



Maintenance of Property

It is essential in the National Interest that Capital invested in building should not be allowed to waste through lack of maintenance painting.

Not only maintenance painting already due and overdue, but painting due next year should be carried out now when there are ample supplies of material and many skilled painters out of work. No man can say how long the war will last, but it is clear to all that both labour and material will be less readily available as time goes on and in all probability prices must rise.

Put maintenance painting in hand so soon as possible.

Red lead for priming steel and white lead for all other purposes are acknowledged to be pre-eminent for maintenance work.

Advice on specific painting problems can be freely obtained from the Technical Information Bureau of the Lead Industries Development Council, 90 Ebury Street, London, S.W.1. Telephone Sloane 9801.

THE ARCHITECTS'



JOURNAL

THE ARCHITECTS' JOURNAL
WITH WHICH IS INCORPORATED THE BUILDERS'
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The Editor will be glad to receive MS. articles
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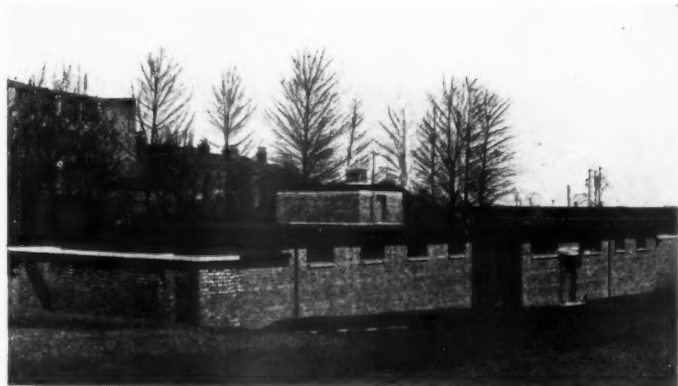
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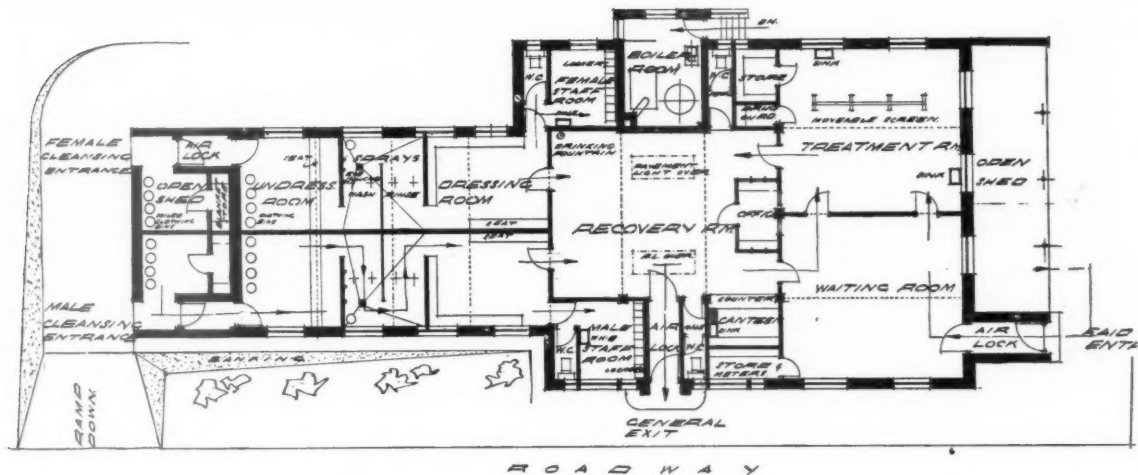
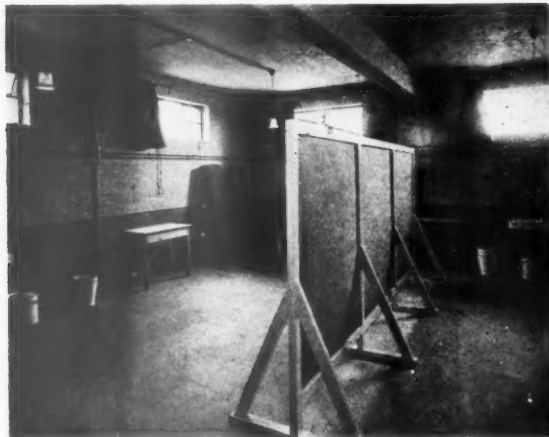
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FIRST AID POST, FALKIRK

DESIGNED BY
CLARK FYFE(Architect to the Stirling and
Clackmannan A.R.P. Joint Authority)

Right, view from entrance road; Below, treatment room; Below, right, recovery room.



Site is in a low-lying part of the town, the ground having been made up within the last ten years.

The frame is of R.C. piers 9 in. by 9 in. with R.C. beams, the roof being 5 in. thick reinforced and finished with three-layer bitumen. Fifteen-inch walls of composition brick with bull-nose cills and metal casements. Doors are constructed of

2-in. solid deal with a flat galvanized metal finish. Floor is composed of R.C. slab which will eventually be covered with linoleum.

General finish is pointed brick, painted, the cleansing section being treated with silicate of soda.

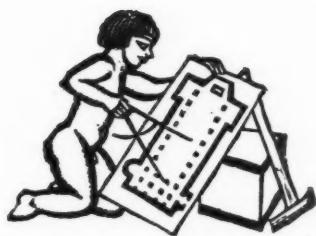
Cost, approximately, £3,500.



PANTILES AND CORBELS

*Detail of a romanesque church at Airvault, Deux
Sevres, France.*

[Photo: Lucien Myers]



BUILDING AND TOTAL WAR

FOR the past four weeks military events have dominated everyone's thoughts and all decisions unconnected with work immediately in hand have seemed dependent on their outcome.

Members of the building industry have not escaped this general feeling. But for them the past four weeks have a particular importance. In that period the whole problem of building and the war has changed twice, and both changes may, and probably will, have great consequences.

At Whitsuntide, the appointment of a new Government and the expansion of the war effort then announced made it very probable that the suggestions for the better use of building resources which the industry had advocated for six months would at last be accepted. And the building muddles revealed by the Select Committee on War Expenditure provided additional grounds for this belief.

But since Whitsuntide there has been no opportunity for the industry to advocate, or for the Government to consider, a change of system; and until that opportunity occurs, the building industry can only continue to work under the old system with its utmost energy. In short, this first change in the industry's part in war remains for the moment only a potential change.

The second change of the past month is that which is of immediate importance—perhaps of vital importance.

The military events of the past month may mean, indeed they are commonly assumed to mean, that the next phase of the war will be an attack on this country. The failure of such an attack must depend greatly on our war effort being continued without interruption, and on Home Defences remaining undisorganized, despite severe air raids. And if this attack takes place it would put the building and associated industries right in the front line: there should be no mistake about that.

The chief lesson which emerges from the fighting in France and Belgium seems to be the disorganization which may be caused by one bomb rather than the casualties caused by many. And when account is taken of this country's defences, it seems additionally likely that the immediate repair of damage done by isolated bombs in important places will be found to be one of the most vital A.R.P. services: particularly as it is unlikely that air attack, if it comes, will be confined to populous districts and neglect important points in less well organized areas.

It may be a little difficult for members of an industry whose hardships have been largely ignored for nine months to realize that they may become, overnight, an essential defence force. Yet this is what may take place: moreover, it would be foolish to ignore that it may take place before there is an opportunity to organize the industry for repair service in all areas with all the thoroughness which now seems desirable.

Building firms and public works contractors would therefore be wise to do what they can to prepare themselves for such an emergency. The present organization of the industry in several thousand units throughout the country is ideal for the work that may be required of it; and most of its component firms, despite nine months' hardship, still retain a minimum of skilled men, plant and materials. Those who can make arrangements to increase these minima at very short notice might be well advised to do so.

Beyond these internal preparations all that is needed to enable the industry to execute essential repairs at once is a method of bringing it into action *at once*—and not after days of filling up forms in triplicate.

The Government have announced during the past week further details of the financing of repairs to buildings essential for war production or civilian needs. For help in immediate and temporary repairs application is to be made to the local authority; while for larger works loans will be available from the Government acting through the appropriate Ministry. It is therefore local authorities which are charged with the execution of urgent repairs. And a method which will enable them to set local builders to work without an hour's delay will certainly have to be found, and will be found, directly serious air raids begin.

The new phase of warfare has therefore changed completely the situation of the building industry. The expansion in war production will require a great increase in the war building programme, which in turn will require contracts to be spread much more widely throughout the industry. Simultaneously, severe air raids may at any moment show that the skill and resourcefulness of building professions and local building firms are as essential in A.R.P. as ambulance and fire services.

Total war, in short, has brought the building industry into the front line—just as its members have prophesied for so long.



The Architects' Journal
45 The Avenue, Cheam, Surrey
Telephone: Vigilant 0087-9.

NOTES & TOPICS

OXFORD CARRIES ON

A HOST of correspondents of *The Times* (what have they been thinking about for the last nine months?) are asking each other with great indignation why "useless" buildings are still being built, why luxuries are still for sale inside doors held open by flunkeys of military age, why, in short, everyone and everything has not been harnessed to the war effort.

In Oxford last week I wondered whether this correspondence would change the attitude of Oxford University, which recently announced its intention of continuing its building programme in a modified form to avoid overwhelming arrears when peace comes.

Work is certainly going ahead there. The new physical laboratory, the library in Merton Street and the extensions to the Ashmolean all showed a positively peacetime activity; and a London architect I met during a sightseeing stroll suggested darkly that the Oxford version of a certain poster ought to be "Space reserved for Worthington."

Compared with provincial cities London seems almost a derelict area nowadays. Oxford hums and bubbles with a hectic life which is partly the result of busy factories, but receives an added sharpness and vigour from the influx of business and official evacuees. There are fewer undergraduates, of course, but many more undergradettes, their honest faces beaming above the handlebars as they spin over the hot tarry roads, dismounting before the spiky gates of *Normanhurst*, *Saxonhurst* and *Peebles*. The gardens of North Oxford just now are ablaze with laburnum and lilac, and beneath their "Anglo-Jackson shade" roll the prams which today in Oxford are almost as numerous as bicycles.

The reason, I was told, is that the maternity department of a smart West End nursing home has moved there, together with its cargo of Mayfair mothers and glossy nursemaids.

For after all, says the current number of a fashion weekly, "most of our modern young women are blandly having babies, despite the war."

SPLINTER PROOF

Your Home as an Air Raid Shelter,* which has just been published by the Ministry of Home Security, is aimed at those householders who do not come within the free-Anderson-shelter scheme and are not already provided with some other kind of shelter. And I fancy we are still a far too numerous body.

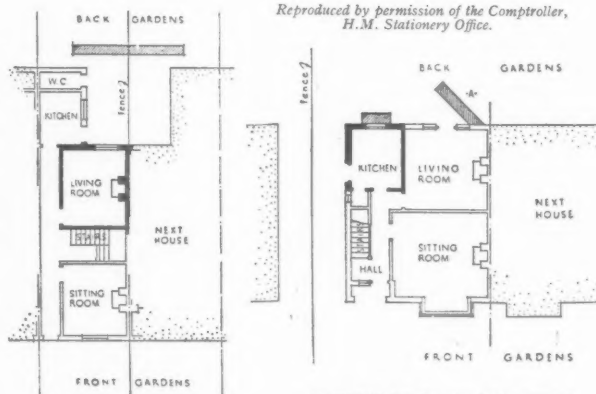
It is a sensible booklet, which wastes no space on gas-proofing, expensive detached shelters or complicated strutting. It tells people how they can make one room in their house tolerably proof against bomb splinters and flying glass at the smallest possible cost. And this is just what is needed at the present moment.

It might have been better to have built in past months communal shelters for three or four houses in the garden of one and to have compelled tenants to pay for them, if the Government or local authority decided not to do so. But it is clear that the only precautions which the mass of still shelterless householders can be persuaded to execute now are those which would cost little money and take little time. Any other recommendations would simply be ignored.

The first part of *Your Home as an Air Raid Shelter* deals with choosing the best room as a refuge space. Various house plans are reproduced (of which two are shown below), with suggested refuge rooms outlined in solid black and reasons given for their choice. But it is also made clear that all the larger societies of architects, engineers and surveyors have agreed that their members will give advice on this question for a fee of 10s. 6d. per house.

This is a most sensible and, even in these times, most unselfish offer. If it is to be fully used, however, it seems necessary for local authorities to compile, with the help of local professional societies, a rota of men ready to give such advice and then to conduct a house to house campaign of persuasion. For the mass of the public have an awe of

* H.M. Stationery Office. Price 9d.



In this case the living room affords quite good protection as all the walls are well screened and the only place where splinters could enter is the window. The chances of this are small but a screen wall built across the opening would protect the window.

The kitchen affords good protection, the door is screened by the next house and the window is small and can be readily protected. The two thin inside walls are well protected except from a chance splinter coming through the living room window. This window can be also screened as shown at A, then almost complete protection would be obtained.

"professions" which cannot be overcome by one Government recommendation.

*

The second part of the booklet illustrates various ways in which walls, doors and windows can be protected from splinters—most of which can be carried out by the householder himself.

*

I am glad to see that the methods advocated for preventing glass flying are becoming more realistic: by which I mean that they coincide more closely with my own inexperienced opinion. Brown paper strip is "not very effective" and patent liquid coatings are not encouraged. My own favourite— $\frac{1}{2}$ -in. wire mesh on same frame with the black-out material—receives a mention, but it is pointed out that this, unlike cellulose film, gives no protection against the weather once the glass is cracked. That had escaped my notice.

OTHER PEOPLE'S PORTLAND PLACE

Last week I paid what I am ashamed to say was my first visit to the Chancery Lane headquarters of the Law Society. Even in 66 Portland Place there is a "Ssh-we-are-in-a-Bank" atmosphere, but here it is positively religious. Here is no gleaming glass and polished metal, no light-hearted carvings, dramatic lighting or disappearing walls enliven the scene. Behind the heavy soot-black Palladian façade are ranged a series of rooms whose scale and grandeur are truly awe-inspiring.

*

The building was erected in 1831 to the designs of Lewis Vulliamy, who was unrivalled as a master of the Roman manner. Within, a delicate cantilevered staircase winds from among the coloured marble columns of the hall up to the "piano nobile" which has been planned in the best Beaux Arts style.

*

The library, which stretches across the front, is surely one of the finest of its kind in London: huge, rich and sombre. The caps of the columns and the cornice itself are almost invisible in the velvety gloom of the ceiling, and the old-fashioned brass light fittings, which barely illumine the ranked rows of leather-bound law reports, are discreetly reflected in the polished bald heads of the readers. There is an intoxicating atmosphere of mahogany and brass, of Turkey carpets and shiny horsehair, of cheroots, starch and "Spy" cartoons. To look within the doors of this room is just like opening a fifty-year-old issue of the *Illustrated London News*.

*

Round at the back are some rather unskilful additions by P. C. Hardwick (not "Euston" Hardwick) and a set of interiors by Charles Holden in pre-Great-War mood—good, solid, confident stuff—which includes one room described recently by a Swedish architect as more impressive than anything he had yet seen in London.

*

I advise you strongly to visit this building if you are in the neighbourhood. No determined man should have much difficulty in disguising himself, for the purpose of entry, as a provincial solicitor.

BOOKS FOR ARCHITECTS IN THE SERVICES

Many architects who have moved or temporarily closed down their offices during the war may have found that

they have some books on architecture and associated subjects which they would be prepared to give away in a good cause.

*

They now have an opportunity. Books of this kind are required for architects who are on active service or prisoners of war to enable them to keep in touch with architecture and prepare themselves either for examinations or continued practice. It should be made clear that the books specially needed are those which it may be a little sad to part with: rubbish is not wanted.

*

Architects who can spare up-to-date textbooks, books listed in the R.I.B.A. syllabus for Intermediate and Final examinations, or *good* books on any architectural subject, should send them to the Librarian, R.I.B.A., 66 Portland Place, W.1—marked "Books for Serving Members." Alternatively, architects can send to the Librarian a *list* of the books which they will give if they are wanted.

SYNTHETICS

The *Municipal Engineering and Sanitary Record*, in a recent leading article, discusses the problem of research into substitute materials for building purposes. The article quotes Mr. F. L. Charlton, retiring president of the West Yorkshire Society of Architects, as saying that substitute materials might one day be universally used and bring about "the birth of a new architecture."

*

Municipal Engineering agrees with the first part of his suggestion, but views "with something akin to consternation" the conclusion he draws from it. "We have no desire [it says] to witness the uprise of a new architecture. It might be worse than that under which we now suffer; and the extended use of synthetic materials, which can never, of course, harmonize with anything but a synthetic landscape, augurs ill for the future."

*

I'm not sure that, even in wartime, *Municipal Engineering* should be allowed to get away with that cheery type of "of course." It is generally held that the bricks, tiles, stucco, and glass, of which most of the external surfaces of pre-1840 buildings are composed, harmonize tolerably well with the English landscape—itsself an artificial product. And these are synthetic materials, insulting though the adjective seems when tacked on to our glorious heritage.

*

The fact is that most of the British public, as well as experts like *Municipal Engineering* and ourselves in weak moments, don't like seeing *unfamiliar* synthetic materials arranged in *unfamiliar* ways. They have about them a beastly suggestion that we may be out of date, that the world is marching past us.

*

So we sneer at them to keep our spirits. After ten years we stop sneering and after twenty we are giving some of the pioneers gold medals. It is a simple human story.

PROGRESS

Although we have been too busy on this side of the Atlantic to pay proper attention to such things, research workers in one branch of U.S. industry have not been idle. They have just designed a "stovepipe hat" for women which is so constructed that it emits at regular intervals puffs of scented vapour.

ASTRAGAL

NEWS

REVIEW OF WAGES

National Joint Council for the Building Industry recently reviewed the wages payments now in force under the National Joint Agreements with the view of deciding what, if any, variation of current standard rates should be made in accordance with the sliding-scale provisions of Rule 11 (b) (i), as amended under the Terms of Settlement of April 17, 1935, and of November 22, 1939.

The Council found that the Ministry of Labour Index figures of the cost of living, published monthly during the eight months of October, 1939, to May, 1940, inclusive, showed an aggregate of 595, so that the average monthly cost of living figure was 74½. Under decision (7) of the War-Time Emergency Wage-Agreement, adopted and published by the Council on November 22, 1939, this average monthly index figure of 74½ corresponds to a Grade A standard rate of 1s. 9d. per hour. The current Grade A standard rate has (since February 1, 1940) been 1s. 8½d. per hour. Accordingly, an increase in the current standard rates of ½d. per hour falls due from June 1, 1940. Under the Emergency Agreement standard rates for other grades maintain their normal relation to the Grade A standard rate in all cases and, by decision (5) thereof, equal adjustments have to be made in labourers' rates (as a war-time emergency measure only).

The Council therefore resolved: That, having reviewed the wages payments in force under the War-Time Emergency Agreement of November 22, 1939, and finding that a Variation Amendment of the current standard rates is due to be made under that agreement, this Council decides that on and from the first day of June, 1940, the current standard rates of wages shall be adjusted by an increase of one halfpenny per hour, and that the same increase of one halfpenny per hour shall also be made in labourers' rates.

Resulting from the application of this decision, the authorized grade rates payable on and from June 1 will be as under:

Craftsmen	1/9	1/8½	1/8	1/7½	1/7	1/6½	1/6	1/5½	1/5
Grade Classifications	A	A½	A½	A½	B	B½	B½	B½	C
Labourers	1/4½	1/3½	1/3½	1/3	1/2½	1/2½	1/2	1/1½	1/1½

Craftsmen: Within the 12 miles radius, 1s. 10½d.; from 12-15 miles radius, 1s. 10d.
Labourers: Within the 12 miles radius, 1s. 5½d.; from 12-15 miles radius, 1s. 5d.

APPOINTMENT

Mr. John Fyfe, Aberdeen, was elected vice-chairman of the British Granite and Whinstone Federation in London last week. He succeeds Mr. N. F. Nalder (Cornwall). Mr. Alfred Dryland, C.B.E., was re-elected independent chairman.

ANNOUNCEMENT

On June 1 the staff of Lloyd Boards, Ltd., who have been carrying on at Sittingbourne since the beginning of the war, returned to Shell-Mex House, Strand, W.C.2.

FLATS IN KENSINGTON

The general contractors for the flats in Kensington, illustrated in last week's issue, were Messrs. Haymills (Contractors), Ltd.

INSTITUTION OF STRUCTURAL ENGINEERS

Constitution of Council for the Session 1940-1941:

President: M. B. Buxton, M.C., M.A., M.INST.C.E. Past Presidents: F. E. Wentworth-Shields, O.B.E., M.INST.C.E., H. J. Deane, B.ENG., M.INST.C.E., M.MECH.E., R. H. H. Stanger, F.C.S., A.M.INST.C.E., A.M.I.MECH.E., Major E. C. P. Monson, T.D., F.R.I.B.A., F.S.I., Major A. H. S. Waters, V.C., D.S.O., M.C., M.INST.C.E., Ewart S. Andrews, B.Sc., M.INST.C.E., Dr. Oscar Faber, O.B.E., D.C.L., D.Sc., M.INST.C.E., Lt.-Col. C. H. Fox, O.B.E., B.Sc., F.S.I., Professor J. Husband, F.R.C.S.L., M.INST.C.E., Lt.-Col. H. S. Rogers, C.M.G., D.S.O., P. J. Black, L.R.I.B.A. Vice-presidents: J. F. Butler, A.M.INST.C.E., Major H. J. Collins, R.E., M.Sc., M.INST.C.E., H. R. Cox, W. K. Wallace, M.INST.C.E., Professor C. E. Inglis, M.C., Gower B. R. Pimm, M.INST.C.E. Honorary Secretary: R. Travers Morgan, M.ENG., M.INST.C.E. Honorary Treasurer: D. H. Green, O.B.E., M.C., B.Sc., A.M.INST.C.E. Honorary Librarian: S. Bylander. Honorary Editor: A. H. Edwards. Honorary Curator: C. Roland Woods, M.B.E., LL.D., ASSOC.INST.C.E.



Captain Joseph Hill, F.R.I.B.A., who has been elected President of the Architectural Association.

Members of Council: H. E. Brooke-Bradley, W. Cyril Cocking, F. E. Drury, M.Sc., G. McLean Gibson, O.B.E., M.I.MECH.E., A.M.INST.C.E., E. Granter, B.Sc., A.M.INST.C.E., S. B. Hamilton, M.Sc., A.M.INST.C.E., H. Jackson, A.R.S.C.MINES, M.I.MECH.E., A.M.INST.C.E., Professor M. K. Rice-Oxley, M.INST.C.E., A. Scott, M.B.E., F.R.I.B.A., Major R. A. B. Smith, M.C., A.M.INST.C.E., F. S. Snow, M.INST.C.E., L. Scott White, M.INST.C.E. Associates of Council: E. Weir, P.A.S.I., W. H. Woodcock, F.C.S. Associate Members of

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MAINTENANCE OF THE BUILDING INDUSTRY

The maintenance of the building industry was the subject debated at a conference held at the Royal Society of Arts, Adelphi, London, W.C.2, on May 29. It was organized by the Incorporated Association of Architects and Surveyors. The chair was occupied by Sir Alfred Hurst, K.B.E., and among the speakers were Mr. Laurence Gotch, F.R.I.B.A., Mr. P. J. Spencer, M.A. (of the Institute of Builders), Mr. J. W. Laing (Master Builder), Colonel C. S. Marriott, Mr. F. R. Yerbury and Alderman A. T. Pike, O.B.E.

Mr. Laurence Gotch said that any criticism he made was to be taken as referring to the past Government, not the present one. The definite idea of himself and others was that of the complete submission of the whole of the industry to its allied professions to the Government to be of any service possible; and they wished they had been called in to be of more service. Architects and surveyors were supposed to have a power of thinking and planning ahead, but this power had been ignored by the late Government. Another mistake had been the placing of enormous contracts to be controlled by two or three firms and carried out by one contractor, instead of splitting them up among several minor contractors, possibly with a central control over the whole thing, and the greater employment of local talent in the way of architects, surveyors and local contractors.

As to what might be done to maintain the industry, there must be people who a little before the war had been planning building operations—public authorities, banks, insurance companies, speculative promoters of flats and others—and was it not possible for some of these to employ architects to plan for the time when the work could be carried out? At the conclusion of the last war there had been an interval of nine months before the industry started again, and this might be avoided with the present war if planning was done in advance. The architects wanted the money now. How were they to be paid? His suggestion was to establish an insurance scheme. Into this fund contractors, architects and surveyors who were now doing well with big Government contracts should put a proportion of estimated net profits or fees earned. The proportion he suggested was one-tenth, and the money would provide a fund to pay for work done planning for the future.

Mr. J. W. Leach said quantity surveyors felt that Government work had not been equally distributed. Certain firms had been given enormous contracts and were employing assistants. In other cases the Ministry had carried out schemes itself and employed assistants, gathering them from every walk of life connected with the building industry. Had this work been distributed among quantity surveyors, it would have been carried out more economically. Quantity surveyors felt that the Government had not taken full advantage of the services of the profession.

Mr. P. J. Spencer said it would be left to us and our successors to carry the national debt, to whatever amount the war might expand it, and it was essential that we should maintain and plan the building industry as a major economic instrument in support of the war and of post-war recovery and development.

Mr. J. W. Laing said that after the war there would be a period when labour would be dislocated and many men idle. There were three directions in which the surplus labour could be employed. The first was the construction of roads. There should be an orbit road round every town permitting through traffic to circuit it, and three great new roads running from the London orbit through the most thinly populated parts of the country. One of these roads should proceed through the eastern counties to the Firth of Forth and, possibly, the Caledonian Canal. Another should proceed through the western counties to the Clyde, and the third should go to Cornwall. Moreover, in every county there were still a number of county roads required. The second reservoir of employment should be the construction of aerodromes: every town should have one. But the most important matter was rebuilding: in most of our towns a considerable number of existing structures were out of date. Private enterprise should be encouraged to clear them away and replace with new.

Colonel Marriott said the Government programme of £300,000,000 was likely to be expended by the end of this year, and that the concomitant with that possibility was the probability that the continued removal of men from civil to military employment would create a shortage of operatives. Thus it was difficult to formulate a scheme which would form a mainstay to enable us to weather the difficulties before the building industry, where already many hundreds of one-man businesses were out of action. Post-war construction would be influenced by different motives from those of today. It would be affected by the aftermath of war and the threat of war—the world would not settle down in our time. Further, it would be influenced by the great development of flying and transport, and by the fact that the shortage of steel and timber was bringing into use many new materials. When the war was over, our whole outlook on life would have changed. The architect should get post-war construction, consult with the builder as to the means of construction and treat the allied trades as a specialist. It was for the architect to create, the builder to construct and the specialist to handle the goods. They should work in harmony and not in watertight compartments.

Mr. F. R. Yerbury said they must take a big view and realize that the building industry was one big thing where the parts were interdependent. The bricklayer was equally part of it with the architect. If they were to maintain the industry in the position it should hold, they must put it house in order. Organization was almost completely lacking and should be dealt with, particularly on the manufacturing side. When the war finished there would be a shortage of materials, and this would continue for some time. How should we deal with that? Should we say that the richest man, or the most persistent, should get what he wanted, or should we say things were to be used for national needs? He did not accept the assumption that you could sit down now and design buildings for after the war: you must know the programme for building in the country before you could do that; but you could evolve a long-term policy, which would really in the end maintain employment in the industry for some years to come.

Something might be done now to preserve the little builders who in some places were the backbone of the craft. Certain materials were impossible to get, but others were available, and if decoration and maintenance work was carried out now it would find work for the small builder, give manufacturers an opportunity to carry on, and enable the preservation of property now going to ruin.

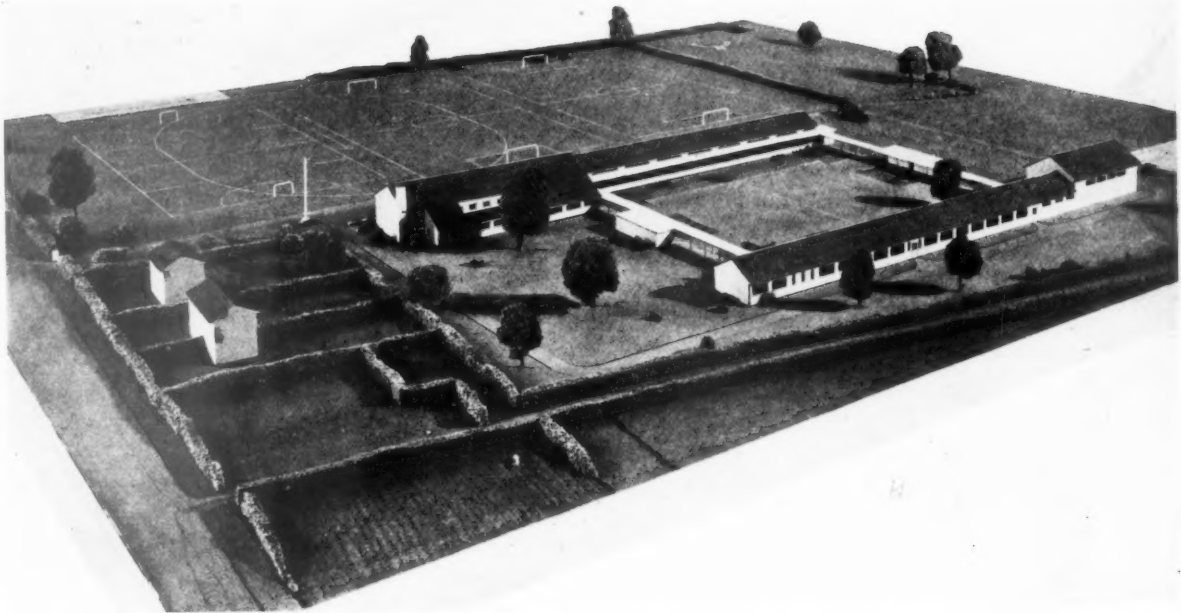
Alderman Pike said there should be a carrying forward of town-planning schemes now in course of preparation, so that when the war was over those schemes could be submitted to the Minister of Health for his approval. Thus we should find ourselves in readiness to continue the development that had been interrupted.

DIARY

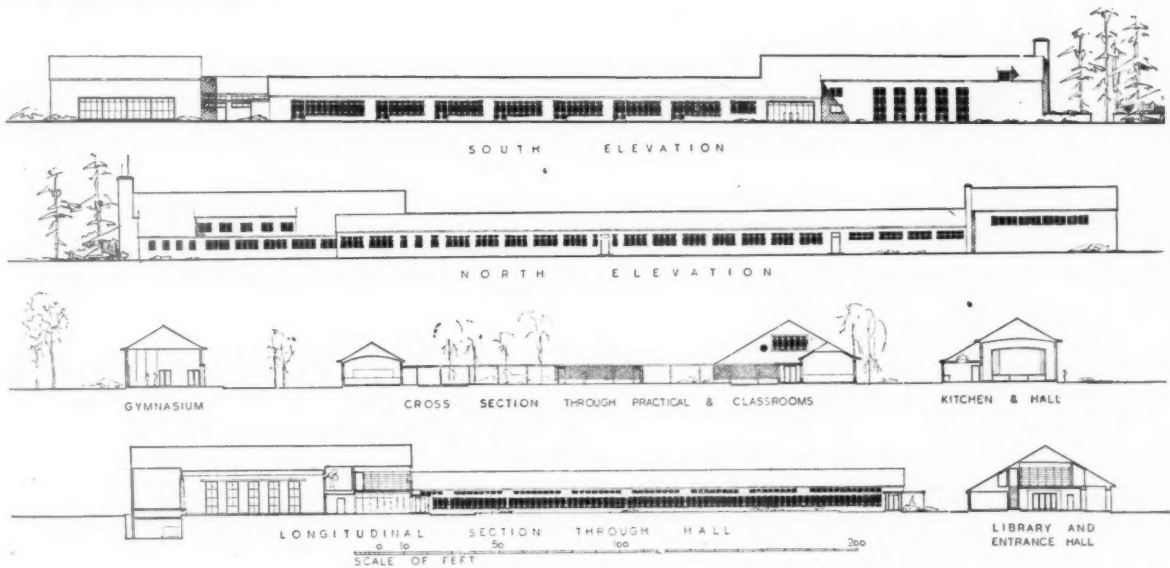
Thursday, June 6. BUILDING CENTRE, 158 New Bond Street, W.1. Exhibition: "Railings for Scrap." Until June 8. 10 a.m. to 6 p.m.

Friday, June 7. A.A.S.T.A. Party at 2 Willow Road, Hampstead, N.W.3. 7 p.m.

Friday, June 18. R.I.B.A., 66 Portland Place, W.1. General meeting. Paper on "Alternative Methods of Construction." By R. Fitzmaurice. 8 p.m. HOUSING CENTRE, 13 Suffolk Street, S.W.1. "Day Nurseries." By Mrs. Lanchester. 1 p.m.



Model from the north-east



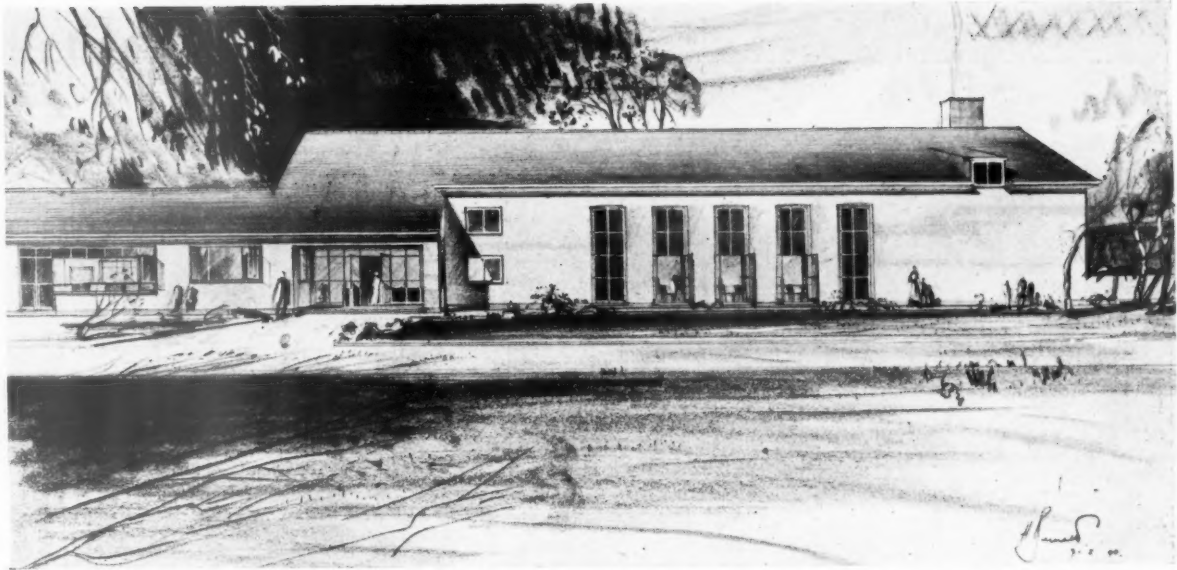
PROPOSED SENIOR SCHOOL YARM-ON-TEES, NORTH RIDING

DESIGNED BY HUBERT BENNETT

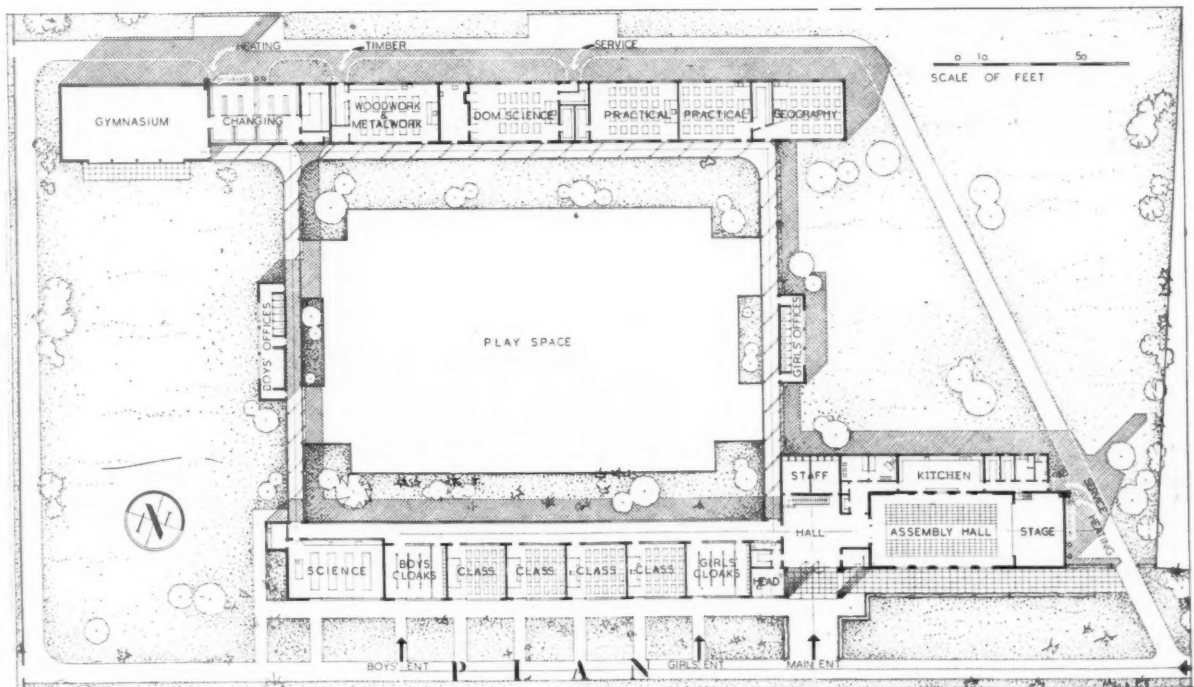
GENERAL AND SITE—Site of this proposed school is one of eleven acres on high ground above the town of Yarm-on-Tees. Work was suspended owing to the outbreak of war.

CONSTRUCTION AND EXTERNAL FINISHES—Weight-bearing brick walls, with steelwork used to the minimum extent for roof spans and covered ways. 15½-in. and 11-in. external walls will be faced with

2½-in. golden-brown sand-faced bricks set with a ¾-in. flush joint. Roofs will be mainly of timber construction, boarded and covered with light sea-green slates in diminishing courses, with a 3-in. lap, copper nailed, counter lathed and underdrawn with untearable felt. Classrooms will be divided by 9-in. structural walls which will carry the steel joists supporting the roof. Metal windows will be fitted.



Perspective view from south, showing the assembly hall and principal entrance



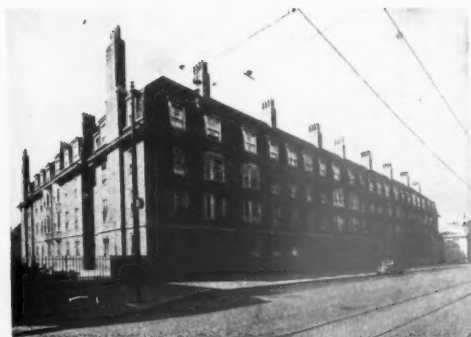
PLAN—The school is to be a single-storey structure with the exception of the library and projection room. These two rooms are placed over the entrance hall, thus overlapping the mass of the assembly hall over the front block of the classroom wing. Principal entrance hall, while allowing for the possibility of evening classes, forms a crush hall to the assembly hall, as well as providing access to the head teacher's room, staff rooms, medical inspection rooms and the library on the first floor. Remainder of the accommodation is planned in two blocks running approximately east and west—the classroom wing housing the science laboratory, boys' and girls' entrances, cloak-rooms and lavatories. The rear wing includes geography

room, two practical rooms, domestic science, wood and metalwork practical rooms, domestic science, wood and metalwork rooms, showers and changing room accommodation, kit stores and gymnasium. Each room of the building is directly accessible from the corridor which is enclosed only where exposed to the north. This arrangement will give the school an open character, and shelter the open play space, which is served with boys' and girls' offices at the east and west side respectively. The playground area is given a thirty foot wide lawn as a surround, in order to isolate it from the windows. The rear wing of the school, the kitchen services to the assembly hall and the heating chambers are to be served by the service roadway on the east and north of the school.

FLATS,



View looking across children's playground.



Extreme left: High street front; left: view from south-west.

D E S I G N E D B Y L . H . K E A Y

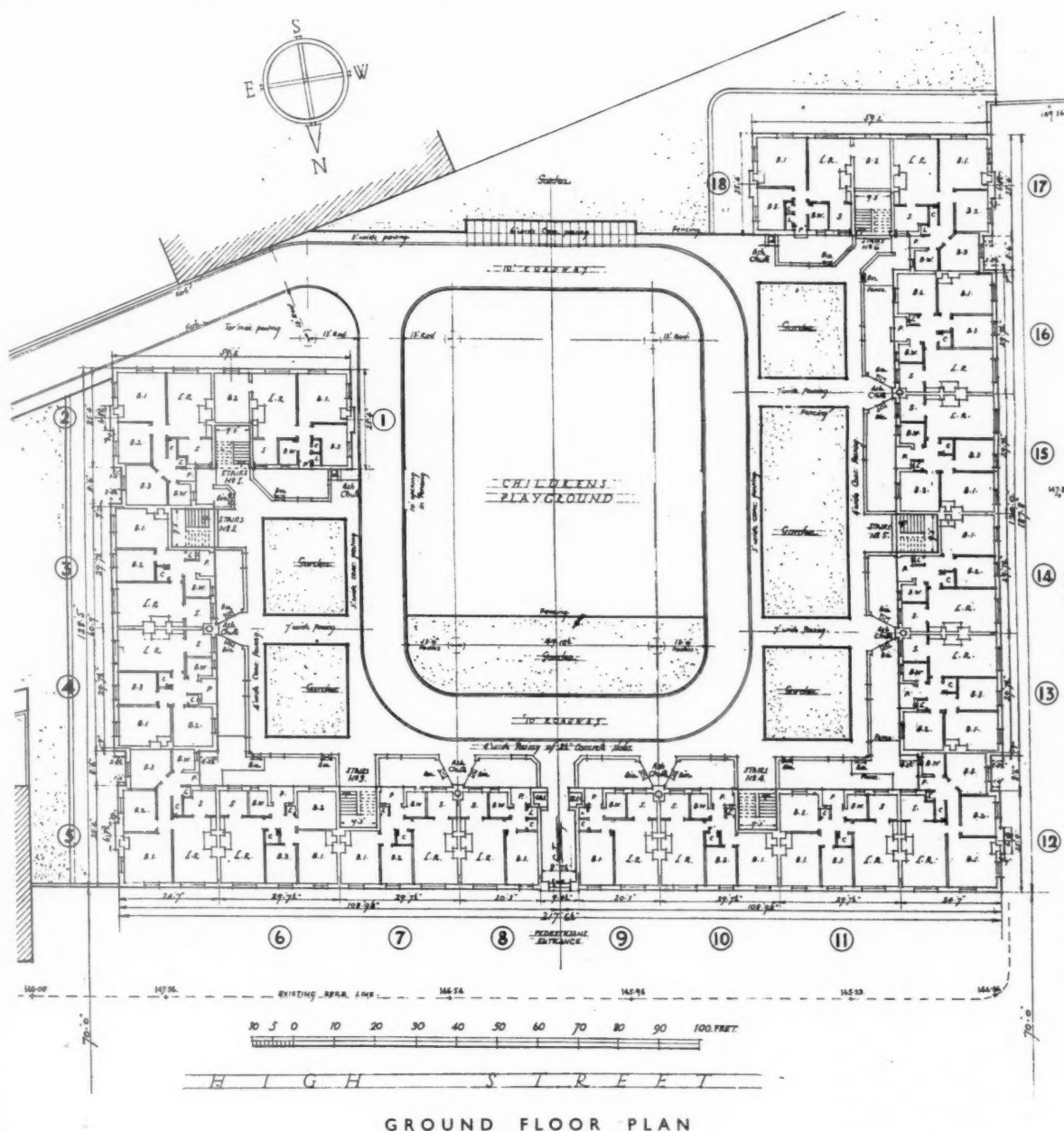
GENERAL—Block of 72 flats for slum clearance scheme, forming three sides of a hollow square and four storeys in height throughout. Each flat comprises a living-room, scullery, bathroom, larder, etc., together with one, two or three bedrooms.

SITE—Corner of two main roads, with the longer frontage facing due north. The retention of existing licensed premises on the corner prevented the use of the whole site.

PLAN—The block forms three sides of a hollow square, the open side being to the south; the courtyard is partly planted and partly paved to form a playground. Access to the flats is by balconies in short sections with stair towers at convenient positions.

CONSTRUCTION—Foundations are fairly deep and consist of mass concrete piers spanned immediately below ground surface by reinforced concrete beams. External and division walls are in solid brickwork. Floors and

WAVERTREE GARDENS, LIVERPOOL



balconies are R.C. with a spinal beam and R.C. column in the centre of each unit. Roof is of timber covered with plain red tiling, the front portion being in the form of a mansard.

EXTERNAL FINISHES—Rustic brick facings with rubbed gauged brick arches and pre-cast stone dressings; windows, generally, double-hung wooden sashes.

INTERNAL FINISHES—Internal walls of living-rooms and bedrooms are plastered and colour-washed. Walls of

sculleries and bathrooms colour-washed on sand lime pointed brickwork. Floors of living-rooms and bedrooms finished with boards on creosoted fillets; halls and sculleries and bathrooms are finished with quarry tiles.

SERVICES—Living-rooms are fitted with grates with back boilers which provide hot water to bathrooms and sinks. Gas coppers are fitted in sculleries.

Work executed by direct labour; for list of sub-contractors and suppliers, see page xxviii.

LETTERS

The Panel System

SIR,—“Astragal’s” note in your issue for May 23 and the correspondence that has ensued drew attention again to this controversial issue. Can we not all agree that the Panels are frankly a makeshift method—typical of our British flair for compromise, as opposed to the logical solution? The solution is the appointment by each authority of paid qualified advisors on architectural, as for other professional matters.

Many of the larger authorities already have such advice at their disposal, and we may hope that in due time, especially if a more definite lead in that direction could be given by the Ministry of Health, all planning authorities will be induced to adopt the same course. Meanwhile, on the analogy of half a loaf being better than no bread, the Panel system during recent years has been at work, and in spite of what “Astragal” may think, the system has rendered valuable service voluntarily in improving the appearance of small buildings in many districts. He was surely unfair in remarking that the Panels “have not measurably improved the design of the three million odd houses built since 1919,” as it is only since about 1932 that Panels have had any opportunities to make their influence felt.

As one who has taken an active part in the work of one Panel, and has knowledge of the operations of several others, I know that the standard of design has definitely improved, and what is almost as important the use of incongruous materials and vulgar imitations has been very much curtailed. What has happened in this one case may be summarized thus:—

(a) The fact that the Panel is in existence has in itself had a good effect on the kind of plans submitted by builders.

(b) Whereas previously perhaps 50 per cent. of plans were of the most illiterate kind, badly prepared by builders’ clerks, etc., now nearly all the plans scrutinized by the Panel have been prepared by architects.

(c) Although many of the latter have the minimum qualifications and their design is often poor, the Panel now has to devote much less time in suggesting such obvious improvements as simplified roofs, proportions of windows and doors and omissions of sham half-timber.

I may say that the Panels of which I have personal knowledge are asked to scrutinize *all* building plans submitted to the local authority, and the Panel’s recommendations are all acted on.

Cardiff.

T. ALWYN LLOYD

SIR,—I am sorry to take up your space once more, but the implications of your regular contributor “Astragal” in the JOURNAL for May 23 are so serious that I have no alternative. To begin with, I think “Astragal’s” defence against Dr. Farncombe’s admirable letter is very weak. I cannot read into that letter any complaint against an accusation that the Worcestershire Panel had failed “more conspicuously than other Panels.” Secondly, I fully agree with Dr. Farncombe that “the comparison with the ‘last coat of paint’ is singularly inept.” But the most misleading and dangerous statements are those which refer to external appearance. Of course the architect is concerned with external appearance. What else, except layout, as a Panel architect, can he possibly be concerned with? He is wise enough to know that in many cases external appearance is affected by plan, so that his recommendations are bound to take plan—when required—into account. I can only be amazed that “Astragal” does not recognize that “small details of external appearance” are of the utmost importance, as every intelligent layman recognizes. If this fact is not recognized by a paper with the standing of THE ARCHITECTS’ JOURNAL, it is time we had a course of articles by one who knows, on “Little Things that Matter” in elevational treatment, to parallel Mr. Gunn’s articles under the same heading on constructional matters.

Cambridge.

THEODORE FYFE

Member of the County Advisory Panel for Cambridgeshire, and Hon. Secretary of the Cambridgeshire and Isle of Ely Branch of the C.P.R.E.

[We have submitted Mr. Fyfe’s letter to “Astragal,” who replies:

The problem under discussion is whether the Panel system has brought about any measurable improvement in the design of the several million houses built since the last war or even in the design of all those built since 1932. My view is that it has not done so, and I doubt whether Mr. Fyfe will gain much support for his view that “small details of external appearance are of the utmost importance” in bringing about such an improvement.

I did not deny that architects are concerned with external appearance. What I said was:

To the small owner and the small builder

the Panel system presents a picture of the architect as a man wholly concerned with external appearance, and mostly with small details of external appearance. What is more, the public in general does not attach value to anything which costs nothing: and the Panel system reinforces their belief that the architect contributes nothing to a building which really matters.

I may add that my views are not necessarily those of this JOURNAL.—ASTRAGAL.]

Registration

SIR,—July 31 next is the closing date for applications for the registration of architects under Section 2 of the Architects Registration Act, 1938. Under that Section persons are entitled to register who can prove to the satisfaction of the Architects’ Registration Council that they were or had been practising as architects on July 29, 1938. Special provision is made in the Regulations of the Council for Architectural Assistants who, on August 1, 1938, had had seven years’ experience in the United Kingdom. If part of the period of seven years has been spent outside the United Kingdom, in some part of the British Empire, an applicant will still be eligible for registration, provided that he had served for not less than one year before the above date as an architectural assistant in an architect’s office in the United Kingdom and had received an architectural education and training equivalent in value to that normally received by an architect in the United Kingdom. The closing date for applications is the same in all cases.

Applicants should write to the Registrar of the Architects’ Registration Council, 68 Portland Place, London, W.1, enclosing a postal order for 1s. for a copy of the Council’s Regulations, stating whether they apply as practising architects or as assistants with not less than seven years’ experience on August 1, 1938.

From August 1 next, it will be an offence punishable on summary conviction by a fine not exceeding £50 for any person whose name is not on the Register to practise or carry on business under any name, style or title containing the word architect. This prohibition of the use of the title will not affect those who apply for registration before August 1, unless and until their applications are rejected.

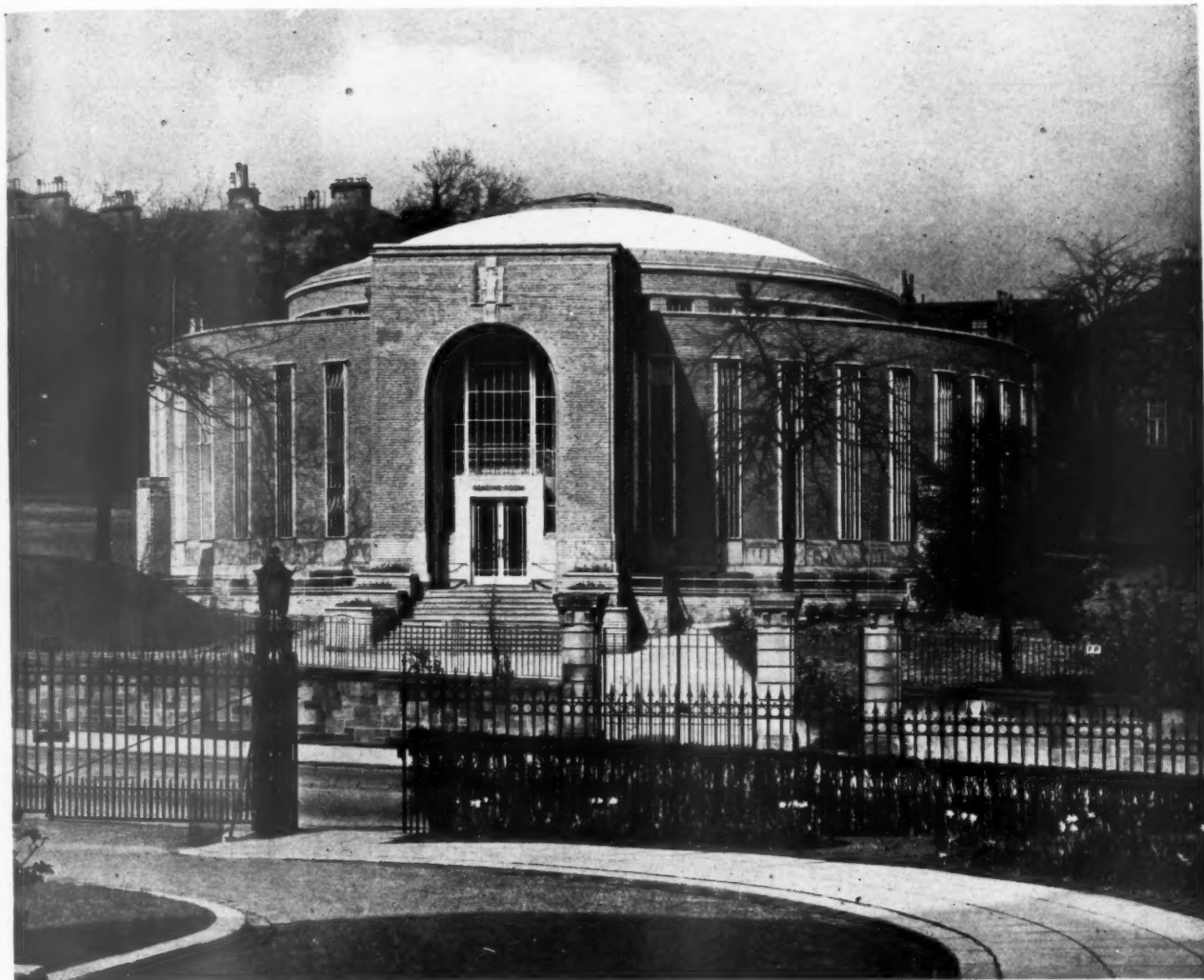
After July 31 an applicant, to be entitled to registration, must have passed one of the examinations recognized by the Council as a qualification.

With a view to the prosecution of offenders by the Council, architects, after July 31, should notify the Registrar of any cases coming to their notice in which business is being carried on under the title of architect by unauthorized persons.

London, W.1. SYDNEY TATCHELL
Chairman, Architects’ Registration Council.

Owing to the paper shortage caused by the German invasion of Scandinavia, the JOURNAL, in common with all other papers, is now only supplied to newsagents on a “firm order” basis. This means that newsagents are now unable to supply the JOURNAL except to a client’s definite order.

To obtain your copy of the JOURNAL you must therefore either place a definite order with your newsagent or send a subscription order to the Publishers.



South front

READING ROOM UNIVERSITY OF GLASGOW

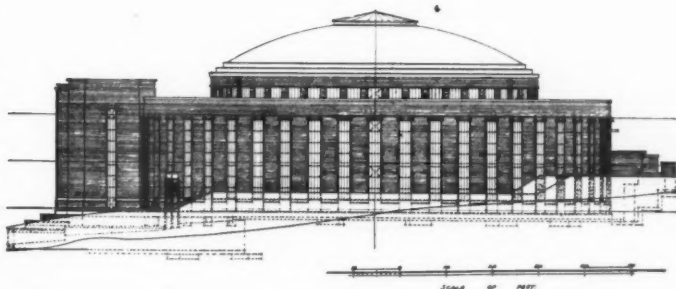
DESIGNED BY T.
HAROLD HUGHES



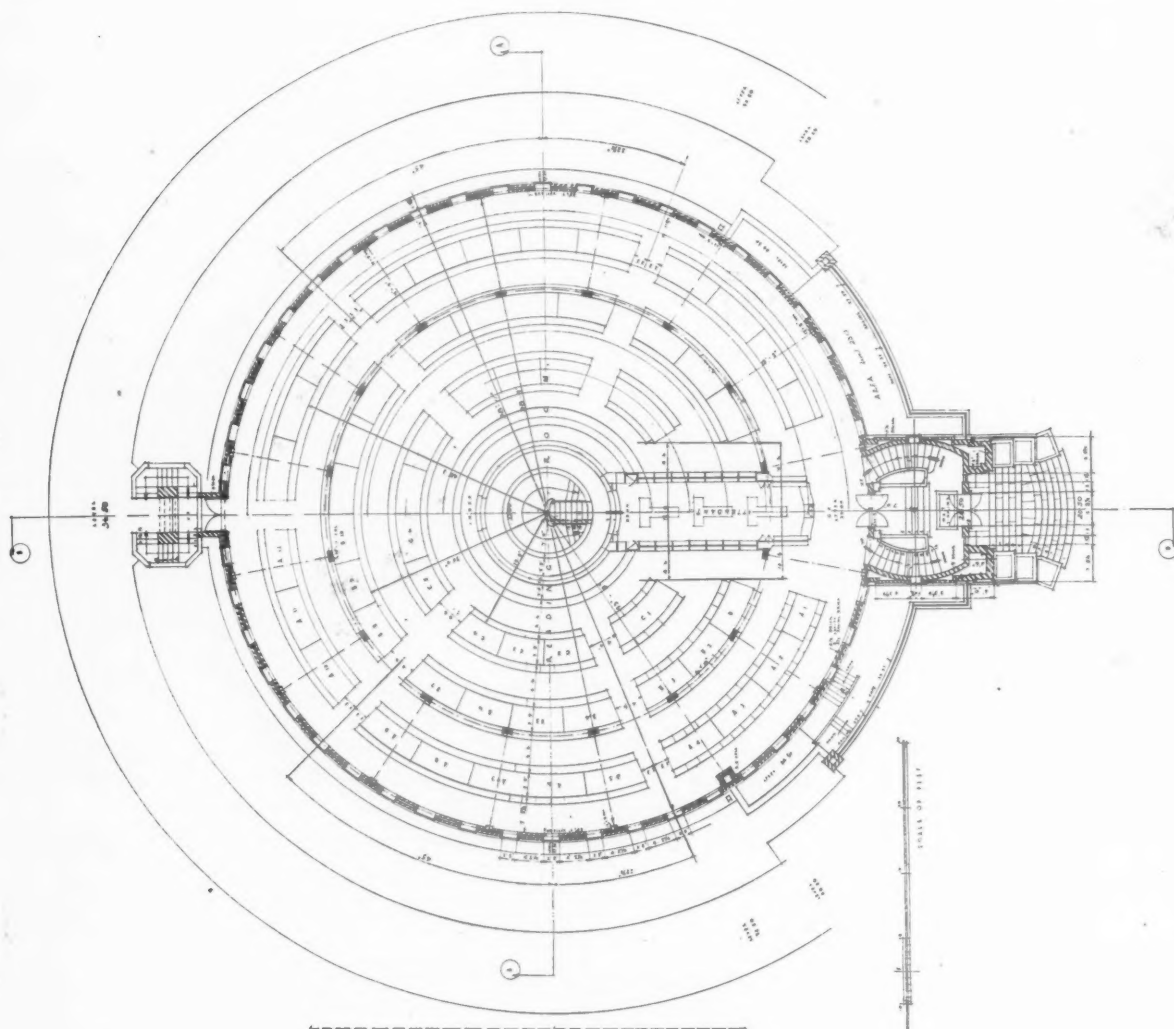
SOUTH ELEVATION

GENERAL—Reading room for University students, together with departmental seminar libraries for honours students. It was desirable that complete supervision of all parts should be possible with a minimum staff.

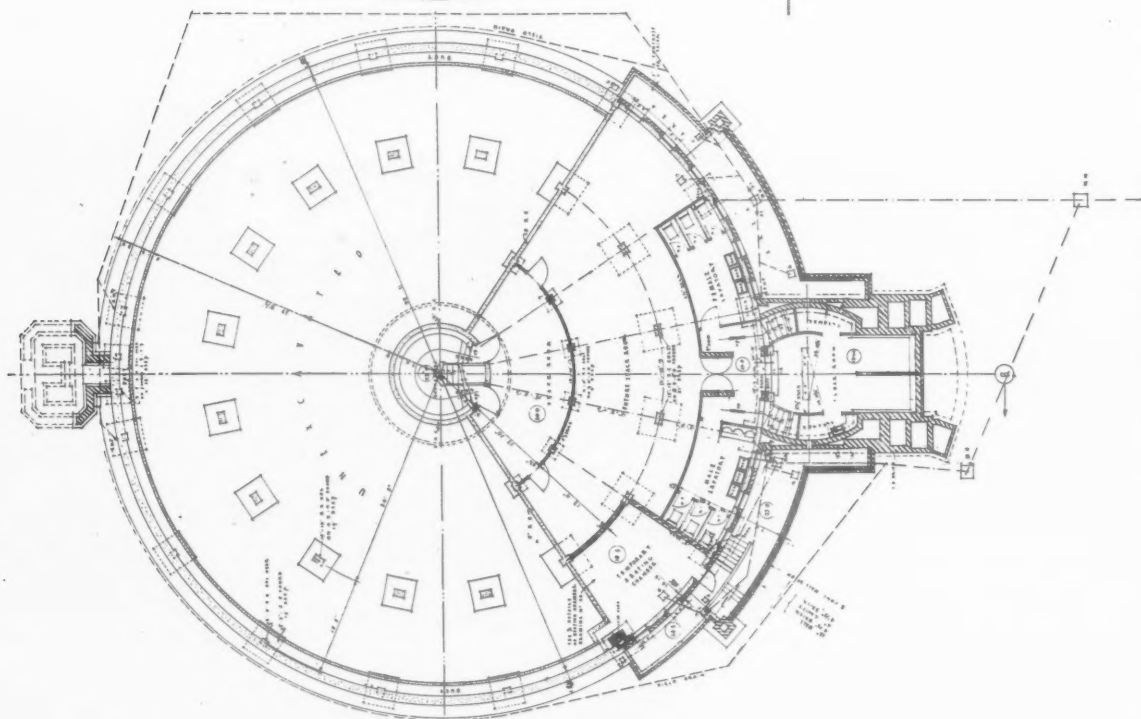
SITE—The building was placed on recently acquired land opposite to, and on the main axis of, the existing University buildings. The reading room is part of a general scheme for developing the new site for University purposes. Advantage was taken of the rising site to obtain a large basement store for books from the main University library.



EAST ELEVATION



GROUND FLOOR PLAN

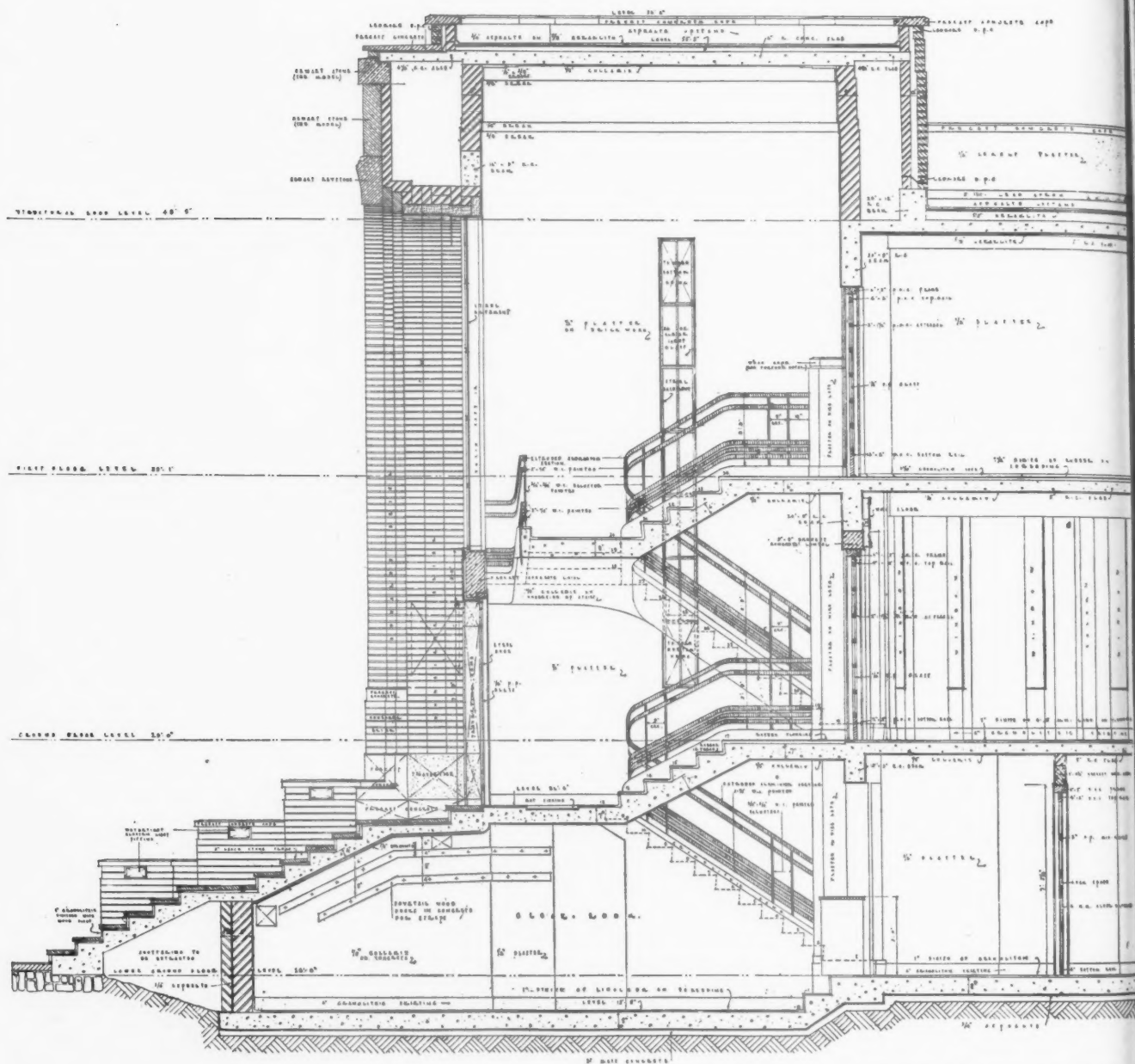


BASEMENT PLAN

READING ROOM, UNIVERSITY OF GLASGOW • BY

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T



SECTION THROUGH FRONT ENTRANCE

A detail of the balcony



INTERNAL FINISHES—Dome and all walls finished with special plaster, cream tint. Floor of main reading room and seminars, battleship linoleum. Floor of stairs and balcony, rubber. Balustrades of wrought iron with aluminium handrail. Electric light fittings, wrought iron. Furniture, oak.

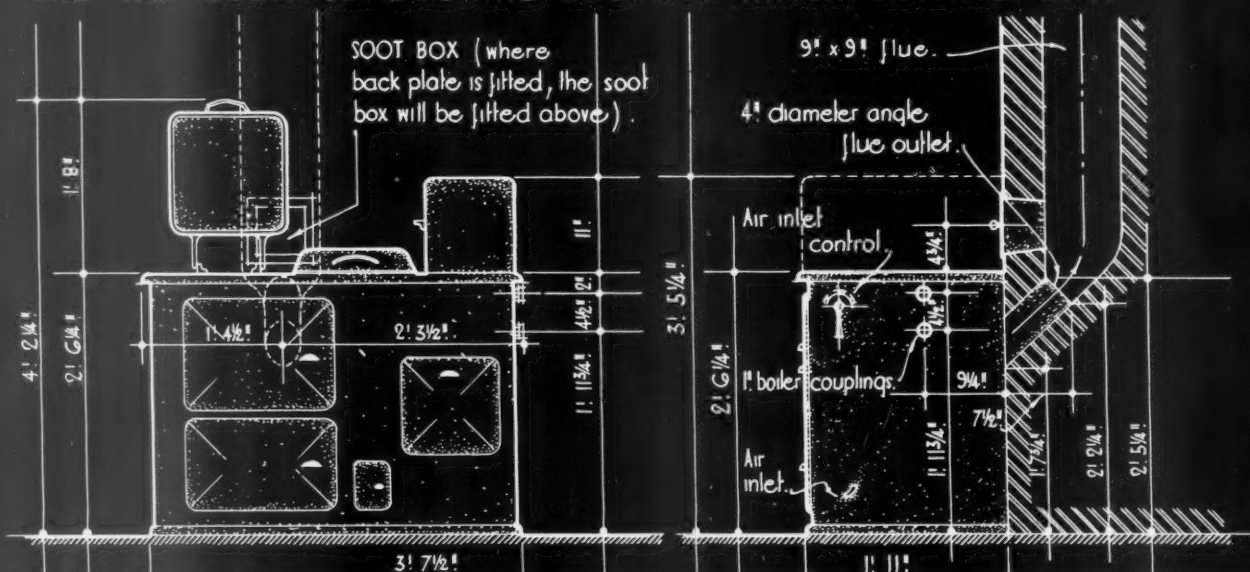
SERVICES—Low pressure hot water heating (temporary boiler house pending development of whole site).

COST—Price per cubic foot (approx.) 1s. 8d. Contract price, £20,000.

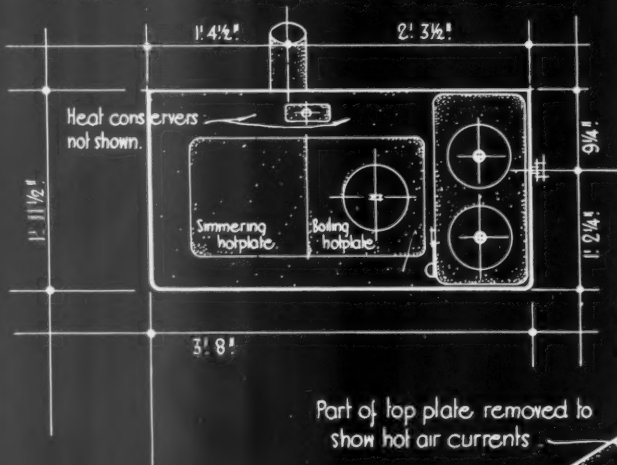
For list of sub-contractors and suppliers see page xxviii.

READING ROOM, UNIVERSITY OF GLASGOW
DESIGNED BY T. HAROLD HUGHES

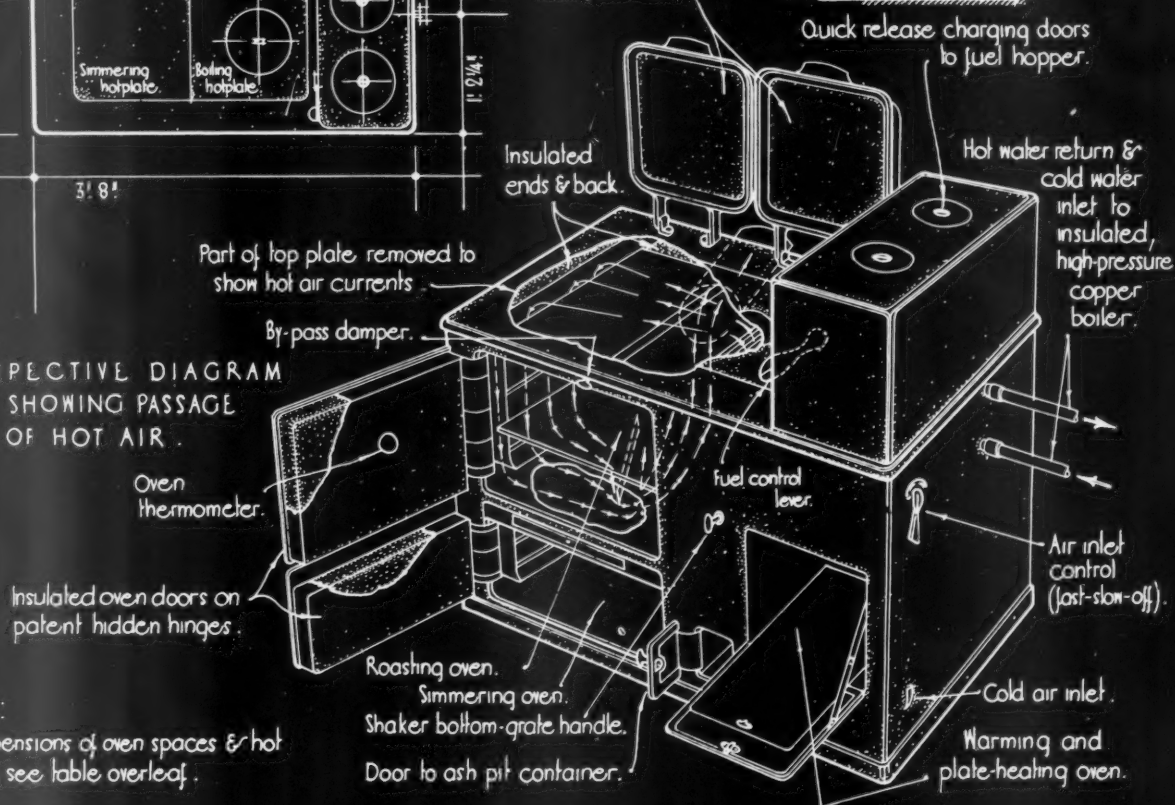
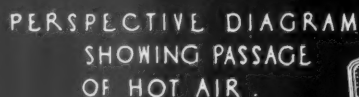
pendings



4. Bluepipe connection for existing openings.



Pair of hinged, insulated baffle plates for lowering over hot plates when not in use, to conserve heat and increase hot water facilities.



NOTE:

for dimensions of oven spaces & hot plates, see table overleaf.

Issued by Federated Sales Ltd.

INFORMATION SHEET : KITCHEN EQUIPMENT : SOLID FUEL CONTROLLED COMBUSTION COOKERS.
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1.

THE ARCHITECTS' JOURNAL
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INFORMATION SHEET

• 795 •

KITCHEN EQUIPMENT

Product : The "A B" Cooker (Combining
Cooking and Water Heating)

General :

The cooker illustrated on this Sheet is solid fuel fired, and is of the low consumption, automatic feed type, having the fuel-storage hopper superimposed. This arrangement permits not only greater oven capacity, but also compact nesting and insulation of the internal working parts to obtain a cooking and water-heating unit of minimum overall dimensions. The cooking ovens as well as the high-pressure 7 gauge $\frac{3}{16}$ -in. copper boiler are enclosed on all sides with consolidated insulating materials.

Operation :

The annual consumption of $\frac{3}{8}$ in. to $\frac{1}{2}$ in. diameter solid fuel is approximately three tons, and at this rate it is necessary to fill the hopper only twice every twenty-four hours for continuous operation.

Oven temperature is rapidly increased or decreased as desired, by means of the three-stage air inlet control lever, while the hopper automatically regulates the continuous minimum fuel supply required by the particular cooking demands. In this manner complete fuel combustion in the fire pot is maintained and there is no wastage of fuel heat value, the only attention necessary being an occasional movement of the shaker bottom grate handle, and removal of powder ash from the pit container.

Hot Plates :

Two hot plates are provided, each $13\frac{1}{2}$ in. wide by 13 in. deep, that for boiling using heat direct from the fire and having a boiling cup capable of boiling water at the rate of one pint per minute.

To conserve heat for ovens and water supply, both the boiling and the simmering hot plates are fitted with hinged, insulated lids for lowering over the plates when not in use.

Ovens :

Three ovens are provided, with a cooking capacity for up to twenty persons, and the following table gives their overall internal dimensions :—

Use	Width	Height	Depth
Roasting Oven	17 in.	$13\frac{1}{2}$ in.	$16\frac{1}{2}$ in.
Simmering Oven	17 in.	8 in.	$16\frac{1}{2}$ in.
Plate Oven ...	11 in.	$8\frac{1}{4}$ in.	$19\frac{1}{2}$ in.

The roasting and simmering ovens have heavily insulated doors side hung on continuous hidden hinges, and the plate oven door is bottom hinged to open down to the horizontal.

Water Heating :

The copper boiler is self-contained, and is suitable for ready connection to existing systems.

It is recommended that both the flow pipe and the 30-40 gallon domestic hot water storage tank be insulated. Unless an independent boiler is installed, radiators should not be included on the circuit.

The proportion of the total heat released from the fire and transferred to the boiler varies according to the rate of burning of the fuel. Under normal conditions, with the cooker in use, and correct balance of oven and hotplate temperatures, an output of 10,000 B.Th.U.'s per hour is obtainable, corresponding to the heating of 10 gallons of water per hour from 50 degrees F. to 150 degrees F. An increased output from the boiler is obtainable by increasing the burning rate of the fuel, but care should be taken under these conditions to ensure that the hotplates and ovens do not become overheated.

Installation :

A true and level hearth is essential. The angle flue pipe should have an airtight connection where it discharges into the chimney.

Detailed installation instructions are issued, and in addition to the Company's guarantee covering the replacement of any defective part during the life of each unit, satisfactory functioning of every cooker is guaranteed provided it is installed, operated and fuelled according to their requirements. These include the use of only approved machined-base cooking utensils.

The total weight of each cooker is $9\frac{1}{4}$ cwt.

Accessories :

Standard accessories include hot plate and hopper lid key, fuel hod, flue brush and rake and galvanized roasting tin.

Optional parts supplied at extra cost are back plate, plate rack and soot box.

Finish and Maintenance :

Standard finish is high-class cream and black porcelain enamel, but other colours are available at slight extra cost.

All exterior surfaces may be cleaned by an occasional wiping with a damp cloth.

The angle flue provides easy access either from the front of the cooker through the special vent, or through the flue-box itself, for cleaning purposes.

Free renewal of fire bars or fire bricks is undertaken by the Company should failure occur under fair usage within two years of installation.

Prices :

Standard finish and equipment, £40 ex works ; shades of blue or green, £45 ex works ; any desired shade, £50 ex works. Delivery charges to prepared sites vary between 28s. and 80s. according to location.

Issued by : Federated Sales, Ltd.

Address : 80 Grosvenor Street, London, W.1

Telephone : Mayfair 5054/5

Telegrams : Fedsales, Westdo, London

SOME QUESTIONS ANSWERED THIS WEEK:

- ★ *WHAT were the pre-war (1939) Wage Rates for building craftsmen and labourers in New York and London? - - - - -* Q₃₄₈
- ★ *WE have seen a ceiling ventilator circular in shape, with circular louvres. Can you arrange for the suppliers to send us particulars?* Q₃₅₀
- ★ *WHO are the publishers of the Architects' Standard Catalogue? - - - - -* Q₃₅₆
- ★ *CAN you tell me of an economical substitute for timber doors and door frames? - - - - -* Q₃₅₈

THE ARCHITECTS' JOURNAL INFORMATION CENTRE

THE Information Centre answers any question about architecture, building, or the professions and trades within the building industry. It does so free of charge, and its services are available to any member of the industry.

Questions may be sent in writing to THE ARCHITECTS' JOURNAL, 45 The Avenue, Cheam, Surrey, or telephoned direct to the Information Centre: Regent 6888.

Enquirers do not have to wait for an answer until their question is published in the JOURNAL. Answers are sent direct to enquirers by post or telephone as soon as they have been prepared.

The service is confidential; and in no case is the identity of an enquirer disclosed to a third party. Samples and descriptive literature sent to the Information Centre by manufacturers for the use of a particular enquirer are forwarded whenever the Director of the Centre considers them likely to be of use.

Finally, if an answer does not provide all the information needed, the Centre is always glad to amplify any point on which the enquirer wants fuller explanation.

Any questions about building or architecture may be sent to:

THE ARCHITECTS' JOURNAL

45 THE AVENUE, CHEAM, SURREY.

Telephone:

VIGILANT 0087

or ring the Architects' Journal Information Centre at

R E G E N T 6 8 8 8

Q₃₄₄ ARCHITECT, KING'S LYNN.—*Do you know whether there is on the market a BLACKOUT BLIND or shutter which makes provision FOR VENTILATION? The windows concerned are in a cookery room of a school. Size of metal window 5 ft. 6 in. wide by 7 ft. 5 in. high, with four lights balanced above two hopper lights, with frame set 2 in. in reveal from outside of 11 in. plastered wall.*

A variety of proprietary and other devices for this purpose were illustrated and described in the JOURNAL for May 30 last.

Q₃₄₅ ARCHITECT, EWELL.—*One of my clients has used transparent blue varnish on many of the windows at his hotel and is now wanting TO REMOVE the VARNISH STAIN. Can you tell me how this can be done most quickly and economically?*

Most forms of blue varnish used in light obscuration under the complementary colour system are ordinary gum varnishes incorporating a dye. This being so, the simplest method of removal from glass would be by the use of an ordinary paint or

varnish remover, of which a pint, quarter gallon or other size tin would be procurable from any local oil and colour merchant. It is possible, however, that a dyed cellulose lacquer was used in the obscuration, and if so, a special solvent would be necessary. This solvent is usually a solution of acetone and would be procurable from the firms given below.*

Q346 BUILDERS, TOTNES.—*Will you favour us with the name and address of the MANUFACTURERS OF the pressed sawdust and shavings COMPOSITION BOARD which has recently been placed on the market? We understand that this material might be used for the construction of War Department huts.*

The description given covers two types of boards—there are the shavings or so-called wood-wool cement boards such as Thermacoust, Wellinlith, etc.† And there are the sawdust cement slabs—Lignacrete and Maycrete.‡ The latter type are of more recent introduction—or at least of reintroduction—since they existed in the period 1926–1930, and for some reason their production ceased from about that date until the outbreak of this war,

Q347 ARCHITECT, LONDON.—*My problem is in connection with a private house CONTRACT entered into prior to the outbreak of war, the building being UNCOMPLETED. At the outbreak of war the contractor ceased site operations without any instructions from my client or myself. There is a certain amount of unfixed material on the site, and the contractor has received some payment; but not to the full value of the work done, and excluding the cost of the materials unfixed on the site. My client is not anxious to continue the work, but has not so informed the contractor. He, the client, seems to desire the contract to be terminated to his best pecuniary advantage. What steps can be taken to this end?*

Nothing is said regarding the present whereabouts of the contractor or of his financial position. If it can be found that he has ceased trading or is in financial difficulties, a clearer line

of action would present itself. In any case the employer has a right to determine the contract because of the suspension of the works before completion. For this purpose the employer may send notice to the contractor by registered post expressing his intention to determine the employment of the contractor should such default continue for a period of fourteen days after notice. An obvious danger in this line of action would lie in a sudden willingness on the part of the contractor to resume operations, and under a recent agreement reached between contractors and the R.I.B.A. your client would be morally bound to pay not only the contract sum, but for the increased cost of labour and material since the outbreak of war. Nor is it stated whether the structure was left in a wind and watertight condition when work ceased. If rapid deterioration was to be prevented this would have been essential. Since apparently neither party to the contract wishes to go on with the work, it would seem that only at a meeting between them could a satisfactory solution and financial arrangement be found.

Q348 STUDENT, SCHOOL OF ECONOMICS.—*What were the pre-war (1939) WAGE RATES for building craftsmen and labourers IN NEW YORK AND LONDON?*

The following were the figures on February 1, 1939:—New York: Skilled constructional staff, \$1.43 per hour; common constructional staff, \$0.68 per hour. London: Craftsmen, 1s. 8d. per hour; labourers, 1s. 3d. per hour. The dollar was then 4.86 to the £.

Q349 ARCHITECT, LONDON.—*Having been appointed to a position abroad, I am making arrangements for closing my office. Is there any possibility at this time of SELLING my TRESTLES, BOARDS, ETC., as otherwise I should have to arrange for storage until I return?*

This equipment could be offered for sale to any of the leading instrument and equipment firms in London. Better still, it could be offered to any firm of architects or engineers which to the enquirer's knowledge are known to be busy or increasing their staff. As an alternative to ordinary repository storage the use of the trestles, boards, etc., could be offered to Miss M. Morrison, Hon. Secretary, The Atelier, at the Building

Centre, 158 New Bond Street, W.1, since it is believed that the Atelier would give free storage in return for the use of the articles.

Q350 ARCHITECTS, DUNDEE.—*We have seen a CEILING VENTILATOR circular in shape and with circular louvres. Can you arrange for the suppliers to send us particulars?*

The ventilator indicated would seem to be the Stylovent by Messrs. Richard Crittall & Co., Ltd., Bush House, London, W.C.2. (Particulars have been sent to the enquirer.)

Q351 CONTRACTORS, LONDON.—*I am contemplating the purchase of a series of SECOND-HAND light steel ROOF TRUSSES of 28 ft. span. What would be the weight of, and A FAIR PRICE to give for each of the trusses?*

For a rough approximation the weight in lbs. per truss can be assessed from the formula, Weight in lbs. is equal to $\frac{1}{2}$ (span in feet)², and this, in the case of 28-ft. span trusses comes to 5½ cwt. As to price, it is possible only to suggest the limits between which a reasonable price can be assessed. Light fabricated steelwork as in roof trusses is about £30 per ton ex works. The price of scrap steel of this class is about £2 10s. per ton delivered to scrap yard. Between these two rates—when allowances have been made for dismantling and delivery charges, for the condition of the trusses and their particular suitability without modification for a buyer's purpose—the "fair price" may be taken to lie.

Q352 ARCHITECT'S DEPARTMENT, LOCAL AUTHORITY.—*At our request tenders have been submitted by three firms for the spraying of colourless mediums on to the plate glass windows of the Town Hall for purposes of SPLINTER-PROOFING the GLASS under action of blast. Before accepting any offer, however, we wish to ascertain the measure of protection afforded by such treatment. Are any particulars available?*

We have been unable to discover any information of tests of such coatings, and very little information seems available on the degree to which paper strips, cellulose films, wire-mesh or other methods are successful in preventing glass flying in splinter form. It may be assumed that all give a certain amount of

* Cellon, Ltd., Richmond Road, Kingston-on-Thames, Surrey. I.C.I. (Paints), Ltd., Imperial Chemical House, Millbank, London, S.W.1.

† THERMACOUST, by Thermacoust Products, Ltd., 32 Victoria Street, London, S.W.1; WELLINLITH, by Gliksten Doors Co., Ltd., Carpenters Road, London, E.15; GYPKLITH, by Honeywill and Stein, Ltd., 21 St. James's Square, London, S.W.1.

‡ LIGNACRETE, by Tarran Industries, Ltd., Clough Road, Hull; MAYCRETE, by R. May and Son, Ltd., Frensham Street, London, S.E.15.

protection; and it appears very likely that cellulose films are better than paper strips and close wire mesh than cellulose films (though it should be remembered that cellulose films will normally give protection from weather after the glass is cracked. This wire mesh cannot do). But it would appear simple and desirable for tests of glass-protection devices to be made and their relative efficiencies officially announced.

Q353 ARCHITECTS, NR. LIVERPOOL.—We shall be glad if you will send us addresses of firms who manufacture **REMOVABLE TRAPS**, suitable **FOR** covering **SERVICE DUCTS** in a laboratory building. The ducts in question run under a corridor and we intend to provide access from above by way of removable traps.

No indication is given of the dimensions of the trap units nor of the type of traffic in the corridor (e.g. whether foot traffic or heavier) but in any case from the firms whose names are given below* a wide range of standardized forms of duct covers are available to withstand various traffic conditions.

Q354 ARCHITECT, LONDON.—I should like some information on the following:

There is a question of putting an additional floor upon an existing building, the flat roof of which is now covered with cement screed to fall of 1 in. in 10 ft., $\frac{1}{2}$ in. B.P. insulating board, two layers bituminous felt and $\frac{1}{2}$ in. tar macadam. (This roof was laid by McNeills.) In order to save timber I have advised the new floor be finished in Marbolith **JOINTLESS FLOORING** and am wondering if this can be laid successfully **ON** the existing **ROOF COVERING**. I took up the point with Marbolith and they in reply say:—

"We do not advise that Marbolith should be laid direct on to tar macadam or any similar asphaltic material. In view of the fact that there is a fall to the existing floor of approximately 3 in. which is to be made up, we advise that this should be done in concrete allowing for a thickness of 1 in. at the highest point. This would, of course, mean that assuming the fall to be 3 in., the thickness of the concrete at the lowest point would be 4 in. Provided, suitable precautions are taken to obtain a key between tarmac and the concrete we have no doubt that the two materials would bond successfully, as we believe it is the ordinary practice to lay cement over asphalt."

Do you consider the floor will be satisfactory or would you advise the removal of the existing roof covering down to screed and levelling that to take

* Ashwell and Nesbit, Ltd., 12 Gt. James Street, W.C. 1.
Dover Engineering Works, Ltd., Dover Iron Foundry, Dover.
Mendon Foundry Co., Ltd., Mansfield, Nottingham.
Ditworth and Carr, Ltd., Bow Lane, Preston, Lancs.

The Information Centre must make clear that, while it gives general opinions on problems involving legal matters, such advice must in no case be taken as a legal opinion on the facts of a particular case. It must also be made clear that the Centre, in helping to solve inquirers' problems, can accept no responsibility for any action taken as a result of its advice.

the jointless flooring? The structure will carry the additional floor, as it was designed to take two additional floors when built, and it seems a pity now to have to take off the roof covering, as it has only been on a few months.

The upper surface will require to be levelled for the new floor. It can be assumed that there is less likelihood of satisfactory service from the superimposed screeding and floor covering if the built-up bitumen roofing is allowed to remain. Subsequent cracking showing in the jointless flooring is almost inevitable if this is laid on new screeding varying in thickness between 1 in. and 4 in. If the work must be done in this way expansion joints of paper thickness should be inserted in the screeding in a manner so that great variation in thickness in individual panels of screeding is avoided. The new jointless flooring should also be laid in panels with expansion joints. But much more satisfactory service of the finished floor is likely if the existing cement screedings are cut back to form a new level surface and also roughened to take the new jointless flooring. Alternatively, a carpet of consolidated broken brick could be laid over the existing bitumen roofing and surfaced on top with a level 1 $\frac{1}{2}$ in. thickness of cement screeding and this reinforced with wire netting and left rough on the upper surface to receive the jointless flooring.

Q355 PROPERTY COMPANY, LONDON.—A steel lantern light over an office corridor was protected shortly after the outbreak of war by sandbags supported on a rough timber frame. The bags were treated with **PRESERVATIVE LIQUID** two months after being fixed. With the advent of warmer weather a **PRONOUNCED** musty **SMELL** is noticeable in the corridor below. Is there any simple method, by spraying or otherwise, of eliminating or reducing this smell?

Certain proprietary deodorizers possibly could be used, but to be successful in overcoming the musty smell would in themselves have to be fairly powerful concentrations and the resultant combination of odours might not be liked any more than the present nuisance. No doubt the lantern light in its original form had opening

sections for ventilation. These should be arranged so that they are at least in part permanently open, and steps taken to introduce wood lintols into the sandbagging and withdraw sandbags under these lintols so as to allow circulation of air under the sandbagging through the open portions of the lantern light. Alternatively, it might be possible to introduce into part of the corridor a power-operated extract fan.

Q356 BUILDING CONTRACTORS, LONDON.—Who are the publishers of the **ARCHITECTS' STANDARD CATALOGUE**?

The Standard Catalogue Co., Ltd., 26 Bloomsbury Way, London, W.C. 1.

Q357 ARCHITECT, BACUP.—I was recently shown a **NEW GLASS PANEL** to an entrance door, and I am interested to know what type of glass it is, if it is still manufactured, and if so, where. The glass is constructed in two sheets, small beads are bedded on the cavity side of one sheet and between the layers of glass brass strips are formed in a basket and fruit design, and the pattern is filled in with various coloured beads. The total thickness of the panel is $\frac{5}{16}$ of an inch.

From the description given this would appear to be the "Vividek" glass produced by The Glasscraft Co., Ltd., 21 Farringdon Avenue, London, E.C. 4.

Q358 ARCHITECT, LONDON.—Can you tell me of an economical **SUBSTITUTE FOR TIMBER DOORS** and door frames?

No—particularly for the doors. Certainly normal supplies are not available, but inquiry should be made of the bigger merchants and manufacturers to see whether their stocks of what would usually be termed "damaged" doors have been exhausted. This "damage" is often slight and can be easily covered. Pressed steel manufacturers have been producing doors of two sheets of thin steel, packed between, but it can be expected, because

of the steel situation, that in future these will be available in decreasing numbers. If sufficient timber can be obtained by the contractor a hollow cored flush door could be made up using panels of asbestos-cement or asbestos-wallboard. Moulded and pressed asbestos-cement doors are

being experimented with at the moment and should shortly be available from Turners Asbestos Cement Co., Ltd., Trafford Park, Manchester. For door frames there are several alternative materials, such as pressed steel, asbestos-cement units, and reinforced concrete.

and I will therefore suggest that the small size half-boxes will one day be seen on many an urban window sill.—(*Turners Asbestos Cement Co. (Branch of Turner and Newall, Ltd.), Trafford Park, Manchester, 17.*)

Pressed Steel Tanks

Some time before the war started, Braithwaite & Co. were selling their pressed steel tank units as a lining for air-raid shelters, and they have now issued a new and well-produced booklet devoted mainly to the more orthodox use of their products. Starting with the largest pressed-steel water tank in the world, a 3½ million gallon job for the water supply of Murree in the North-West Provinces, the illustrations progress gradually downwards to the comparatively insignificant jobs like the 40,000 gallon oil storage tanks in the basement of Shell Mex House, though tanks are made with capacities as small as 220 gallons, this being the smallest possible with a cube made up of metre square sheets. These tanks need not, of course, be confined only to water storage, but can be used for any liquid, while the standard plastic jointing compound also covers most of the likely storage requirements.

The principle on which these tanks are built is by now fairly well known. Using either 4 ft. or metre square flanged plates, any size of tank can be made up, variations being possible not only on plan but also in depth. Internal divisions are simply arranged and strutting is kept to a minimum, while fixings for pipework have also been standardized. Covers can also be arranged, either flat if the tank is used

TRADE NOTES

[By PHILIP SCHOLBERG]

Hand Lamps

Ediswan are now marketing a very reasonably priced accumulator hand lamp which will give from 50 to 60 hours' light on one charge. It is known as the "Ensuralite" Junior and consists of an Ediswan accumulator with a bulb attachment and switch, this lamp unit screwing under the ordinary terminals of the accumulator. The accumulator box is moulded glass and the electrolyte is unspillable, and at the price of 7s. 6d. this seems quite a handy little unit to keep about the house.—(*The Edison Swan Electrical Co., Ltd., Charing Cross Road, London, W.C.1.*)

Asbestos-Cement Sand Boxes

Some people may remember the little Problem booklets which were issued by Turners before the war. They dealt with the application of asbestos-cement to various special problems and were often

very informative. Their issue has now been started again, and No. 13 deals with asbestos-cement sand boxes. After a very few months of use, the sandbag is now generally regarded as being almost useless, and a number of substitutes have been suggested, several firms offering precast concrete boxes which can be filled with sand and used to build block protective walls. Turners are now making much the same thing in asbestos-cement. Two sizes have been standardized, 20 in. by 12 in. by 10 in. deep and 18 in. by 9 in. by 9 in., and in each range there are also half-boxes which are to be used as closers, while all sizes have a wall thickness of ¾ in. Prices are 4s. and 3s. 3d. for the larger box and half-box, 2s. 10d. and 2s. 2d. in the smaller size, this figure including delivery charges provided that 100 boxes are ordered.

Turners also deserve a bouquet for being the first firm not to suggest that these boxes will be useful in the garden when the war is over. For their forbearance I am grateful,

PRICES

BY DAVIS AND BELFIELD, CHARTERED QUANTITY SURVEYORS

GENERAL POSITION

Rates of wages, as stated opposite, have again risen but otherwise prices have remained much the same. It will be noted that apart from recent rises in the cost of Tiles, Cement and Lime, there has been very little change in the prices of basic materials since February.

RATES OF WAGES

Labour rates have been increased by ½d. for craftsmen and labourers from June 1, 1940. This makes an increase of 9.52 and 7.14 per cent. on pre-war labour costs for labourers and craftsmen respectively in the Central London area.

BASIC MATERIAL	Increase over pre-war prices at end of				
	January, 1940	February, 1940	March, 1940	April, 1940	May, 1940
Portland cement	per cent. + 9.8	per cent. + 9.8	per cent. + 9.8	per cent. + 9.8	per cent. + 18.3
2-in. unscreened ballast	+ 17½	+ 17½	+ 17½	+ 17½	+ 17½
Fletton bricks (at station)	—	—	—	—	—
Stoneware drainpipes (British Standard), 2 tons and over ..	+ 9.4	+ 9.4	+ 9.4	+ 9.4	+ 9.4
Roofing tiles	+ 7½	+ 7½	+ 7½	+ 7½	+ 12½
Steel joists (basic sections), ex mills	+ 19	+ 19	+ 19	+ 19	+ 19
Lime (greystone)	+ 14.3	+ 14.3	+ 14.3	+ 14.3	+ 19
Sheet lead	+ 50	+ 50	+ 50	+ 50	+ 50
Iron rainwater goods	+ 3½	+ 12½	+ 12½	+ 12½	+ 12½
Iron soil pipes	+ 3½	+ 12½	+ 12½	+ 12½	+ 12½
Copper tubes	+ 23½	+ 25½	+ 25½	+ 25½	+ 25½
White lead paint	+ 21½	+ 21½	+ 22½	+ 22½	+ 22½

T. Davis

F.S.I.

Home Industries

STEEL SHORTAGE AFFECTS BUILDING TRADE

FEW PEOPLE realise to what extent this country's steel production depends on scrap even in peace time; but to-day, with the enormously increased demand for war material coupled with the increased difficulties of the importation of foreign iron ore, the steel industry needs every ounce of ferrous material it can get from home sources. Home scrap is pouring in to the steel works from all parts of the country where most of it is turned into steel ingots for armaments. Naturally, with the present urgent demand for guns, ships, tanks, etc. and the uncertain supplies of iron and steel, the dependence is given by the home sources of war material. On the other hand, the materials for home production are being produced.

Hold-up of Building Material

In direct consequence of a certain amount of doubt being cast on the supply of scrap, but if greater supplies are assured the situation is greatly improved.

How can we seek supplies. Most of the scrap is hidden away in some sort. Yet one source in peace time is available source to-day. That source is *home scrap* and the very men whose professions are to-day beset by steel shortage can do usefully in providing the steel industry with what they need—the scrap that can be more normal in the building trade.

One of the greatest untapped sources of scrap iron and steel lies in the ruins of war-time buildings. All over the country, in the ruins of factories, obsolete pit heads and other buildings, thousands of tons of precious scrap are hidden away. The people most likely to know of these scrap hiding-places are builders, land agents and architects. By simply reporting the whereabouts of such plant to the authorities at Steel House, the architect especially is doing a service, not only to the country but also to his profession generally. That is one of the reasons why the President of the R.I.B.A. has written to architects appealing to them to keep their eyes, ears and every other sense well open for news of derelict property. So much of this property contains quantities of ferrous rubbish and fixed plant. It is just a matter of reporting it to the right people. The plant is

demolished, giving employment where it is needed, the steel and iron is salvaged, and the melting pots of the steel industry produce the steel ingots for the material needed by so many departments of the building trade.

SEND FOR THIS TO-DAY

The Scrap Iron & Steel Control at Steel House, London, ask all executives to link up with the Scrap Campaign, by using posters, handbills and envelope stuffers specially prepared for the National Scrap Drive for more scrap. By distributing these will help to increase the supply of scrap.

SCRAP

“SCRAP n. and v.i. Fight, scrimmage, esp. of unpremeditated kind.” (Oxford Dictionary.)

...that's what the other kind of scrap is needed for—to win this present fight quickly. And Architects and Builders can help considerably in supplying this need by reporting any particulars of derelict property from which a worth-while quantity of scrap iron and steel might be salvaged. Derelict factories, buildings and works usually contain any amount of ferrous refuse and fixed plant which will melt down into the steel urgently needed for war material—steel which is also urgently needed by the building trade.

If you own derelict plant or the land on which it stands—even if you only know of it—make it your duty to do something about demolishing it for the scrap it may contain. The President of the R.I.B.A. appeals to all architects. The Country appeals to every professional and business man. What can you do in this connection?

IN CASE OF ANY DIFFICULTY

arising over the sale or clearance of your scrap iron and steel write to:

IRON AND STEEL CONTROL,
MINISTRY OF SUPPLY, STEEL
HOUSE, WESTMINSTER, S.W.1

★

“I am asking you, therefore, if you will co-operate with the authorities by providing particulars of any derelict property from which a worth-while quantity of iron or steel scrap might, on further investigation, be found to be available and any railings or other ironwork could be removed with advantage. Enquiries can then be put in hand. A stamped envelope is enclosed.

A hard and fast rule can be laid down as to what property or material should be included in this survey, importance is placed on the professional experience of individual architects in the country and these, I trust, will be freely available in the best.”

is 60% Old

Pages of scrap are used by the building trade each year, apart from the more specialised scrap used by steel and iron manufacturers. In a “normal” year, some 13 million tons of steel scrap are melted in this country.

In 1939, some 2,850,000 tons of scrap were melted, and 226,000 tons of scrap were supplied by the steel industry. The cast iron for the broken-up moulds, of scrap steel and cast iron were the main sources. Taking the average price of £3 per ton, in round figures the turn-over of purchased scrap would thus be near £13 millions a year.

Railings Exhibition

Sir Giles Gilbert Scott recently opened an exhibition, entitled “Railings for Scrap”, at the Building Centre, New Bond Street. The exhibition is designed to show not only what railings might be removed with advantage but also what railings ought to be retained on aesthetic grounds. Mr. Burgin, in a message read at the opening of the exhibition, stated that in the Royal Parks the Office of Works had collected about 30 tons of surplus railings and sold them as scrap last month. The exhibition will remain open in London for some time and will later be shown at other places in the country.

R.I.B.A. President's Appeal

Mr. Stanley Hall, President of the R.I.B.A., has addressed a letter to 7,500 architects, from which the following is an extract.

“...There is also a considerable quantity of iron in the railings that line our streets and disfigure our parks. Some, no doubt are strictly practical and a certain number have aesthetic value. Others, however, have neither merit nor usefulness and the present need for scrap metal provides an opportunity to remove them.

TEAR OUT THIS PAGE AND SEND IT WITH A MEMO TO YOUR STAFF

internally, or low pitched if resistance to weather is required.

As a means of ensuring adequate water supply in rural areas, these tanks are the most obvious solution, but I cannot sympathize with the effort shown on this page. It is described as "providing all supplies to

a garden city." I do not imagine that Messrs. Braithwaite admire it very much either. Unfortunately, the name of the garden city is not given, but I cannot suspect Letchworth or Welwyn.—(*Braithwaite & Co., Ltd., Horseferry House, Horseferry Road, London, S.W.1.*)



The water tank referred to in Trade Notes.

THE BUILDINGS ILLUSTRATED

HOUSING SCHEME, WAVERTREE GARDENS, LIVERPOOL (pages 574-575). Architect: L. H. Keay, F.R.I.B.A. Work was carried out by direct labour. Sub-contractors and suppliers included: L. Marr and Son, roads and sewers; Trussed Concrete Steel Co., Ltd., reinforced concrete; Ravenhead Sanitary Brick Co., Ltd., bricks; Northern Cement Construction Co., Ltd., artificial stone; Carter & Co., Ltd., tile direction panels; Carron Company, grates; Parry's Electrical Engineers, electric wiring; British Plaster Board Co., Ltd., Thistle hardwall plaster; Hadley & Co., Blockley roofing tiles; E. Wilson & Co., metalwork; William Rowlands & Co., shrubs and trees.

READING ROOM, UNIVERSITY OF GLASGOW (pages 577-580). Architect: T. Harold Hughes, F.R.I.B.A. Sub-contractors and suppliers included: John Train & Co., Ltd., excavation and damp courses; Limmer and Trinidad Lake Asphalt Co., Ltd., asphalt; Trussed Concrete Steel Co., Ltd., reinforced concrete; J. C. Edwards (Ruabon), Ltd., silver-grey facing bricks; Uxbridge Flint Brick Co., Ltd., Hunziker 2½ in. silver-grey bricks; Sparmatt, special roofings; A. S. Wright & Co., Ltd., glass; Ashwell and Nesbit, Ltd., central heating; Allan Arthur and Ure, electric wiring; Archibald Low and Sons, Ltd., plumbing; Shanks & Co., Ltd., sanitary fittings; North British Rubber Co., Ltd., stairtreads; Maclean & Co. (Metal Windows), Ltd., casements; George Rome & Co. (Glasgow), Ltd., plastering; David M. Tyre and Son, metalwork; John Baxter and Sons, and John Cochrane & Co., Ltd., joinery; Galbraith and Winton, Ltd., marble; James D. Bennet, Ltd., furniture; John Walker and Sons (Glasgow), Ltd., furniture; George Boyd & Co., cloakroom fittings; T. S. Cuthbert, clocks.

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