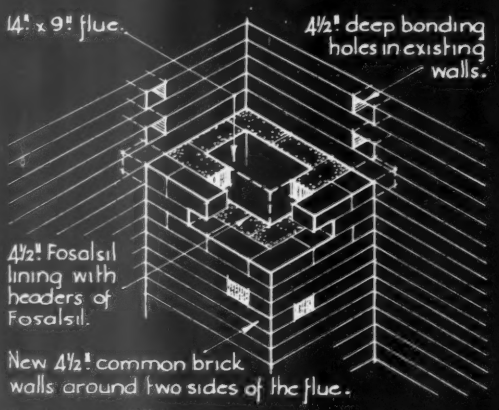
	3" SQUARE.	2½" SQUARE.	2" SPLITS.	1½" SPLITS.	3/A. SIDE ARCH.	3/B. END ARCH.	SIDE SKEW.	CIRCLE.
APPROXIMATE WEIGHT (per 1000 flue bricks.):	28 cwts.	23½ cwts.	18⅔ cwts.	14 cwts.	26½ cwts.	26½ cwts.	26½ cwts.	28 cwts.

SKETCH DETAILS: Showing standard methods of bonding Fosalsil Flue Linings to common brickwork.

36" x 36" flue using 4½" Fosalsil flue lining showing method of bonding.



Common brickwork cut away to show lining.



Bonding: All bonding must be done by means of headers of Fosalsil.

DIAGRAMS OF VARIOUS FLUE CONSTRUCTIONS, giving the comparative weights for different flue dimensions.

DIAGRAMMATIC PLANS OF FLUE WALL CONSTRUCTION	WEIGHT OF FLUE IN POUNDS/FOOT RUN — INTERNAL DIMENSIONS OF FLUE: 9" x 9"	9" x 14"	9" x 18"	14" x 14"	14" x 18"	18" x 18"
Stock brick bonded 4½" / 4½" to Fosalsil lining.	394.	456.	497.	516.	558.	600.
Fosalsil alone. 9"	185.	218.	236.	247.	265.	283.
Stock brick bonded 9" / 4½" to Fosalsil lining.	882.	983.	1041.	1085.	1143.	1200.
Stock brick bonded 4½" / 9" to Fosalsil lining.	669.	733.	784.	797.	848.	899.
Fosalsil alone. 13½"	357.	396.	428.	435.	466.	498.
Cavity constructed flue with 9" stock and 4½" firebrick lining.	1135.	1248.	1335.	1361.	1442.	1544.

Information from Moler Products Ltd.

INFORMATION SHEET: BONDED FLUE LINING BRICKS·No 1.
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1· Olive A. Bayne

THE ARCHITECTS' JOURNAL
LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET

• 762 (483 revised) •

FLUE LININGS

Product : Fosalsil Flue Lining Bricks

NOTE.—This Sheet supersedes No. 483, published in March, 1937, which is now cancelled.

General :

The Fosalsil brick possesses high heat-resisting qualities and considerable crushing strength, it may, therefore, be used as the insulating lining of a flue and to form part of the structure of the stack.

Cavity construction in flues :

In the past it has been common practice to build the inner lining of a flue entirely separate from the structure of the stack, thus providing a cavity or air-space between the two.

This method of construction is not recommended by the Company as it can now be shown that the introduction of a cavity is only necessary if a flue lining of high expansion coefficient or of low crushing strength is used. The cavity, if sealed at the top and bottom to form a dead air space, has some insulating value, but if, on the other hand, the cavity is ventilated to produce air movement around the flue lining, the result is that an excessive amount of heat is drawn off through the flue lining, thus increasing the temperature drop in the height of the flue and correspondingly reducing the strength of the draught.

Fosalsil construction :

The construction recommended is to eliminate the independent lining and the air space, and to replace the first 4½ ins. or 9 ins. of common brickwork with Fosalsil flue bricks. This gives a saving in the floor space required for the flue of as much as 13 ins. in each direction, thus reducing the quantity of materials used. Owing to the lightness of Fosalsil bricks, this also gives a large reduction in the weight of the flue and consequently a considerable saving in the foundations.

Non-conduction of heat :

Owing to the exceptionally low thermal conductivity of Fosalsil bricks, the temperature on the outside of the flue will not be more than a few degrees above atmospheric.

Bonded flue linings :

With Fosalsil bricks it is possible to bond the lining with the structural brickwork with consequent saving in material and labour. The low coefficient of expansion of the material ensures freedom from expansion troubles, and its strength renders it suitable for use as part of the structural brickwork.

Jointing Mortar :

Mortar of similar insulating value and characteristics to the insulating bricks should always be used to achieve a homogeneous insulating structure. The similarity of material and bond reduces to a minimum the possibility of cracking, shrinkage or disintegration, and the mortar recommended is made from Fosalsil No. 6F Powder, mixed with Portland cement (it must be emphasized that no sand is to be added to the mix).

Flue construction :

For further details of flue construction, raking flues, etc., see future Sheets of this series.

Manufacturers : Moler Products, Ltd.

Address : 103 Kingsway, London, W.C.2

Telephone : Holborn 2961 2

BLOCK OF FLATS IN HAMPSTEAD

DESIGNED BY PETER H. CASPARI

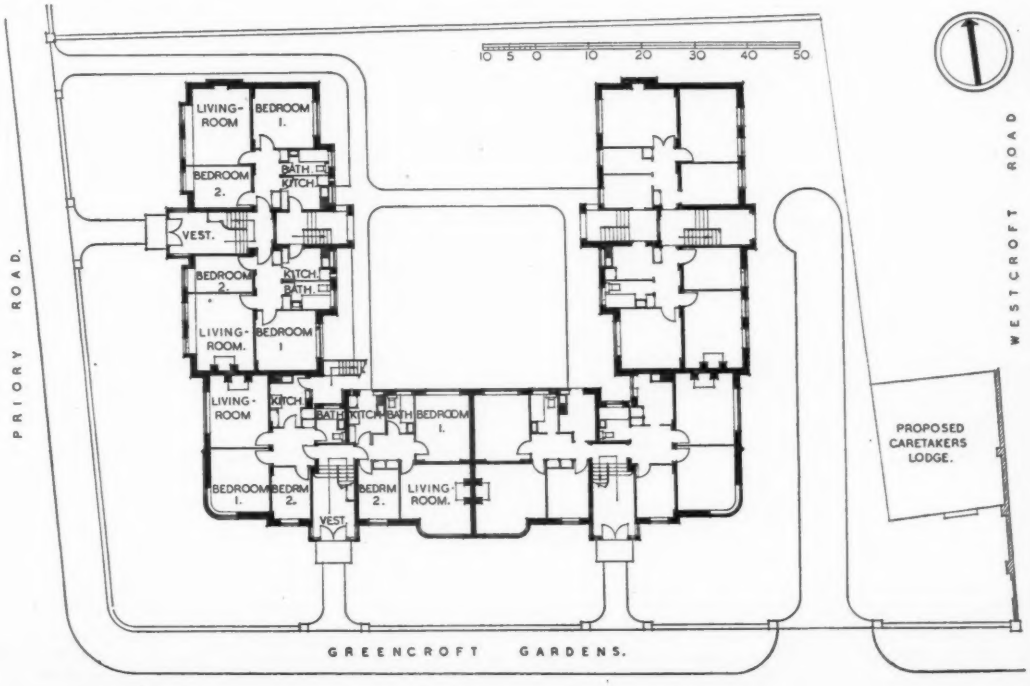
VIEW FROM GREENCROFT GARDENS

GENERAL—*A block of residential flats on a corner site at the junction of Priory Road and Greencroft Road, Hampstead. Accommodation of each flat comprises: Two bedrooms, one living room, kitchen, bathroom, hall and cupboard space; the second bedroom to be used as a dining room if so desired by the tenant. Restrictions included: oriel windows on the Priory Road frontage, and the building to have red brickwork only.*

SITE—*Site area, 19,438 sq. ft. The area covered is 5,860 sq. ft. (30·15 per cent. of the area). Excavations in the ground formerly used as cellars for the existing private dwelling houses, were utilized for the construction of boiler house and fuel store.*

CONSTRUCTION AND EXTERNAL FINISHES—*Brick; floors are of timber with breeze plugging; flat roof is asphalt covered; internal partitions where not in 4½-in. or 9-in. brickwork, are in 2½-in. breeze blocks.*

INTERNAL FINISHES—*Bathrooms and kitchens are tiled; ceilings and friezes are distempered; walls papered; flush joinery (which has been employed throughout) is painted in plain colours; staircases are rubber covered, and the solid balustradings have oak cappings.*



GROUND FLOOR PLAN

ANOTHER VIEW OF THE MAIN FRONT

BLOCK OF FLATS IN HAMPSTEAD

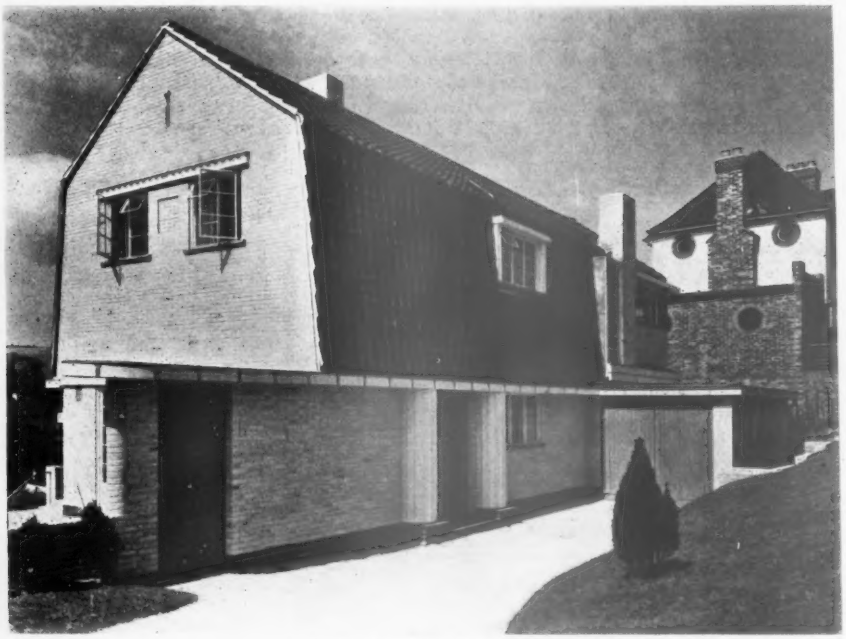
DESIGNED BY PETER H. CASPARI

SERVICES—*Central heating system, which serves the individual flats through radiators installed in the halls; constant hot-water system throughout. All hot-water pipes are housed in the linen cupboards. Coal fireplaces in all living rooms; electric panel fires in all first bedrooms; wireless aerial and earth points in all flats.*

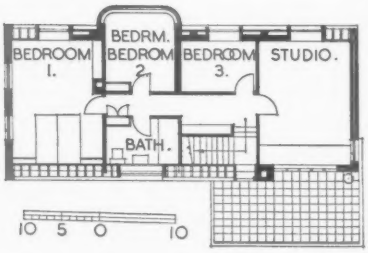
The general contractors were Aubrey Bell, Ltd. For list of sub-contractors and suppliers, see page 349.

HOUSE AT WITHDEAN, SUSSEX

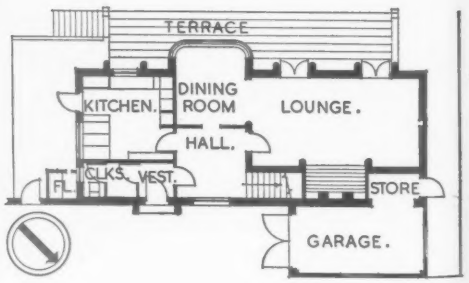
DESIGNED BY EDMUND J. THRING



ENTRANCE FRONT FROM EAST



GROUND AND FIRST FLOOR PLANS



PROBLEM—*The general requirements consisted of a medium-sized private house, combined with a drawing-office and garage. The house was designed by the architect for his own occupation.*

SITE—*Situated on a steep slope of 1 : 4½, with a frontage of 78 ft. and depth of 165 ft., the house was designed on a long and narrow plan.*

CONSTRUCTION—*Walls up to first-floor plate are of 2-in. white bricks with yellow joints, externally, with 2½-in. cavity and Sussex*

HOUSE AT WITHDEAN, SUSSEX

DESIGNED BY EDMUND J. THRING

FRONT ENTRANCE

Seconds forming the internal skin. The 9-in. plinth is of Sussex blue-bricks. The mansard roof is covered with black pantiles. On the S.S.W. elevation, the windows on the first floor are framed in a vertical, weather-boarded plane, having a solid 9-in. brick wall to carry the roof timbers. Internal walls are 4-in. and 3-in. brick or breeze blocks according to position. The garage roof is asphalt on 1¼-in. boarding on 2-in. by 5-in. joists.

FIREPLACE IN DINING ROOM

INTERNAL FINISHES—*Walls with exception of kitchen and bathroom dados are plastered, with small cove 2-in. radius at ceiling. Ceilings are plaster-board skim-coated. All walls and ceilings are pinkish off-white washable distemper. The kitchen dado is of cream 6-in. tiles with fitments cellulosed to match, and the bathroom dado is of 6-in. black glazed tiles. Flush doors to all rooms are enamelled light grey. Floor of studio and hall are plywood, the former in 5 ft. by 5 ft. squares, with small V-joints, painted, the latter in 2 ft. by 2 in. Floors of cloakroom-w.c. and fireplace recess are in 6 in. by 6 in. leather brown quarries, and the bricks of fireplace are light brown, semi-circular and bull-nosed special bricks.*

SERVICES—*Heating is by a boiler connected to flush wall panel radiators in the lounge and dining room, hall, and one on first-floor landing. Small electric panel fires are placed in the four first-floor rooms.*

COST—*£1,057. Price per ft. cube, 1s. 0½d.*

The general contractors were T. J. Braybon and Son, Ltd.; for list of sub-contractors see page 349.

HOUSE AT WITHDEAN, SUSSEX

DESIGNED BY EDMUND J. THRING

RIGHT, VIEW FROM DINING ROOM LOOKING INTO THE LOUNGE ; AND THE KITCHEN

TRADE NOTES

[*By PHILIP SCHOLBERG*]

Wiring Regulations

RIGHTLY or wrongly the average architect pays very little attention to the wiring regulations of the Institution of Electrical Engineers ; yet these regulations are designed not only for the protection of the contractor who is interested in doing his job properly, but in the interests of the user, who is, after all, somewhat wishful that his installation should be comparatively safe and yet carried out in a reasonably economical way. As an almost standardized clause which a number of architects are accustomed to use without in the least understanding its implications, the wiring regulations of the Institute provide something akin to the standard form of contract of the R.I.B.A., and this clause is used in much the same way as any other abracadabra, in the hope that somebody will understand what it means, and that the resultant job will be more or less satisfactory.

That an eleventh edition of the regulations for the Electrical Equipment of Buildings should have been published is therefore of some importance to architects, though it is doubtful whether more than a small percentage of them will take the trouble to find out what the revisions mean. And when all is said and done the architects will be as near right as no matter, for the alterations made in the eleventh edition are not of very great importance. In view of the constitution of the committee responsible, this is not to be wondered at, for, in the words of the *Electrical Review*, " twenty out of thirty-six members of the committee were representatives of interested bodies," and we all know that interested bodies are unlikely to make any drastic change in accepted practice, for this would only lead to departures from normal routine, and a corresponding increase in costs of installation without any advantages which would be intelligible to architects.

From all of which it may be assumed that the alterations made in the eleventh edition are completely pointless. This, however, would not be altogether true, for the committee has tightened up quite a number of points which may not be of extreme importance in themselves, but which were, none the less, well worth the trouble involved by a proper solution, for the general public as well as architects are extraordinarily ignorant of the simplest safety precautions so far as electricity is concerned. Now for the practical aspects. The use of two pin reversible plugs and lampholder plugs is deprecated, and rightly so, though it would very probably be better if they were forbidden altogether. The use of portable appliances, such as hair dryers and toasters is not approved unless the appliances are of the all-insulated type, a sensible measure, but, again, one which would be very much better if compulsion rather than suggestion were the order of the day. Fascism ? Well, maybe, but a really safe piece of apparatus is bound to cost a fair amount of money, and there will always be manufacturers who are prepared to take a chance and undercut the man who pays a proper attention to safety.

Caveat emptor is a perfectly reasonable doctrine so long as *emptor* has a working knowledge of what he is buying, but, with electrical apparatus, it is possible to produce something so cheap, provided that danger is ignored, that the public judges in terms of price and must be protected against itself. Shortly after Christmas I drew attention to an immersion heater which sold at the price of 4s. 6d., absurdly low to any knowledgeable buyer, but a temptation to the unwary who do not know how near death they may be.

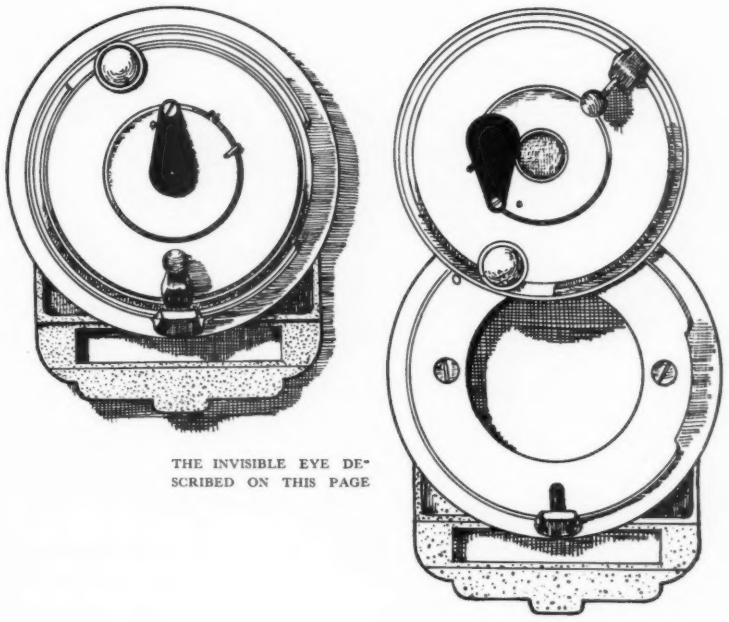
Under the heading of Earthing, quite a number of new regulations have been introduced, the most important from the architects' point of view being the "strong recommendation" that electrical apparatus of the all-insulated type should be installed wherever possible, and that toasters and hair dryers should have no exposed metal parts.

Numerous other recommendations are made, and copies of the specification are available at 1s. 9d. and 1s. 2d. post free. (*E. & F. N. Spon, Ltd., 57 Haymarket, London, S.W.1.*)

Unwanted Intruders

Some months ago there appeared in these notes a reference to an invisible eye which allowed people inside a door to see that was going on outside, a wide-angle lens giving a considerable angle of view. Designed originally as an anti-burglar device, I am told that this fitting is thought suitable for carrying out observations in children's clinics, and the same idea could, of course, be applied in any kind of mental home where too obtrusive observations might have a bad effect on the patients.

The same principle is applied to the fitting illustrated on the right of this page, though in this no lens is used and the field of view is therefore somewhat smaller. As the section shows, the fitting is fixed in the door so that the central opening comes at about eye level, the small hole with the swinging cover allowing anyone inside to see who has rung the bell. The larger plate also swings so that it is possible to talk through the larger hole, or even take in letters or telegrams without opening the main door at all. The diameter of this hole is $1\frac{3}{4}$ in., just large enough, by the way, to take this JOURNAL in its normal wrapper, though I doubt if this fact has any particular significance. In order to prevent people outside from seeing in, the outer face of the larger swinging plate is silvered, and, provided that there is an approximately equal degree of illumination inside and outside the door, this works quite well. The price of this fitting is 12s. 6d. retail, other finishes being more expensive, while the cost of fixing should be low.—(*M. Newmark & Co., 5 Red Lion Court, Cannon Street, London, E.C.4.*)



THE INVISIBLE EYE DESCRIBED ON THIS PAGE

Fan Testing

Ventilating engineers are naturally accustomed to specifying fans in terms of performance, but certain difficulties arise in practice because the figures given by different manufacturers in their catalogues are not strictly comparable. A new British Standard Specification (No. 848/1939) includes sections covering the terms and definitions in general use in the industry, precise instructions on the types of instrument to be used in testing, general instructions on the measurement of air flow, and a detailed code for carrying out performance tests on certain types of fan. The code does not cover mine fans or compressors working at a pressure greater than 1 lb. per square inch. (*The British Standards Institution, 28 Victoria Street, London, S.W.1.*)

Light Obscuration

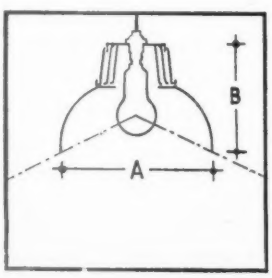
The sketches adjoining show a telescopic reflector which is designed to prevent the direct rays of electic lamps from falling on the window. The shade is made of spun aluminium, finished in black or ivory outside, with the internal face of the telescopic sections in black, the dispersive reflector in white. Various sizes are standardized in accordance with the dimensions given in the table. Prices vary from 10s. 6d. upwards, though special quotations are made for quantities.

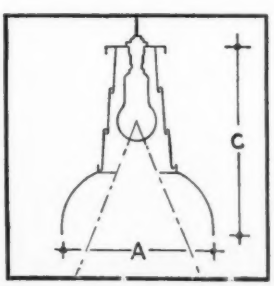
No.	Watts	Dimensions in Inches		
		A	B	C
A.R.P. 1 ..	60	$8\frac{1}{2}$	$6\frac{1}{2}$	$10\frac{1}{2}$
A.R.P. 2 ..	100	10	$7\frac{1}{4}$	$12\frac{1}{4}$
A.R.P. 3 ..	150	10	8	13
A.R.P. 4 ..	200	12	$9\frac{3}{4}$	$15\frac{1}{2}$

To lower the reflector the telescopic section in the top cap is turned until projections on the top cap pass through slots in the telescopic section. (*Best and Lloyd, Ltd., 40 Great Marlborough Street, London, W.1.*)

Clearing Stopped Sink Drains

Having spent a mildly hectic week-end in clearing a stopped sink in the intervals of listening to the war, I am reminded that a friend of mine keeps a light chain permanently in the drain. The chain is shackled to the underside of the sink grating, and the end projects about a foot from the pipe where it stops over the outside gully. A mild stoppage can generally be cleared by giving a few tugs to and fro, but a really firm bung can be cleared by tying a wire mesh pot cleaner to one end of the chain and using it as a pull-through. The ordinary brass lavatory pull chain lasts for a year or two, and replacements are very cheap.





LAW REPORTS

CONDITIONAL AGREEMENT TO CONCLUDE A CONTRACT NOT ENFORCEABLE

H. C. Berry, Ltd. v. *Brighton and Sussex Building Society.—Chancery Division. Before Mr. Justice Farwell*

THIS action raised an interesting point of law as to whether an agreement to grant a lease, which was conditional on an agreement being reached as to the terms

to be contained in it, was an enforceable agreement, in view of the fact that it was an agreement to conclude a contract at a future time.

His lordship held that in view of a previous decision and the facts of the case, the agreement was too vague to be enforceable.

The point arose out of an action by the plaintiffs, H. C. Berry, Ltd., of Birmingham, for the specific performance of an alleged contract by the defendants, the Brighton and Sussex Building Society, to take a lease of certain ground floor premises at Waterloo Street, Birmingham, for the purposes of a branch office.

The plaintiffs' case was that the Society offered £560 per annum for the three years' lease subject to the superior landlord's consent, the usual references and a lease to be drawn up by the plaintiffs' solicitors.

The Society replied that the final conclusion of the contract was always contingent on their obtaining an option from the superior landlord for an extension of the three years' period, and that they never received.

It was argued by Mr. Spens, K.C., for the plaintiffs, that the contract in the circumstances of the case was binding on the Society, notwithstanding that the point as to the option raised by the Society had not at that time reached a conclusion. He contended that the term, "a lease to be drawn up by plaintiffs' solicitors," covered his clients.

His lordship did not call upon Mr. Voisey, K.C., who appeared for the Society, to argue the point. He pointed out that it had been held in a prior case that "subject to the terms of a lease" must be taken to mean subject to terms yet to be embodied in the lessors' lease. His lordship therefore was of opinion that an agreement to grant a lease which was conditional on an agreement being reached as to the terms to be contained in it, was not an enforceable agreement. It was too vague to be enforceable. He did not think that the contention put forward by Mr. Spens was the true construction of the matter, seeing that the essential conditions were not stated in the letter, but left over for further discussion. Until the lease was executed there was no binding contract, and this being so, he dismissed the action, with costs.

ONEROUS AND UNUSUAL COVENANTS : COURT BOUND BY FORMER DECISIONS

Griffiths and wife v. *Lane and another.— Chancery Division. Before Mr. Justice Farwell*

IN this action the learned judge, though holding an opinion favourable to the defendants, held that he was bound by former decisions of the Court of Chancery and the Court of Appeal and gave judgment for the plaintiffs.

The case concerned the purchase of a house at Brockenhurst Way, Norbury, by the plaintiffs, Mr. F. R. Griffiths and his wife, from the defendants, Misses Ada Lane and O. Stuckey, and the point in the case was whether the covenants in the long lease were onerous and unusual.

Mr. H. Farrer, for the plaintiffs, said in September, 1937, his clients entered into a written agreement to purchase a long lease of the house at Norbury for £550, paying the usual deposit of £55. Unfortunately they did so without any knowledge of the covenants in the lease. When the abstract of the lease was received it was found that

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there were two covenants on the part of the lessees, one to give notice of any assignments and pay a fee for their registration, and further there was a power of re-entry upon breach of any of the covenants by his clients. When this matter was brought to the notice of the plaintiffs, they were advised not to proceed. Counsel contended that these covenants were onerous and unusual and that under the circumstances his clients were entitled to succeed and to have their deposit returned to them.

Mr. Lloyd Jones, for the defendants, resisted the claim of the plaintiffs and argued that such covenants were neither onerous or unusual. He had legal evidence to show that as a rule long-term leases gave the power of re-entry and a proviso for the payment of a fee for registration of an assignment.

His lordship, after hearing the evidence, gave judgment dealing fully with the legal issues raised. The case, said his lordship, was an unusual one, as the plaintiffs signed an agreement to purchase without ever having seen the terms of the lease. When the abstract was received, it was found to contain the covenants upon which the action was based. Though he should have had little hesitation in saying that the covenants were not onerous and unusual, he was bound to find otherwise by decisions of the Court of Chancery and the Court of Appeal.

It was therefore not necessary to go into the arguments as to whether the covenants were onerous and unusual. In 1931 Mr. Justice Maugham in a case that concerned more or less similar covenants, held that he was bound by a decision of the Court of Appeal, who came to the conclusion that a covenant to re-enter was most onerous, offensive and oppressive beyond measure. Under these circumstances he must find that the plaintiffs had succeeded in the action and that defendants must repay the deposit, and costs of the action.

His lordship added that the matter was one for the consideration of the Court of Appeal, as Mr. Justice Maugham had expressed the views that his lordship had stated, bearing in mind the evidence that had been given on behalf of the defendants.

THE BORDERS APPEAL

Bradford Third Equitable Benefit Building Society v. *Borders. — Court of Appeal. Before the Master of the Rolls and Lords Justices MacKinnon and Finlay.*

THIS was an application by the Bradford Third Equitable Benefit Building Society that Mrs. Elsy Florence Eva Borders, of the Coneyhall Estate, West Wickham, should give security for the costs of her proposed appeal from the judgment of Mr. Justice Bennett in the Society's recent action against her.

Mr. G. Hewins said the appeal was against the judge's dismissal of Mrs. Borders' counter-claim for damages for alleged misrepresentation in regard to her house. The judge also dismissed the Society's claim for possession of the house.

The Master of the Rolls inquired why the Society had been so long in applying for security.

Mr. Hewins said it was thought better to await the result of Mrs. Borders' application to the House of Lords for some grant from the public funds to enable her to put before the court copies of the transcript of the shorthand notes of the evidence. The total cost of that transcription would be £226 9s. 4d. They were not told she would appeal but assumed that that decision would not be made until after the House of Lords appeal.

Counsel read an affidavit by the Society's solicitors, which stated that their taxed costs of the counter-claim were £1,054.

The Master of the Rolls said the court were of opinion that the application should be dismissed. It was hopelessly out of time and the reason given for not applying earlier was irrelevant.

Sir Stafford Cripps, K.C., for Mrs. Borders, said the general trend of the House of Lords Committee in Mrs. Borders' appeal was with regard to the transcript, that the Court of Appeal would find some way out of the difficulty. He thought that perhaps the court might proceed without the note. It would be necessary to go into the question of fact on one of the questions of law raised, whether the fraudulent misrepresentations were made by an agent of the Society or not. The other legal point was collateral security.

The Master of the Rolls said if the appeal raised questions of fact it would be necessary for the appellant to satisfy the court that the decision of the court below was wrong, and if the material were insufficient for the court, the appeal would not succeed. On the other hand the court could not refuse the hear the appeal because there was not a copy of the official shorthand note. A copy of the judge's note, however, must be supplied. The court would deal with the issues on the material supplied if possible, but if the court could not then a certain consequence would follow.

THE BUILDINGS ILLUSTRATED

NEW DIVISIONAL POLICE STATION, ETC., TOOTING (pages 329-333). Architect: G. Mackenzie Trench. General contractors, Walter Lawrence and Son, Ltd., and Prestige & Co., Ltd. Sub-contractors and suppliers included: Permanite, Ltd., asphalt; Trussed Concrete Steel Co., Ltd., reinforced concrete;

Brickmakers and Factors, Ltd., bricks ; H. J. Quentain (1929), Ltd., hand-made facing bricks ; Farnley Iron Co. (Fireclay Wks.), Ltd., glazed facings ; Ryarsh Brick and Sand Co., Ltd., sand limes ; Stent Precast Concrete, Ltd., artificial stone ; Standard Pavements, Ltd., patent tile pavings ; Dorman Long & Co., Ltd., structural steel ; D. Anderson and Son, Ltd., special roofings ; Moler Products, Ltd., partitions ; J. A. King & Co., Ltd., glass and concrete lights ; The Lewis Construction Co., Ltd., metal trims ; Stevens and Adams, Ltd., wood-block flooring ; B. & B. Plastering, Ltd., grano pavings ; Adamite Co., Ltd., Colemenoid waterproofing materials ; Richard Crittall & Co., Ltd., central heating, electric wiring and ventilation ; Fletcher Russell & Co., Ltd., Jackson Boilers, Ltd., Parkinson Stove Co., Ltd., and Wandsworth Gas Co., gas fixtures ; Wholesale Fittings Co., Ltd., Troughton and Young, Ltd., and Frederick Thomas & Co., Ltd., electric light fixtures ; Carron Company, kitchen equipment ; George Wright (London), Ltd., and John Bolding and Sons, Ltd., sanitary fittings ; Parker, Winder and Achurch, Ltd., door furniture ; Williams and Williams, Ltd., casements ; Haywards, Ltd., fireproof doors ; T. W. Palmer & Co., iron staircases ; J. R. Pearson and (Birmingham,) Ltd., metalwork ; Rippers, Ltd., doors ; Camden Tile and Mosaic Co., Ltd., terrazzo ; Bryon & Co., Ltd., tiling ; Avon India Rubber Co., Ltd., rubber ; W. N. Froy and Son, Ltd., mantels ; A. Vigers and, Sons, Ltd., panelling ; Marryat and Scott, Ltd., lifts ; Gent & Co., electric clocks ; Metropolitan Water Board, water supply ; Bull Motors (branch of E. R. and F. Turner, Ltd.), Bull super silent motors ; Ashwell and Nesbit, Ltd., automatic fire stokers ; Abbey Building Supplies Co., anchorages to concrete.

WEST END COURT, HAMPSTEAD (pages 343-344). Architect : Peter H. Caspari. General contractors, Aubrey Bell, Ltd., who was also responsible for the foundations, electric wiring and bells. Sub-contractors and suppliers included : Buildings' Material Association, Ltd., dampcourses, Flettons, tiles and tiling ; Metropolitan Asphalte Co., Ltd., asphalt, special roofings, roofing felt ; E. H. Smith (London), Ltd., bricks ; T. C. Jones & Co., Ltd., structural steel ; John Stewart (Highbury), Ltd., carcassing timber ; J. Watney & Co., Ltd., partitions ; Leay Glazing Service, Ltd., glass ; London and Midland Steel Scaffolding Co., Ltd., scaffolding ; S. Mulliner, Ltd., central heating ; Rownson, Drew and Clydesdale, Ltd., stoves, electric heating, sanitary fittings and mantels ; Gas Light and Coke Co., gas fixtures, refrigerators and gasfitting ; M. Newman and Sons, Ltd., plumbing ; Treloar and Sons, Ltd., stairtreads ; G. and S. Allgood & Co., Ltd., door furniture ; Williams and Williams, Ltd., casements and window furniture ; Gliksten Doors, Ltd., internal and fireproof doors ; Borough Engineering Works, Ltd., iron staircases ; Wealdstone Joinery, Ltd., oak entrance doors ; H. G. Cook, plaster ; Austins' of East Ham, Ltd., joinery ; W. N. Joyce and Sons, Ltd., wallpapers ; Knowles and Weller, Ltd., shrubs and trees ; Metropolitan Water Board, water supply ; Youngsigns, Ltd., signs.

HOUSE AND DRAWING OFFICE, WITHDEAN (pages 344-346). Architect : Edmund J. Thring. General contractors, T. J. Braybon and Son, Ltd., who were also responsible for the excavation, foundations, dampcourses, asphalt, waterproofing materials, central heating, gasfitting, electric wiring, electric heating, plumbing, stairtreads, plaster and joinery. Sub-contractors and suppliers included : Dunbrik, Ltd., bricks ; Walkers (Hove), Ltd., tiles, roofing felt and tiling ; Cox and Barnard, glass ; Ideal Boilers and Radiators, Ltd., stoves and boilers ; Peter Jones, Ltd., electric light fixtures ; Wm. Hall & Co., sanitary fittings ; Allgood & Co., Ltd., door furniture ; Crittall Manufacturing Co., Ltd., casements and window furniture ; Wm. Heal and Son, textiles ; Naco, Ltd., kitchen fitments ; Stanleys Nurseries, shrubs and trees.

BUILDING NEWS

PROVINCES

ALDINGBOURNE. *School.* West Sussex Education Committee is to acquire a site at Aldingbourne for the erection of a senior school.

ANGMERING. *School.* West Sussex Education Committee has approved plans for the erection of a C.E. senior school at Angmering.

ASHTON-IN-MAKERFIELD. *Houses.* The U.D.C. is to erect 72 houses on the Rectory estate at a cost of £23,551.

BARROW-IN-FURNESS. *Houses and Flats.* The Corporation has obtained sanction for a loan of £45,300 for the erection of 98 houses and 24 flats on the Greengates estate.

BEDWORTH. *School.* The governors of the Bedworth Nicholas Chamberlaine Charity are to purchase a site in Bedworth, Warwickshire, for the erection of a C.E. senior school.

BIDFORD-ON-AVON. *School.* Warwickshire Education Committee is to purchase a site in Victoria Road, Bidford-on-Avon, for the erection of a junior school.

CHESTER-LE-STREET. *Extensions.* The Bethel Congregational Church trustees are to enlarge the church in Low Chare, Chester-le-Street.

COLESHILL. *Extensions.* The governors of St. Edward's R.C. school, Coleshill, are to enlarge the premises for another 100 children.

CORBY. *School.* Northants Education Committee has purchased a site at Corby for the erection of an elementary school.

CHELMSFORD. *Bungalows, etc.* Plans passed by the Corporation : Two bungalows, Wallace Crescent, for Messrs. R. H. Currie, Ltd. ; 16 bungalows, Stroma Gardens, for Mr. W. L. Allan ; house, Longstomps Avenue, for Mr. W. J. Aldred ; six houses, Highfield Road, for Messrs. Tyler and Dobie ; additions, Black Bull public-house, Rainsford Road, for Messrs. Taylor Walker & Co.

CHELMSFORD. *School.* The Education Committee has obtained a site in Patchinghall Lane for the erection of an infants' school.

CRAWLEY. *School.* West Sussex Education Committee has asked the county architect to prepare plans for the erection of a senior school for 320 at Crawley.

CROOK. *Houses.* The North-Eastern Housing Association, Ltd., are to erect 61 houses on the Jobs Hill and Wheatbottom estates, Crook.

DEWSBURY. *Houses.* The Corporation is to erect 160 houses in School Lane at a cost of £56,969.

EXHALL. *School.* Warwickshire Education Committee is to obtain a site for a junior school at Exhall.

HARTSHILL. *School.* Warwickshire Education Committee is in negotiation for a site at Hartshill for a senior school.

HORSHAM. *School.* West Sussex Education Committee is to erect senior schools for girls and boys at Horsham at a cost of £62,000.

KIRKHAM. *School.* Lancashire Education Committee has acquired a site at Kirkham for a Roman Catholic senior school.

LANCASHIRE. *Branch Libraries.* Lancashire C.C. is seeking sanction to borrow £34,000 for the erection of branch libraries at Knowsley, Poulton, Gt. Harwood, Ormskirk and Prescot.

LANCASTER. *School of Art.* Lancashire Education Committee is to erect a school of art at Lancaster at a cost of £39,612.

LEAMINGTON SPA. *Cinema and Theatre.* Messrs. C. Upfill Jagger and Son, on behalf of Messrs. Raymond de Courcy and L. L. Dussault, are to erect a cinema and theatre in Warwick Terrace, Leamington Spa.

LEEDS. *School.* The Leeds Education Committee has purchased a site at Halton for the erection of an elementary school.

LITHERLAND. *Houses.* The U.D.C. is to erect 72 houses on the Moss Lane estate at a cost of £27,262.

LUTON. *A.R.P. Work.* The Corporation is to provide air raid protective works at the schools at a cost of £32,000.

MAGHULL. *School.* The Lancashire Education Committee has purchased a site at Maghull for the erection of a junior school.

MURTON. *Cinema.* The Knaresborough Theatre Co. are to erect a cinema in Knaresborough Road, Murton, co. Durham.

NEWTON-LE-WILLOWS. *Nursery School.* Lancashire Education Committee has purchased a site at Newton-le-Willows for the erection of a nursery school.

NUNEATON. *Swimming Baths.* The Nuneaton Corporation is seeking a grant for the erection of swimming baths.

NEW SEAHAM. *Houses.* Major C. D. Gregson is to erect 14 houses on the Burden estate, New Seaham.

NEW SEAHAM. *Houses.* The North-Eastern Housing Association, Ltd., are to erect 183 houses at New Seaham.

OSCROFT. *Extensions.* Mr. A. Priest, architect, has prepared plans for extensions at the Methodist Church, Slay Lane, Oscroft, Cheshire.

PAGHAM. *School.* The L.C.C. is to purchase 32 acres on the Lagoon estate, Pagham, Sussex, for the erection of an open-air residential school for convalescent children.

PULBOROUGH. *School.* West Sussex Education Committee has approved plans by the county architect for the erection of a senior school at Pulborough at a cost of £19,000.

RAINHAM. *Branch Library.* Kent C.C. has approved plans for the erection of a branch library at Rainham.

RAMSGATE. *Technical Institute.* Kent Education Committee is preparing plans for the erection of a technical institute at Ramsgate.

RUGBY. *College.* Warwickshire Education Committee has decided to complete the scheme for the new college of technology and arts at Rugby at a cost of £51,000.

RYHOPE. *Houses.* Sunderland R.D.C. is to erect 90 houses and 2 shops at Ryhope at a cost of £33,565.

SCUNTHORPE. *Council Offices.* The Corporation is to erect new council offices at a cost of £62,996.

SHIPSTON. *School.* Warwickshire Education Committee is to erect a senior school at Shipston-on-Stour at a cost of £18,250.

SOUTHBOURNE. *School.* West Sussex Education Committee is to obtain a site at Southbourne for the erection of a senior school.

WHITFIELD. *School.* The Kent Education Committee is to acquire a site at Whitfield for the erection of an elementary school.

WASHINGTON. *Hotel.* Messrs. J. Jeffrey & Co., Ltd., are to erect an hotel on the site of Southgate Villa, Washington, co. Durham.

YARMOUTH. *Flats.* The Corporation has obtained sanction to borrow £115,500 for the erection of 198 flats on the clearance areas.

SHEFFIELD. *Houses, etc.* Plans submitted to the Corporation : Two houses, Mount View Road, for Messrs. Chaphall & Co. ; two houses, Bellhagg Road, for Mr. Walker ; warehouse, Meadow Hall, for Messrs. Arthur Lee and Sons, Ltd. ; two houses, Broadway Road, for Mr. T. T. Osbourne ; workshops, Eldon Street, for Messrs. Smith, Cooke, Son & Co., Ltd. ; development, Dore House estate, Retford Road, for Mr. J. Davidson ; three houses, Torbay Road, for Mr. J. Samuel ; two houses, Jepson Road, for Mr. F. Clifton ; 22 houses off Station Road, Woodhouse, for Mr. J. L. Conway ; house, Bocking Lane, for Mr. W. C. Mander ; workshop, Royds Lane, for Messrs. Keeton, Sons & Co., Ltd. ; house, Carr Road, for Mr. F. Robson; additions, Walkley Institute, Providence Road, for committee ; flat and surgery, Ridgeway Road, for Dr. O. H. Billington ; house, Millhouses Lane, for Mr. F. Newsham ; four houses, Norton Park View, for Mr. A. G. Redmile ; land development, Stannington Road and Roscoe Bank, for Mr. E. W. Chapman ; business premises, Copper Street, for Messrs. A. Appleby and Sons ; house and shop, Buchanan Road, for Mr. W. Wardley ; 38 houses, Vauxhall Road, for Messrs. Ackroyd and Abbott ; 21 houses, Barncliffe Drive, for Messrs. Simpson Bros., Ltd. ; 14 flats off Cherrytree Road, for Mr. J. S. Mason ; workshop and showrooms, Barnsley Road, for Messrs. Credland Bros., Ltd.

Copies of the loose supplement containing the labour rates for the principal towns and districts throughout the country can be obtained from the JOURNAL, price 2d. to cover postage.

PRICES

The complete series of prices consists of four sections, one section being published each week in the following order :—

1. Current Market Prices of Materials, Part I. (published last week)
2. Current Market Prices of Materials, Part II.
3. Current Prices for Measured Work, Part I.
4. A. — Current Prices for Measured Work, Part II.
   B. — Prices for Approximate Estimates.

IMMEDIATELY below, Messrs. Davis and Belfield mention the principal changes which have occurred in the last month. Similar notes, and the deductions that may be drawn from them, will be published on this page each month.

PART 2

Prices vary according to quality and quantity ordered.

Those given below are average market prices and include delivery in the London area, except where otherwise stated, but do not include overhead charges and profit.

CURRENT MARKET PRICES OF MATERIALS

BY DAVIS AND BELFIELD

JOINER

Prices are for standards in one delivery; when less than a standard is required, or special lengths, add £1 per standard

Joinery Timber

			Per standard £ s. d.	Per foot cube s. d.
3″×9″ Scantling	2nd	Archangel	43 0 0	5 2½
3″×9″	,,	3rd ,, ...	30 0 0	3 7¾
2″×9″	,,	2nd ,, ...	50 0 0	6 0¾
●2″×9″	,,	3rd ,, ...	32 10 0	3 11½
3″×8″	,,	2nd ,, ...	36 10 0	4 5½
●3″×8″	,,	3rd ,, ...	26 10 0	3 2¾
2″×8″	,,	2nd ,, ...	40 0 0	4 10½
2″×8″	,,	3rd ,, ...	25 10 0	3 1¼
●3″×7″	,,	2nd ,, ...	38 10 0	4 8
3″×7″	,,	3rd ,, ...	25 0 0	3 0½
2″×7″	,,	2nd ,, ...	39 10 0	4 9½
2″×7″	,,	3rd ,, ...	24 0 0	2 11
2″×6″	,,	u/s ,, ...	23 0 0	2 9½
1½″×11″	,,	3rd ,, ...	38 10 0	4 8¼
1½″×9″	,,	u/s ,, ...	35 0 0	4 3
1″×9″	,,	2nd ,, ...	47 10 0	5 9¼
●1″×9″	,,	3rd ,, ...	35 10 0	4 3¾
1″×11″	,,	2nd ,, ...	53 0 0	6 5¼
1″×11″	,,	3rd ,, ...	40 0 0	4 10¾
1½″×9″	,,	2nd ,, ...	47 10 0	5 9¼
●1½″×9″	,,	3rd ,, ...	37 0 0	4 6
1½″×11″	,,	2nd ,, ...	51 0 0	6 2¼
1½″×11″	,,	3rd ,, ...	41 0 0	4 11¾

JOINER—(*continued*)

Flooring

		⅞″	1″	1¼
Yellow deal, plain edge in batten widths ..	per square	●21/–	●24 6	30 6
Ditto, T. & G.	per square	●21 6	●25/–	31/–
Ditto, T. & G. narrow widths	per square		●24/–	
T. & G. rift sawn B.C. pine in 4″ widths ..	per square		●33 6	●43/6
T. & G. random grain, in 4″ widths	per square		●20 6	

Wall Linings

Deal Match Boarding :—		
●1″ × 6″ T.G.B.	per square	27,6
1″ × 4½″ T.G.V.	per square	25/–
●¾″ × 6″ T.G.B.	per square	20/6
●¾″ × 4½″ T.G.V.	per square	20/6
●⅝″ × 6″ T.G.B.	per square	16,9
●⅝″ × 4½″ T.G.V.	per square	17/–
●½″ × 4½″ T.G.V.	per square	12,6
Asbestos-Cement :—		
5/32″ Semi-compressed flat building sheets, grey	per yard super	1,3½
3/16″ Ditto	per yard super	1/4
¼″ Ditto	per yard super	1/11
¼″ Metal reinforced flat building sheets	per yard super	3/2¾

Prices are for orders of two tons and over and are subject to 5% trade discount.

● Items marked thus have risen since August 10.

CURRENT PRICES

BY DAVIS AND BELFIELD

JOINER AND STEEL AND IRONWORKER

JOINER—(*continued*)

Wall Boards :—

¼" Asbestos wallboard (in sheets 8′ 0″ × 4′ 0″, 10′ 0″ × 4′ 0″ and 12′ 0″ × 4′ 0″) under 5,000 feet super	per foot super	–/2¾
5/16" Ditto	per foot super	–/2¼

The following prices are subject to 10 per cent. trade discount :—

Asbestos-cement stipple glazed sheets (in sheets 8′ 0″ × 4′ 0″ and 4′ 0″ × 4′ 0″) ..	per yard super	6/6
Ditto, plain white glazed sheets (in sheets 8′ 0″ × 4′ 0″ and 4′ 0″ × 4′ 0″)	per yard super	8/6
Marble glazed sheets (in sheets 8′ 0″ × 4′ 0″ and 4′ 0″ × 4′ 0″) ..	per yard super	7/–

	300 yards	300–1,000 yards	1,000–2,000 yards	Over 2,000 yards
½" Fibre board ..	2/–	1/10	1/8	1/6

		25-75 yards	150–300 yards	Over 600 yards
⅜" Fireproof plaster board	per yard super	2/2	1/10	1/6
¼" Ditto	per yard super	2/–	1/8	1/4
Joint tape (approx. 250 feet run)	per roll ..		..	1/6
Joint filler	..per lb.	..	..	–/4

Plywoods :—

	4 m/m	5 m/m	6 m/m	9 m/m	15 m/m
Birch (A) per square	18/9	23/6	—	37/–	—
„ (B) per square	15/6	—	21/–	30/6	43/–
Japanese figured oak (A.A.) per square	33/6	—	39/3	65/–	—
Austrian oak, figured one side, plain oak reverse (A.A.) per square	—	—	86/3	92/6	—
Australian walnut, finely figuredoneside(boards 72″ × 36″) per square			¼″ 67/6	⅜″ 85/–	
Sycamore, figured one side (ditto) per square			75/–	85/–	
Honduras mahogany, figured one side (ditto) per square			75/–	—	
Honduras mahogany, finely figured (boards 84″ × 36″) per square			125/–	—	

Prices are for complete bundles.

Blockboards :—

Alder :—

Thickness		Boards 60″ × 183″	Boards 72″ × 183″
½″	per square	59/3	59/3
5/8″	per square	66/3	66/3
¾″	per square	72/6	72/6
7/8″	per square	79/–	79/–
1″	per square	85/6	85/6
1¼″	per square	99/6	99/6
1½″	per square	114/6	114/6
1¾″	per square	128/–	128/–

Birch :—

Thickness		Boards 60″ × 84″ & 54″ × 72″	Boards 60″ × 140″
½″	per square	43/9	47/3
5/8″	per square	50/–	54/–
¾″	per square	55/3	59/6
7/8″	per square	60/–	64/–
1″	per square	67/6	72/3

Prices are for complete bundles.

Hardwoods

Joinery Quality.

English oak	per foot cube	15/–
American oak (plain)	per foot cube	10/–
„ „ (quartered)	per foot cube	12/–
Australian Silky Oak (plain) ..	per foot cube	11/–
„ „ „ (quartered) ..	per foot cube	12/6
Walnut, European	per foot cube	18/–
Teak, Rangoon	per foot cube	15/–
Iroko	per foot cube	12/–

JOINER—(*continued*)

Mahogany, Honduras	per foot cube	13/6
„ „ Cuban	per foot cube	18/–
American whitewood	per foot cube	9/–
Birch	per foot cube	8/–
Cedar (aromatic)	per foot cube	16/–
Japanese oak (plain)	per foot cube	10/–
„ „ (quartered)	per foot cube	12/–
Austrian oak (plain)	per foot cube	10/6
„ „ (quartered)	per foot cube	14/–

Sundries

Slaters or sarking felt	per yard run	–/6
Roofing felt	per yard run	–/8
Bituminous hair felt	per roll	33/–
All rolls 25 yards long by 32″ wide.		
Cork slabs, 1″ thick (3′ 0″ × 1′ 0″)	per foot super	–/4½
„ 2″ thick (3′ 0″ × 1′ 0″)	per foot super	–/8
Slagwool	per cwt. (approx.)	12/–
Building paper in rolls of 100 yards, 1-ply, 60″ wide (B.I.80 and L.G.I.80)	per roll	67/6
Ditto, 2-ply, 60″ wide (B.I.80)	per roll	135/–
Ditto, 2-ply, 60″ wide (B.I.20)	per roll	202/6
" Cabots " Quilt :—(Ex Works Twelve roll lots delivered carr. free.		
Double ply .. per roll 42/–	per half roll	23/6
All rolls 28 yards long by 36″ wide. Special terms for quantities.		
Cut steel clasp nails, 1″ per cwt. 29/9	4″ per cwt.	20/9
„ „ floor brads, 2″ „ 20/–	3″ per cwt.	19/6
Bright oval wire nails 1″ „ 29/3	4″ per cwt.	21/3
Galvanised wire staples with slice cut points	1″ × 12 gauge per cwt.	31/–
Scotch glue	per cwt.	65/–

Floor Clips :—

		£ s. d.
One leg floor clip	per 1,000	7 10 0
2″ short leg floor clip	per 1,000	7 10 0
2″ Regular floor clip	per 1,000	7 15 0
3″ „ „	per 1,000	8 8 0
2″ Regular ceiling clip	per 1,000	7 15 0
Single leg ceiling clip (7½″)	per 1,000	10 10 0

Special terms for quantities.

STEEL AND IRONWORKER

Steelwork

		£ s. d.
Basis price for rolled steel joists sections 5″ × 3″ to 16″ × 6″, in 10 ft. to 50 ft. lengths	per ton	12 10 0
Extras on above for :—		
9″ × 7″ Section	per ton	0 5 0
4″ × 3″, 5″ × 2½″, 10″ × 8″, 12″ × 8″, 14″ × 8″ and 16″ × 8″ to 20″ × 7½″ sections inclusive	per ton	0 10 0
3″ × 1½″, 3″ × 3″, 4″ × 1¾″, 4¾″ × 1½″ and 24″ × 7½″ sections	per ton	1 0 0
Channels, angles and tees	per ton	13 10 0
Mild steel plates	per ton	13 10 0
Screw bolts	per ton	31 0 0

Fabricated Steelwork

		£ s. d.
Joists cut and fitted	per ton	16 10 0
Stanchions, ordinary sections with riveted caps and bases	per ton	20 0 0
Stanchions, compound	per ton	23 0 0
Plate girders	per ton	24 10 0
Framed roof trusses, 25′ 0″ span	per ton	25 0 0
„ „ „ 60′ 0″ span	per ton	23 0 0

These prices are *ex mills*. For material *ex stock*, definite quotations should be obtained.

Prime Galvanized Corrugated Iron Sheets
(Ex London Stocks)

	10 cwt. lots £ s. d.	Less quantity £ s. d.
4 to 9 fts. 18 or 20 gauge, 8/3″ corrugations .. .. .. per ton	18 15 0	19 15 0
10 fts. 18 or 20 gauge, 8/3″ corrugations	19 5 0	20 5 0
4 to 9 fts. 22 or 24 gauge, 8/3″ corrugations .. .. .. per ton	19 5 0	20 5 0
10 fts. 22 or 24 gauge, 8/3″ corrugations	19 15 0	20 15 0
4 to 8 fts. 26 gauge, 8/3″ corrugations ..	20 10 0	21 10 0
9 fts. 26 gauge, 8/3″ corrugations ..	21 0 0	22 0 0
10 fts. 26 gauge, 8/3″ corrugations ..	21 10 0	22 10 0
Galvanized roofing nails 2½″	per cwt.	37/6
Galvanized roofing washers	„ „	45/–

CURRENT PRICES

BY DAVIS AND BELFIELD

PLASTERER, PLUMBER AND INTERNAL PLUMBER

PLASTERER

Plaster and Cement

		1-ton loads	5-ton loads	
Sirapite (coarse)	per ton	70/–	64/–	
„ (fine)	per ton	78/–	—	
Victorite No. 1	per ton	85/–	78/6	} 6-ton
„ No. 2 or non sweat	per ton	80/–	73/6	} loads
Thistle (browning, haired and pink finish)	per ton	70/–	64/–	
Thistle (fine)	per ton	78/–	—	
Pink plaster	per ton	66/–	—	
White plaster	per ton	78/–	—	
Keene's pink	per ton	112/6	—	
Keene's white	per ton	117/6	—	
Super Carbo	per ton	—	47/6	} 4-ton
Carbo-setting	per ton	—	57/6	} loads

1 ton upwards

	£ s. d.
Cullamix No. 2 cream (rendering mixture) per ton	5 10 0
„ No. 3 cream „ „ per ton	5 10 0
Snowcrete mixture „ „ per ton	5 5 0

Sundries

Sharp washed sand	per yard cube		8/–
Cow hair	per cwt.		40/–
Goat's hair	per cwt.		55/–
⅜″ laths	per bundle		2/–
½″ laths	per bundle		2/4½
Expanded metal lathing, 9′ 0″ × 2′ 0″ ⅛″ mesh × 26 gauge	per yard super		–/11
Lath nails (galvanized) 1¼″ × 14 gauge	per cwt.		48/6
„ (bright wire) „ „	per cwt.		27/–
	Less than 150 yds.	Less than 300 yds.	Over 300 yds.
⅜″ Plaster board	per yard super	1/–	–/11	–/10
1½″ Galvanized nails	per lb.		–/5	
Scrim cloth in 100-yard rolls	per roll		2/3	

Wall Tiles

Commercial quality.	
Ivory, white, etc., glazed 6″ × 6″ × ⅜″	per yard super 9/9
Angle beads (1½″ wide)	per yard run 1/2¾
„ „ (1″ „)	per yard run –/10
Rounded edge tiles	per yard run 2/6½
Coloured enamelled bright glazed, 6″ × 6″ × ⅜″	per yard super 14/3
Angle beads (1½″ wide)	per yard run 1/4⅜
„ „ (1″ „)	per yard run –/11¼
Rounded edge tiles	per yard run 2/7
Eggshell gloss enamelled, 6″ × 6″ × ⅜″	per yard super 15/–
Angle beads (1½″ wide)	per yard run 1/7¼
„ „ (1″ „)	per yard run 1/0⅜
Rounded edge tiles	per yard run 2/8½

PLUMBER

Lead

• 3½ lbs. and upwards milled sheet lead in quantities of 5 cwts. and upwards	per cwt. 24/–
Add if cut to sizes	per cwt. 3/–
Lead ternary alloy, No. 2 quality extra over sheet lead	per cwt. 7/–
• Allowance for old lead delivered to merchant	per cwt. 13/3

Cast Iron Rainwater Goods (Painted or Unpainted)

The following prices for rainwater pipes and gutters are subject to 20 per cent. trade discount, and the prices of the fittings are subject to 5 per cent. and 20 per cent. trade discount.

Rainwater Pipes

	2″	2½″	3″	3½″	4″	4½″	5″	6″
Round pipes per yard	2/8½	2/9¾	3/7¾	4/0¾	4/9½	6/1¾	7/2½	9/2
Shorts, 2′ 0″, 3′ 0″ and 4′ 0″ extra per yard	–/3¾	–/3¾	–/3¾	–/3¾	–/3¾	–/5	–/5	–/5
Bends each	1/9	2/–	2/6	3/–	3/7	5/–	6/6	8/5
Offsets, 4½″ and 6″ projection each	2/2	2/8	3/–	3/5	4/4	6/3	7/6	9/10
Offsets, 9″ projection each	2/10	3/2	3/9	4/8	5/7	7/6	8/10	11/2
Branches, single each	2/7	3/1	3/9	4/4	5/3	7/6	8/5	13/1
Shoes each	1/6	1/9	2/–	2/8	3/–	4/4	5/5	7/6

PLUMBER—(*continued*)

Square and rectangular pipes.

3″ × 3″	per yard 6/9¼
3½″ × 3½″	per yard 8/4
4″ × 2″ or 2½″	per yard 7/4¾
4″ × 3″	per yard 7/4¾
4″ × 4″	per yard 9/0¾
4½″ × 3″	per yard 8/5¼
5″ × 3″ or 3½″	per yard 9/7

Gutters

	3″	3½″	4″	4½″	5″	6″
Half round gutters per yard	1/9¼	2/1	2/1	2/2¼	2/4¾	3/7¾
Shorts 2′ 0″, 3′ 0″ and 4′ 0″ extra per yard	–/2½	–/2½	–/2½	–/2½	–/3¾	–/3¾
Angles and nozzle pieces each	1/5	1/7	1/9	2/–	2/2	3/1
Stop ends each	–/5	–/5	–/7½	–/9	–/10½	1/–
Ogee gutters per yard	2/1	2/3½	2/4¾	2/6	2/9¾	3/10¼
Straight back and shorts 2′ 0″, 3′ 0″ and 4′ 0″ extra per yard	–/2½	–/2½	–/2½	–/2½	–/3¾	–/3¾
Angles and nozzle pieces each	1/11	1/11	2/–	2/4	2/8	3/3
Stop ends each	–/6	–/7½	–/9	–/10½	1/–	1/3

Mild Steel Rainwater Goods

The following prices are subject to 12½ per cent. trade discount.

24 Gauge rainwater slip jointed pipes.

	2″	2½″	3″	3½″	4″
Galvanized round pipes with ears per 6′ 0″	2/7½	3/1½	3/9	4/3	4/9
Painted round pipes with ears per 6′ 0″	2/4½	2/9	3/1½	3/7½	4/–
Painted or galvanized short lengths with ears, extra each	–/6	–/6	–/6	–/6	–/6

18 Gauge Gutters.

	3″	3½″	4″	4½″	5″	6″
Galvanized half round gutters per 6′ 0″	2/–	2/3	2/4½	2/9	3/–	3/7½
Painted half round gutters per 6′ 0″	1/6	1/9	2/–	2/3	2/6	3/–
Painted or galvanized short lengths extra each	–/3	–/3	–/3	–/3	–/3	–/3

Asbestos-Cement Rainwater Goods

The following prices are subject to 12½ per cent. trade discount.

Orders over £30 are subject to 17½ per cent. trade discount.

Rainwater pipes.

Prices are for 6′ 0″ lengths, and 10′ 0″ lengths in 2″, 2½″ and 3″ diameters. Short lengths up to 2′ 0″ are charged as one yard. From 2′ 0″ to 4′ 0″ charged as 1½ yards. From 4′ 0″ to 6′ 0″ charged as 2 yards. Over 6′ 0″ charged as 10′ 0″.

Round pipes.

2″	per yard run 1/10
2½″	per yard run 2/0¾
3″	per yard run 2/5¾
3½″	per yard run 2/11¼
4″	per yard run 3/4¾
4½″	per yard run 4/10¼
5″	per yard run 5/9¼
6″	per yard run 7/1¾

Gutters.

Short lengths of gutter up to 2′ 0″ charged as 1 yard; from 2′ 0″ to 4′ 0″ as 1½ yards, and over 4′ 0″ as 2 yards.

	3″	4″	4½″	5″	6″	8″
Half round gutters per yard run	1/3¾	1/6¾	1/7¾	1/11	2/8	3/3½
Ogee gutters per yard run	—	1/11	2/0¾	2/5¾	3/0¼	3/11¼

INTERNAL PLUMBER

• Lead pipe in coils, 5 cwts. and upwards	per cwt. 23/6
• Lead soil pipe	per cwt. 26/6
Add if ribbon marked	per cwt. –/3
Lead ternary alloy, No. 2 quality extra over lead pipe	per cwt. 7/–
• Plumber's solder	per cwt. 104/–
Tinman's solder	per cwt. 130/–

Drawn lead traps with brass screw eye, 6 lbs.

	1″	1¼″	1½″	2″
• S. trap each	1/9	2/–	2/6	3/7
• P. trap each	1/7	1/8	2/–	2/11
Extra for 3″ deep seal each	–/6	–/6	–/6	–/6

• Items marked thus have risen since August 10.

CURRENT PRICES

INTERNAL PLUMBER

BY DAVIS AND BELFIELD

INTERNAL PLUMBER—(*continued*)

Screwed and Socketed Steel Tubes and Fittings for Gas, Water and Steam, etc.

Tubes.		½″	¾″	1″	1¼″	1½″	2″
Tubes 2 ft. long and over	per ft.	–/5½	–/6¾	–/9½	1/1	1/4½	1/10
Pieces 12″ to 23½″ long	each	1/1	1/5	1/11	2/8	3/4	4/9
Bends	each	–/11	1/2	1/7½	2/7½	3/2	5/2
Fittings.							
Elbows, square ..	each	1/1	1/3	1/6	2/2	2/7	4/3
Elbows, round ..	each	1/2	1/5	1/8	2/4	2/10	4/8
Tees	each	1/3	1/7	1/10	2/6	3/1	5/1
Crosses	each	2/9	3/3	4/1	5/6	6/7	10/6
Sockets, plain ..	each	–/4	–/5	–/6	–/8	–/10½	1/3
Sockets, diminished	each	–/6	–/7	–/9	1/–	1/4	2/–
Flanges	each	1/–	1/2	1/4	1/9	2/–	2/9
Caps	each	–/5	–/6	–/8	1/–	1/3	2/–
Plugs	each	–/4	–/5	–/6	–/8	–/10	1/3

Fittings and flanges and tubes ordered in long random lengths are subject to the following trade discounts :—

	Tubes	Fittings	Flanges
Gas	62½%	53¾%	57½%
Water	58¾%	50%	52½%
Steam	56½%	46¼%	47½%
Galvanized gas ..	53¾%	46¼%	47½%
,, water.. ..	48¾%	42½%	42½%
,, steam ..	43¾%	38¼%	37½%

Brasswork. Best Quality

		½″	¾″	1″
Brass screw-down bibcocks, with crutch top, screwed for iron ..	per dozen	33/–	51/–	90/–
Ditto, with screw ferrule ..	per dozen	38/–	57/–	99/–
Chromium plated easy clean screw-down bibcocks, with capstan head lettered, screwed for iron ..	per dozen	54/–	78/–	153/–
Ditto, with screw ferrule ..	per dozen	61/–	88/–	.166/–

		Brass Screwdown Stop Cocks with Unions both Ends	Brass Screwdown Stop Cocks with Screwed Ends	Brass Screwdown Stop Cocks with Male Screwed End and Iron Unions
½″	per dozen	44/–	33/–	41/–
¾″	per dozen	65/–	51/–	50/–
1″	per dozen	99/–	83/–	93/–
1¼″	each	13/6	11/9	12/9
1½″	each	21/9	18/6	20/3
2″	each	41/3	38/3	39/–

		½″	¾″	1″
Portsmouth pattern ball valve for low pressure, screwed for iron ..	each	4/1	5/11	12/–
Ditto, with flynut and union ..	each	4/9	6/9	13/6
High pressure ditto, screwed for iron	each	4/1	5/11	12/–
Ditto, with flynut and union ..	each	4/9	6/9	13/6

		2″	2½″	3″	4″
Socket thimble sloping shoulder	per dozen	10/–	13/–	16/–	22/–
		1½″	2″	2½″	3″
Flanged ferrule thimble ..	per dozen	8/–	10/–	14/–	17/5

	½″	¾″	1″	1¼″	1½″	2″
Union joints for lead and iron .. per dozen	8/3	11/3	15/5	28/2	46/9	101/2
Single nut short boiler screws .. per dozen	6/–	9/–	15/–	21/–	33/–	60/–
Double nut boiler screws per dozen	9/–	10/–	16/–	23/–	44/–	69/–
Belfast sink wastes stamped brass with brass plug diameter of outlet 2″ .. .. .. per dozen						19/10

Galvanized Mild Steel Open Top Cisterns riveted with internal angle iron at top and corner plates

The following prices are subject to 15% and 20% trade discount :—

	14-gauge £ s. d.	12-gauge £ s. d.	¼″ plate £ s. d.	5/16″ plate £ s. d.
50 gallon capacity each	2 5 11	2 14 5	3 1 7	7 0 8
100 ,, each	3 8 9	4 2 11	4 16 9	9 10 8
200 ,, each	6 6 9	6 19 5	7 18 3	13 1 0
500 ,, each	12 6 0	13 16 1	15 16 3	22 6 9
1,000 ,, each	—	21 9 4	24 19 5	34 15 4

INTERNAL PLUMBER—(*continued*)

Galvanized Hot Water Tanks, fitted with handhole cover.

The following prices are subject to 15% and 20% trade discount :—

Capacity	16-gauge tested to a pressure of 1 lb. per sq. inch = 1½ ft. head of water £ s. d.	14-gauge tested to a pressure of 3 lbs. per sq. inch = 4½ ft. head of water £ s. d.	12-gauge tested to a pressure of 7½ lbs. per sq. inch = 10 ft. head of water £ s. d.	¼″ plate tested to a pressure of 10 lbs. per sq. inch = 15 ft. head of water £ s. d.
20 gallons each	2 0 3	2 3 11	2 7 8	2 12 9
40 ,, each		3 1 7	3 9 0	3 16 8
		Tested to a pressure of 5 lbs. per sq. inch = 7½ ft. head of water	Tested to a pressure of 7½ lbs. per sq. inch = 10 ft. head of water	
60 ,, each		4 19 3		5 5 5
80 ,, each				7 5 7
100 ,, each				8 4 5

Screwed flanges or bosses

½″	¾″	1″	1¼″	1½″	1¾″	2″	2¼″	
1/8	2/–	2/4	2/11	3/4	3/9	4/8	6/9	Extra per flange or boss.
2½″	3″	3½″	4″	4½″	5″	6″		
8/4	14/3	16/9	19/3	26/11	30/1	45/1		

Galvanized Hot Water Cylinders, Mild Steel Riveted throughout, without Manhole, with usual number of flanges

The following prices are subject to 15% and 20% trade discount :—

Capacity	16-gauge tested to 5 lbs. pressure = 10 ft. head of water £ s. d.	14-gauge tested to 15 lbs. pressure = 30 ft. head of water £ s. d.	12-gauge tested to 20 lbs. pressure = 40 ft. head of water £ s. d.	¼″ plate tested to 25 lbs. pressure = 50 ft. head of water £ s. d.
20 gallons each	1 18 7	2 2 8	2 8 4	2 15 4
40 ,, each	2 10 11	2 16 8	3 6 1	3 15 0
65 ,, each		4 8 7	5 1 8	5 16 1
75 ,, each		5 1 7	5 15 0	6 11 4
85 ,, each			6 10 8	7 11 9
100 ,, each				8 2 5

Cast Iron Soil Pipes and Connections, L.C.C. 1/16″ metal.

The following prices for soil pipes are subject to 20% trade discount, and the prices of the fittings are subject to 20% and 5% trade discount.

	2″	2½″	3″	3½″	4″	5″ ¼″ metal	6″ ¼″ metal
Minimum weights in lbs. per 6′ 0″ length	24	30	35	41	46	78	92
Pipes coated or uncoated per yard run	3/10½	4/0½	4/5½	5/–	5/8½	11/8	14/0½
Double sockets extra each	–/11½	–/11½	–/11½	–/11½	–/11½	1/0½	1/0½
Short lengths extra 2′, 3′ and 4′ per yard run	–/3½	–/3½	–/3½	–/3½	–/3½	–/5	–/5
Single spigot branch cast on pipe .. .. each	4/3	4/5	4/7	4/9	4/11	7/6	9/3
Single socket branch cast on pipe .. .. each	10/9	11/–	11/3	11/6	11/9	16/–	19/–
Bends, standard angles each	3/1	3/5	3/9	4/8	5/3	9/4	12/9
Large radius bends each	4/–	4/4	5/–	6/–	7/–	13/–	16/9
Inspection bends raised flange door, 4 gunmetal bolts .. .. each	16/1	16/11	17/9	18/8	19/3	31/10	36/6
Swannecks 4½″ and 6″ projection .. .. each	3/9	4/4	5/11	6/10	7/11	14/11	20/1
9″ ditto .. .. each	5/–	5/7	6/10	7/11	9/4	17/1	22/10
12″ ditto .. .. each	5/11	6/10	7/11	9/8	10/7	19/1	27/1
Single branch with two sockets. T pieces. T pieces diminishing two sockets, inverted two sockets.	3/9	4/8	5/7	6/6 each	7/6	15/10	21/8
Parallel branch pieces not exceeding 6″ centres. Y pieces. Anti-syphon branches with curved arm.	4/10	5/11	6/10	7/11 each	8/11	—	—
Double branch pieces, three sockets .. .. each	5/11	7/–	7/11	9/–	10/3	20/3	27/8
Inspection branch pieces double oval access door, 2 gunmetal screws each	12/11	14/–	14/11	16/6	17/9	29/2	36/2
Long branch pieces each	5/–	6/–	7/3	8/6	9/9	19/–	25/–

CURRENT PRICES

BY DAVIS AND BELFIELD

COPPERSMITH AND ZINCWORKER, GLAZIER AND PAINTER

COPPERSMITH AND ZINC WORKER

Copper

Hot rolled copper sheeting in 1 cwt. lots, all gauges to 24 wire gauge	per lb.	-/9½
• Light gauge copper tube, solid drawn	per lb.	1/-
• Copper tube, solid drawn screwing sizes	per lb.	-/11½
Copper wire, 10 and 12 gauge	per lb.	-/10¼
Copper nails, 1″ and up	per lb.	-/11

Fittings for Copper Tubes

Compression Type		¼″	⅜″	1″	1¼″	1½″	2″	2½″
Straight coupling	each	1/1½	1/4½	2/–	2/7	3/8½	5/5½	13/7
Obtuse elbow	each	1/9¾	2/1½	3/2	4/–	7/10	10/1½	—
Tees ..	each	2/0¾	2/4¾	3/10½	5/7½	8/11	12/8	18/7½
Crosses ..	each	2/11	3/3½	5/0½	6/1½	10/6½	14/8	26/6
Reducing coupling	each	—	1/4¼	2/–	2/7	3/8¼	5/5½	13/7
Bends ..	each	1/6½	1/10½	2/10	3/7½	6/4½	9/6¾	13/7
Brass stop cocks	each	3/8½	5/6	8/–	14/10	20/3	34/10½	—

Extra for Polishing 25%; Chromium plating 50%; Nickel plating and polishing 50%.

Capillary Type								
Straight coupling	each	-/8	-/11½	1/5½	1/11	2/7	3/9	6/4¾
45° elbow ..	each	1/5½	1/11	2/7½	3/6¼	5/3¼	7/11	11/5½
Tees ..	each	1/7½	1/10	3/–	4/5	6/3	9/3	14/1
Crosses ..	each	2/0¼	2/3¼	3/9	5/3½	8/–	11/8	20/4
Reducing coupling	each	—	-/7	-/9½	1/2	1/9	3/1	4/10
Bends ..	each	1/9	2/1½	3/1	4/2	6/7¼	9/3	13/2
Pillar tap connection ..	each	1/1½	1/7½					

Extra for Polishing 15%; Chromium plating 40%; Nickel plating 27½%.

Zinc

		Quantities of less than 3 cwts.	Quantities of more than 3 cwts.	Quantities of more than 5 cwts.
• Sheet zinc, 10 gauge and up ..	per cwt.	34/–	33/6	33/–
		5 sheets and under		12 sheets
8 gauge zinc safe hole perforated sheets, size 8′ 0″ × 3′ 0″ ..	per sheet	4/11½		4/2½
7 gauge ditto	per sheet	4/4½		3/9
6 gauge ditto	per sheet	3/11		3/4¼

GLAZIER

Sheet Glass cut to size (ordinary glazing quality)

		In squares not exceeding 2 ft.	4 ft.	5 ft.	Over 6 ft.
18 oz. clear sheet ..	per foot super	-/2½	-/2¾	-/3	-/3½
24 oz. ditto	per foot super	-/2¾	-/3¼	-/4	-/4⅓
32 oz. ditto	per foot super	-/4	-/5¼	-/6⅞	-/7⅛
Obscured sheet glass net extra	.. ..	-/1½	-/1½	-/1½	-/1½
⅛″ figured rolled glass, white	per foot super	-/6½			
⅛″ ditto, normal tints ..	per foot super	-/9½			
Hammered, double rolled, Cathedral white	per foot super	-/6			
Ditto, normal tints ..	per foot super	-/8½			

Thick Drawn Sheet Glass cut to size

		In squares not exceeding 1 ft.	2 ft.	3 ft.	4 ft.	6 ft.	8 ft.
⅛″ thick ..	per foot super	-/9	-/11	1/–	1/2	1/3	1/5½
¼″ thick ..	per foot super	-/11	1/–	1/3	1/5	1/7	1/9½
		In squares not exceeding 12 ft.	20 ft.	45 ft.	65 ft.	90 ft.	100 ft.
⅛″ thick	per foot super	1/5½	1/8	1/8	—	—	—
¼″ thick	per foot super	1/9½	2/3	2/3	2/6½	2/10½	2/10½

For selected glazing quality add 10 per cent. to the above prices.

British or Foreign Polished Plate Glass cut to size

Ordinary ¼″ Substance		Glazing for Glazing Purposes	Selected Glazing Quality	Silvering Quality
In Plates not exceeding				
1 ft. super ..	per foot super	1/1	1/4	1/7
2 ,, ..	per foot super	1/5	1/7	1/10
3 ,, .	per foot super	1/10	2/1	2/6
4 ,, ..	per foot super	2/6	2/9	3/2
6 ,, ..	per foot super	2/9	2/10	3/3
12 ,, ..	per foot super	2/11	3/2	3/8
45 ,, ..	per foot super	3/1	3/10	4/2
65 ,, ..	per foot super	3/4	4/3	4/11

GLAZIER—(*continued*)

British or Foreign Polished Plate Glass cut to size—(contd.)

Ordinary ¼″ Substance		Glazing for Glazing Purposes	Selected Glazing Quality	Silvering Quality
In Plates not exceeding				
90 ft. super ..	per foot super	3/7	4/8	5/1
100 ,, ..	per foot super	3/9	4/10	5/4

Plates exceeding 100 ft. super or 160 in. long or 104 in. wide at higher prices.

The usual thickness of polished plate glass is about ¼″, but if required of special thickness for glazing purposes add to the above for :—

		Plates up to and including 4 ft. super	All plates over 4 ft. super
¼″ to ⅜″ ..	per foot super	-/2	-/4
¼″ to ⅜″ exact	per foot super	-/2	-/3
⅜″	per foot super	No extra	-/1½
¼″ bare ..	per foot super	,,	-/1⅔
¼″ exact ..	per foot super	-/2	-/2
⅜″ to ½″ ..	per foot super	No extra	-/4½
½″ exact ..	per foot super	-/2	-/6

Special quotations should be obtained for other qualities and thicker substances.

Silvering

		Ordinary Quality on Polished Plate, Thick Drawn Sheet, Patent Sheet and Plain Sheet	On Embossed or Decorative Work
12 ft. super or 90 in. long	per ft. super	9d.	1/4
20 ft. ,, or 100 in. long	per ft. super	10d.	1/4
45 ft. super } or 110 in. long	per ft. super	1/–	1/5
50 ft. ,, } or 110 in. long	per ft. super	1/0½	1/6
55 ft. ,, } or 120 in. long	per ft. super	1/1	1/6½
60 ft. ,, } or 120 in. long	per ft. super	1/1½	1/7
65 ft. ,, } or 130 in. long	per ft. super	1/2	1/8
70 ft. ,, } or 130 in. long	per ft. super	1/3	1/9½
75 ft. ,, } or 140 in. long	per ft. super	1/4	1/11
80 ft. ,, } or 140 in. long	per ft. super	1/5	2/0½
85 ft. ,, } or 150 in. long	per ft. super	1/8	2/5
90 ft. ,, } or 150 in. long	per ft. super	1/11	2/9½
95 ft. ,, } or 160 in. long	per ft. super	2/2	3/2
100 ft. ,, } or 160 in. long	per ft. super	2/5	3/8

For silvering on fluted sheet, figured rolled and cathedral, add 4d. a foot to the prices set out in the first column for polished plate, etc.

Silvering bent glass, double or more, according to bend.

For plates over 100 ft. super add 3d. per ft. super for every 5 ft. or part of same.

Plates over 160 in. long at special rates.

Stripping for re-silvering, add 8d. per ft. super.

Wired Glass Cut to Sizes

¼-in. Georgian rough cast	per ft. super	10d.			
	In squares not exceeding	1 ft.	2 ft.	3 ft.	4 ft.
¼-in. Georgian polished plate	per ft. super	2/6	2/8	2/10	3/2
		8 ft.	12 ft.	20 ft.	30 ft.
¼-in. Georgian polished plate	per ft. super	3/8	3/10	4/2	4/6

Supplied in sizes up to 110 in. long and up to 36 in. wide.

For cutting to allow for wires in adjacent pieces to be " lined up," add 4d. per foot super.

PAINTER

White ceiling distemper	per cwt.	11/6
Washable distemper ..	per cwt.	60/–
Petrifying liquid	per gallon	4/6
Ready mixed white lead paint (best) 5-cwt. lots, in 14 lb. tins ..	per cwt.	66/–
White enamel ..	per gallon	25/–
Aluminium paint	per gallon	20/–
Stiff white lead, genuine English stack process, 1-ton lots, in 1-cwt. kegs ..	per cwt.	49/3
Driers ..	per cwt.	36/–
Linseed oil raw (5-gallon drums) ..	per gallon	3/–
,, boiled ,, ,, ..	per gallon	3/3
French polish ..	per gallon	11/6
Knotting ..	per gallon	16/–
Oil stain ..	per gallon	12/–
Varnish, oak ..	per gallon	10/–
,, copal ..	per gallon	16/–
,, flat ..	per gallon	20/–
Turpentine, genuine American, 5-gallon lots	per gallon	3/3
Creosote, 1-gallon lots ..	per gallon	1/4
Putty ..	per cwt.	13/–
Size ..	per firkin	3/6
Best English quality gold leaf, 23 carat ..	per book	2/4½
Extra thick, ditto ..	per book	3/6

• Items marked thus have risen since August 10.