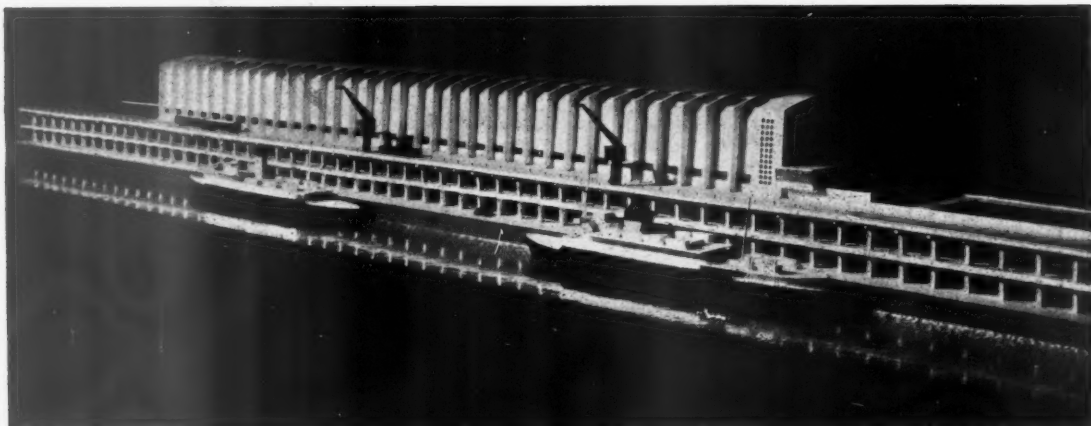
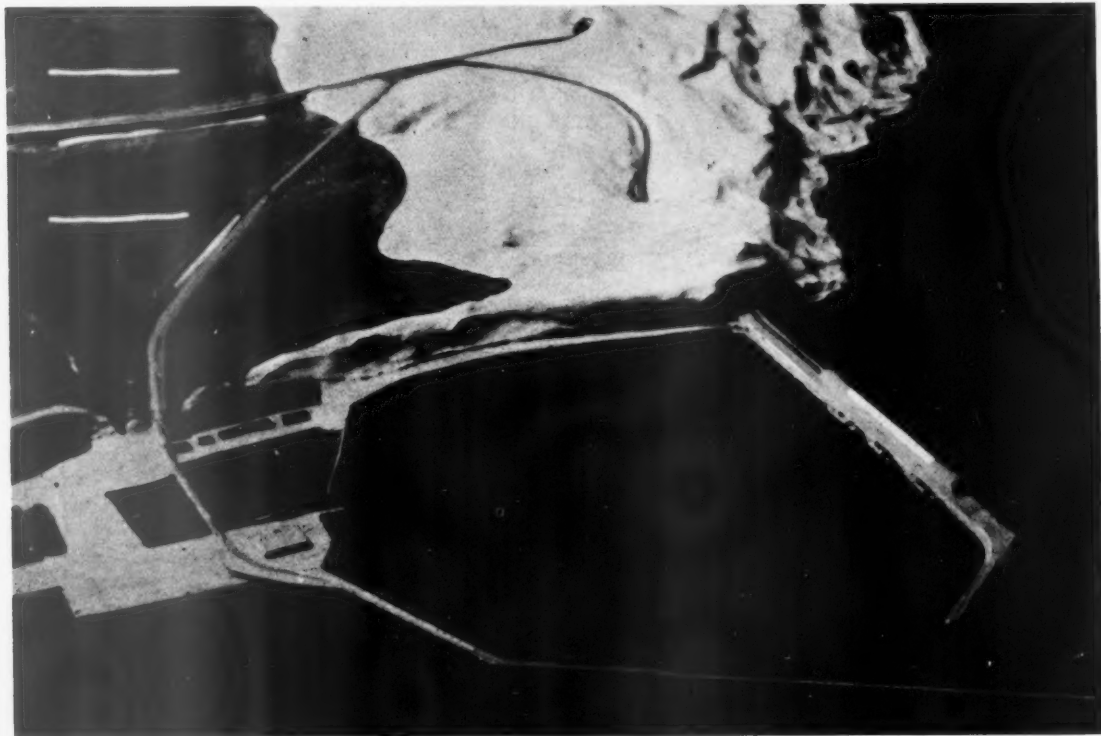


## FOLKESTONE HARBOUR : A SCHEME FOR IMPROVEMENT



The conditions experienced by cross-Channel passengers—particularly those crossing with cars—have been the subject of severe criticism in recent years. Folkestone Harbour has received a full share of this criticism. It affords inadequate protection for ships, and passengers have to wait on a wind-swept mole or in a crowded Customs shed while trains are shunted down a branch line to the Harbour.

The scheme illustrated, by E. Delson and A. H. Crickmay, is part of a pre-thesis design at the Architectural Association School for the improvement of these conditions.

It was considered that the present quay (on the left above, and extending to the "elbow" of the mole) does not lend itself to improvement. A new quay for ferries has therefore been designed connecting with the railway main line by a new branch and tunnel. The old quay would be used for cargo

vessels and the mole extended to provide a well-protected harbour.

The new quay has four decks so that the tracks can be kept high to minimize the gradient to the main line. The lowest deck contains mechanical and fuelling equipment; the landing deck contains Customs, booking and automobile booking halls, passport and other offices; an intermediate deck houses cars and persons who are not crossing, thus keeping them separate from Continental traffic; and the top deck contains railway station, restaurants and administrative offices.

The circulation keeps passengers and luggage separate throughout.

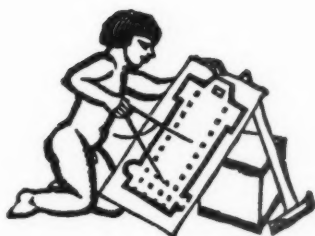
Above are, a general view of the model showing the complete scheme; and a view of the harbour side of the new quay.



## GARAGE

*A corner of the garage on the first floor of the new City of Westminster Central Highways Depot in Galliff Road, S.W. The roof trusses consist of welded steel two-hinged portals, at 34 ft. 6 in. centres, which spring from the first floor and span 92 ft. 8 in. across the complete width of the building, the rise to the crown being 31 ft. Members are of H section built up of plates, the web varying in depth from 18 ft. to 3 ft., and the flanges are 12 in. wide, stiffened at intervals. Each truss was assembled in the shop in three pieces,*

*so that only two site welds had to be made to each prior to erection. The portals are fixed to the stanchions carrying them by pin and socket rocker joints. These prevent the feet of the portals from moving laterally, but allow the trusses to move freely between the enclosing walls to which they are not attached. The architect for the depot was Mr. G. Grey Wornum, Messrs. R. T. James and Partners being responsible for the structural design. Further illustrations appear on pages 9 to 12.*



## RESOLUTION

**N**INETEEN THIRTY-NINE. At this time last year the JOURNAL noted that newspapers were beginning to go slow on prophecies in their New Year issues. The previous year's events, light relief, anniversaries, cautious statements that, in troubled times, Britain's position was at least as good as that of other countries—these were the stuff of the New Year numbers of 1938.

The recipe is the same this year, and in its double issue, on January 19, the JOURNAL will fall into line with competitors. It will review 1938, illustrate some of the best new buildings which it could find in a chilly December, and try to brighten architecture and architects by applying to them in a dozen pages that news magazine technique which can apparently boost any periodical well past the million mark.

That will be on January 19. This week, as bills of every kind come in by every post, architects are probably pondering over 1939 with serious expressions: wondering what it will be like for the livelihood of architecture. And it is no good mincing matters about 1939. It is not a glad New Year.

A year ago architectural prosperity in 1938 was said to depend on international politics and re-armament. This year the existence of architects at all—and of many other people—depends on international affairs. We can expect that badly needed accommodation, some public works, and buildings directly or indirectly connected with re-armament will prevent an actual architectural slump as long as the present situation continues; but the confidence, security and freedom of spirit needed for the best kind of architectural boom can only be regained by a change in international relations of which we see no signs at present.

Can architects, then, only sit with folded hands and minimum staffs waiting for peace and friendship to be restored in Europe? If they do, their chance of getting it will be rather less than nothing at all.

Only real peace can give architects the conditions in which their greatest services can be realized. That all of them know. But as things now are a nation has managed to get by threat of war far more than that which was repeatedly refused to it in peaceful discussion; and it is at least probable that it will go on asking, with more threats. It is now generally believed—by architects as well as others—that things have now reached a state where genuine peace is impossible unless it is proved to Germany that if she starts a general war she will be beaten.

For Britain this attitude means that before all else she must guard against the "knockout blow" of sustained aerial attack against her large urban districts.

In this aspect of defence architects have it in their power to play an active, and possibly a decisive, part. A.R.P. is in the melting pot now and for the next three weeks. The public and M.P.'s—Government as well as Opposition—are agreed upon the incompetence and ineffectiveness of the handling of A.R.P.

by the Home Office. That changes will be made is certain. But what changes?

It is here that the architect can come in. Correspondence in the Press has been devoted so far either to side issues (the Blue Air v. Blue Funk schools) or to constituents of A.R.P., such as holiday camps and heavy v. light shelters. No one has yet said that A.R.P. is a *PLANNING* problem, depending for efficiency on an organization worked out to the last detail for each administrative area by intelligent whole-time planners. Every urban district displays the same chaos of bored volunteers, quarter-time attention by an overworked borough engineer, ignorance of services, dotting of "rescue stations" here and there, and decaying trenches. Except for a few desperately struggling A.R.P. officers it is no one's job to organize.

The blame for this rests on the architects—the professional planners—as much as on anyone. Their chief professional headquarters has done what was asked by the Home Office and not a dot more, has endured years of delay without a murmur. It has never given its views to the public and increased its prestige at one blow more than by ten years of travelling exhibitions. It has allowed itself to be browbeaten by the Home Office until at last it is the derided M.P.'s who have risen in revolt—and the engineers and town planners who are laying down the law in the Press. A sillier example of a great profession allowing itself to be sidetracked by incompetent officials can hardly be imagined.

Architects have until Parliament reassembles to change their minds and *do* something—about three weeks. They can, for instance, demand:—

1: That all urban districts be classified in three degrees of vulnerability.

2: That it be compulsory for the local authorities in the first two classifications, to employ an A.R.P. officer, an architect and an engineer to prepare a complete A.R.P. scheme for each area.

3: That these schemes be based on a day- and night-time census of population; estimates of numbers who would probably be evacuated; plans showing all service mains; plans showing open spaces, framed buildings and unframed buildings according to height.

4: That these schemes should show the position of every type of rescue station and personnel needed; and the position, capacity and type of every shelter.

5: That estimates should be prepared of the kind, amount and cost of the materials needed for the shelters and the time needed to erect them.

6: That every supervising local authority should appoint an Evacuation Officer and staff to take over quotas of refugees from constituent boroughs, and arrange all details of their transport, billeting and maintenance.

If architects can persuade the Government to adopt these six measures in the next six weeks, they will have done a lot for peace in our time.



The Architects' Journal  
Westminster, S.W.1  
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9 2 1 2 - 7  
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London

## NOTES & TOPICS

### SHELTERS

IN the lack of any statement from the Government as to how the distribution of A.R.P. shelters is to be organized the Press still carries a heavy correspondence over details. Those interested in the manufacture of reinforced concrete very reasonably suggest that this material's possibilities should also be borne in mind for light shelters; and the deep and light shelter battle goes on.

\*

In the meantime there is plenty of keen speculation over Sir John Anderson's statement that we are to pay for shelters according to our means.

\*

One can see how this works in the case of a private house, particularly one with a garden. But what about flat blocks, where some tenants have just arrived, some are just going and all may be far from Piccadilly where the balloons go up? What about office blocks—particularly those inhabited by architects whose incomes, persons and assistants will all disappear in an emergency? And whose responsibility is it to *plan* the shelters?

\*

In short, as I have said before, unless each local authority prepares accurate figures of its population and its distribution as they are likely to be in an emergency, and thereafter *plans* the shelters itself, chaos will be piled on chaos endlessly. Architects should think of this as they fill up the National Register index card reproduced on the opposite page.

### A DESIGNER HONOURED . . .

The astonishing lack of public interest in typography has often been remarked. Although everyone is perforce in daily contact with it, few seem to be even aware that it is an art. The name of Edward Johnston, therefore, which appears in the New Year's Honours List, is

probably less well known than his work. He has been made a C.B.E.

\*

It is a good many years now since he designed that familiar type for the L.P.T.B., but its bold virile quality is particularly agreeable in these days of stunt lettering and tricky layout. We are all getting a bit tired of those thin high letters with their sinister club-footed serifs, that "brush-script," and those oh-so-amusing Early Victorian types.

### AND AN ARCHITECT

I am told that Mr. William Lionel Eves has the distinction of being the only architect in the List. He is architect to the Uxbridge Urban District Council, and gets an M.B.E.

### MODERN ARCHITECTURE AND THE GEORGIAN GROUP From Lord Derwent:

Your editorial of December 15 has reached me here. I ought perhaps just to point out—

(1) That it is hardly correct to suggest that the Georgian Group admires, among modern buildings, "*particularly* those put up by the Air Ministry"—the Air Ministry's buildings only came up in the course of general conversation and the Committee seemed agreed that they liked them, but they cannot be said to have singled them out for special praise, *as opposed to* other modern buildings.

(2) That I trust it is well understood that the names of the modern buildings I suggested are simply a selection of my own, and that I do not wish to implicate the Committee in any way in my choice; they might be much divided on the question!

(3) That I perceive I have unwittingly somewhat fogged my own argument by criticizing Berkeley Square House, both on the grounds of the mistakenness of its site and on æsthetic grounds, whereas I did not mention the site aspect at all in connection with the buildings I say I prefer. But I still suspect the latter of being *right* independently of their sites, and Berkeley Square House of being intrinsically *wrong*, even if it were properly situated; however, I admit I *may* be mistaken about this, though I do not think so.

(4) That it is hardly fair to put either me myself or the Georgian Group Committee in the position of being candidates for the post of the vigilance committee you would like to see formed when neither they nor I have aspired to it! All I was intending to do when I wrote was to dispel the impression you seemed to have that we were not in the least interested in modern architecture.

Yours faithfully,

DERWENT

\*

This letter, commenting on my note of a few weeks ago, makes things happily clear, and proves that there was really no disagreement between Lord Derwent and myself.

\*

I can confess now that I was somewhat shocked at the list of buildings\* Lord Derwent recommended as being both modern and good. I concede that I must not saddle the whole Georgian Group with responsibility for its chairman's preferences, but that does not make my original argument less valid. It was for *individuals* that I was searching, to form a hypothetical vigilance committee such as Mr. Goodhart-Rendel pleaded for.

\*

Such individuals, may I repeat, one would naturally look for, (a) among men of general culture and education; (b) among men of culture and education who are especially

\* New R.A.F. Aerodromes and Barracks; Battersea Power Station; Broadcasting House; Radio City, New York; Scarborough Hospital; Underground Building; Imperial Airways Headquarters.



NAME (Full name)		11 12 14 15 16	
CHRISTIAN NAME	NATIONALITY	PRIVATE ADDRESS	Telephone Number
AGE - Give date of birth	NATIONALITY OF FATHER	PROFESSIONAL ADDRESS	Telephone Number
QUALIFICATIONS - including Engineers	NATIONALITY OF MOTHER	(To facilitate classification under state Courts)	
HEALTH - with particulars of any physical disability	Have you any 500-Hour Professional experience?		
ARE YOU:	Are you attached to the Territorial Forces or Reserve or Auxiliary Forces?		
(a) IN ARMED SERVICES:	Are you prepared to enter a Queen's Mess Office if ordered to do so?		
(b) A LICENSED ARCHITECT IN AN OFFICE OR FIRM?	Have you served with His Majesty's Forces? Please state unit and rank and dates of service.		
(c) IN EMPLOYMENT OF OTHER PUBLIC EMPLOYMENT? Please give details.	Shannon 3 6847 38		

Particulars of professional education and training
Architectural or other professional experience
Have you experience in connection with Hospitals, Factories, Aerodromes, Seaplane Stations, Housing, Schools, temporary buildings of any kind including Halted Camps and Convents, and dangerous structures? Please give details.

Obverse and reverse of the Architects' National Register index card which all Registered Architects have now been asked to complete in duplicate.

interested in buildings; (c) among men of culture and education who are especially interested in buildings and who have shown themselves sufficiently public-spirited to take active steps about it all. This process of elimination led me to the Georgian Group.

But a vigilance committee must be interested in modern buildings and discriminating about them. Where shall we find this discrimination?

#### WHAT ARE THE ARCHITECTS DOING?

Frozen cisterns, burst pipes and the consequent queues waiting on the local plumber have produced sundry complaints. My lord of Dorchester, in the *Telegraph*, maintains, quite rightly, that "there is absolutely no excuse for frozen pipes in the properly designed modern house." His Lordship "does not know what educational authority is responsible for the training of young architects," but he suggests that "the syllabus should include a course on the correct installation of pipes, cisterns and tanks, and their protection against frost."

The special reason for Lord Dorchester's outburst was the news that 400 Council houses in one town were suffering from frozen pipes. What do we say?

Just the usual things, I suppose. It takes a little trouble to group risers on inside walls, it may cost £25 in a small house to protect the piping and tanks properly and give a neat finish to exposed runs. Because bad frosts are so rare builders on their own don't bother to do this; and if the architect does, up jumps the price of the house—"for no reason at all," as the clients say. What a dreary story it is.

#### ARCHITECTURE AND THE PUBLIC

I'm always delighted when I hear of someone in authority lecturing the public on what it is now fashionable to call the "bio-technic approach" to architecture. Mr. J. E. Barton has been giving the final lecture of the University Extension series at Bournemouth. Although the lecture was called "The Modern Interpretation of Artistic Tradition," he seemed to say most of the right things. Except that to me his remark about architecture returning to "classical treatment of mass and proportion" was a dangerous *non sequitur*. Maybe it was just bad reporting.

#### IN VINE ST. VERITAS

Vine Street, perhaps the most famous police station in the world, is shortly closing its doors before being put up for auction.

It is a building so fraught with memories for many an ex-undergraduate and one-time subaltern, that to them it must seem as if the old school itself was coming under the hammer.

But Boat Race Night is not what it was, and those glorious days are past when every night saw its complement of inebriated peers and their gay escorts. Vine Street has become as unfashionable as last week's smart restaurant, and its owners have been forced to abandon it, and move to Savile Row, in hopes, presumably, of re-capturing their old clientèle.

The ultimate fate of the building is not yet known. If you are thinking of making an offer for it, it will probably cost you about £50,000, but there is no reason why, properly handled, it should not be a little gold-mine. You could, for instance, cash in on its snob value, and turn it into a night club. The cells would be as airless and constricted as the best of those cellars in which one has often sat, "crouched over the spine of an eighteen-shilling kipper," and I'm sure there's plenty of space in the police-women's old restroom for the "Fifteen Vine Street Virgins" to rattle through their cabaret.

#### FOCUS

The second number of *Focus* contains, very encouragingly, a greater proportion of contributions by the students of the A.A. and "younger members of the profession" who are responsible for its publication.

Junior members, architectural education in Scotland, the B.R.S., the Czechoslovakian situation and plastics are some of the subjects covered; and a charming house by Gropius and Breuer in Massachusetts is among the illustrations.

But it seems to me that one or two of the works illustrated do not rise to the standard of the text. Is it possible that the editors' reverence for famous names is diminishing their ability to judge buildings on their merits? Buy a copy and see for yourself.

ASTRAGAL

## NEWS

POINTS FROM  
THIS ISSUE

- Architects have until Parliament re-assembles to make the six demands enumerated on page . . . 3
- "Mr. Kenneth Palmer has been appointed Chief Architect to the Leicester Corporation. As the control of the department is vested in the City Surveyor, Mr. Palmer's title will be 'chief architectural assistant' . . . 6.
- "May I express the hope that Mr. Gloag will presently visit Russia and give us his opinion of the new architecture of the Soviets?" . . . 8

## R.I.B.A.

Mr. H. M. Fletcher, F.R.I.B.A., has been elected an Honorary Corresponding Member of the American Institute of Architects.

## ARCHITECTS' REGISTRATION COUNCIL

The Secretary of the above Council asks us to remind registered architects of the importance of notifying the Architects' Registration Council, 68 Portland Place, W.1, of any change of address as early as possible in order to ensure insertion in the new volume of the Register which is published in the Spring. In some cases architects have been struck off the Register in accordance with the provisions of the Architects (Registration) Act, 1931, for failure to pay their annual retention fees solely because they have failed to notify their changes of address, so that the demand notes for the retention fees have failed to reach them and have been returned by the Post Office. Architects are, in their own interests, recommended to see that the Architects' Registration Council is duly informed. Now that registration is to be compulsory as from August 1, 1940, removals from the Register will be a very serious matter for those concerned.

SURVEYOR FOR THE ST. ALBANS  
DIOCESE

On December 31, Mr. Walter Butler Stonebridge, F.R.I.B.A., terminated his long engagement as Diocesan Surveyor of Ecclesiastical Dilapidations. He served for sixteen years under the 1871 Act and fourteen years under the 1923 Measure in Hertfordshire and Bedfordshire. Mr. John Leech, F.R.I.B.A., succeeds Mr. Stonebridge.

## NATIONAL EMERGENCY

The Minister of Labour has set up a central bureau which will, in the event of a national emergency, be responsible for supplying both in the Government services and elsewhere the additional requirements for personnel of administrative, scientific, technical and professional qualifications (excluding the medical service).

He is also, in consultation with the Lord Privy Seal, appointing an Advisory Committee under the chairmanship of Sir Walter Moberly with the following terms of reference:

"To advise the Minister of Labour on the utilization in Government departments or elsewhere, in the event of an emergency, of personnel with scientific, technical or professional qualifications, and persons qualified for higher administrative posts."

The committee will include representatives of the universities, the principal professional bodies, employers, the Department of Scientific and Industrial Research, and of the other Government departments principally concerned.

In response to the Minister of Labour's request, the President of the R.I.B.A. has nominated

THE  
ARCHITECTS'  
DIARY

## Thursday, January 5

INSTITUTION OF ELECTRICAL ENGINEERS, Savoy Place, W.C.2. "The Application of Electric Heating to Domestic Hot-Water Supply Systems." By J. I. Bernard. 6 p.m.

A.A.S.T.A. At 66 Portland Place, W.1. Annual General Meeting of Insured Members of the Architects' and Surveyors' Approved Society. 6.30 p.m.

ROYAL INSTITUTION, 21 Albemarle Street, W.1. Christmas Lectures to juvenile audience, by Professor James Kendall, on "Young Chemists and Great Discoveries." 3 p.m. Also on January 7 and 10 at 3 p.m.

## Friday, January 6

INSTITUTION OF SANITARY ENGINEERS, 118 Victoria Street, S.W.1. Presidential Address.

## Monday, January 9

R.I.B.A., 66 Portland Place, W.1. Award of Prizes and Studentships, 1939. Announcement of the Council's Nomination for the Royal Gold Medal, 1939.

DEVON AND CORNWALL ARCHITECTURAL SOCIETY. Exeter Branch. Lecture by Raymond Walker.

## Tuesday, January 10

INSTITUTION OF CIVIL ENGINEERS, 91, George Street, S.W.1. "Conditions of Engineering Contracts." By E. J. Rimmer. 6 p.m.

ROYAL SANITARY INSTITUTE, Buckingham Palace Road, S.W.1. Discussion on "House Management: its Principles and Practice" to be opened by Dr. J. Greenwood Wilson, Medical Officer of Health, Cardiff, and Miss Emily Murray, Secretary and Estate Manager, Westminster Housing Trust. 5.30 p.m.

AIR RAID PROTECTION INSTITUTE, 18 John Street, Adelphi, W.C.2. "A.R.P. in a Metropolitan Borough." By Dr. R. H. R. Tee. 8 p.m.

ILLUMINATING ENGINEERING SOCIETY. At the offices of Goumont-British Picture Corporation, Wardour Street, W.1. "The Lighting of Cinema Auditoriums for Visibility and Safety." By E. Stroud and H. C. Weston. 7 p.m.

## Wednesday, January 11

L.C.C. CENTRAL SCHOOL OF ARTS AND CRAFTS. "Roman Architecture (146 B.C.-A.D. 385): Influences. Etruscan Architecture: Temples, Tombs. Architectural Character." By Sir Banister Fletcher. 6 p.m.

INSTITUTION OF CIVIL ENGINEERS (ASSOCIATION OF LONDON STUDENTS), 91, George Street, S.W.1. "An Investigation of Stresses in a Three-Hinged Stiffened Suspension Bridge." By J. W. Roderick. 6.30 p.m.

LIVERPOOL ARCHITECTURAL SOCIETY. "The Architect and the Retailer." By David L. Webster. 6 p.m.

Mr. Thomas E. Scott, F.R.I.B.A., to represent the Institute on the Advisory Committee. Mr. Scott is Chairman of the R.I.B.A. Emergency Panel Committee and he is also Chairman of the R.I.B.A. Air Raid Precautions Committee which has just been appointed.

## APPOINTMENT

Mr. Kenneth Palmer, A.R.I.B.A., has been appointed Chief Architect to the Leicester Corporation. His selection for the position, held for some years by Mr. E. J. Hannaford, who left to become City Architect of Norwich, was confirmed last week by the City Council Finance Committee and is to be submitted to the next meeting of the Council. As the control of the department is vested in the City Surveyor, Mr. Palmer's title will be chief architectural assistant.

GENERAL POSITION OF THE  
BUILDING INDUSTRY

"The position of the building industry shows a further deterioration in spite of the favourable autumn weather," states the current issue of *The Building Industries Survey*. "The number of unemployed building operatives in Great Britain in November showed an increase on the year of 35,799, as compared with a rise in the previous month of 19,364. This progressive decline is attributable to the reduction of private work, which is only partly compensated by an acceleration of housing by public authorities and by work in connection with the re-armament programme."

"In this connection it is important to realize that, although the statistics of building plans approved may over-state the prospective

decline in total activity, in that they exclude work undertaken directly for Government departments, they under-state the decline in private work, on which the industry normally depends, in that they include some work connected with the re-armament programme."

It is pointed out that "the five-year programmes of local authorities, which should now be in the hands of the Ministry of Health, provide the basis for a long-term policy of planned and stable constructional activity, but no official statement of policy or of the results of the survey have been made since it was undertaken."

## ANNOUNCEMENT

Messrs. Lanchester and Lodge, F.F.R.I.B.A., inform us that the name of their partner Mr. E. E. Davis, A.R.I.B.A., will in future be added to the style of the firm, which will be known as Messrs. Lanchester, Lodge and Davis. They are also taking into partnership Mr. Robert Lanchester, A.R.I.B.A., as from January 1, 1939.

## CHANGE OF ADDRESS

Mr. J. Pinckheard has moved to No. 19 St. Peter's Square, Hammersmith, W.6. Telephone No.: Riverside 6311.

## Obituary

## CHARLES SPOONER

We regret to announce the death of Mr. Charles Sydney Spooner, F.R.I.B.A., which took place at Eyot Cottage, Chiswick Mall, on Friday last. He was seventy-six years of age.

Mr. Spooner was well known as a church architect. An early example of his work was St. Gabriel's, Aldersbrook, near Wanstead, and others included St. Christopher's, Haslemere, St. Bartholomew's, Ipswich, and St. Michael and All Angels, Little Ilford. His latest church was St. Paul's, East Ham. Other work designed by Mr. Spooner included a country house designed for himself (after his retirement from practice in 1930) at Burwash, Sussex; No. 52 Tufton Street, Westminster; the roadside memorial, Ranby, Notts; and a great deal of decorative woodwork for various churches, and also stained glass, in which tasks he was associated with his wife.

Mr. Spooner was specially interested in decorative details, particularly wood-carving, and for some years he conducted the classes in woodwork at the L.C.C. Central School of Arts and Crafts. He was an early member and on the committee of the Art Workers' Guild as also of the Arts and Crafts Exhibition Society and the Society for the Protection of Ancient Buildings.

Mr. Spooner, who was elected a Fellow of the R.I.B.A. in 1907, was joint author (with Sir Charles Nicholson, Bt., F.R.I.B.A.) of *Recent English Ecclesiastical Architecture*, published in 1931.

## EDMOND J. HILL

We regret to announce the death of Mr. Edmond J. Hill, the senior director of Messrs. Higgs and Hill, Ltd.

Although he had been less active in recent years owing to indifferent health, of late he seemed as sprightly as ever and his sudden death at the age of sixty-nine, while taking his Christmas holiday at Wengen, came as a great shock to his many relations and friends.

He was a Fellow of the Institute of Builders and one of the earliest members of the London Rotary Club. The late Mr. Hill also rendered valuable service to the industry and its charities, having served as a President of the L.M.B.A., the Builders' Benevolent Institution, and the Builders' Clerks' Benevolent Institution.

## EXHIBITIONS

[By D. COSENS]

FROM the sixteenth century onwards, in the face of increasing renaissance influences at court, Spanish painting remained national and almost fanatically religious. The Italian tradition helped to mould El Greco and Ribera, and Velazquez and others were undoubtedly strongly influenced by Flemish work, but the native art of Spain retained fundamentally that strange mixture of logic and mysticism which is

Gothic, right up to its decline at the end of the seventeenth century.

As a general survey of Spanish painting from 1580 to 1812, from El Greco to Goya, the exhibition arranged by Messrs. Thomas Harris at the Spanish Art Gallery is excellent and could hardly be improved. And it is augmented by a catalogue which contains, not only a short biography of each artist, but what is perhaps even more important, an introduction to Spanish painting of exceptional breadth and intuition.

This is largely a loan collection of works which are seldom, if ever, on view, and the proceeds are for Spanish Relief. For most people the six magnificent El Grecos will prove the chief attraction, covering as they do about thirty years of his work, and including a portrait, an unusual *genre* painting, and three superb compositions. Beside the work of this greatest master, most paintings appear insignificant, but Velazquez, Maino, Ribera, and particularly Zurbaran with his beautiful Still Life (13), must not be overlooked.

There is another exhibition of Spanish painting for Spanish Relief, this time by a living artist, Ignacio Zuloaga, whose chief recommendation to fame would seem to lie, not in the two rooms filled with his own works, but in his generosity in lending his lovely, unknown El Greco to hang with them. This alone more than repays the entrance fee, and induces a gratitude to Signor Zuloaga that would wish to speak more kindly than is possible of his own painting.

At the exhibition at Knoedler's of great masters of the fourteenth to the eighteenth century, from the Bachstiz collection at The Hague, there are also a number of paintings of historic importance which are largely unknown, even in reproduction. But in spite of the almost unique opportunity of seeing in this country such a painting as the magnificent late Goya portrait (19), or Tintoretto's earliest portrait, that of his greatest friend the Venetian architect and sculptor Jacopo Sansovino, it is perhaps for the works, and particularly the portraits of the lesser masters that this exhibition is so interesting. For they, in their pursuit of the current idiom, illuminate both its sources and the tastes of a community that has always been insufficiently documented. Throughout the period surveyed, the vociferation of the court drowns the indigenous dialect that was to supersede it and come into full flower in the nineteenth century.

Each of the paintings in this collection has its particular interest, the typically Siennese "Madonna Enthroned," the lovely untouched Ruysdael with its original varnish and unspoiled colours, Jan Fyt's "Still Life of Birds," reaching as it does the extreme of realism with complete success, Drouais' charming treatment of that difficult subject, a royal child, Van Steen's fine composition, or Gerard David's rare portrait with its conscious distortion. And pedants can amuse themselves by wondering whether Sir Thomas Lawrence painted with his own hand the almost impressionist ruffles and lace of his "Portrait of Mrs. Tyrell," which are in such complete contrast to the finished face, or whether, as is more probable, they were the work of the drapery man—and whichever of them did it, whether it was deliberate experiment. I like to think of a drapery man who for once so far forgot himself as to experiment while finishing off the fashionable portraits of the President of the Royal Academy.

From El Greco to Goya (for Spanish Relief). Spanish Art Gallery, 6 Chesterfield Gardens.\*

An Unknown El Greco and Paintings by Ignacio Zuloaga (for Spanish Relief). New Burlington Galleries. Until January 6.

Fourteenth to Eighteenth Century Masters from the Bachstiz Collection, The Hague. Knoedler's Gallery, 15 Old Bond Street.\*

Christmas Exhibition. Zwemmer's Gallery, 26 Litchfield Street. Until January 17.

\* Closing dates early in January, but unspecified.



ARCHITECT HITLER

With officials grouped about him, Herr Hitler explains his point of view—not on a question of strategy, but on architecture. This picture, taken at a Munich exhibition, reveals a Hitler that not everyone knows—the Hitler who once considered becoming an architect. Dr. Goebbels is on right.

## GERMANY BUILDS

[By JOHN GLOAG]

*This is the last of a series of four articles by Mr. John Gloag, who has just returned from studying the art and architecture of Nazism. The third article appeared in last week's issue.*

*The views Mr. Gloag expresses are, needless to say, his own and not those of the JOURNAL.—Ed., A.J.*

### 4: THE PRESENT STATE OF DESIGN

ENOUGH work for seventy-five years lies before the Labour Service organization. The land must be made fit for the Volk to live in. Everyone must love the land. They must stay on it, cherish it, produce families to carry on the good work, and obtain spiritual and artistic refreshment from the travelling theatres and film shows that come under the "Strength through Joy" section of the Deutsche Arbeitsfront. Everything is being done for the Volk; all their thinking, their arrangements for work, the organizing of their leisure, the development of their taste, and, in the care of their taste, the fatherly State guards them from the dangers of experiment.

To this end, a respect for the traditional beauties of their villages is fostered, and competitions are arranged by the appropriate department—a sort of Council for the Preservation of Rural Germany, although very official and deriving motive power from passionate enthusiasm for preserving tradition intact, rather than from indignation at the senseless destruction of anything of the slightest interest or beauty, which provides the incentive for its English voluntary counterpart. This department incites the Volk to make their villages beautiful, and the spirit of competition is inflamed and the necessary labour stimulated by awards in the form of medals. As Germany's great gift to European civilization has been a profound appreciation of order and good arrangement, and a sense of civic responsibility unequalled by any other country, this official anxiety for the maintenance of a national quality seems

odd. But it is perhaps part of the education of the Volk, and intended to protect them from the intoxication of novelty in any form of design.

But how fares design in those activities where Germany once had a front-rank place? Look in the shops of Berlin, of Munich, of Cologne, of smaller cities like Bonn, and you still see traces of that genius for the display of goods in windows and showrooms that used to distinguish this land; but—they are only traces. Generally speaking, standards of display have fallen far below those established ten years ago. Windows are overcrowded; the actual design of articles for sale, things of glass and metal, fabrics and leather goods, lacks the sense of style that once endowed so many German things with character.

Germany was one of the great inspirational sources for advertisement design and typographical experiment in the 'twenties; but the advertisements in newspapers and magazines and the posters have sunk to a commonplace level, and are totally devoid of distinction when they are not actively vulgar.

Germany produced some magnificent films, both silent and talking. The only good films to be seen now are news films. For the rest, sentimental slush, only passably well photographed, and agonizingly long (they've forgotten everything about cutting), alternates with the dreariest and most prolonged documentary films, dealing with nice established traditional things, like the working of the solar system, the mating of tropical birds, and nature in all its safety-first aspects. Of course, a lot of health and joy pours off the screen—hulking wenches leap about, and somebody (generally a young man who looks like a repressed architectural student) is



always wringing melody from a squiffer. The part the accordion plays in fomenting joy in modern Germany cannot be over-estimated.

Everything arty and crafty that was popular in the dear dim nineteen-twenties, when the world had been made safe for democracy, is getting on its feet again in Germany now. It is part of the flight from functionalism; and a hand-made tomb for the modern movement is being prepared. But this does not mean that the gifts of industry are to be rejected. Presently the Volk will be able to buy a car for about £80. This car will carry them from one homely spot to another homely spot, and on to some super-homely spot that has perhaps just won a medal (or a shield) for its proud inhabitants.

But the arty-crafty revival, which is quite a natural part of the great educational scheme that works through form and colour, just as logically as it does through the printing press and the radio set, is laying heavy hands upon the shape of everything. Furniture has lost all suggestion of lightness and gaiety—chairs, tables, sideboards and dressers are putting on flesh. The cabinet maker seems to be trying to get back to the adze, and to derive his inspiration from the butcher's shop.

Even the cars in the streets have, with few exceptions, an old-fashioned look. There are hardly any American and no English cars, and the German models suggest that design has stayed put for some years.

In Berlin during October there was an exhibition of Health and Hygiene, and all the old German brilliance in the devising of display material was apparent in the great hall of the exhibition; but the details of each display did not bear examination. The conceptions were excellent—inventive, and insistent upon rubbing in the perfectly obvious; but the lettering used, the way the individual displays were set out, the poverty of the symbolism, showed how far Germany has lost all claim to leadership in such matters. The deliberate imposition of traditional forms in everything; the passion for realism, good, understandable, picture - postcard realism; and the quite earnest, quite sincere wish of the rulers of this new State for the happiness and contentment of the German people and the just distribution of the country's wealth, may only mark a stage in the most remarkable educational experiment that has taken place in our time. Meanwhile, design suffers; it is not even marking time; it is marching back—to what?

"Where there is no vision, the people perish." But what happens when there is vision—vision that sees a people gloriously healthy, physically fit as no people have been fit since the days of Sparta, vision that sees a revival of all that was best in medieval civilization, which gives first place to the peasant,

and strives to restore to the mechanic the pride he lost when industrial production turned him into a machine-minder?

But, for the moment, Europe has lost German inspiration in design.

## LETTERS

### *Germany Builds*

SIR,—In your issue for December 29 you publish a letter by Mr. A. R. Leggett who, in the name of the Architects' Group of the Left Book Club, expressed the hope that you would decline to continue Mr. John Gloag's series of articles entitled "Germany Builds," now appearing in your pages. Such a request, coming from an architect, seems to me to be a most undesirable and even a dangerous innovation. Although I have been a constant reader of your Journal for the last thirty years, I am not aware that ever previously any of your contributors have assumed such an illiberal and dictatorial attitude. I have studied Mr. Gloag's articles with great care, and I am unable to see in them the slightest evidence that, in the words of Mr. Leggett, he has lent support to a "policy of aggression, persecution and tyranny." On the contrary, Mr. Gloag has devoted himself to an impartial study of the architectural achievement of the Nazi régime, a matter which is surely of legitimate interest to members of our profession.

Mr. Gloag's articles appear to me to be particularly valuable at the present time. I admire the way in which he tempers his praise of the new German buildings with a warning of the danger of an excess of regimentation in the field of design. If I may say so without offence to Mr. Leggett and the Architects' Group of the Left Book Club, by far the worst instance of such regimentation occurred in Soviet Russia in which unhappy country our modernist friends were given *carte blanche* to impose their peculiar stamp upon all buildings erected under the auspices of the State. But the Russian people, previously accustomed to an attribute of humanity in their buildings and a considerable amount of colour and decoration, made a spontaneous protest, contumeliously dismissed their "modernist" masters and have now inaugurated a Classic Revival. Whether this latest development is good or bad I do not presume to judge, as I have not yet seen illustrations of the buildings. May I express the hope that Mr. Gloag will presently visit Russia and give us his opinion of the new architecture of the Soviets?

For my own part, I decline to admit that it is necessary or desirable at any time to bring politics into architecture. But I am in favour of bringing archi-

teature into politics, which is quite a different matter. First of all, we should, in collaboration with all the parties most intimately concerned, determine what is the most convenient and dignified manner of life for all and the architectural environment which alone could make this manner of life possible. If there are political or financial powers which hinder the consummation of this object, we as architects and as citizens have the duty to try to overcome them. This is the attitude which we are adopting in the Hundred New Towns Association. We do not judge architecture by a political standard, but we judge the activities of politicians by an æsthetic standard, whether they be Fascists, Communists or English Liberals.

A. TRYSTAN EDWARDS

### *International Congress of Architects, Washington*

SIR,—We have been very interested to observe the enquiry from Mr. Phillip Thomson, one of your subscribers, who desired information in regard to special fares, etc., for architects intending to take part in the above Congress.

We have one sailing at least which is likely to be of the greatest convenience for intending delegates, i.e. the "Georgic," leaving Southampton on September 16, due New York on the 24th, leaving ample time for passengers to reach Washington the same day.

The meetings at Washington continue until September 30, after which there will be some activities apparently in New York, and we therefore put forward as a homeward sailing the "Samaria" from Boston on October 7, which would give delegates ample time at New York and also the opportunity to travel to Boston. Incidentally the "Samaria" sails on October 6 from New York, and the round-trip rate, tourist class, Westbound by the "Georgic," returning in the "Samaria" would be £50 2s. 6d., and third class £35 10s.

For those delegates desiring to return quickly to England, there is the "Queen Mary" October 4, due at Southampton on the 9th, and if there is any further information you desire, we shall be only too pleased to give you full particulars.

We have written a letter to Mr. Phillip Thomson, which we would be obliged if you would re-address, for which service, in anticipation, we extend our thanks.

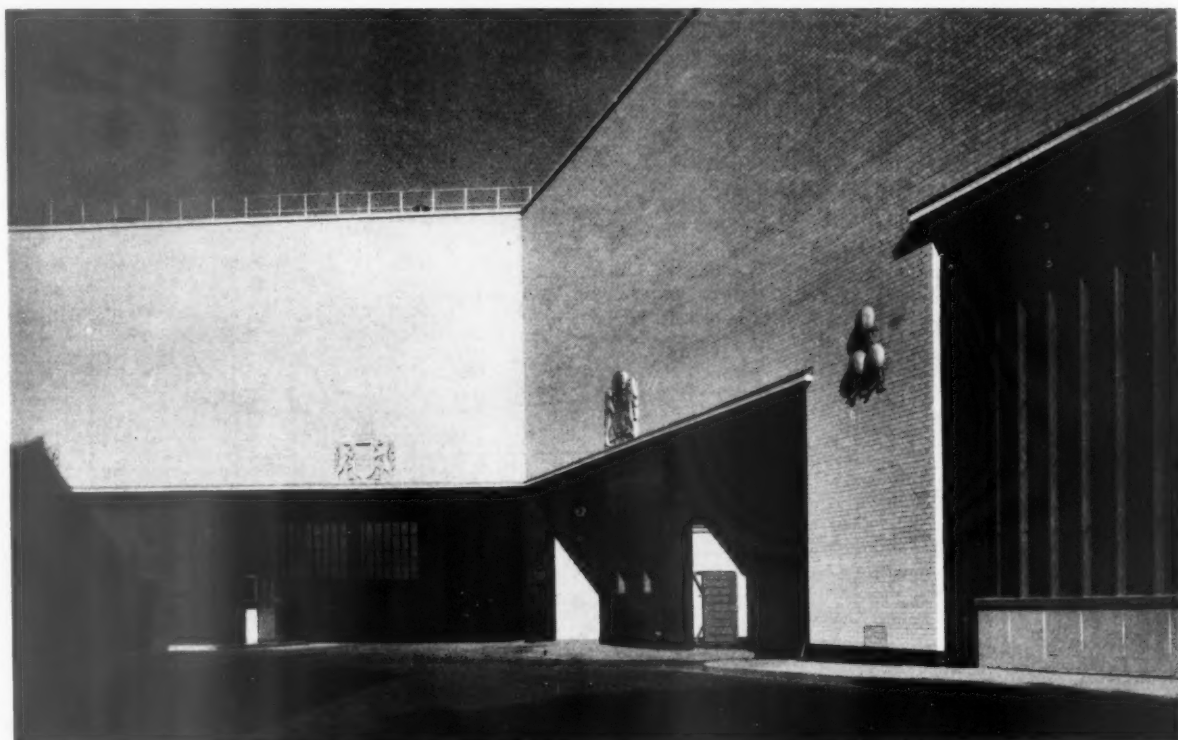
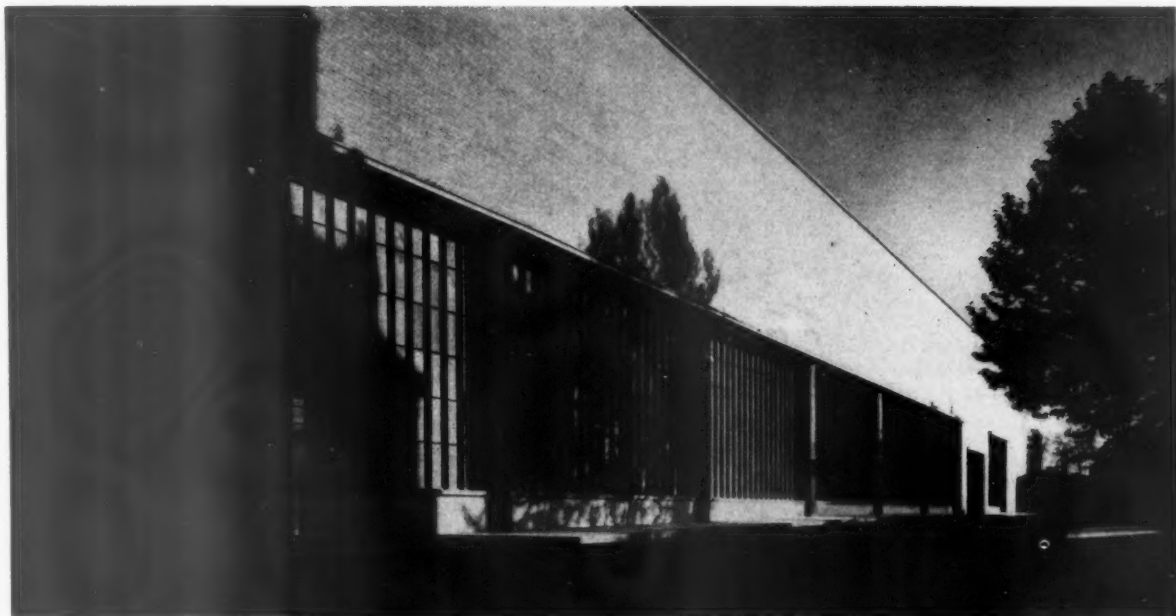
H. S. TAYLOR

CUNARD WHITE STAR LIMITED

[Mr. B. A. Phillips-Howard's letter, which appeared in the JOURNAL for December 15, referred to the possibility of cheap fares being available for those architects and students who may want to visit the World's Fair at New York this summer.—Ed. A.J.]



## CITY OF WESTMINSTER CENTRAL DEPOT



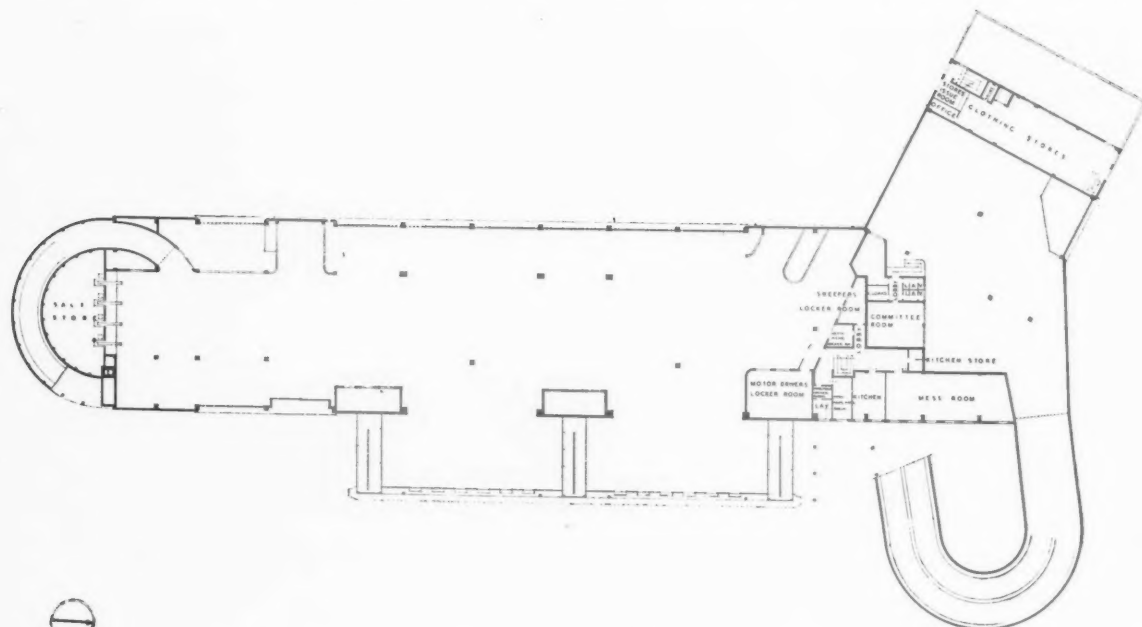
**PROBLEM**—To provide: (1) A building for the centralized reception in lorries of all refuse collected throughout the City and its transference into barges, by existing moving belt conveyors, for disposal. The prevention of nuisance from dust, both inside the building and to surrounding property, was of great importance. (2) Garage accommodation for both petrol and electric vehicles, the majority being approximately 24 feet long; stock rooms for all materials and equipment for servicing and cleaning the streets and the collection of refuse. (3) Space for washing and servicing vehicles; also a fitter's shop, smith's shop, wheelwright's and carpenter's shop, painter's bays, etc. (4) General and

clothing stores with issue rooms and offices. (5) Administrative offices. (6) Locker rooms, clothes drying rooms and lavatories for the men; mess rooms and a kitchen. It was necessary that the weighing of the refuse laden vehicles and the loading of the barges should continue uninterrupted throughout the construction of the building. When the building was nearing completion provision had to be made for an A.R.P. shelter to be used during peace time as a respirator store.

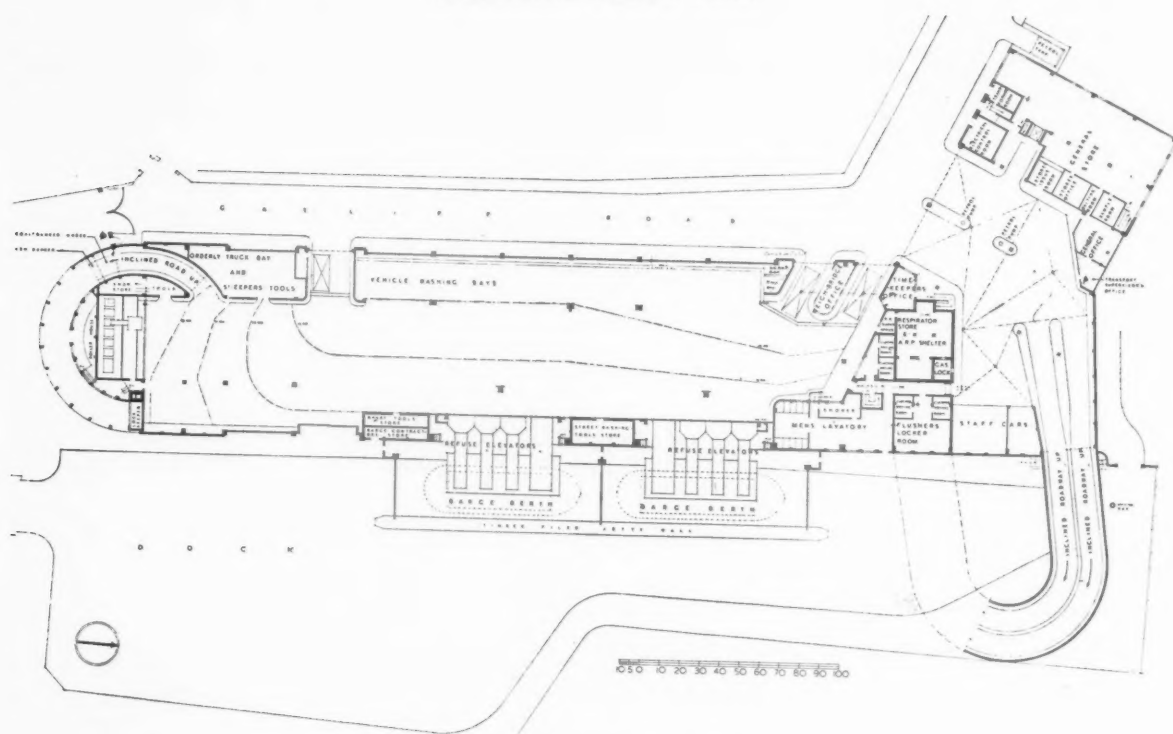
Top, the front to Gatliff Road; bottom, another view of the same front.

DESIGNED BY G. GREY WORNUM. ASSISTANT: LIONEL SMITH

## CITY OF WESTMINSTER CENTRAL



MEZZANINE FLOOR PLAN



GROUND FLOOR PLAN

**FOUNDATIONS**—The foundations are of two types, i.e. in situ reinforced concrete piles and mass concrete. The piles were tested to carry a load of 180 tons each, and are in groups of three, four or five under each stanchion. Their shafts vary in length from 15 ft. to somewhat over 20 ft., and the pile cap of each group is tied to its neighbours with reinforced concrete beams which also carry the walls where these occur. The foundations along the dock wall are of mass concrete on account of the difficulty of pile driving through the concrete filling between the dock wall and the

old canal wall. The greatest loads on the foundations are produced by the six stanchions (each having a reaction of approximately 1,000 tons) along the dock wall which carry the cantilevered central portion of the building. The cantilever foundations for these are in three pairs. Each pair consists of two large reinforced concrete beams 34 ft. 6 ins. apart at right angles to the dock wall, tied together with other reinforced beams in the opposite direction. Each of these large beams is 10 ft. wide by 20 ft. deep, the tailing back length being 78 ft.

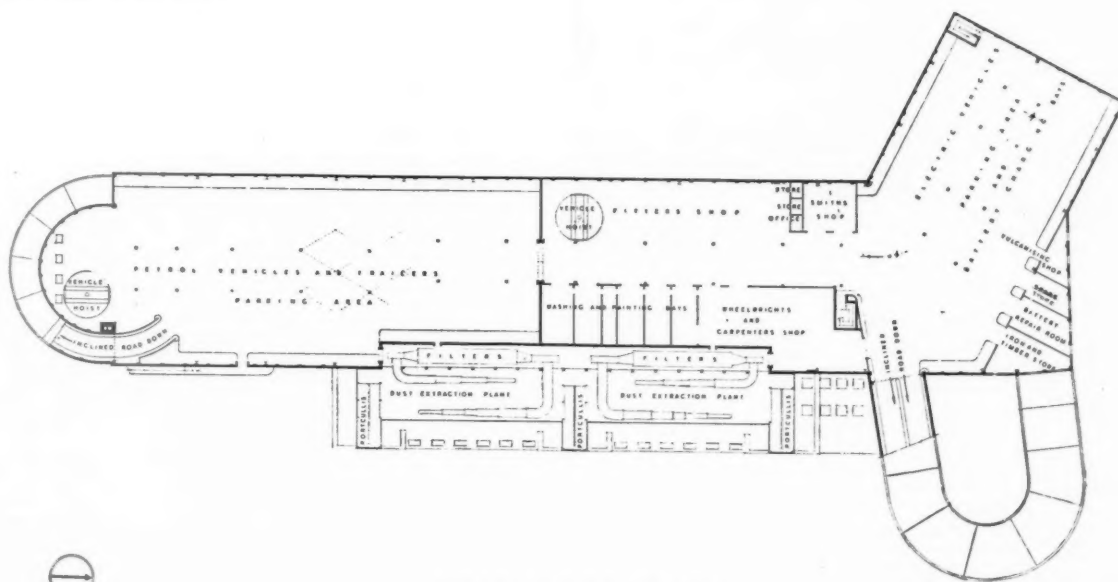
## DEPOT: DESIGNED BY G. GREY WORNUM

**CONSTRUCTION AND FINISHES**—Steel frame infilled with brick panel walls; floors, reinforced concrete; roof, light sheeting and glazing supported on electric arc-welded portal roof trusses. The steel frame consists of main beams at 34 ft. 6 in. centres running across the width of the building, and between them span uniform secondary beams at 11 ft. 9 in. centres which support the floor. To carry the roof of the barge berths and the dust extraction chamber over, three pairs of main beams have been extended 40 ft. over the dock as cantilevers and they are tailed back 67 ft. 6 ins., their greatest web depth being 6 ft. and their flanges 6 ins. thick. Between each pair of cantilevers is a 9 ft. 6 in. deep lattice girder spanning 69 ft. over the refuse conveyor batteries and supporting the uncased steel framework of the dust extraction chamber. To the underneath of the lattice girders are attached steel joists which support the ceiling of the barge berths and are cantilevered forwards and downwards to meet the top of the jetty wall. At this point there is a continuous gap which allows the jetty wall to move without affecting the structure of the building. Floors are reinforced concrete, the first floor having been designed to carry the actual load transmitted through the wheels of 14-ton vehicles, packed all over the floor. It is 7 ins. thick. The ramp roads are supported by stanchions and beams fairly closely spaced which, in the case of the double ramp where it spans the dock, are carried on heavy plate girders, one having a span of 90 ft. and another 80 ft. The gradient of the ramps is 1 in 10 and they are surfaced with 2-in. granolithic, having a special aggregate and surface. They are enclosed with brick walls and have concrete roofs which are stepped to provide clerestory lighting. All walls are white flint and lime bricks left fairface with the exception of the firewalls on the first floor which are of foamed slag concrete to save weight. Windows are steel, and floors generally of hardened granolithic. The finishings have been chosen with a strict regard for economy in initial cost and upkeep and to withstand very hard wear. Generally brickwork and concrete have been left in their natural state. Elevations are white brick. That to Gallif Road has large windows with brightly coloured vertical mullions and divided with blue terra-cotta piers. Above them is a continuous concrete hood which supports the large unbroken area of the first floor brickwork. Over the entrances on this front are three cast stone coats of arms of the City, modelled by Mr. Bainbridge Copnall.

Right, a view from the barge dock.

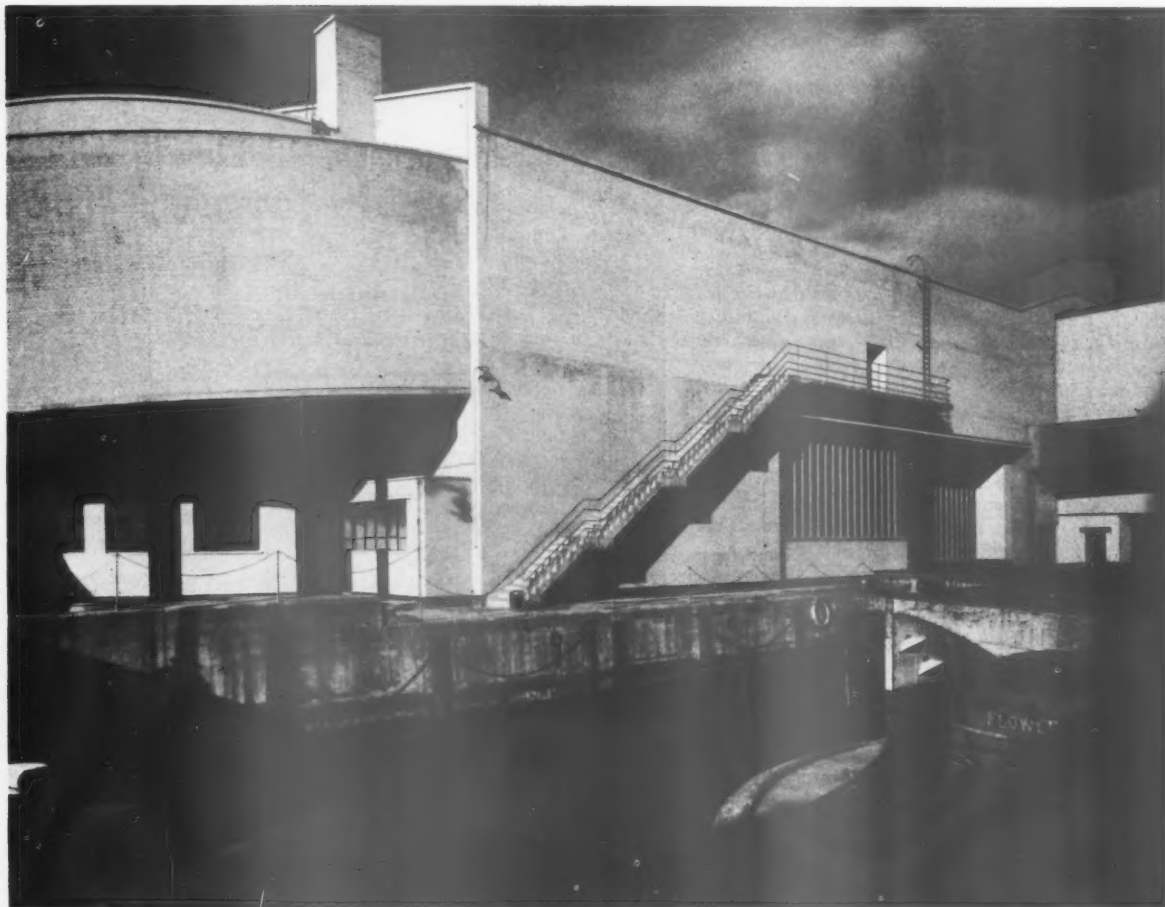


L I O N E L S M I T H ,  
ARCHITECTURAL ASSISTANT



FIRST FLOOR PLAN

## CITY OF WESTMINSTER CENTRAL DEPOT



D E S I G N E D B Y  
G . G R E Y W O R N U M

**BARGE BERTHS**—It is during the transference of the refuse from lorry to barge that dust is caused; first when it falls from the lorry into the hopper of the conveyor and secondly when it falls from the mouth of the conveyor into the barge. Two enclosed barge berths have therefore been provided to each battery of refuse conveyors. These are enclosed on the east side by a timber piled jetty screen driven into the bed of the dock and on the west side

by the building itself. The whole is covered with a structure cantilevered some 40 ft. over the dock and housing the dust extraction plant. This "tunnel" is closed at the ends, and divided in the middle by three 28 ft. wide electrically operated counter-balanced dead-drop timber portcullis doors which seal at the bottom in the water. The barges are drawn through the barge berths by an electric capstan placed at the north end of the dock beyond the double ramp. Immediately to the north of the barge berths a portion of the dock has been covered with a concrete canopy under which the barges are trimmed and tied down in readiness for leaving for the open river.

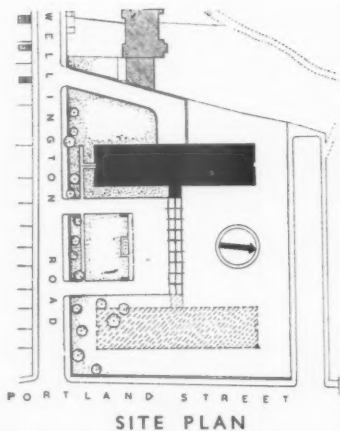
**SALT STORE**—At the south end of the building, at mezzanine level, is a large store for salt used for laying on the roads in the event of snow. Provision is made for four lorries to back up to the store, in which position a moving belt conveyor projects into each, so enabling them to be filled with the least loss of time. A great amount of assistance in the final planning and equipment of the building was given by the Council's Director of Public Cleansing, Mr. H. Ardern, M.B.E., of the Highways Department.

Above, a view from the barge dock; left, the garage on the first floor.

For list of specialists, general and sub-contractors, see page 30.



## PORTLAND COURT, NEW BRIGHTON



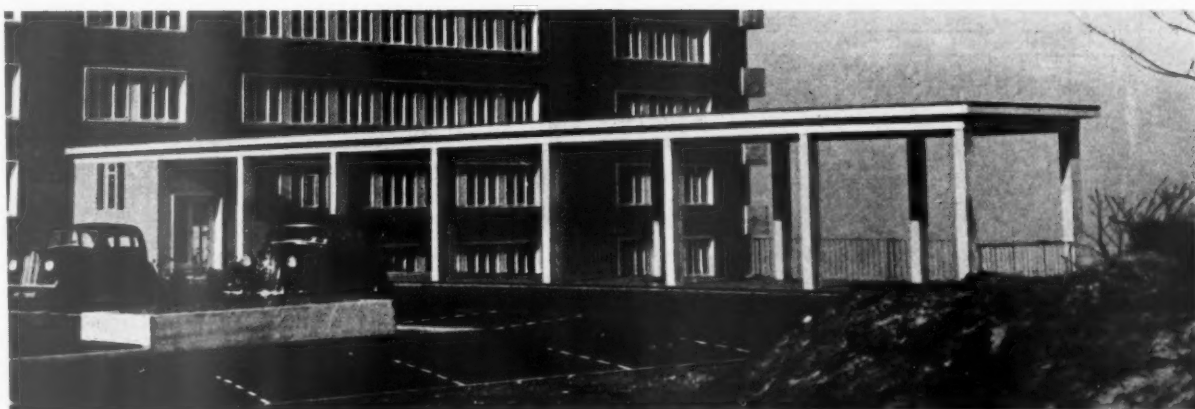
SITE PLAN

**SITE**— The site is at the north-east extremity of the Wirral Peninsula, overlooking the Mersey estuary and the Irish Sea. The entrance approach is by Wellington Road, from which the site falls rapidly (about 1 in 6) towards sea level.

**CONSTRUCTION**— Reinforced concrete frame with 14-in. brick panel cavity walls. The external columns take the form of small mullions 13½ ins. wide and 9 ins. deep at 6 ft. 1½ in. centres, although the building has eight storeys. Other external columns, which do not show in the rooms, carry the external walls and their appropriate proportion of floor slabs and are not relieved by internal columns placed near to them, the nearest being about 15 ft. 6 ins. away. These internal columns carry the longitudinal beams, which have been arranged to pass through cupboards where their 5-in. projection does not show. The floor slabs are solid reinforced concrete.

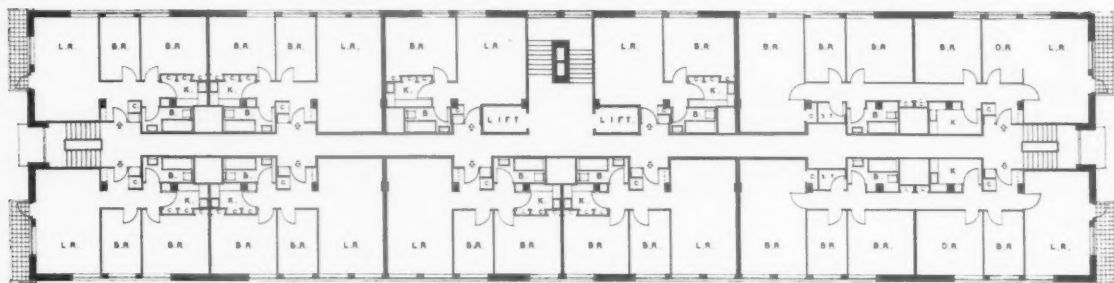
The external walls consist mostly of glass at window level with practically no intervening brickwork. The walls could not be relied upon to resist wind in conjunction with the floors; therefore, two cross walls dividing the building up into approximately three inner sections were constructed in reinforced concrete for the full height of the building to act as vertical wind buttresses.

Top, a perspective; right, a general view from Wellington Road; below, the temporary end to the loggia.

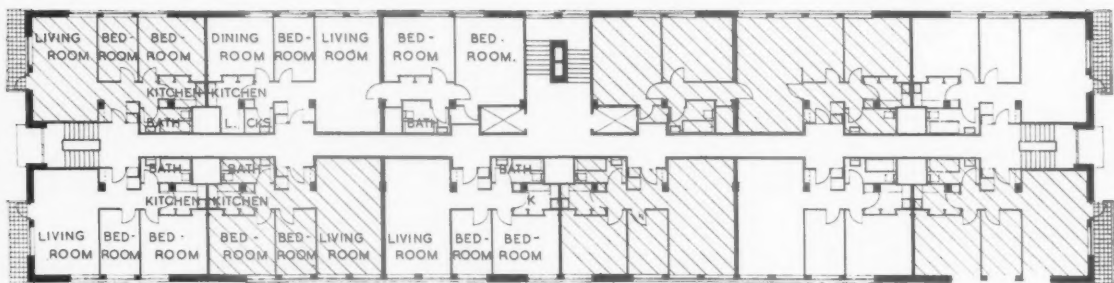


By H. THEARLE, IN ASSOCIATION WITH S. SILCOCK

## PORTLAND COURT, NEW BRIGHTON: DESIGNED BY



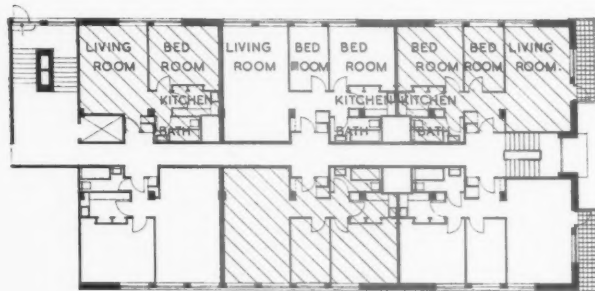
SECOND AND FOURTH FLOOR PLANS



FIRST AND THIRD FLOOR PLANS



UPPER GROUND FLOOR PLAN



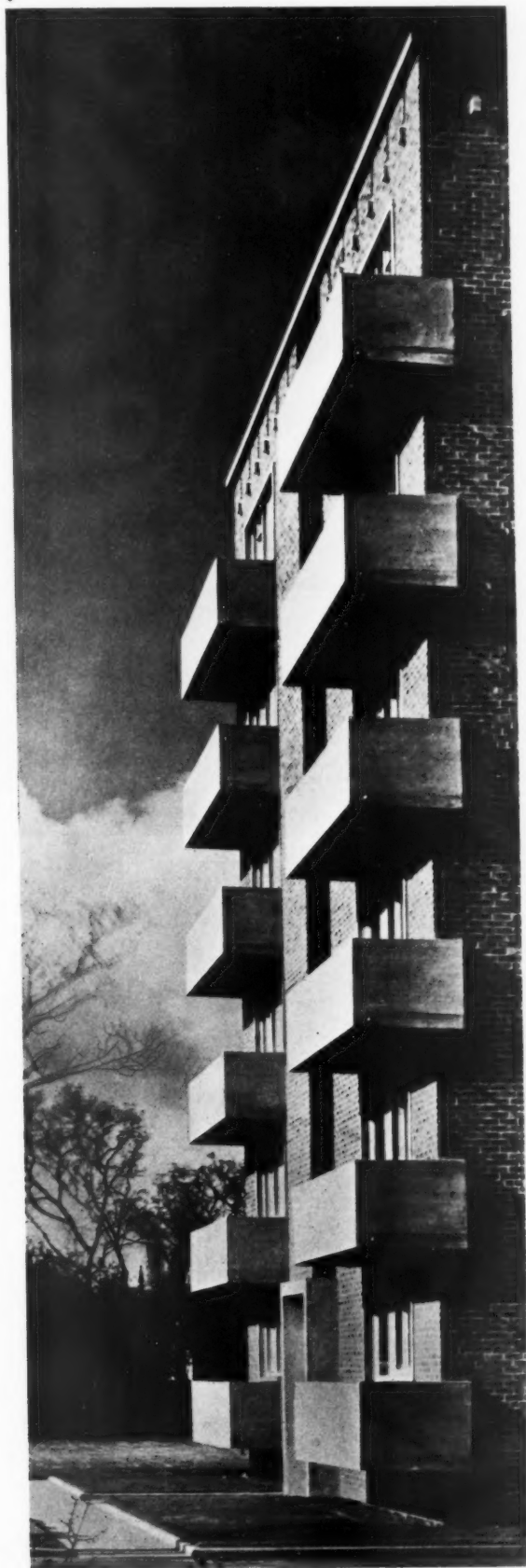
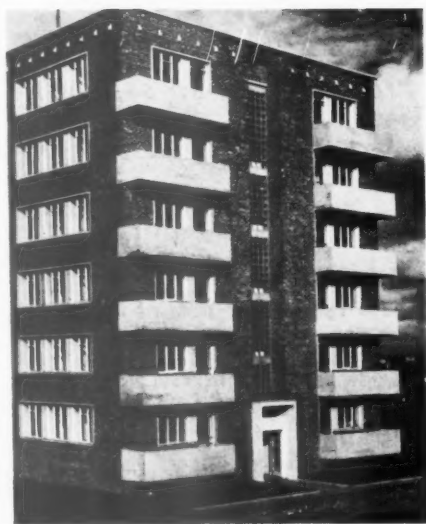
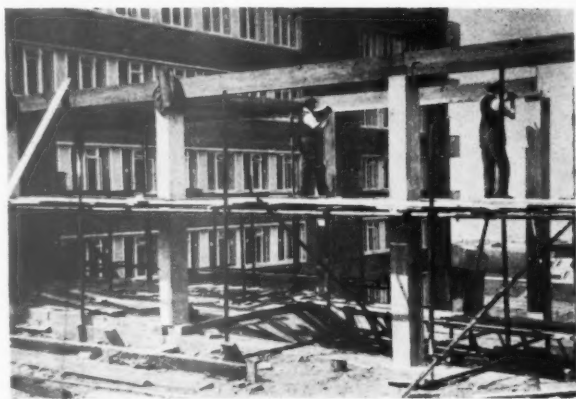
LOWER GROUND FLOOR PLAN

**PLAN**—Self-contained flats varying from one to four bedroom types. The approach is by internal corridors, naturally lighted at the ends and the middle. Large living rooms have been provided in all cases, and the kitchens and bathrooms, which are grouped round ducts, are mechanically ventilated, as also are the lifts.

**EXTERIOR TREATMENT**—External walls are 14-in. cavity

construction, a 3-in. local facing brick being used. The bonding courses (immediately above floor level) are balanced by rows of snap headers spaced at intervals. External woodwork and metal casements are painted marine white to contrast with the natural colour of the concrete, while the balcony, canopy and coping soffits are picked out in ochre. Concealed floodlights have been provided at the north and south entrance porches.

H. THEARLE IN ASSOCIATION WITH S. SILCOCK



*Top, progress photographs showing the erection of the temporary roof to the loggia; and placing the reinforcement in one of the beams. Above and right, two views of the south end.*

## PORTLAND COURT, NEW BRIGHTON



DESIGNED BY H. THEARLE  
IN ASSOCIATION WITH S. SILCOCK



**INTERNAL FINISH**—Fitted carpets have been installed in the lounge and corridors. The windows are standard throughout, of wood, and were designed to utilize a standard metal unit comprising a side hung casement and night ventilators. For insulating purposes, cork has been used extensively both in conjunction with the breeze block partitions and the R.C. floors, but generally density of material has been relied upon as far as possible.

**SERVICES**—The heating installation consists of gravity feed coke boilers under thermostatic control. The flats are centrally heated, each having an independent circuit. Hot water is supplied from central boilers, and refrigerators are installed in the kitchens. The plumbing is of the one pipe system.

Above, the entrance lounge; left, a view from the loggia lobby looking towards the main staircase.

The consulting engineer for structure and services was Dr. Oscar Faber, and the mural decorations were executed by Mr. W. L. Stevenson. The general contractors were Messrs. R. Costain and Sons (Liverpool), Ltd.; for list of sub-contractors, see page 30.



# WORKING DETAILS : 713

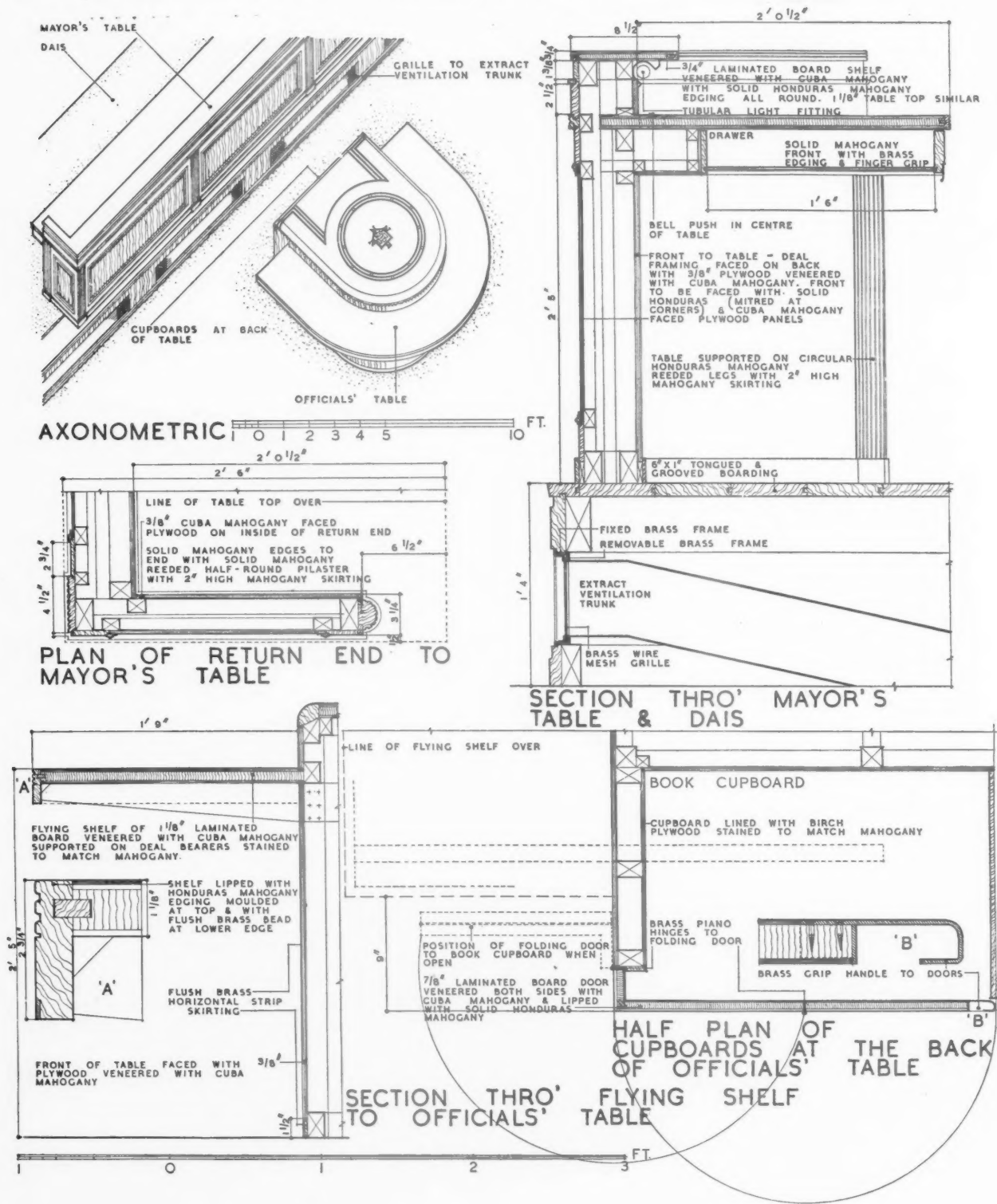
MAYOR'S DAIS AND OFFICIALS' TABLE • NORWICH CITY HALL. • C. H. JAMES AND S. ROWLAND PIERCE



The Mayor's table and the officials' table are in mahogany (Honduras solids and Cuban veneers) inlaid with brass bands, edges and skirtings. The extract ventilation trunk runs underneath the dais with brass wire mesh grilles in the dais front. In the top of the officials' table the City Arms in heraldic colours are inlaid in various metals and woods. At the back of the table is a book cupboard with specially designed folding doors. Details are shown overleaf.

# WORKING DETAILS : 714

MAYOR'S DAIS AND OFFICIALS' TABLE • NORWICH CITY HALL • C. H. JAMES AND S. ROWLAND PIERCE



Axonometric and details of the mayor's dais and officials' table illustrated overleaf.

## The Architects' Journal Library of Planned Information

# INFORMATION SHEET SUPPLEMENT



### SHEETS IN THIS ISSUE

**693** Fuel Storage

**694** Kitchen Equipment



*All the Information Sheets published in The Architects' Journal Library of Planned Information since the inception of the series to the end of 1937, have been reprinted and are available in the four volumes illustrated here. Price 21s. each.*

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601 : Sanitary Equipment  
 602 : Enamel Paints  
 603 : Hot Water Boilers—III  
 604 : Gas Cookers  
 605 : Insulation and Protection of Buildings.  
 606 : Heating Equipment  
 607 : The Equipment of Buildings  
 608 : Water Heating  
 609 : Fireplaces  
 610 : Weatherings—I  
 611 : Fire Protection and Insulation  
 612 : Glass Masonry  
 613 : Roofing  
 614 : Central Heating  
 615 : Heating : Open Fires  
 616 : External Renderings  
 617 : Kitchen Equipment  
 618 : Roof and Pavement Lights  
 619 : Glass Walls, Windows, Screens, and Partitions  
 620 : Weatherings—II  
 621 : Sanitary Equipment  
 622 : The Insulation of Boiler Bases  
 623 : Brickwork  
 624 : Metal Trim  
 625 : Kitchen Equipment  
 626 : Weatherings—III  
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 628 : Fireclay Sinks  
 629 : Plumbing  
 630 : Central Heating  
 631 : Kitchen Equipment  
 632 : Doors and Door Gear  
 633 : Sanitary Equipment  
 634 : Weatherings—IV  
 635 : Kitchen Equipment  
 636 : Doors and Door Gear  
 637 : Electrical Equipment, Lighting  
 638 : Elementary Schools—VII  
 639 : Electrical Equipment, Lighting  
 640 : Roofing  
 641 : Sliding Gear  
 642 : Glazing  
 643 : Glazing  
 644 : Elementary Schools—VIII  
 645 : Metal Curtain Rails  
 646 : Plumbing  
 647 : Veneers  
 648 : U.S.A. Plumbing—V  
 649 : U.S.A. Plumbing—VI  
 650 : Ventilation of Factories and Workshops—I  
 651 : School Cloakrooms (Boys)  
 652 : U.S.A. Plumbing—VII  
 653 : Plumbing  
 654 : U.S.A. Plumbing—VIII  
 655 : School Cloakrooms (Girls)  
 656 : Ventilation of Factories and Workshops—II  
 657 : Floor Construction  
 658 : Partitions  
 659 : Equipment  
 660 : Asbestos-Cement Decorated Sheets

661 : Aluminium  
 662 : Sound Resistance  
 663 : Adjustable Steel Shelving  
 664 : Sheet Lead Work  
 665 : Adjustable Steel Shelving  
 666 : Sound Insulation  
 667 : A.R.P.  
 668 : Aerodromes  
 669 : Aluminium  
 670 : Metal Trim  
 671 : Rainwater Gutters  
 672 : Waterproofing  
 673 : Aluminium  
 674 : Roof Insulation  
 675 : Furniture  
 676 : Ventilation of Factories and Workshops—III  
 677 : Oil Paint  
 678 : Ventilation of Factories and Workshops—IV  
 679 : Plumbing  
 680 : Aluminium  
 681 : Corded Curtain Rails  
 682 : Sound Insulation  
 683 : Roofing Tiles  
 684 : Sheet Metals  
 685 : Partitions  
 686 : Aluminium  
 687 : Plumbing  
 688 (81 revised) : Bricks (Standard Specials)  
 689 : Suspended Ceilings  
 690 : Acoustics  
 691 : Fuel Storage  
 692 (84 revised) : Bricks (Standard Specials)

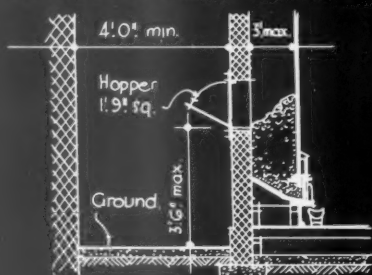






## THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

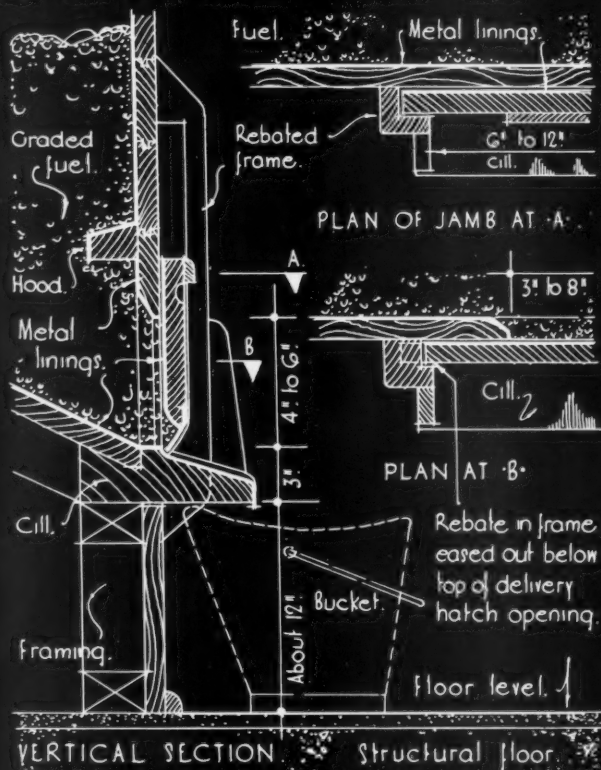
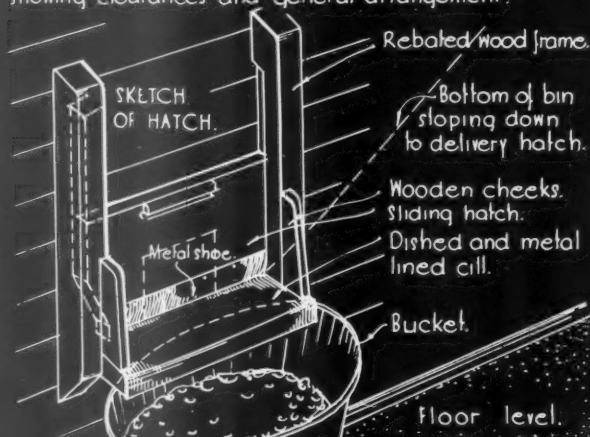
## TYPICAL DETAILS OF A GRAVITY FEED STORAGE BIN FOR SMALL GRADED FUEL



REFUELLING: The bin is refilled by means of a metal hopper in the external wall.

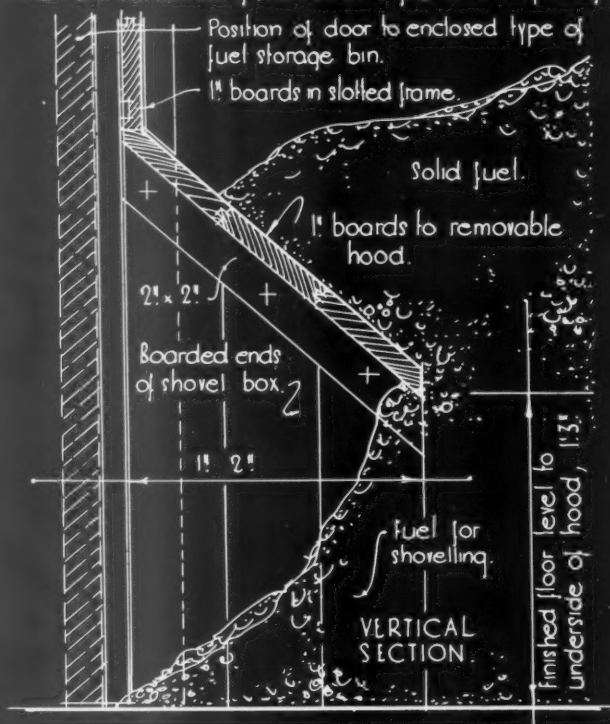
OPERATION: Coal bucket is placed beneath lip of cill, & hatch raised till required amount of fuel is released.

KEY DIAGRAMMATIC SECTION through storage bin showing clearances and general arrangement.

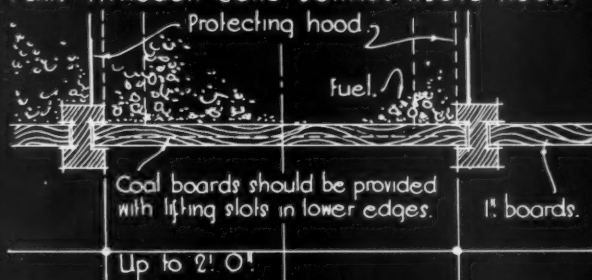


## TYPICAL DETAILS OF WOODEN SHOVEL-BOX CONSTRUCTION IN FUEL STORAGE BINS

The walls surrounding the wooden fuel bins may be of any suitable material, lined with sheet iron if not solid.



## PLAN THROUGH COAL BOARDS ABOVE HOOD



## PLAN THROUGH JAMBS OF SHOVEL BOX



*Information from the Coal Utilisation Council.*

INFORMATION SHEET: FUEL STORES FOR SMALL & MEDIUM SIZED HOUSES: No. 2.  
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WCI

THE ARCHITECTS' JOURNAL  
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## INFORMATION SHEET

• 693 •

### FUEL STORAGE

**Subject :** Domestic Coal and Coke Bins

**General :**

This Sheet deals with fuel stores for domestic purposes, and gives details of a gravity feed bin for small coal or coke, and of a shovel box with sliding front suitable for all types of bin.

Details of other types of bin are given on Sheet No. 691.

**Gravity feed bins :**

The gravity feed bin cannot be used for the large types of coal, but is suitable for all coal and coke up to 4". The width of the opening should be designed to suit the type of fuel to be used, and varies from 6" wide for the smallest nuts and peas to 12" for the larger sizes.

The smaller sizes of fuel will feed into the coal bucket purely by gravity, but with the large and more irregular sizes a short fine rake may be necessary.

**Shovel box :**

The details given here are for a shovel box with an upper hood and side cheeks and sliding door as shown fitted to each of the fuel bins set out on Sheet No. 691.

The upper hood takes the weight of the fuel above, but allows the fuel to roll forward into the box for shovelling.

**Fuels for Domestic Purposes :**

To get the full efficiency out of an appliance, it is essential that the fuel should be suitable for the particular appliance in which it is burned. The following fuels are recommended for various appliances :—

**Open Fires.**—Bituminous house coal of good quality and of "large" or cobble size ; low temperature fuel ; or, in specially adapted grates, free-burning low volatile coals and graded gas coke or furnace coke.

**Continuous-burning Stoves** (according to design).—Anthracite or low volatile coals of appropriate size ; low temperature fuel ; gas or furnace coke of nut size ; hard kitchen nuts ; or a mixture of kitchen nuts and coke nuts.

**Cookers** (according to design).—Kitchen nuts or cobbles ; anthracite ; low volatile coals ; gas coke or furnace coke.

**Hot-water Boilers** (according to design).—Anthracite boiler nuts ; low volatile coals of nut size ; graded gas coke or furnace coke.

These recommendations are necessarily general, but the Council's engineers will give more precise information at any time on request on the most suitable fuel for any job.

**Technical Service :**

The British coal industry, through the engineers of the Coal Utilisation Council, provides technical service to architects and to the public generally on all problems relating to the use of coal and its derivatives for all purposes.

In addition to the staff at the head office, an engineer is attached to each branch office at the addresses given below. Additional general information is also available in various technical bulletins issued free by the Council.

**Previous Sheets :**

This is the seventh Sheet issued by the Coal Utilisation Council, the previous Sheets being Nos. 571 (fuel storage), 582 (heating stoves), 603 (hot water boilers), 614 (radiators), 630 (central heating) and 691 (fuel storage).

**Issued by :** The Coal Utilisation Council

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East Parade, Leeds, 1

Telephone : Leeds 23616

**North-Western Branch :** 38 Deansgate,  
Manchester, 3

Telephone : Blackfriars 4081

**Scottish Branch :** 81 Mitchell Street,  
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Telephone : Dublin 23034

**South Wales and South-Western Branch :**

United Kingdom Provident Buildings,  
14-16 Baldwin Street, Bristol, 1

Telephone : Bristol 24797







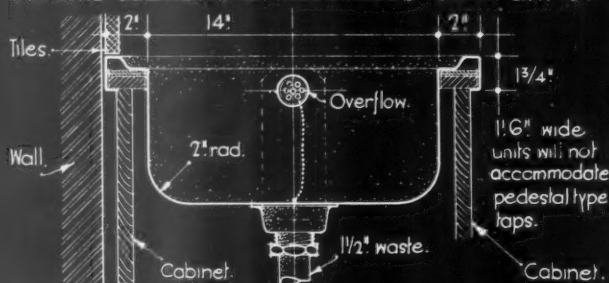
## THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

## DIAGRAMS SHOWING STANDARD SIZES OF PRESSED STAINLESS STEEL SINKS :

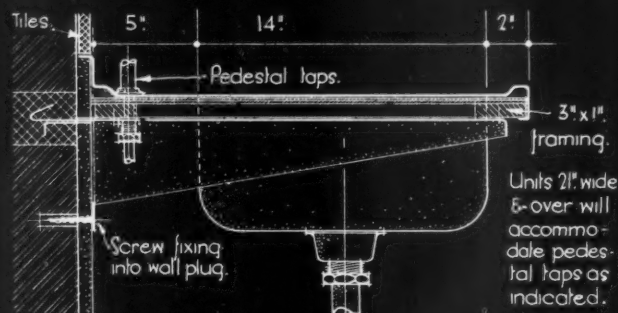
Besides their position in the standard sized sink units shown below, these sinks can be assembled in draining boards of any size in any desired combination.



## TYPICAL SECTIONS OF ASSEMBLED SINK UNITS :



Cross section of 16" wide unit showing standard metal mouldings and underframe, and unit fitted on wood or metal cabinet.

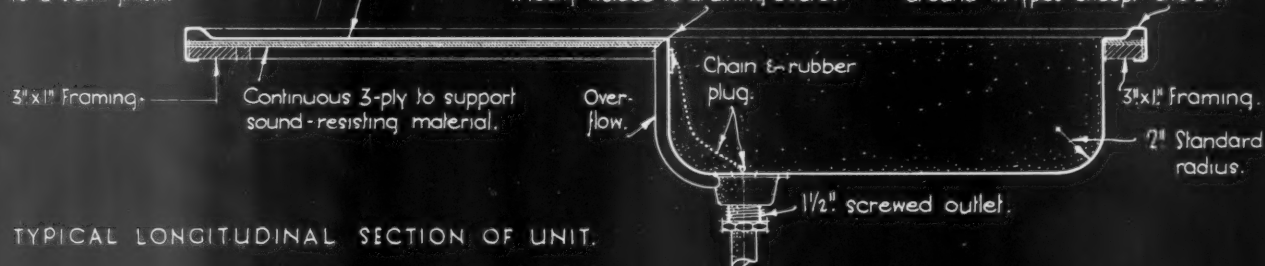


Cross section through 19" unit draining board, showing alternative turn-up and tuck-in at back edge, and steel cantilever supporting brackets.

All exposed surfaces are polished to a satin finish.

All sinks are seamless and electrically welded to draining boards.

The 3/8" anti-splash rim is continuous around all types except U.C.B.S.



## TYPICAL LONGITUDINAL SECTION OF UNIT.

## DIAGRAMMATIC PLANS OF STANDARD SINK UNITS GIVING OVERALL SIZES AND SINK TYPES :



SINK UNITS TYPE C.S.  
Combined sink and rinsor bowl unit.



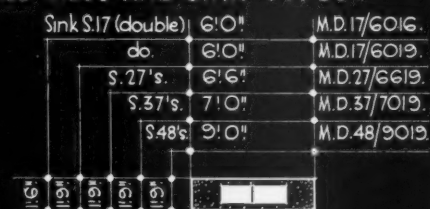
SINK UNITS TYPE M.S.  
Designed for average sized houses.

The R.S. and L.S. type units shown below are primarily designed for flats & small houses.

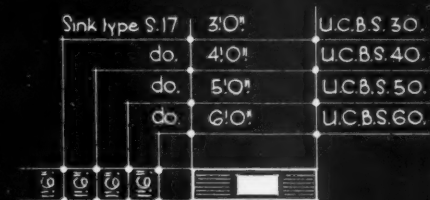


SINK UNITS TYPE R.S. & L.S.  
Sink may be either right or left handed.

SIZES: The overall sizes of units given above are a selection only from the full range. In addition to the standard sink units, units can be purpose made to any size.



SINK UNITS TYPE M.D.  
Recommended for hotel & restaurant use.



SINK UNITS TYPE U.C.B.S.  
Wash-up drainers for hotels & public bars.

Information from The Stainless Steel Sink Co. Ltd.

INFORMATION SHEET : STAINLESS STEEL SINKS AND SINK UNITS.  
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON W.C1. *Wm. A. Bayne*

THE ARCHITECTS' JOURNAL  
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## INFORMATION SHEET

• 694 •

## KITCHEN EQUIPMENT

**Product :** Pland Stainless Steel Sinks and Sink Units**Manufacture :**

The stainless steel sinks and sink units illustrated on this Sheet are each made in a single piece. The sheet metal is of relatively light weight throughout, thus enabling easy handling in installation and offering considerable resilience to falling crockery. The sinks, which are available separately and in any size if desired, are in the standard units electrically welded to the drainers. There are no joints or crevices in any part of the assembled fitment and all internal corners are well rounded. The sinks are entirely of British material and workmanship.

The satin polished surfaces are practically indestructible and will not corrode in contact with liquids or other substances used in the preparation of food.

Any combination of standard or special sinks and drainers can be made to suit individual requirements.

**Framing and Insulation :**

Units are normally supplied on 1-in. timber framing, covered with three-ply to support the continuous sound-deadening material directly beneath the drainer. Cantilever brackets for building-in can be supplied for all widths of units. These can be screwed direct to the wood framing as shown.

**Edges :**

The edge mouldings shown on the sections overleaf are standard on all types except U.C.B.S. sinks, which are provided with 3-in. vertical ends and back.

Specially moulded edges can be made for building-in purposes. An alternative back edge is available as shown, this being an upstand of 1½ ins. with a ¾-in. turn in.

**Fittings :**

Standard equipment on all sink bowls (except type S.09 which overflows into its adjoining unit) includes a grated overflow leading back to the waste outlet. Where double sinks are used with a low division member as in type M.D., only one sink need be provided with an overflow.

A stainless steel chain with rubber plug is attached to the grating, and 1½-in. grated waste outlets with screwed tail pieces are fitted. Any suitable type of trap may be used.

**Services :**

There is enough space behind the sink of all units 21 in. wide and over for the accommo-

dation of pedestal type taps if desired. The taps are not included but can be supplied as an extra.

**Maintenance :**

The units themselves are unbreakable and permanent. The surface can be cleaned with ordinary soap and water and no scrubbing or abrasive chemical cleaners are necessary to preserve the original brightness of the metal.

**Prices :**

The prices of standard units range between £7 and £28, according to size, number and size of sinks, etc.

The following are prices, at the time of publication, of the units given on the front of this Sheet :—

Sinks				
S.09	...	...	...	...
S.17	...	...	...	£3 12s. 6d.
S.27	...	...	...	£4 5s. 6d.
S.37	...	...	...	£5 7s. 6d.
S.38	...	...	...	£5 15s. 0d.
S.48	...	...	...	£6 17s. 6d.

Type C.S.				
C.S. 17/5016	...	...	...	£14 5s. 0d.
C.S. 27/5619	...	...	...	£15 8s. 9d.
C.S. 17/6016	...	...	...	£15 4s. 6d.
C.S. 27/6619	...	...	...	£17 7s. 6d.
C.S. 27/7019	...	...	...	£18 2s. 6d.

Type M.S.				
M.S. 17/4616	...	...	...	£9 15s. 0d.
M.S. 27/5619	...	...	...	...
M.S. 27/6019	...	...	...	£12 15s. 0d.
M.S. 37/6019	...	...	...	£13 4s. 6d.
M.S. 48/7019	...	...	...	£16 5s. 6d.

Type M.D.				
M.D. 17/6016	...	...	...	£16 15s. 0d.
M.D. 17/6019	...	...	...	£17 9s. 0d.
M.D. 27/6619	...	...	...	£18 15s. 0d.
M.D. 37/7019	...	...	...	£20 6s. 6d.
M.D. 48/9019	...	...	...	£28 12s. 0d.

Type U.C.B.S.				
U.C.B.S. 30	...	...	...	£7 4s. 0d.
U.C.B.S. 40	...	...	...	£8 5s. 0d.
U.C.B.S. 50	...	...	...	£9 4s. 6d.
U.C.B.S. 60	...	...	...	£11 2s. 6d.

Type R.S. and L.S.				
S.17/3616	...	...	...	£7 14s. 6d.
S.17/4019	...	...	...	£9 14s. 0d.
S.27/4016	...	...	...	£9 10s. 0d.
S.27/4619	...	...	...	...
S.27/5019	...	...	...	£11 0s. 9d.

**Manufacturers :** The Stainless Steel Sink Co., Ltd.

**Address :** Ring Road, Lower Wortley, Leeds, 12

**Telephone :** Armley 38711

**London Office :** 40 Wood Street, Westminster, S.W.1

**Telephone :** Abbey 1575



## SHOP AND SHOWROOMS, EALING, W.



R E C O N S T R U C T E D  
F R O M D E S I G N S O F  
S M I T H A N D L O B B



**PROBLEM**—Reconstruction of shop with showrooms for sale of furniture, floor coverings, etc. Alterations required to give impression of size and to be carried out with minimum of inconvenience to shopping. The work was completed in ten weeks. The building originally consisted of three separate shops with living accommodation over. A passenger lift was installed some time ago. The architects have been retained in a consulting capacity to advise on questions of display, etc., for a period of twelve months.

**SITE**—The frontage to High Street is 64 ft., and that to Ealing Green 32 ft.

**PLAN**—The existing entrance to the shop has been retained, but alterations have been made internally to give improved display.

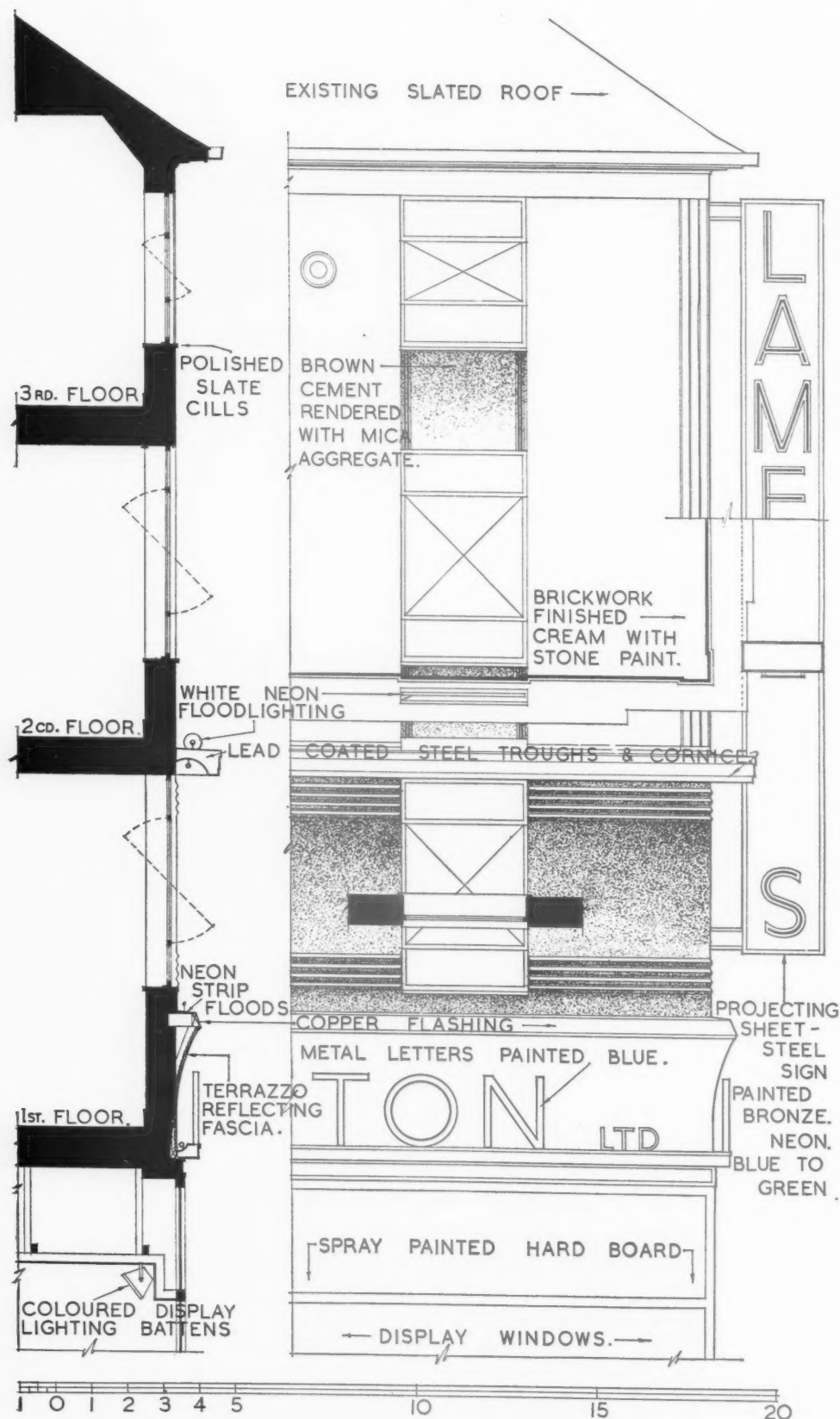
**CONSTRUCTION**—The existing box frames to sashes were removed and the reveals bricked up and plastered. The fascia was framed in wood and covered with expanded metal coved to shape and finished in flint, plaster polished. The light boxes are in lead coated sheet steel painted four coats.

**EXTERNAL FINISH**—The rendering is in a coloured cement with mica added and has a scraped finish. Colours externally are: Brown rendering; light cream paint to brickwork; light blue paint to windows and gutters; and bronze finish to all light boxes and signs.

Top, the building before and after alteration, taken from the same viewpoint; and two night views.

## SHOP AND SHOWROOMS, EALING, W.

RECONSTRUCTED  
FROM DESIGNS  
OF SMITH  
AND LOBB



ELEVATION AND SECTION OF THE RECONSTRUCTED FRONT

**LIGHTING** — The vertical neon sign is in green-blue and all other lighting in white. The shop window lighting is by battens with colour screens for special displays.

The general contractors were : H. W. Pain and Son; for interior : F. D. Hidden & Co., Ltd.; for list of sub-contractors see page 30.

## SEVINGTON HOUSE, LEIGH DELAMERE, WILTS

RECONSTRUCTED  
FROM DESIGNS OF  
G. PARKER PEARSON

**PROBLEM**—The building was originally a sixteenth century farm house, afterwards turned into two cottages, which in 1935 were condemned by the local authority. Being situated in a hamlet with beautiful surroundings, and the cottages having possibilities, it was decided to convert them into a country residence, maintaining the original architectural character. Generally the existing walls remain, but the condition of the timbers made it necessary for the roof to be stripped, the stone tiles being relaid on new timbers.

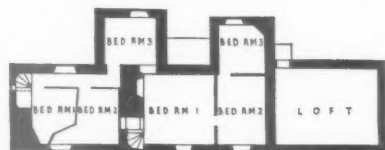
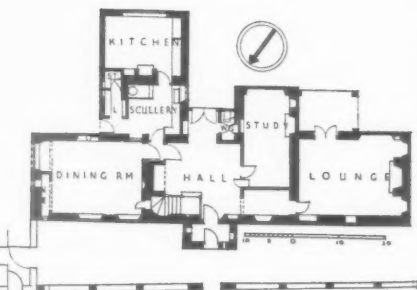
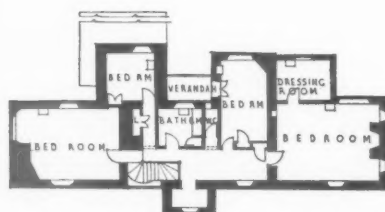
As the work progressed, several interesting features were revealed. On the removal of the grates in the living rooms of the cottages the original large fireplace openings and ash pits were discovered, and also a number of wall recesses. Miscellaneous objects of interest were found in the building during restoration, particularly an Apocrypha Bible in a sealed bread oven, a wood doll's head in a wattle and daub partition, and an ox shoe below the stone paving in front of the ox-stable, afterward pigsty, and now the lounge. In the reconstructed house the living room of cottage No. 2 forms the hall, and the only additions are the porch, kitchen and a dressing room adjoining the principal bedroom (formerly the loft), beneath which is the loggia. The accommodation comprises dining room, lounge, study, kitchen, scullery and hall, with four bedrooms and a dressing room.

**SITE**—The building stands on  $2\frac{1}{2}$  acres of ground, one acre of which is utilized as garden and orchard. Outbuildings immediately adjoining are converted into a laundry and fuel house, and the cowshed into a garage and stable.

**CONSTRUCTION**—The building generally is of cornbrash stone, with stone mullions, heads, cills, etc. The roof is stone tiled. The floor of the hall is relaid with stone slabs. The scullery floor is of buff tiles in cement concrete. Right, views from the north, before and after reconstruction; below, views from the west, before and after reconstruction.



## SEVINGTON HOUSE, LEIGH DELAMERE, WILTS

GROUND AND FIRST FLOOR  
PLANS BEFORE RECONSTRUCTIONRECONSTRUCTED FROM DESIGNS OF  
G. PARKER PEARSON GROUND AND  
FIRST FLOOR PLANS AFTER  
RECONSTRUCTION

**PLAN**—The front of the house facing north, and the proximity of the building line to the road, made it desirable to arrange the majority of the windows at the back of the house. It will be noticed from the plan that the new porch acts as a buttress to the front walls, which are one foot out of upright, and that wing walls, with openings to the kitchen garden and lawns, are built at each end.

The ground has been excavated around the house to below floor level, and a concrete channel constructed to act as a dry area.

During the reconstruction, a recess and a flue, the purpose of which could not be ascertained, were found in the living room of cottage No. 1, now dining room. This recess, with the original plaster, is maintained. The dining room has been panelled in oak taken from a farm house, originally a sixteenth-century monastery. A secret panel gives access to a cupboard, and a door, incorporated in the panelling, leads into a large cupboard under the stairs. A beam exposed during reconstruction had "T.S.1712" chalked upon it. In the exposed fireplace a brick oven opening was found, and in it a small window has been inserted, with a piece of leaded glass dated 1520. The hall also contains several objects of interest. A Roman

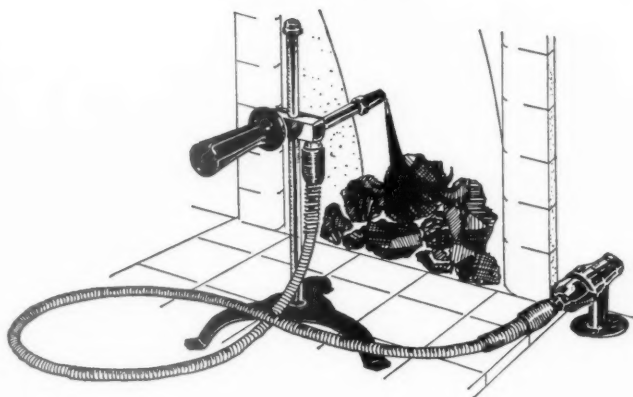
plaque of alabaster is inserted in one wall; a door of Norman glass encloses the telephone, which may be used from either the study or the hall. A cupboard in the thickness of the outer wall contains the various finds during reconstruction work, as a "museum."

The oak staircase, with carved newels and balusters, leading from the hall, was taken from a seventeenth-century house which had to be demolished as no tenant could be found for it, owing to the fact that it was reputed to be haunted.

**INTERNAL FINISH**—The partition between hall and study is of ashlar as originally constructed, the surface exposed in the hall showing the joints in the stonework. The plastering finishes are antique style and different in each room, and no two doors or fireplaces are alike. Most of the doors are of reconstructed church panelling of the fifteenth century. The oak ceiling joists in the dining room, hall and lounge are exposed, and soundproof boards have been fixed in the bedroom floors. The kitchen, scullery and bathroom are finished in white enamel, the latter having white glazed tiles. Built-in wardrobes are provided in all bedrooms.

Above, two views of the rear elevation, before and after reconstruction.





## TRADE NOTES

[By PHILIP SCHOLBERG]

### Lighting Coal Fires

**M**OST people in London seem to have been sent a copy of "Britain's Burning Shame," the anti-smoke propaganda booklet recently produced by the Gas Light and Coke Co. I forget exactly how many tons of soot fall on London every year, but it is enough to fill Trafalgar Square up to the top of the column, assuming, of course, that you think this is worth the trouble. But whatever the figure is, it is far too much, and when you come to think of the gas, petrol, tar, dye bases and other things you can get out of coal it seems little less than madness to burn it in an ordinary fire. None the less people will presumably go on doing it, if only because they like looking at the pretty flames. The coal interests, however, are reasonably alive to the smoke nuisance, and a method has now been evolved for lighting fires which reduces the amount of smoke emitted by eighty to ninety per cent. This is not, of course, a complete answer to the problem, for a fire smokes for a short period every time more coal is put upon it, but there is a great deal to be said for any device which will do away with smoke while the fire is being lighted, and which will also make lighting easier. The sketch at the head of these notes shows a small fitting recently developed by the British Coal Utilization Research Association. All you have to do is pile the coal in the grate and then light the gas jet, which plays downwards on the centre of the fire for ten to fifteen minutes. As soon as the coal is burning properly the jet can be removed. This method is better than the more usual gas poker, for the jet coming downwards on top of the fire manages to consume the smoke, whereas the gas poker under the fire cannot consume any smoke at all.

With this fitting there is the additional advantage that it is not necessary to lay the fire in the usual way with paper and sticks, for the fresh coal can, if necessary, be laid on top of last night's ashes. Since the price of this fitting is only 12s. complete with flex and gas plug socket, it seems worth while on labour-saving grounds

alone, with the smoke pollution argument as an additional incentive if your client happens to have a social conscience. If the idea of this fitting standing in the hearth seems a little untidy, it is possible to have the fitting built in to the side of the fire, when nothing will be visible except a small nozzle projecting through the firebrick. For building in two jets are recommended, one on each side of the fire. I seem to remember that when this device was first demonstrated a long time ago by the Coal Utilization Council, the jets were self-lighting with a catalyst, but this is probably an unnecessary refinement. Anyway, most of these self-lighting devices are very good in the showroom, but not always so reliable in actual practice over a long period. With a two-jet fitting the amount of gas used to light the fire is about 10 cubic feet, rather less than ½d. with gas at 9d. a therm, and also about the same as the cost of a fire-lighter. — (William Edgar and Son, Ltd., Blenheim Works, Hammersmith.)

### Ceiling Roses and Lampholders

The G.E.C. have just introduced a new range of large base Bakelite ceiling roses and lampholders which dispense with the usual wood block, as they can be mounted straight on the ceiling, or on the conduit box, since they have 2-in. fixing centres to suit B.S.S. conduit boxes. They are available either with porcelain or Bakelite interiors, and prices range from 3s. a dozen for the two terminal small cover type in brown to 10s. for the three-terminal large cover type in cream. Much the same advantages are offered by the lampholders, which have the same size base. The price of these is 9s. 8d. a dozen in brown, 15s. in cream. For the shielded type these prices are 11s. 8d. and 18s. — (The General Electric Co., Ltd., Magnet House, Kingsway, London, W.C.2.)

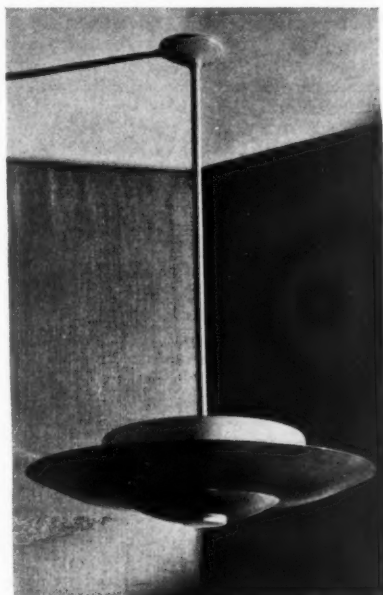
### Lighting Fittings

If Best and Lloyd had never done anything but produce the Bestlite lamp we should still have a good deal to be grateful for. Practically every architect seems to have one in his office, and they are often to be found in the most surprising places, for

the strongholds of reaction seem to think that it is quite in order to have a lamp which looks like a lamp, and this eight- (or is it ten?) year old design has probably been the thin end of quite a large wedge, for it must have been many people's first introduction to rational design in light fittings. Old though this design is, it is still one of the best standard models, and seems to survive any amount of modification, though I am sorry to see that the manufacturers themselves have sometimes fitted it with a conical parchment shade instead of the much more sensible spun aluminium reflector. For the last two or three years Best and Lloyd have been fairly quiet, but they have now announced some more ceiling fittings, one of which is illustrated at the foot of this page. This model has a reflector 24 in. diameter in anodized aluminium finished a natural silver, with a glass in yellow or white flashed opal. The ceiling plate, suspension tube and bottom knob are sprayed ivory colour, and the fitting takes three lamps of anything between 40 and 100 watts. The price is £4 11s. 3d., or £1 less without the glassware. While this particular design is my own particular favourite of the new bunch, the others are well worth seeing. None of them is really startling but there are nothing like enough decent standard ceiling fittings available for the small house, and it is high time we had some more. Many firms are tempted to produce something a little more rich looking and the result is only too often a cinema fitting on a small scale. May I suggest that Best and Lloyd make a gesture and let us know the name of the designer? He seems to deserve a certain amount of credit. — (Best and Lloyd, Ltd., 40 Great Marlborough Street, London, W.1.)

### Electric Water Heaters

The new Sadia catalogue contains one phrase which might well be brought to the notice of electrical propagandists. Sadia, as you know, is a thermostatically controlled water heater. As a fit-and-forget device these heaters are all that one could want,



and this is the line the manufacturers take. "Admittedly the Sadia is a luxury—if anything so economical can be called a luxury. But what a necessary luxury." This seems a fair and reasonable argument, though I doubt if it will go down well with the supply companies, who can all conclusively prove that electricity is ten per cent. or more cheaper than any other form of fuel. And before the Central Electricity Board and the E.D.A. start writing furious letters let me say that, given the right circumstances, electricity undoubtedly is cheaper. So, for that matter, are coal and gas. The point is not strictly material, but it is something of a relief to meet a manufacturer who does not try to show a saving in cost.

New items, listed by this firm for the first time, include a pressure heater for floor mounting. This design is almost the same as the wall mounting types, but the heating elements and thermostat are mounted horizontally, and can be taken out without emptying the water tank. This heater is available in five sizes from 20 to 60 gallons capacity, the 40, 50 and 60 gallon sizes being intended for large houses with several bathrooms, or for offices and institutions. Loadings vary from  $1\frac{1}{2}$  to 3 kilowatts. For larger installations two heaters can be used in water series, and by this means internal mixing of the hot and cold water is avoided.

Two new types of side entry circulator have also been evolved, one for fitting to existing storage tanks, and another for calorifiers. This last is an external circulating pipe which can be fitted to the outside of the tank without having to find out the position of the inner cylinder. The loadings of both these types are 2 and 3 kilowatts.—(Aidas Electric Ltd., Sadia Works, Rowdell Road, Northolt, Greenford, Middlesex.)

#### Cheap Heaters

Mention of electric water heaters reminds me that, in the usual hunt for Christmas presents, I was shown a small immersion heater which was about the most dangerous thing I have ever seen. For some years manufacturers have been producing small immersion heaters for putting into jugs of water or milk if you only want to heat up a small amount at a time. Possibly these are rather a fuss about nothing, but, with embedded elements, at least they are safe. The latest effort consists of two bare carbon electrodes which are slipped inside a porcelain tube, the current actually passing through the liquid to be heated. In the lid of the box it does at least say "do not touch the heating rods while the electric current is switched on," but it does not say that it is very nearly as dangerous to put your finger in the water while the current is on. The whole thing is cheap—only 3s. 6d. complete with a cup to hold the water—and it will presumably get into unskilled hands, where it will be as near murder as no matter. The box bears the statement "British made," so the best thing E.D.A. can do is to suppress it, and quickly.

#### Manufacturers' Items

Messrs. G. A. Harvey & Co., Ltd., of Woolwich Road, London, S.E.7, have sent us their "Harco" pocket diary for 1939. It measures  $5\frac{1}{2}$  ins. by 3 ins. and is extremely well bound. Each page is devoted to one week of

the year and, in the front, is a section (approximately 40 pages) devoted to the firm's products and other useful technical information.

We have received from the Ketton Portland Cement Co., Ltd., of Ketton, Rutland, their diary for 1939. In addition to the useful technical information in the front of the diary, there are no fewer than 16 maps, in colour, of various parts of the British Isles. It measures  $5\frac{1}{2}$  ins. by  $3\frac{1}{2}$  ins.

In the list of contractors for the flats in Sloane Street, Chelsea, published in our issue for December 22, we omitted the name of Joseph Sankey and Sons, Ltd., who supplied the internal pressed steel window cills.

Messrs. Y. J. Lovell & Son, Ltd., announce that they have now taken over the old-established building and contracting business of Y. J. Lovell and Son, with head office at Gerrard's Cross and branch offices at London, Marlow and Beaconsfield.

The directorate of the new company includes the respective branch managers, each of whom has served the firm for over 20 years, and it will be their particular concern to maintain the tradition of first-class building always associated with the old firm, while the new facilities and finance available will ensure even better service being offered to clients, architects and surveyors.

Y. J. Lovell and Son, Ltd., would welcome the opportunity of quoting you for all classes of building work, and will be glad to give their keenest attention to any inquiries or orders with which they may be entrusted.

## THE BUILDINGS ILLUSTRATED

**CITY OF WESTMINSTER CENTRAL DEPOT** (pages 9-12.) Architect: G. Grey Wornum. Assistant: Lionel Smith. Structural Engineers: Messrs. R. T. James & Partners. Quantity Surveyors: Messrs. Drower & Son. Heating Consultant: Messrs. Albion T. Snell & Partners. Sculptor for Coats of Arms: E. Bainbridge Copnall. Clerks of Works: Mr. W. W. Marsh and Mr. H. Izzard. Boreholes: Legrand Sutcliffe & Son. Demolition: H. Sabey & Co.

Foundation Contract: General contractors: Messrs. W. & C. French, Ltd. Reinforced concrete piles: Franki Piling Co. Weighbridges: W. & T. Avery, Ltd.

Superstructure Contract: General Contractors: Messrs. W. & C. French, Ltd.

Sub-Contractors and Suppliers: Constructors, Ltd., steel clothing lockers; Taylor Pearce & Co., lock and door furniture; Clark, Hunt & Co., iron staircases, wrought iron road gates and steel sheeting; Dorman Long & Co., steel work (welded work using quasi-arc electrodes); J. H. Nicholson & Co., heating and hot water installation, extract fans to drying rooms and painting bays; Pinching & Walton, electrical installation; Benjamin Electric Ltd., and Ascog, Ltd., light fittings; Foster Engineering Co., electrical switchgear; Gent & Co., Ltd., electric clocks; J. W. Gray & Son, Ltd., lightning conductors; Waygood-Otis, Ltd., electric goods lift; Stothert & Pitt, Ltd., electric capstan; Paterson, Hughes & Co., Ltd., electric salt conveyors; B. & A. Engineering Co., Ltd., portculis gates and electric lifting gear; Dreadnought Fireproof Doors (1930) Ltd., gas-proof doors; Mather & Platt, Ltd., steel rolling shutters and steel doors; Haskins, steel rolling shutters and wood rolling shutters; Independent Sprinklers, Ltd., sprinkler installation and fire appliances; Williams & Williams, Ltd., metal windows and doors, patent roof glazing and lantern lights; Wallis Bainbridge & Co., pressed steel gutters; Matthew Hall & Co., Ltd., drainage, plumbing and roof flashings; John Bolding & Sons, Ltd., sanitary fittings; Carter & Co. (London) Ltd., quarry tiles and glazed tiles;

Stonart Asbestos Flooring Co., Ltd., composition floors; Prodorite, Ltd., hardened granolithic—special granolithic tiles and acid-resisting floor; Highways Construction, Ltd., hardened asphalt tiles; The Dover Engineering Works, Ltd., electric goods lift; Grill Floors, Ltd., gutter gratings; Limmer & Trinidad Lake Asphalt Co., Ltd., roof asphalt and asphalt lining to salt store; Stic B. Paint Sales, Ltd., sprayed and lacquered paint; Indestructible Paint Co., paint; William Briggs & Sons, Ltd., "Aqualite" roofing; Cellacite & British Uralite Ltd., roof sheeting and ventilators; J. A. King, Ltd., pavement lights; George Jennings (Lambeth), Ltd., "Rainforeware" faience; The Croft Granite, Brick & Concrete Co., Ltd., artificial Clapham stone and cast coat of arms; Hunziker (Great Britain), Ltd., bricks; Silent Gliding Doors, Ltd., sliding doors; Granwood Flooring Co., flooring; Benham & Sons, Ltd., kitchen fittings; Kingfisher, Ltd., committee room furniture; Bird Iles, Ltd., committee room curtains.

**PORTLAND COURT, NEW BRIGHTON** (pages 13-16.) Architects: Silcock and Thearle. The general contractors were R. Costain and Sons (Liverpool), Ltd., who were also responsible for the plumbing, electrical and kitchen equipment. The sub-contractors and suppliers included: Williams and Watson, Ltd., glazing and metal windows; Young, Austen and Young, Ltd., heating and ventilating; Marryat and Scott, Ltd., lifts; George Lowe and Sons, Ltd., ironwork; Troughton and Young, Ltd., and Merchant Adventurers of London, Ltd., light fittings; Ferroconcrete (Lancashire), Ltd., concrete windows; Korkoid Decorative Floors, rubber and cork floors; J. B. Johnson & Co., Ltd., plastering; John Stubbs and Sons, marble and quartz; Edward Marshall, Ltd., sanitary fittings; Ravenhead Brick Co., Ltd., facing bricks; Permanite, Ltd., flat roof; John McGeoch and Sons, Ltd., paving and asphalt to drives; Walker Bros. (Fireplaces and Tiles), Ltd., tiling; McAndrews and Forbes Co., doors; Campbell and Isherwood, Ltd., refrigerators; D. R. Weir and Son, Ltd., door furniture.

**MESSRS. LAMERTON'S PREMISES** (pages 25-26.) Architects: Smith and Lobb. The general contractors were H. W. Pain and Son, and the sub-contractors and suppliers included: F. D. Hidden & Co., Ltd., internal contractors; Stephens and Carter, Ltd., scaffolding; London Brick Co., Flettons; George Fletcher and Sons, Ltd., plasterers, Cullamix rendering and plaster; Cement Marketing Co., Ltd., Cullamix; Slate Slab Products, slate sills; Thermolux Glass Co., Ltd., glass; Falkner, Greene & Co., glazing; W. H. Cooper & Co., Ltd., copper flashings; James Akers & Co., Ltd., clocks (Smith's Electric Movement), sunblinds, high tension and low tension troughs and neon lighting and all signs, and metalwork; Yannedis & Co., door furniture; Crittall Manufacturing Co., Ltd., casements; Haskins, sunblinds; Stic-B Paint Sales, Ltd., paint for brickwork; Walpamur Co., Ltd., Duradio paint for ironwork; L. C. Lamerton, Ltd., textiles and furniture.

**HOUSE AT SEVINGTON** (pages 27-28.) Architect: G. Parker Pearson. General contractors, Downing, Rudman and Bent, Ltd.

#### Housing Progress in Scotland

In Scotland during the quarter ended September 30, 1,703 houses of a working-class type were erected by private enterprise without State assistance, as compared with 1,715 houses completed during the corresponding quarter of 1937.

In the period January 1 to September 30, 1938, 5,182 houses of a working-class type have been completed by private enterprise. The comparable number for the first three quarters of 1937 was 5,664 houses.

Since 1919 a total of 296,228 working-class houses have been built in Scotland—202,747 by local authorities and 93,481 by private enterprise.

# PRICES

On the following pages appear (a) Prices for Measured Work, Part II; (b) Prices for Approximate Estimates.

## ★ ANSWERS TO QUESTIONS

While the JOURNAL, naturally, cannot presume to undertake the responsibilities of a quantity surveyor, it has arranged with the authors of this Supplement to answer readers' questions regarding any matter that arises over their use of the Prices Supplement in regard to their work, without any fee. Questions should be addressed to the Editor of the JOURNAL, and will be answered personally by Messrs. Davis and Belfield. As is the normal custom, publication in the JOURNAL will omit the name and address of the enquirer so that it is unnecessary to write under a pseudonym.

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.
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.

● Prices are for work executed complete and are for an average job in the London Area, all prices include for overhead charges and profit for the general contractor.

## PART 4

### CURRENT PRICES FOR MEASURED WORK—II

BY DAVIS AND BELFIELD

#### JOINER

##### Deal Flooring

		1"	1½"
Plain edge flooring in batten widths ..	per square	38/-	46/5
Ditto tongued and grooved ditto ..	per square	41/9	50/6
T. & G. B.C. Pine rift flooring in narrow widths ..	per square	50/-	—

##### Wood Block Flooring, laid herringbone, 100 yards and up

D.G. and T.G. kiln dried, 2 block border, laid in hot mastic composition on cement screed, including 2 feet run of straight cutting per yard super, and wax polishing at time of laying.

		1"	1½"
		nominal	nominal
Burma teak .. .. .	per yard super	12/4	16/10
Canadian Maple .. .. .	per yard super	10/6	12/1
25-30 per cent. quart Austrian Oak .. .. .	per yard super	12/1	14/11
Plain American Oak (no selection made for sap) ..	per yard super	11/6	—
Gurjun .. .. .	per yard super	12/2	14/9
Pitch Pine (50% rift sawn) ..	per yard super	11/10	13/8
Ditto (100% ditto) .. .. .	per yard super	13/1½	15/6
British Columbian Pine .. ..	per yard super	8/5	9/2
Deal, 100 per cent. rift sawn ..	per yard super	9/5	10/9
Jarrah .. .. .	per yard super	11/-	15/9
Additional straight cutting ..	5½d. per foot run		

#### JOINER—(continued)

##### Secret Nailed Tongued and Grooved Strip Flooring, fully Desiccated, including Polishing

		1" nominal	1½" nominal
		£ s. d.	£ s. d.
Austrian Wainscot Oak ..	per square	8 18 6	10 12 7
Plain Japanese Oak ..	per square	7 10 8	9 2 2
Plain American Oak ..	per square	7 7 0	9 3 9
Pitch Pine .. .. .	per square	7 0 6	8 15 7
British Columbian Pine ..	per square	4 14 6	5 7 7
Canadian Maple .. .. .	per square	6 19 1	8 10 7
Burma Teak .. .. .	per square	8 18 6	10 17 4
English Oak .. .. .	per square	10 4 9	12 15 11
Gurjun .. .. .	per square	6 19 1	8 10 7
Jarrah .. .. .	per square	6 13 10	8 6 5

##### Wall Linings

* ½" Deal tongued and grooved V-jointed Matching in narrow widths .. .. .	per square	30/2
½" (6 mm.) Birch (B) Plywood and fixing to walls ..	per square	35/7
½" Asbestos cement sheets butt jointed .. .. .	per foot super	-/3½
½" Fibre board and fixing to walls .. .. .	per yard super	2/11
Deal battens as ground plugged to brickwork .. .. .	per foot super	-/1½
1½" × ½" wrot and chamfered fillets .. .. .	per foot run	-/1½
2" × ½" wrot and moulded ditto .. .. .	per foot run	-/1½

\* Items marked thus have fallen since December 8.



## CURRENT PRICES

## JOINER, IRONMONGER AND

## STEEL AND IRONWORKER

BY DAVIS AND BELFIELD

## JOINER—(continued)

Skirtings	Deal	Austrian Oak
1" chamfered or moulded 4" high, fixed to and including grounds and backings planted on	per foot run -3½	-7½
Add for plugging to brickwork .. per foot run	-0½	-0½
Fitted ends on hardwood price as 4" of skirtings, mitres as 6".		
Fitted ends, etc., on deal skirting included in price per foot run.		

Casements and Fanlights	1½"	2"
Deal moulded sashes divided into squares with glazing bars .. per foot super	1¼	1½
Add for hanging casements (butts measured separately) .. each	1/9	2/-

Cased Frames and Sashes			
Deal cased sashed frame, including 2" double hung sashes, with 6" x 3" Oak cill and brass axle pulleys, sash line and weights, average 15 feet super .. per foot super			3/9

Doors in Deal	¾"	1"	1½"
Matchboarded, ledged and braced door .. per foot super	1/-	1/2	1/4
	1½"	1¾"	2"
Framed, ledged and braced door, filled in with matchboarding .. per foot super	1/5	1/9	1/10
Ditto garage doors .. per foot super			1/7
			4-panel
1½" square framed, both sides .. per foot super			1/7
2" ditto .. per foot super			1/9
1½" ditto bead butt panels one side, but square the other .. per foot super			1/9
2" ditto, ditto .. per foot super			1/11
1½" moulded both sides .. per foot super			1/10
2" ditto .. per foot super			2/-
For fixing only p.c. doors allow .. per foot super			-2½
Hardwood doors two-and-a-half times as much as deal.			
Deal glazing beads, mitred and bradded .. per foot run			-1½
Ditto and fixed with brass cups and screws .. per foot run			-3

Window and Door Linings	1"	1½"	1¾"
Deal linings, 6" wide, tongued at angles and planted on including backings per foot run	-6½	-7	-8
Add for plugging to wall .. per foot run	-0½	-0½	-0½
Add for rebating .. per foot run	-0½	-0½	-0½
Add for ½" x 2" Deal stop planted on .. per foot run	-1½	-1½	-1½
Deal window board 9" wide, with rounded nosing, tongued at back and on and including bearers plugged to brickwork .. per foot run	-10	-11	1/1
¾" Deal scotia mould .. per foot run		-1½	
Oak linings 6" wide tongued at angles and planted on including backings .. per foot run	1/2½	1¼	1/7½
Add for plugging to brickwork .. per foot run	-1	-1	-1
Add for rebating .. per foot run	-1	-1	-1
Add for ½" x 2" Oak stop planted on .. per foot run	-3½	-3½	-3½
Oak window board 9" wide, with rounded nosing tongued at back and on and including bearers plugged to brickwork .. per foot run	1/10	2/1	
¾" Oak scotia mould .. per foot run		-3½	

Window and Door Frames	Deal	Austrian Oak
4" x 3" door frames .. per foot run	-10	2/0½
4" x 3" window frames .. per foot run	1/-	2/4½
4" x 3" transoms and mullions .. per foot run	1/3½	2/11½
6" x 3" door cill, sunk weathered twice throated and grooved for water bar (measured separately) .. per foot run	—	3/9
6" x 3" window ditto .. per foot run	—	3/1
Add or deduct for variation in sectional area per square inch .. per foot run	-0½	-1½
Add for each labour, for chamfer, bead or rebate, etc. .. per foot run	-0½	-1
Add for each moulding .. per foot run	-0½	-1½

Architraves	Deal	Oak
1" x 3" chamfered or moulded architraves, including mitres on softwood, planted on .. per foot run	-3	-7½
Mitred angles on oak price as 6" of architrave.		
Add for plugging to brickwork .. per foot run	-0½	-0½
Add for narrow splayed grounds .. per foot run	-1½	-1½

## JOINER—(continued)

Shelving	Deal	Oak
Slat shelving of 1" x 2" spaced ¾" apart .. per foot super	-9	—
1" shelving .. per foot super	-10	2/2
1½" ditto .. per foot super	-11½	2/6
1" cross-tongued shelving .. per foot super	1/-	2/6
1½" ditto .. per foot super	1/1½	2/10
1" x 2" chamfered bearers planted on .. per foot run	-2½	-5½
Add if bearers plugged to brickwork .. per foot run	-0½	-0½

Teak Draining Boards and Twice Oiling		
1½" Moulmein cross-tongued fluted draining board fixed to slight falls .. per foot super		3/9
½" x 2" rounded rim bedded in white lead and screwed to edge of draining board .. per foot run		-5
½" x 4" rounded skirting fillet ditto .. per foot run		-10

Staircases	Deal	Oak
1½" treads and 1" risers .. per foot super	2/-	5/-
2" strings, fixed .. per foot run	1/10	4/7
Housing treads and risers to strings .. each	-9	1/6
3" x 2½" French polished moulded handrail .. per foot run	—	2/6
1½" x 1½" square balusters 2' 6" long .. each	-10	2/-
4" x 4" Newels with chamfered edges and fixing .. per foot run	1/4	3/4

## IRONMONGER

Fixing only		
4" Butt hinges to softwood .. per pair	1/-	
4" ditto to hardwood .. per pair	1/4	
16" T. hinges to softwood .. per pair	1/6	
48" Collinges patent gate hinges to softwood .. per pair	7/6	
Softwood	Hardwood	
6" Cabin hooks .. each	-7½	-10
Hat and coat hooks .. each	-3	-4
Cupboard knobs .. each	-3	-4
Night latches .. each	1/6	2/-
Thumb latches .. each	1/6	2/-
Letter plate and knocker, including perforation in door .. each	2/6	3/4
Barrel or tower bolts .. each	-10	1/1
Flush bolts .. each	1/6	2/-
Rim locks and furniture .. each	2/-	2/8
Mortice ditto .. each	5/-	4/-
Rebated ditto .. each	3/6	4/8
Grip handles .. each	-6	-8
Cupboard locks .. each	1/-	1/4
Spring catches .. each	-10½	1/1½
Casement fastener .. each	1/-	1/4
Ditto stays .. each	-10	1/1
Sash fastener .. each	-8	-11

## STEEL AND IRONWORKER

(For Rainwater Goods—see "Plumber.")

Steelwork		£ s. d.
Basis for plain rolled steel joists .. per ton	16	6 6

Fabricated Steelwork		£ s. d.
Joists cut and fitted .. per ton	20	10 6
Stanchions, ordinary sections with riveted caps and bases .. per ton	23	10 6
Stanchions, compound .. per ton	25	11 6
Plate girders .. per ton	28	9 6
Framed roof trusses, 25' 0" span .. per ton	30	4 6
Ditto ditto 60' 0" span .. per ton	28	5 0

The above prices are ex mills ordered well in advance of delivery. Prices ex London stocks are considerably higher, and definite quotations should be obtained.

Wrot Iron Work		£ s. d.
Simple balusters and handrail fixed (excluding mortices, etc.) .. per cwt.	56	-
Bolts and nuts fitted .. per cwt.	45	-

Galvanized Corrugated Sheet	20 B.G.	22 B.G.
Sheeting in 3" corrugations and fixing on wood framing with screws and galvanized embossed curved washers including laps .. per square	56/-	49/-
Ditto fixed to steel framing .. per square	63¼	56/8



**CURRENT PRICES**

BY DAVIS AND BELFIELD

**PLASTERER, EXTERNAL AND INTERNAL PLUMBER****PLASTERER***Lime and Sirapite Plastering*

	Per yard super	In narrow widths per foot super
Expanded metal lathing .. .. .	1/8	-3
1" x 3/8" sawn laths .. .. .	-9	-1 1/2
Render and set in lime and hair .. .. .	1/8	-3 1/2
Render, float and set in lime and hair .. .. .	2/-	-3 1/2
Plaster, float and set ditto on lathing (measured separately) .. .. .	2 1/2	-4
Render and set with Sirapite .. .. .	1/9 1/2	-3 1/2
Plaster, float and set ditto on lathing (measured separately) .. .. .	2/3	-4
Skimming coat Sirapite .. .. .	1/5 1/2	
3/4" thick plaster board fixed including covering joints with scrim cloth .. .. .	2/-	

*Keenes*

	Per yard super	In narrow widths per foot super
Cement plain face on and including a backing of Portland cement and sand .. .. .	2/6	-5

*Mouldings and Labours*

	Lime and Sirapite	Keenes
Plain cornices and mouldings 6" girth per foot run	-9 1/2	-11
Labour arris, quirk or throat .. per foot run	-1 1/2	-1 1/2
Ditto rounded angle .. per foot run	-2	-2
Ditto staff bead .. per foot run	-	-7 1/2
Mitres price as 12" of moulding, stopped ends as 6", and rounded angles as 18".		

*Portland Cement and Sand (1 : 3)*

	1 1/2"	3"
Screeds to floors for wood or tiles per yard super	1 1/2	1/4
Screeds for tiling, etc., on walls per yard super	1/4	1/6
Renderings to walls—one coat float finish per yard super	1/6	1/8
Plainface .. .. . per yard super	1/10	2/-

*\*Coloured Cement Plainface*

Cullamix No. 2 or 3 cream, on and including water repellent cement and sand backing .. .. .	per yard super	3/10
Snowcrete mixture on and including ditto .. .. .	per yard super	3/10
Snowcrete and white silica sand on and including ditto .. .. .	per yard super	3/6

For raking out joints of brickwork, keyed bricks or hacking face of concrete, to form key for plastering, see "Bricklayer."

*Wall Tiles, Commercial Quality*

6" x 6" x 3/8" ivory or white .. .. .	per yard super	16/-
Extra for rounded edge tiles .. .. .	per yard run	1/5
6" x 6" x 3/8" coloured enamel bright glazed .. .. .	per yard super	21/3
Extra for rounded edge tiles .. .. .	per yard run	-7 1/2
6" x 6" x 3/8" eggshell gloss enamelled .. .. .	per yard super	22/1
Extra for rounded edge tiles .. .. .	per yard run	-6 1/2

**EXTERNAL PLUMBER***Lead*

	Flats	Gutters, Flashings, etc.	Stepped Flashings	Soakers cut to size
* Milled sheet lead and labour .. per cwt.	40/-	41/1	42 1/2	34/10
Bedding edges in white lead .. .. .			per foot run	-2
Lead wedgings to flashings .. .. .			per foot run	-1 1/2
Ditto to stepped flashings .. .. .			per foot run	-2
Dressing 6-lb. lead over glass and glazing bars .. .. .			per foot run	-3 1/2
Copper nailing .. .. .			per foot run	-1 1/2
Close ditto .. .. .			per foot run	-2
Bossed ends to rolls .. .. .			each	-7 1/2
Extra labour dressing through shoots and into rainwater heads .. .. .			each	3/-
Ditto to cesspools, including extra solder .. .. .			each	5/3

*Cast Iron Rainwater Goods*

	3"	4"
Rainwater Pipes fixed to brickwork.		
Round pipes .. .. . per foot run	1/5 1/2	1/9
Extra for bends .. .. . each	2/2	2/10
Ditto 6" offset .. .. . each	2/4	2/10
Ditto single branches .. .. . each	2/7	3/1
Ditto shoes .. .. . each	1/7	2/2
	3 1/2" x 3 1/2"	4" x 3"
Square and rectangular pipes .. .. . per foot run	3/2	2/10
Extra for elbows .. .. . each	4/11	3/6
Ditto single branches .. .. . each	5/9	5/4
Ditto shoes .. .. . each	4/8	4/3

\* Items marked thus have fallen since December 8.

**EXTERNAL PLUMBER—(continued)***Gutters fixed to fascia.*

	4"	5"	6"
Half-round gutters .. per foot run	1/-	1 1/2	1 8/10
Extra for angles .. .. . each	1/9	2/-	2/3
Ditto nozzles .. .. . each	1/7	1/10	2/5
Ditto stop ends .. .. . each	1/-	1/3	1 1/4
Ogee gutters .. .. . per foot run	1 1/2	1/4	1 9/10
Extra for angles .. .. . each	1/9 1/2	2/3	2/4
Ditto nozzles .. .. . each	1/8	2/3	2/8
Ditto stop ends .. .. . each	1 1/2	1 1/4	1 7/8

**INTERNAL PLUMBER***Lead Pipes*

	1/2"	3/4"	1"	1 1/4"
* Pipes laid in trenches .. per foot run	-10 1/2	1 1/2	1 9/10	2/5
Add if fixed on walls .. per foot run	-2	-3	-4	-5
Ditto if in short lengths .. per foot run	-1	-1	-1 1/2	-2
	1 1/2"	2"	2 1/2"	3"
* Pipes laid in trenches .. per foot run	3/0 1/2	4/0 1/2	-	-
Add if fixed on walls .. per foot run	-6	-8	-	-
Ditto if in short lengths .. per foot run	-3	-4	-	-

*Distributing.*

* Cold water pipes fixed to walls .. per foot run	1 1/2"	3/4"	1"	1 1/4"
Add if in short lengths .. per foot run	-10 1/2	1/3	1 8/10	2/3
* Cold water pipes fixed to walls .. per foot run	1 1/2"	2"	2 1/2"	3"
Add if in short lengths .. per foot run	2/9 1/2	3/7 1/2	-	-
	-3	-4	-	-

*Flushing and Warning.*

* Waste and overflow pipes fixed in short lengths .. per foot run	1 1/2"	3/4"	1"	1 1/4"
* Waste and overflow pipes fixed in short lengths .. per foot run	-9	-11	1 1/2	1 5/8
	1 1/2"	2"	2 1/2"	3"
	1/10 1/2	2/6	-	-

*Soil and Ventilating*

* Pipes fixed, including lead tacks .. per foot run	3 1/2"	4"	4 1/2"
Bends .. each	1 1/2"	2"	2 1/2"
Soldered joints to fittings .. each	1/6	2/9	3/9
Soldered branch joints (price as largest branch) .. .. . each	2 1/2	2/4	2/7
Soldered branch joints (price as largest branch) .. .. . each	2 1/2	2/6	2/9
Wrap small pipes with hair felt .. .. . per foot run	3/8	4/6	5/-

*Drawn Lead Traps*

	1 1/2"	3"	1 1/2"	3"	2"
P. Traps 6 lb. with cleaning eye and two soldered joints .. .. . each	7/1	7/7 1/2	8/3	8/9 1/2	9/8
S. ditto .. .. . each	7/6	8/0 1/2	8/8	9/2 1/2	10/4

*Brasswork (Best Quality)*

	1"	3/4"	1"
Brass screwdown stop cocks including two soldered joints .. .. . each	7/10	10/4	13/11
Ditto, including two red lead joints for iron .. .. . each	6/-	8/5	11/10
Ditto, including one soldered and one red lead joint .. .. . each	6/4	8/7	11/11
High pressure Portsmouth pattern ball valve with flynut and union and one soldered joint .. .. . each	8/7	11/2	19/5
Ditto, including red lead joint for iron .. .. . each	6/6	9/1	16/7
Brass thimble and soldered and cement joints .. .. . each	5/-	9/6	
Ditto, with solder and caulked lead joints .. .. . each	6/-	11/3	

*Fixing Only (Connections to Pipes measured separately)*

24" x 18" x 6" sinks including taps, etc., and pair of brackets cut and pinned to brickwork .. .. . each	6/-
24" x 18" lavatory basins ditto .. .. . each	6/6
W.C. suite comprising pan and trap, seat, W.W.P. and brackets .. .. . each	10/6
Baths, including taps, etc., and setting in position .. .. . each	10/6

# CURRENT PRICES

## INTERNAL PLUMBER, GLAZIER AND PAINTER

BY DAVIS AND BELFIELD

### INTERNAL PLUMBER—(continued)

*Screwed and Socketed Galvanized Steam Quality Steel Tubes and Fittings*

Pipes up to and including 1½" include short running lengths, sockets, connectors, elbows, bends, fire bends; Tees and Diminishing Pieces enumerated.

#### Distributing.

	½"	¾"	1"	1¼"	1½"	2"
Pipes fixed to walls						
per foot run	-10	1/-	1/4	1/10	2/4	3/-
Ditto in short lengths, fittings, etc., measured separately						
per foot run	-10	1/-	1/4	1/10	2/4	3/-

#### Extra for

Firebends ..	each	-4	-6	-9	1/3	1/6	2/-
Bends ..	each	1/2	1/5	1/9	2/6	3/1	4/9
Round elbows ..	each	1/5	1/8	2/-	2/4	2/10	4/4
Square ditto ..	each	1/5	1/8	1/11	2/3	2/8	4/1
Tees ..	each	1/6	1/10	2/1	2/9	3/1	4/8
Crosses ..	each	2/9	3/2	3/10	5/-	6/-	9/1
Diminishing pieces	each	-10	-11	1/2	1/6	1/11	2/8
Caps ..	each	-7	-8	-10	1/-	1/5	1/9
Plugs ..	each	-6	-6	-8	-11	1/4	1/8

#### Cast Iron Waste, Soil and Vent Pipes

	2"	3"	4"	5"	6"
L.C.C. pipes in 6' 0" lengths fixed to brick-work					
per foot run	1/10	2/-	2/5	4/5	5/4
Extra for bends ..	each	5/3	6/1	7/10	11/-
Ditto single branches ..	each	6/5	8/2	11/-	17/6
Ditto swannecks 6" projection					
each	6/1	8/9	11/1	16/1	22/-
Extra for access door or any fitting	each	6/9	6/9	7/3	8/6

#### Zincworker

	13 G.	14 G.	15 G.	16 G.
Rolled sheet zinc on flats	per foot super	-7½	-8½	-9½
Ditto in gutters, cover flashings, etc.	per foot super	-8½	-9	-10
Ditto in stepped flashings	per foot super	-10½	-11	1/-
Labour and risk dressing over glass	per foot run	-4½	-4½	-4½
Capped ends to rolls ..	each	-2½	-2½	-2½
Extra labour to cesspools ..	each	2/7½	2/7½	3/2

#### Copperworker

	½"	¾"	1"	1¼"	1½"	2"
Solid drawn copper tube fixed to walls	per foot run	-9	1/-	1/5½	1/10	2/3
Add if in short lengths	per foot run	-0½	-0½	-1	-1½	-2

#### Fittings for copper tubes

Compression type						
Straight couplings ..	each	1/10	2/2	3/-	3/9	5/1
Obtuse elbows ..	"	2/8	3/2	4/5	5/6	8/10
Tees ..	"	3/1	3/6½	5/4	7/4½	11/3
Crosses ..	"	4/1½	4/8	5/8½	8/-	13/2
Reducing coupling ..	"	2/2	3/-	3/9	5/1	7/3
Bends ..	"	2/5	2/10½	3/1	5/-	8/3
Brass stopcocks ..	"	5/6	7/10	11/-	19/3	26/6

#### Capillary type

Straight coupling ..	each	1/6	1/11	2/7	3/3	4/1
45° Elbow ..	"	2/4	2/11½	3/10½	4/11	6/10
Tees ..	"	2/7	3/-	4/3	5/10	7/10
Crosses ..	"	3/1	3/6	5/1½	6/10	9/8
Reducing coupling ..	"	—	1/7	2/-	2/6	3/3
Bends ..	"	2/8	3/2	4/3	5/7	8/1
Pillar tap connections ..	"	1/11	2/6			

Rolled sheet copper on flats	per foot super	24 G.	23 G.
Ditto in gutters, cover flashings, etc.	per foot super	1/5½	1/7½

Ditto in stepped flashings	per foot super	1/6½	1/8½
Labour and risk dressing over glass	per foot run	2/1½	2/4½
Capped ends to rolls ..	each	-4½	-4½
Extra labour to cesspools ..	each	-3½	-3½

### GLAZIER

*Sheet Glass (Ordinary Glazing Quality)*

18 oz. clear sheet and glazing to wood, sprigged and with back and front putties, to all normal sizes not exceeding 60" in length or 40" wide	per foot super	-6½
24 oz. ditto ..	per foot super	-7½
32 oz. ditto ..	per foot super	-11½

### GLAZIER—(continued)

Obscured ground sheet glass, net extra to above prices

½" figured rolled white glass and glazing to wood with beads (measured separately)	per foot super	-1½
Ditto, normal tints, ditto ..	per foot super	-10½
Hammered double rolled cathedral white ditto	per foot super	1/2½
Ditto, normal tints, ditto ..	per foot super	-10
Add for glazing into metal frames (ordinary rebates)	per foot super	1/1½
Ditto, metal sashes with ferroput ..	per foot super	-1½
Ditto, solid metal casements and screw beads	per foot super	-2½
Wash leather strip or similar material and bedding edge of glass ..	per foot run	-3½

Glazing only thick drawn sheet glass, polished plate or wire polished plate for all normal sizes. (For prices of glass see materials section and add profit, say 10 per cent.) per foot super 6½d.

### PAINTER

*Painting, Whitening and Distempering (on new Plastered Walls)*

Twice distempering white ..	per yard super	-5
Ditto, in common colours ..	per yard super	-7
Add for stippling ..	per yard super	-2
Preparing and painting three coats of paint	per yard super	1/9

*Preparing and Painting Two Coats of Oil Colour on Ironwork after fixing*

General surfaces ..	per yard super	1/1½
Perforated landings and staircases both sides (one side measured) ..	per yard super	2/6

Pipes, bars, balusters, etc., not exceeding 3" girth	per yard run	-1½
Metal Window Frames ..	per yard run	-2½
Eaves gutters ..	per yard run	-7½
2" Rainwater pipes ..	per yard run	-3
4" ditto ..	per yard run	-6
Squares one side ..	per dozen	1/9
Large ditto ..	per dozen	2/3
Extra large ditto ..	per dozen	3/-
Edges of casements ..	each	-3

*Painting on New Woodwork*

	Knot, prime, stop and paint three coats oil colour	Add or deduct for each coat more or less
General surfaces ..	per yard super	2/-
Fascias and soffits ..	per yard super	2/6
Fillets, skirtings, etc., not exceeding 3" girth ..	per yard run	-3
Ditto, not exceeding 6" ..	"	-5½
Ditto, not exceeding 9" ..	"	-7
Ditto, not exceeding 12" ..	"	-9
Squares one side ..	per dozen	3/6
Large ditto ..	"	4/6
Extra large ditto ..	"	6/-
Edges of casements ..	each	-6

#### Sundries

Twice creosoting woodwork ..	per yard super	-6
Twice limewhiting brickwork ..	per yard super	-4

	Sizing	Staining	Varnish
General surfaces ..	per yard super	-2	-4½
Wax polishing ..	per foot super	-6	-4½
Body in and French polish on hardwood surfaces	per foot super	1/-	

#### Writing

Plain letters or figures, two coats, 2" to 12" letters	per dozen inches in height	1/10½
Ditto, shaded ..	"	2/6
Plain gold, 2" to 12" letters ..	"	2/6
Ditto, 12" to 24" ..	"	3/9

#### Gilding

	Single Gold	Double Gold
Preparing and gilding in best oil gold	per foot super	5/3
Ditto in matt or burnished gold	per foot super	7/4

#### Paperhanging

	On walls	On ceilings
Preparing new plastered walls for papering	per piece (60 feet super)	1/4
Plain lining paper ..	"	1/8
Common printed papers ..	"	2/-

# APPROXIMATE ESTIMATES

★ **O**N this and the three following pages the JOURNAL's section of Approximate Estimates is published for the twelfth time.

There is nothing revolutionary about the idea—its usefulness lies in its efficiency as a time-saver in calculating the approximate price of work to which the cubing system cannot be applied.

In brief, an Approximate Estimate in considering a roof, converts the several units of pricing involved into a common unit of price per square yard, and then adjusts the price to cover sundry labours. By this means several stages of calculation are saved by the estimator in a hurry.

● *The following composite prices are for work executed complete and should be used for the preparation of Approximate Estimates only.*

## FOUNDATIONS

Thickness of walls  
9" 11" Hollow 13½"

- Excavation in clay soil for foundations 2' 6" deep to walls, including stock brickwork in second stocks cement mortar 1 : 3 up to 6" above ground and horizontal double slate damp-proof course with external facings p.c. 100/- and pointing ... .. per yard run 25/1 28/3 35/4
- Ditto, in ordinary soil ditto ... .. per yard run 23/10 27/1 33/9

## EXTERNAL WALLS

- External walls in Fletton brickwork in cement mortar 1 : 3 including three coat lime plaster and twice distempering one side and facings p.c. 100/- in Flemish bond, joints raked out and pointed with a neat struck weathered joint, the other ... .. per yard super 19/4 19/1 24/9
- Ditto, including Keenes cement plain-face and three coats oil colour one side and ditto ... .. per yard super 21/- 20/9 26/5
- Ditto, including internal fair face, flush jointed one side and ditto ... .. per yard super 17/7½ 17/4½ 23/0½
- For variation of 10/- per m. in p.c. of facings in Flemish bond (stretcher in cavity work) ... .. per yard super -/9 -/6½ -/9  
E

**APPROXIMATE ESTIMATES—(continued)****INTERNAL WALLS AND PARTITIONS**

	2"	3"	4½"	9"
● Breeze partitions set in cement mortar or Fletton brick walls and including three coat lime plaster and twice distempering both sides ... .. per yard super	9/11	11/1	11/1	16/7
● Ditto, built fair and flush jointed both sides ... per yard super	—	—	7/8½	13/2
● Ditto, including Keenes cement plain-face and three coats oil colour both sides ... per yard super	13/3	14/5	14/6	19/11

**GROUND FLOORS**

- Solid ground floor construction including 9" excavation, 4" bed of hardcore, 6" concrete 6 : 1 surface bed, finished with 1½" granolithic paving trowelled smooth ... .. per yard super 9/10
- Ditto, finished with ¾" cement and sand 1 : 3 screed and wood block flooring or paving p.c. 10/- yard ... .. per yard super 18/2
- Ditto, finished with 2" × 2" sawn floor fillets and floor clips and 1" deal tongued and grooved flooring, batten widths ... .. per yard super 12/11½
- Ditto, finished with floor fillets as before and 1" (nominal) oak tongued and grooved narrow widths strip flooring polished at time of laying per yard super 25/2½
- Sleeper wall ground floor construction, including 15" excavation, 4" bed of hardcore, 6" concrete 6 : 1 surface bed, sleeper walls 12" high, built honeycomb, 4½" slate damp-proof course 4½" × 3" fir plate, and 4" × 2" sleeper joists and 1" deal tongued and grooved flooring in batten widths ... .. per yard super 15/3
- Ditto, with 1" nominal oak tongued and grooved narrow widths strip flooring polished at time of laying ... .. per yard super 27/6

**UPPER FLOORS**

	With 7" Joists	With 9" Joists	With 11" Joists
● Wood construction including 2" fir joists on 4" × 3" fir plates and herring-bone strutting with three coat lime plaster and twice distempering white to soffit and 1" deal tongued and grooved flooring in batten widths ... .. per yard super	12/-	13/2	14/3
● Ditto, with 1" nominal oak tongued and grooved narrow widths strip flooring polished at time of laying ... .. per yard super	24/3	25/5	26/6
● 5" thick concrete 4 : 2 : 1 reinforced with fabric suitable at 13' 0" spans for carrying ½ cwt. per ft. super, with two coat lime plaster and twice distempering white to soffit and 1" Kara Sea deal 100 per cent. rift sawn block flooring wax polished at time of laying ... per yard super			25/7
● Ditto, with 1" nominal 25/30 per cent. quartered Austrian oak block flooring polished at time of laying ... .. per yard super			28/8



## APPROXIMATE ESTIMATES—(continued)

## FLAT ROOFS

	Using 7" Joists	Using 9" Joists	Using 11" Joists
● Wood construction including 2" fir joists on 4" × 3" fir plates and herring-bone strutting with three coat lime plaster and twice distemping white to soffit and best natural rock asphalt roof finish ... per yard super	18/5	19/5	20/6
● 5" Thick concrete 4 : 2 : 1 reinforced with fabric (suitable at 13' 0" span for carrying 40 lbs. per ft. super) with two coat lime plaster and twice distemping white ditto ... .. per yard super			22/7

## PITCHED ROOFS

● Bangor Countess 20" × 10" slating, laid to 3" lap fixed with zinc nails, including 2" × 1" battens, $\frac{3}{4}$ " roof boarding and 4" × 2" rafters (measured on slope) ... .. per yard super	13/1
● Westmorland Random green slates No. 1 best 24" to 12" long proportionate widths ditto ... .. per yard super	17/2
● Machine-made tiles 10½" × 6½" laid to a 4" gauge, fourth course nailed with galvanized nails ditto ... .. per yard super	11/6
● Hand-made sand faced tiles ditto ditto ... .. per yard super	12/3
● Slate ridges, including cuttings and 1½" × 9" deal ridge ... .. per yard run	9/10½
● Half-round ridge tile ditto ... .. per yard run	7/7
● Slate hips, including cuttings, lead soakers, and 1½" × 11" deal hips ... .. per yard run	12/5½
● Hip tiles, including cuttings and 1½" × 11" deal hips ... .. per yard run	14/-
● Lead valley gutter to slated roof, including cuttings and 1½" × 11" deal hips ... .. per yard run	18/5
● Purpose-made valley tiles, including cuttings and 1½" × 11" deal hips ... .. per yard run	13/7

## DOORS

	Partitions or Walls				
● 2" flush door p.c. 29/- 2' 6" × 6' 6", including deal frames or linings, ironmongery p.c. 15/- and simple architraves both sides, all painted ... .. each	100/-	101/5	96/3	100/10½	106/10½

## WINDOWS

Prices are for normal size, including suitable ironmongery, glazing with clear sheet glass and painting.

● Standard metal casements with fixed lights ... .. per foot super	2/5
● Ditto, with average proportion of opening lights ... .. per foot super	3/10
● Standard metal casements in wood frames with fixed lights ... .. per foot super	4/-
● Ditto, with average proportion of opening lights ... .. per foot super	4/11
● Standard industrial type sashes with fixed lights ... .. per foot super	2/2
● Ditto, with average proportion of opening lights ... .. per foot super	3/6
● Solid deal frames and 2" casements ... .. per foot super	5/0½
● Deal cased frames and double hung sashes ... .. per foot super	4/10½

NOTE.—Standard wood surrounds to metal windows can be obtained at a cheaper price than that given for wood frames above.

**APPROXIMATE ESTIMATES—(continued)****STAIRCASES**

- Deal 9' 0" high, including half space landing, newels, balusters and handrail ... .. each £23 10 0
- Austrian oak ditto ... .. each £44 5 0
- Precast concrete ditto ... .. each £32 15 0

**DRAINS**

- |  | Ordinary<br>Soil   | Clay<br>Soil              |
|--|--------------------|---------------------------|
| ● Manhole, 2' 3" × 1' 6" × 2' 0" deep, including excavation, 6" (6:1) concrete bottom, one brick sides 3rd stocks in cement mortar with brown glazed half-round straight main channel and one brown glazed branch channel, including benching, sides rendered in cement and sand (1:3) and a 24" × 18" black single seal cast iron manhole cover and frame, weight 0 cwts. 3 qrs. 0 lbs. ... .. each | £3 12 6            | £3 15 6                   |
| ● Manhole 2' 3" × 3' 9" × 4' 0" deep ditto including six branches ... .. each  | £7 2 0             | £7 6 6                    |
|  | Clay Soil<br>4" 6" | Ordinary<br>Soil<br>4" 6" |
| ● British standard quality stoneware drain pipes laid on and including 6" thick concrete bed flanching up both sides of pipe and excavating average 2' 6" deep ... .. per foot run   | 2/5 3/0½           | 2/3 2/10½                 |
| ● Ditto, but excavating 4' 0" deep ... .. per foot run   | 4/1½ 4/9           | 3/7½ 4/3                  |
| ● Cast iron drain pipes in 9' lengths and laying in trench including 6" concrete bed and excavating average 2' 6" deep ... .. per foot run   | 4/8 6/6½           | 4/6 6/4½                  |
| ● Ditto, average 4' 0" deep ... .. per foot run  | 6/4½ 8/3           | 5/10½ 7/9                 |

**PATHS AND DRIVES**

- 2" finished gravel paths, including 6" excavation and 4" bed of hard-core and edging boards ... .. per yard super 5/3
- 7½" finished gravel drive, including 6" excavation, 6" bed of hardcore and edging boards ... .. per yard super 6/9
- 2½" Tarmacadam drive including ditto ... .. per yard super 7/10

**FENCES**

- Cleft chestnut pale fence 4' 0" high ... .. per foot run -/10
- Deal weather boards, including posts, arris rails and gravel boards creosoted, 5' 0" high ... .. per foot run 2/9½
- Ditto, in English oak throughout ... .. per foot run 3/10½

*The four sections on PRICES published in the issues of December 15, 22, 29 and this week together complete the PRICES SUPPLEMENT. Next week the FIRST SECTION—PRICES OF MATERIALS, PART 1—will be repeated with items revised according to market quotations.*