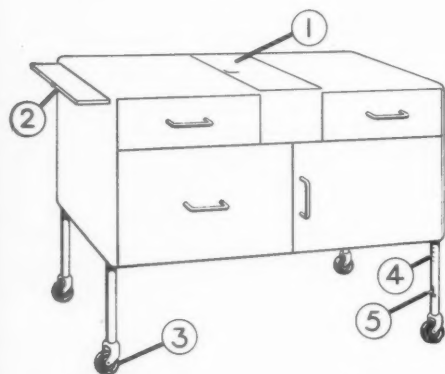
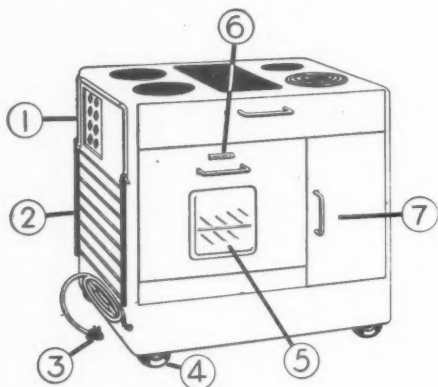


MOBILE KITCHEN EQUIPMENT: Designed by Grace Lovat Fraser

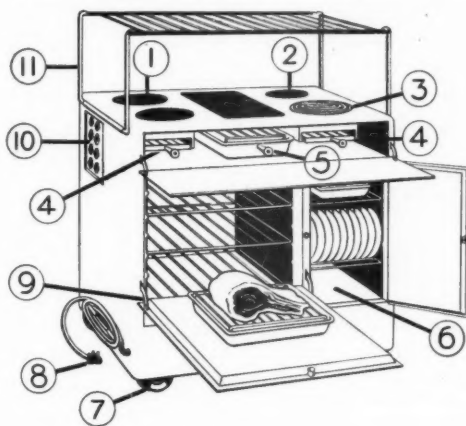
ELECTRIC COOKER (closed position)

- 1 Heat controls (also on opposite side of cooker, not seen in drawing).
- 2 Half of plate rack folded down when not in use.
- 3 Plug-in socket and flex to attach cooker to power point.
- 4 Rubber wheel with foot-brake attachment to lock cooker to stationary position.
- 5 Glass inspection window in oven door.
- 6 Oven thermometer.
- 7 Hot cupboard for casserole cookery, keeping food hot, heating plates.



ELECTRIC COOKER (open position)

- 1 Two large boiling rings.
- 2 Small boiling ring for small saucepans.
- 3 Fast boiling ring.
- 4 Two small grillers with separate radiants for making toast.
- 5 Large griller.
- 6 Hot cupboard with low heat radiant for casserole cookery, keeping food hot, heating plates.
- 7 Rubber wheel with foot-brake attachment to lock cooker in stationary position.
- 8 Plug-in socket and flex for attaching cooker to power point.
- 9 Oven door automatically locks to form shelf when fully opened.
- 10 Heat controls (also on opposite side of cooker, not seen).
- 11 Both halves of plate rack opened and locked into position.

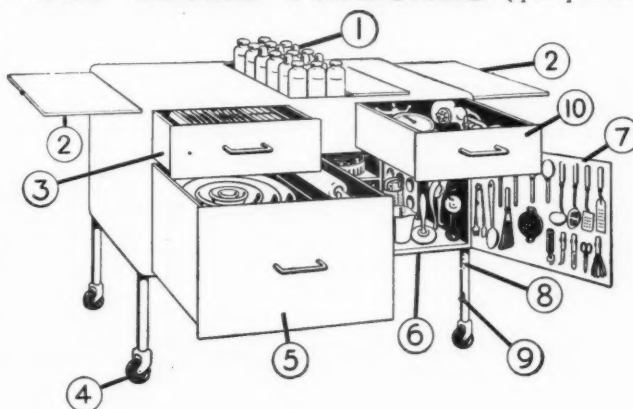


COMBINED KITCHEN TABLE AND STORE CUPBOARD (closed position)

- 1 Rising rack for dry grocery and condiment containers, closed.
- 2 Pastry shelf partly open, same shelf opposite not shown.
- 3 Rubber wheel.
- 4 Special adjustable leg to make table any desired height.
- 5 Footbrake to lock table to stationary position.

COMBINED KITCHEN TABLE AND STORE CUPBOARD (open position)

- 1 Rising rack operated by opening the centre flap in table, fitted with aluminium jars and bottles to hold dry groceries, oil, vinegar, condiments and flavouring essences. Caps of bottles are measuring cups. Closing lid depresses shelf and forms flush table.
- 2 Pastry-making and extra shelf opened out to full.
- 3 Drawer to hold table cutlery.
- 4 Rubber wheel to allow table to be wheeled to desired position.
- 5 Deep drawer fitted with racks to hold mixing bowls and rolling pin.
- 6 Cupboard extending full width of table and with door on opposite side; fitted with compartments and hooks to hold baking tins and pie dishes, pudding dishes, pestle, potato masher, measuring jug, egg beater, etc.
- 7 Door of cupboard fitted with hooks and clips, to hold strainers, spoons, graters, kitchen knives, scissors, etc.
- 8 Special adjustable leg.
- 9 Footbrake attachment to lock table into stationary position.
- 10 Drawer to hold scales and mincing machine.



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THE ARCHITECTS'



JOURNAL

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

THURSDAY, SEPTEMBER 11, 1941. NUMBER 2433: VOLUME 94

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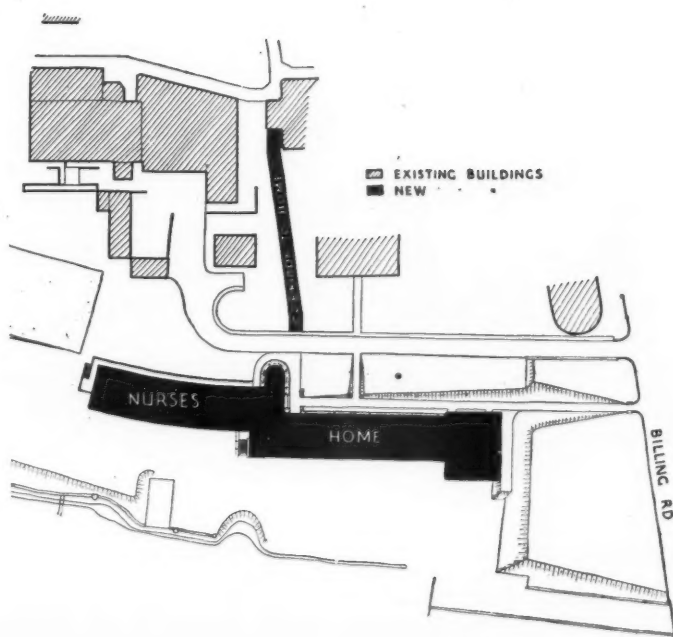
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NURSES HOME AT NORTHAMPTON



This nurses home at Northampton General Hospital is one of the most recent buildings designed by Sir John Brown and A. E. Henson, architects, of Northampton and London, whose senior partner, Lieut.-General Sir John Brown, is retiring from the Army under the age limit regulation. A portrait of Sir John Brown appears on page 174 and photographs of a further selection of buildings designed by his firm are reproduced on pages 178 to 180.

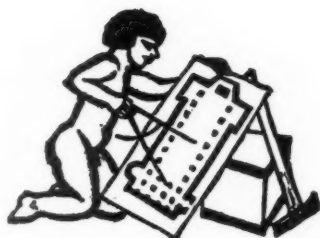




FOUNDER OF THE HOME GUARD

Lieut.-General (Acting) Sir John Brown, K.C.B., C.B.E., D.S.O., F.R.I.B.A., Director-General of the Territorial Army and Inspector-General of Army Welfare, who is retiring under the age limit regulation. He has received the thanks of the King for his long and valuable services. On retirement he will be granted the honorary rank of Lieutenant-General and will remain Chairman of the Council of Voluntary War Work. In the last

war Sir John served with and afterwards commanded the 4th (Territorial) Battalion, the Northamptonshire Regiment, and was at the landing at Gallipoli. He is the senior partner in the firm of Sir John Brown and A. E. Henson, architects, of Northampton and London, and beside being the first T.A. officer to reach the rank of Lieutenant-General is famous as the founder of the Home Guard. The story of his career appears on page 178.



THE LADIES

TO-DAY many people who have never considered the matter before are beginning to wonder how far it is possible to make use of professional women. It is worth considering in this connexion what progress women have made so far in the architectural profession both as to quantity and quality.

There are no accurate figures covering the whole profession, but this year there were 8,874 members of the R.I.B.A. including Fellows, Associates and Licentiates. Out of this total 204 were women. That is to say about 3 per cent. of the total; and this is probably typical of the whole. They are a small minority and a very small proportion of the total work has so far been undertaken by them.

The work they have done has been chiefly domestic or semi-domestic in character. But it is fairly safe to say that this has been because they have been limited to small scale undertakings, not because they have chosen to concentrate on this type of work. The situation can be summarized by saying that until now women have been regarded as substitutes for men. *Ersatz* goods are usually unpopular, and women architects, broadly speaking, have been no exception to this rule. They have contributed nothing new to the body of architectural experience because they have been obliged to accept the same limitations as men: acting within these limitations, however, they have done enough to prove that their ability is considerable.

Professional women of to-day are a product of the suffragette movement, which started by accepting masculine standards of value and then demanded equality. Under the circumstances it is difficult to see what else could have been done. Nevertheless it was a mistake.

Men are specialists; their natural tendency, and the tendency of economic evolution has been to free them more and more from many-sided activities. They judge things in relation to technical efficiency along certain specified lines. During the last century the division of labour has resulted in their lives becoming narrower and narrower; their standard of values more and more limited. The result has been a simultaneous increase in technical efficiency in every single branch of economic life. And yet at the same time human values as a whole have suffered. The means that have been made available have never been related to any desirable end.

The real case for employing women rests on the fact that they are different from men. It is a woman's business to understand enough of everything to deter-

mine what is the best way of living, and to judge things not in relation to technical efficiency, but in relation to human life—their own, their husbands' and their children's. If they are to contribute to the economic and cultural life of the community anything that is of real value, it must be along these lines. And the organization of that life must be modified to suit them. It must be modified in two respects—to allow them to remain what they should be, the centre of family life, and to admit the consideration of human values as something which can legitimately compete with financial and economic "laws."

Family life, as we have been told over and over again, is the foundation of the British Commonwealth. At the moment these foundations are badly in need of attention. The whole framework of the British Empire rests on a multitude of disorganized fragments. The self-contained and satisfactory household unit of 200 years ago was broken up into many parts by the change over from an agricultural to an industrial society. Nearly all the duties that were once undertaken inside a household have now devolved on organizations outside them, but no satisfactory framework has yet been evolved into which these new elements can be fitted. Signs of the prevailing disorganization could be seen on every side even before the war, and the bad results of relying on vitiated instincts to remedy deficiencies in communal organization were sufficiently obvious, even then, to attract general attention. These problems are being intensified by the war which is simultaneously reducing incomes and calling for a fresh output of energy in other directions. In munition camps, for instance, the stark necessity of facing the problem of communal organization is being presented to us in a manner that it is impossible to ignore without fatal results.

The contribution that could be made by women architects is almost too obvious to need description. The only hope of evolving a new structure of society that will work is to make use of women who are sufficiently educated technically to co-operate in the direction of public affairs, but sufficiently many sided to have some hope of understanding what are the essentials of the old type of family life that must be preserved, and what can safely be jettisoned. The contribution that could be made by women architects in this field is quite out of proportion to their numbers, and is not limited to the duration of the war.



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NOTES & TOPICS

R.I.B.A. RECONSTRUCTION COMMITTEE

ONE of the most important things that have happened lately was the press conference held by the R.I.B.A. on August 26, to make public two reports* previously presented to Lord Reith by the R.I.B.A. Reconstruction Committee. The Committee and indeed all architects may well be more than pleased at the result. Not only have the Press published and warmly commended the findings of the Committee, but the *News Chronicle* found them sufficiently important to form the subject of their leader. They headed it "The Kernel," appropriately stressing the report's chief point, namely, the need, the really urgent need for a National Planning Authority. Let us hope that the Government will soon be as enlightened as the Press and that Lord Reith will be given proper powers to set up this long overdue piece of machinery.

★

The conference was presided over by Professor Reilly. Press reporters grouped round the semi-circular table of the Aston Webb room listened intently while he outlined the whole programme of the Reconstruction Committee. The present reports are to be followed by many more.

PLANNING AND AMENITIES

Mr. Davidge spoke next and gave a clear exposition of the report of the planning and amenities group. He asked for a constructive national plan, embodying the needs of industry and agriculture, and centralising powers at present dispersed amongst the Ministries of Transport, Health, Trade and so on.

★

He proposed that a new form of financing land development should take the place of the inequitable system of rating. There were various solutions, he said, to this problem. Nationalisation of land was but one of these.

* The two reports issued are obtainable from the R.I.B.A. and were published in the A.J. last week, Sept. 4.

There is a direct solution which involves developers being required, as a condition of approval, to set aside one-fifth of their land, or its value, at the option of the authority towards the open spaces and improvements of the district.

★

The report drew attention to the anomaly of the dormitory town, and was of the opinion that attraction was better than restriction.

WAR-TIME HOUSING

The report from the Housing Committee was presented by Mr. Edric Neel, in the absence of Mr. E. Maxwell Fry, the chairman; though less fundamental, it is of immediate vital interest, in that it urges that there should be a central authority (at present ministers vie with each other) and that war-time housing should as far as possible be permanent and convertible to peace-time standards; also that there should be no more fully equipped houses erected in war time and that the maximum use be made of communal living facilities. In short, where possible all workers should have the same standard of living accommodation and buildings erected now should be designed to have a useful life after the war in order to carry the population through the transition stage during which a national plan is being put into effect. We hope that Lord Reith's meeting with the R.I.B.A. Committee's chairman will bear good fruit.

B.I.N.C. AND N.C.W.B.

On Monday, August 25, when the National Council for Works and Buildings was introduced to the world at a Press Conference, Lord Reith mentioned that there was no existing organisation to represent the Building Industry, but that the Building Industries National Council had been invited to broaden its basis in order to include in its membership elements not yet represented. I have since been trying to find out to what extent B.I.N.C. is representative of the Building Industry.

★

B.I.N.C. itself, when consulted on the subject, answered that it welcomed the suggestion of the Minister, but pointed out that its charter had been framed to include any branch of the industry organised on a national basis, and that the only important section still remaining unrepresented was the engineering interest, both professional and contracting. In fact it boldly claimed that B.I.N.C. already was representative.

★

The attitude of B.I.N.C. to the N.C.W.B. appears to be one of restrained approval. The members regard it as necessary in the circumstances, but regret that this should be so. "If only the Government," they say, "was as well organised as the Building Industry, then it would be unnecessary to have a special body to interpret one to the other. They could get together and deal direct.* But there is no existing body capable of negotiating for the Government as a whole. The Ministry of Works and

* Direct contact between the Government and the industry would mean in B.I.N.C.'s view that delegates would represent the industry and not just be representative of it. B.I.N.C. is anxious to lay the foundation of the organisation of the industry in such a way that it may ultimately emerge in full control of its own affairs, a term which would apparently be interpreted to include full responsibility for carrying out the building programme of the country.

ARCHITECTS' ASSISTANTS,

with five years experience as such, are now RESERVED AT the age of 35.

This new revision, states the Ministry of Labour and National Service, does not involve the release of men in the Forces or of men who have received enlistment notices. See page 178.

Buildings is gradually taking over the building work of the civilian departments, but the Service departments, which taken together control perhaps 80 per cent. of the Government's building programme, continue to act independently."

★

This claim of B.I.N.C. to represent the building industry seemed rather surprising in view of the Minister's statement. Further investigation brought the following facts to light. About 80 per cent. of the building contractors in the country are *not organised on a national basis*; they employ on an average 10 men. To be represented on B.I.N.C. they would have to join one federation in respect of their single plumber, another in respect of their two bricklayers, yet others in respect of the carpenters, the joiners, the concretors and so on. They might in fact have to join as many as 10 separate federations. And so they prefer to remain unorganised and unrepresented. As far as representativeness goes, B.I.N.C. and the Ministry of Works and Buildings are pot and kettle. Hence the need for a new National Council for Works and Buildings to represent all parties concerned, so that all the available resources of the country may be immediately directed to the point where they are most urgently needed.

★

These small firms, many of which have apprenticed and trained their own workmen, and have kept the same men continually employed for years, are in many ways more, not less, efficient than the larger firms who rely on casual labour. But without some form of outside assistance, both financial and otherwise, they are not capable of handling large contracts. The aim of the Ministry of Works and Buildings at present appears to be to collect the information necessary for organising these small firms to work together as teams capable of handling large jobs, without obliging them to merge permanently into large-scale undertakings and forfeit their independence.

★

As far as the programme of the N.C.W.B. is concerned, B.I.N.C. now approves officially of the regionalisation of labour and contractors. But it adds that it regards this as the last, not the first, stage of the reorganisation that is necessary. Architects and Engineers are the key men in the industry. They should be regionalised first. The Government is the biggest client. It should set up regional offices capable of dealing with all Government work in each area. I find it difficult to see any meaning in this unless it means a central planning

authority working through Regional Commissioners. It is most cheering to find that the organised building industry is in favour of such a development.

IN SEARCH OF STAKHANOVITES

I have received a letter from an architect whose exile on war building work has led to his forming some very definite views on the *You're First on the Job* campaign. The worth of that campaign is so topical a question that the relevant portions of his letter deserve quotation:

★

The rain sweeps steadily over our north-western steppes. If I've said this before it was because it has happened before . . . and your hope that it's nice being *First on the Job* has prodded me into reply.

To-day I was standing near a Site Architect's hut when two visions of *You're First* were pasted up. Both posters were yellow. One seemed a new model of the old *Excelsior* affair and the other was a strip cartoon in six acts. I didn't bother to go nearer and, so far as I could see, nor did anyone else.

I brooded over the whole somewhat feckless campaign on the way home. What is the Ministry after? Presumably, to make the building operative realise that his individual effort does *matter*. Of course, there are other sections of the industry besides the operative, but he matters most: and he is a touchy customer to handle.

★

But, in my view, it could be done. It could be done on the lines "You look after the building and we'll look after you."

For instance, site work on heavy land in rain and a dozen miles from home is not much fun. The Ministry knows it, and special bus services, site canteens, drying rooms and even bus shelters are being provided on many of our sites.

Why does not the Ministry cash in on these things? A coat of primrose or blue paint over each of these buildings would not cost much; and in each of them men stay for periods of time and each of them has wall space on which good posters could carry the statement.

THIS . . . IS PROVIDED FOR YOUR USE BY THE MINISTRY OF BUILDING IN THE KNOWLEDGE THAT YOU ARE DOING A HARD JOB UNDER DIFFICULT CONDITIONS—or some better wording. And underneath there could be a short quotation from one of our rulers to the effect that every munition building completed is a nail in Hitler's coffin or a big jump nearer peace or something.

★

If every special bus bore a similar poster reminding operatives that the *Minister* at least is making a big effort over war building, I think operatives could be left to draw the other conclusion for themselves. And I fancy they would . . .

P.S.—One more point about *You're First*. Operatives and foremen have little chance to wait in queues for tobacco. Site canteens and contractors make big efforts to get some for the men and in most cases succeed (they won't let me have any). Why should not each packet carry a slip saying, "Here's something to set against the queues you must miss.—Sincerely yours, REITH?"

ASTRAGAL

NEWS

- ★ Architects Assistants reserved at 35 - This page
- ★ Procedure for Deferment of Service and Release from the Forces - page 184
- ★ New Director of Bricks This page

RESERVATION OF ARCHITECTURAL ASSISTANTS

The Ministry of Labour and National Service has announced that architectural assistants are to be placed on the Schedule of Reserved Occupations at the age of 35. The age is that at the date of registration for military service. It will be recollected that the Association of Architects, Surveyors and Technical Assistants sent a deputation to the Ministry of Labour in January to discuss the reservation of architects and architectural assistants. After the reservation of architects at the age of 35 was agreed by the Ministry, the A.A.S.T.A. put forward further evidence to show that the acute shortage of architects would not thereby be solved, and a second deputation went to the Ministry in May. The reservation of architectural assistants at the age of 35 was urged, primarily on the ground that every building technician still available should be retained to carry out the immense building programme of approximately £1,000,000 per day. Negotiations with the Ministry were continued for some time and the Association welcomes the alteration in the Schedule as an essential step towards the efficient organisation of production in the building industry. It is understood that procedure for the deferment of service of architectural students is still under consideration.

WAR DAMAGE COMMISSION

Deputy Commissioners Appointed

The War Damage Commission announces the appointment of sixteen Deputy Commissioners; four for London and one for each of the Commission's Regions, including Scotland, Wales and Northern Ireland. The appointments are as follows:—

- Region No. 1, Northern: Northumberland, Durham, Yorkshire, North Riding, Wm. Milburn, B.Sc., F.R.I.B.A., F.S.I.
 Region No. 2, North Eastern: Yorkshire, East and West Ridings, Arthur Hollis, F.S.I., F.A.I.
 Region No. 3, North Midland: Derbyshire, Nottinghamshire, Rutland, Lincolnshire, Leicestershire, Northamptonshire, T. Cecil Howitt, D.S.O., F.R.I.B.A.
 Region No. 4, Eastern: Norfolk, Suffolk, Cambridge, Hunts, Beds, Herts, Essex, J. E. Bidwell, P.P.S.I., F.L.A.S.
 Region No. 5a, London: North East, Sir Edwin Cooper, R.A.
 Region No. 5b, London: North West, H. Arthur Steward, P.P.S.I.
 Region No. 5c, London: South East, W. Wallace Withers, F.A.I.
 Region No. 5d, London: South West, E. Vincent Harris, O.B.E., A.R.A., F.R.I.B.A.
 Region No. 6, Southern: Bucks, Oxfordshire, Berkshire, Dorset, Hampshire, Isle of Wight, Alan Arnold, P.P.S.I.
 Region No. 7, South Western: Gloucester, Wiltshire, Somerset, Devonshire, Cornwall, Scilly Isles, J. Ralph Edwards, A.R.W.A., F.R.I.B.A.
 Region No. 8, Wales: Arthur Lloyd Thomas, M.B.E., F.S.I., F.A.I.
 Region No. 9, Midland: Salop, Hereford, Warwickshire, Worcestershire, Staffordshire, E. Guy Bigwood, F.S.I., F.A.I.

- Region No. 10, North Western: Cheshire, Lancashire, Westmorland, Cumberland, J. F. Linney, P.A.I., F.S.I.
 Region No. 11, Scotland: James Barr, F.S.I.
 Region No. 12, South Eastern: Sussex, Surrey and Kent, Christopher Chart, F.S.I., L.R.I.B.A.
 Region No. 13, Northern Ireland: J. K. Stephens, F.S.I.

The Deputy Commissioners, who are all practising architects, chartered surveyors or estate agents, will advise the Commission on technical matters arising in the Region, particularly on those quasi-judicial issues affecting the interests of individuals which arise under the provisions of the War Damage Act. The Deputy Commissioners will not be concerned with the administration of the Commission's Regional organisation, but will advise on matters referred to them by the Commission and report direct to the Commission itself.

SIR JOHN



Lieut.-General (Acting) Sir John Brown, K.C.B., C.B.E., D.S.O., F.R.I.B.A., Director-General, Territorial Army and Inspector-General of Army Welfare, who is retiring from the Army under the age limit regulations and whose portrait appears on page 174, is the senior partner in the firm of Sir John Brown and A. E. Henson, architects, of Northampton and London. He became an Associate of the R.I.B.A. in 1921, a Fellow in 1930, is a Fellow of the Surveyors Institution and throughout his career has been continuously and actively concerned with his profession as an architect. A selection of his firm's latest work is illustrated on this and pages 179, 180 and 173. Sir John is the son of the late Alderman John Brown, a former Mayor of Northampton. His mother, the late Mrs. Brown, was a school mistress at the British Schools, Campbell Square, Northampton, near to the Garibaldi Hotel, Bailiff Street, where Sir John was born sixty-one years ago, when his father was the proprietor of the hotel. At the age of 13 he went to Magdalen College, Brackley, and on completing his studies there was trained as an architect. Forty years ago he joined the Northampton Volunteers as a private and soon afterwards became the youngest volunteer to obtain a commission in the Battalion. In 1908, when

The appointments have been made after consultation with the President of the Royal Academy, the Presidents of the R.I.B.A., the Chartered Surveyors' Institution and the Auctioneers' and Estate Agents' Institute.

NEW DIRECTOR OF BRICKS

The Minister of Works has appointed Mr. Lockhart W. Hutson, F.R.I.B.A., formerly Deputy Director of Bricks for Scotland, to be Director of Bricks in succession to Mr. T. P. Bennett, F.R.I.B.A., now Director of Works. Mr. James M. Honeyman, F.R.I.B.A., succeeds Mr. Hutson as Deputy Director of Bricks for Scotland.

BROWN: ARCHITECT AND SOLDIER



the volunteers became the Territorials, Captain Brown's company was one of the first to sign on. During the last war he served with the Mediterranean Expeditionary Force in Gallipoli, Egypt and Palestine, first as Adjutant and afterwards commanding his old regiment, the 4th (Territorial) Battalion, the Northamptonshire Regiment. In 1919 he was discharged as medically unfit and was made a Deputy Lieutenant of Northamptonshire. In 1920 he was fit again and rejoined the Territorial Force and from 1924 to 1928 commanded the 162nd (East Midland) Infantry Brigade (T.A.). In 1924 he received the C.B.E. (Military Section) for services in re-establishing his old regiment and in 1925 he took the 162nd Brigade, which included his regiment, on manoeuvres when it achieved very high praise. In 1926 he was made a Companion of the Bath. In November, 1937, he retired from his rank as Colonel, but in the same month joined the War Office at the invitation of Mr. Hore-Belisha as Deputy Director-General of the Territorial Army and was

Above, Cinema at Towcester, Northants; below, Corset Factory at Slough (in association with W. David Hartley); facing page, the main staircase in the Corset Factory at Slough.

Page 180, the main entrance to the Nurses' Home, Northampton General Hospital.



SIR JOHN BROWN

ARCHITECT AND SOLDIER



promoted to Major-General. At the beginning of this war he was promoted to Lieutenant-General, being the first Territorial officer to reach that rank, and became Director-General of the Territorial Army and Inspector-General of Army Welfare. He was the founder of the Home Guard, and undertook the greater part of the work in the establishment and development of the A.T.S. Sir John has done much to further the interests of the soldier and the ex-Service man. After two years of work connected with the expansion of the Territorial Army he conceived the idea of the Army Welfare Organisation and successfully laid its foundations. In the initial stages the work was financed by money collected by him. Later funds were provided by the Treasury. He also initiated the Service Libraries from which already 7,500,000 books and 8,500,000 magazines have gone to the troops. He also built up the Council of Voluntary War Work, under whose organisation there are 3,888 canteens and 1,149 mobile canteens in this country and a number in the Near East. For four years he was the National chairman of the British Legion. His wife is the daughter of another former Mayor of Northampton, the late Alderman Tonsley. They have two sons.

LORD REITH ON WORK OF HIS MINISTRY

Lord Reith, Minister of Works and Buildings, discussing the achievements of his department working on the advice of experts from the industries concerned, said that there was now no shortage of bricks; there was an eight weeks' consumption of cement in reserve and a weekly output of 150,000 tons; the Government building programme was twice the capacity of the industry; and the Ministry was now handling £1,000,000 worth of building work a day.

Lord Reith was speaking at a complimentary luncheon given by the National Federation of Clay Industries to its president, Mr. Horace Boot, a Sheriff of the City of London. Mr. H. J. C. Johnston presided.

The establishment of the Central Council of Works and Buildings, he said, tended to the essential integration of the industry, thus bringing quicker and more efficient results. Some direction and control must continue after the war for a time, but the more the industry looked after itself the less would there be for the Ministry to do, and, no sensible Ministry wanted to do more than an industry could do for itself.

RAILINGS TO MAKE TANKS

The Ministry of Works has issued the following press notice:—

Iron gates and railings from undamaged private houses are expected by the Ministry of Works to yield five hundred thousand tons of scrap iron that will rapidly be forged into the tanks and Tommy guns.

Instructions have been issued to local authorities throughout the country to list all unnecessary gates and railings in their district. As soon as these lists are completed the scrap will be removed. Only those gates or railings that serve a safety purpose or that have an historic interest or artistic merit will be left untouched.

Private owners of railings need not wait to have their scrap iron listed. If a gate is easy to remove or a railing can be dismantled without any difficulty they should do it themselves in order to save time and labour.

A recent Order in Council absolves tenants from any obligation to landlords for railings in their charge. Receipts will be given for all that is removed and compensation will be paid in due course.

Hundreds of tons of scrap have already been gleaned from the Royal Parks and Government buildings, and a complete survey of all railings on or around the 18,000 buildings in charge of the Ministry of Works is now in progress.

THE LATE PROFESSOR A. C. DICKIE

Professor A. C. Dickie, A.R.I.B.A., Professor of Architecture in the University of Manchester from 1912 to 1933, and then Professor Emeritus, died suddenly in hospital in London. Born in Dundee in 1868, Archibald Campbell Dickie was the son of the late Mr. Charles Dickie. He was educated privately and at the A.A., and had practised in London from 1898. From 1894 to 1897 he was architect to the Palestine Exploration Fund, had been a member of the executive committee since 1906, and secretary from 1910 to 1912. He was master in design at the A.A. school from 1906 to 1911.

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GENERAL CONSIDERATIONS & PRINCIPLES OF DESIGN IN WELDED STEEL: No 4

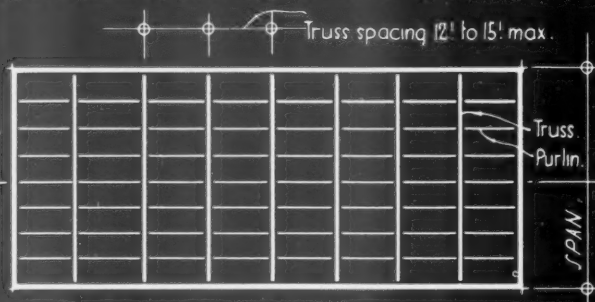
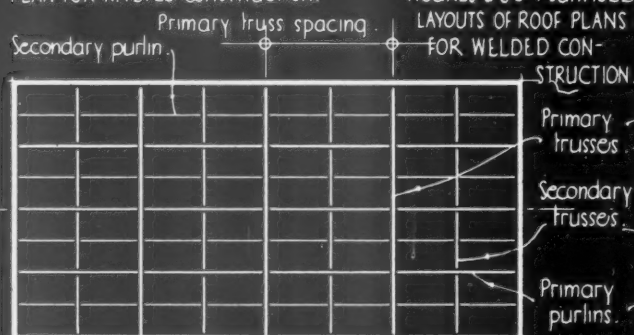


FIGURE 1: USUAL LAYOUT OF ROOF PLAN FOR RIVETED CONSTRUCTION.



FIGURES 2 & 3: SUITABLE LAYOUTS OF ROOF PLANS FOR WELDED CONSTRUCTION.

FIGURE 3a: POSSIBLE OUTLINES OF SINGLE MEMBERS IN LARGE SPAN ROOFS.

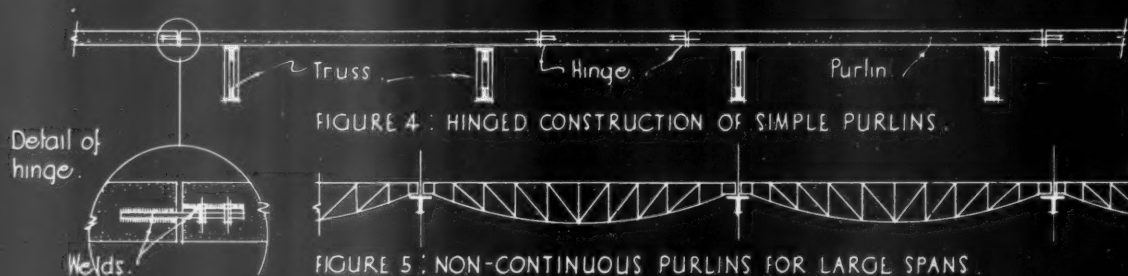
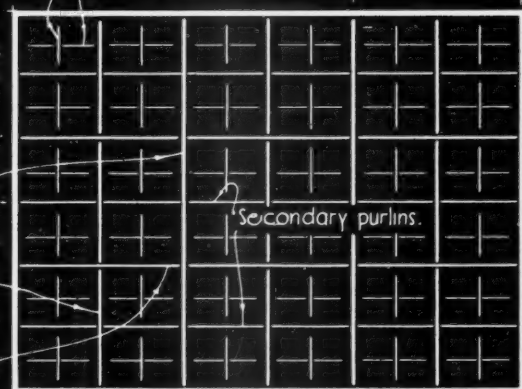
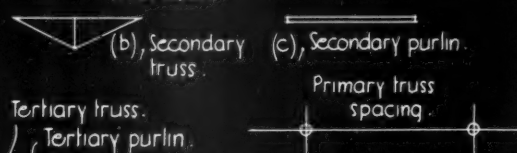


FIGURE 4: HINGED CONSTRUCTION OF SIMPLE PURLINS.



FIGURE 5: NON-CONTINUOUS PURLINS FOR LARGE SPANS.



FIGURE 6: TRUSS RESTING ON TWO SUPPORTS.

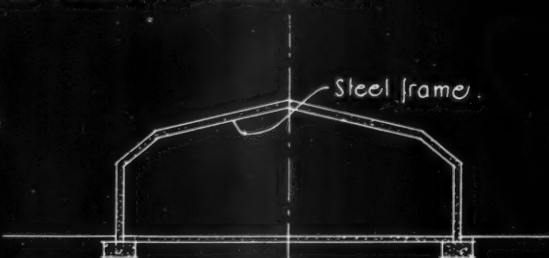


FIGURE 7: TRUSS WITH RIGID COLUMN CONNECTIONS.

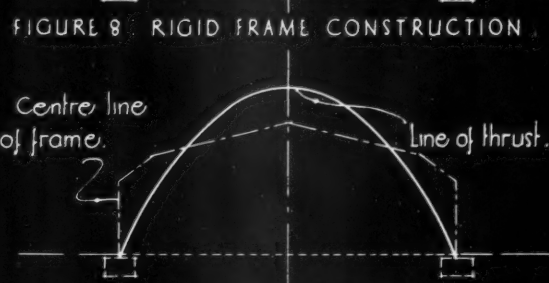


FIGURE 8: RIGID FRAME CONSTRUCTION.

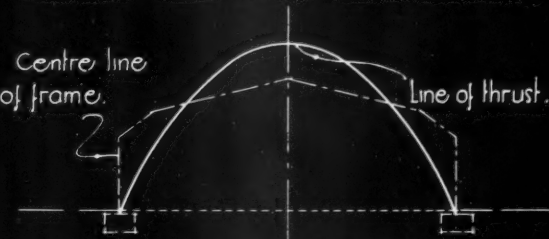


FIGURE 8a: THRUST DIAGRAM FOR RIGID FRAMES.

Issued by Braithwaite & Co, Engineers, Ltd. Compiled by Samuels & Hamann, Consulting Engineers.

INFORMATION SHEET: STEEL FRAME CONSTRUCTION, 58 WELDING No 14.
 BY JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WCI

THE ARCHITECTS' JOURNAL
LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET

• 840 •

STRUCTURAL STEELWORK

Subject : Welding 14 : General Considerations and Principles of Design in Welded Steel : No. 4, Single-Storey Construction.

General :

This series of Sheets on welded steel construction is a continuation of a preceding group dealing with riveted and bolted construction, and is intended to serve a similar purpose—namely to indicate the way in which economical design as affected by general planning considerations may be obtained.

Both the principles of design, and the general and detailed application of welded steelwork are analysed in relation to the normal structural requirements of buildings. The economies in cover and dead weight, resulting from the use of lighter and smaller steel members and connections, are taken into consideration in the preliminary arrangement of the building components in order to obtain a maximum economy in the design of the steel framing.

This Sheet is the fourth of the section dealing with general principles and considerations of design, and illustrates the application of welded steelwork to industrial buildings and large single-storey construction.

Loading :

In general, the steel construction of single-storey buildings merely serves to carry the roof and to withstand wind pressure. This means it has to deal only with light loads. On the other hand, the spans are quite often much greater than with multi-storey buildings. The preference given to trusses for long spans is due to their greater depth and the reduced deflection achieved in this way.

Layout :

In welded construction, suitable layouts differ from those of riveted structures. As purlins are bound to become heavier with large spans, the usual arrangement of the layout in riveted construction is that given in Figure 1, with trusses at a distance not exceeding 12 ft. to 15 ft. With large spans this arrangement is not very economical owing to the large number of long trusses required, each with a comparatively small load.

The possibility of arranging very light trussed purlins, which will be explained in Sheet No. 18, allows the use of longer spans, see Figure 2. If the total span of the building exceeds 60 ft., it is worth while to subdivide the spans further and to have secondary, or even tertiary purlins and trusses. In Figures 2 and 3, examples of such sub-division are shown, and Figure 3a shows possible outlines for the single members.

Purlins :

Simple joist purlins may be of hinged construction, see Figure 4, but where the spans are larger, non-continuous purlins are used to simplify the erection. Figure 5.

Trusses :

Trusses can either rest on two columns, Figure 6, or be connected to them rigidly, Figure 7, or be replaced altogether by rigid frames, Figure 8. The constructions shown in Figures 7 and 8 will have increased application in welded, as compared with riveted construction.

Rigid Frames :

As far as possible, the form of rigid frames should follow approximately the line of thrust, which in the case of equally distributed loads, is a parabola. The bending moments at any point of the frame are almost proportional to the vertical distance from that point to the line of thrust, see Figure 8a, and are, therefore, greater the more the frame differs from the line of thrust.

It follows from this that buildings which need a uniform ceiling clearance are not particularly suitable for such rigid frames, while buildings requiring less headroom near the walls than in the centre constitute economical examples for this type of construction. Thus workshops with cranes, and cinemas with galleries would more often be carried out with a non-rigid structure, while exhibition halls, cinemas without galleries, sound studios, etc., could economically be of rigid construction.

Reference :

The different types of roof construction shown in Figures 6, 7 and 8 will be further explained by examples in Sheet No. 16 of the welding series.

Previous Sheets :

Previous Sheets of this series on structural steelwork are Nos. 729, 733, 736, 737, 741, 745, 751, 755, 759, 763, 765, 769, 770, 772, 773, 774, 775, 776, 777, 780, 783, 785, 789, 790, 793, 796, 798, 799, 800, 801, 802, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 816, 819, 821, 822, 823, 824, 826, 827, 829, 830, 832, 836 and 837.

Issued by :

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London Office (Temporary Address) :

King's House, Haymarket,
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Telephone : Whitehall 3993.



HOSTEL

FOR AGRICULTURAL WORKERS
AT PRINCES RISBOROUGH
BY MINOPRIO AND SPENCELY

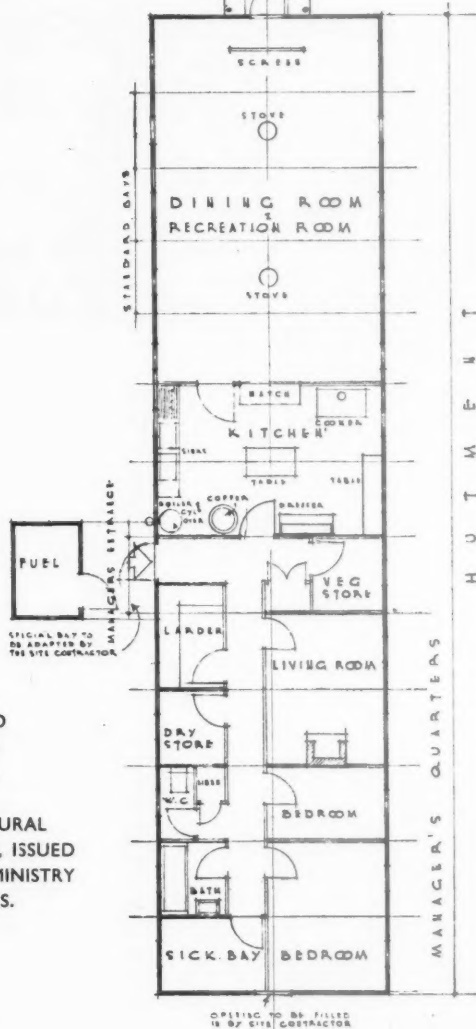
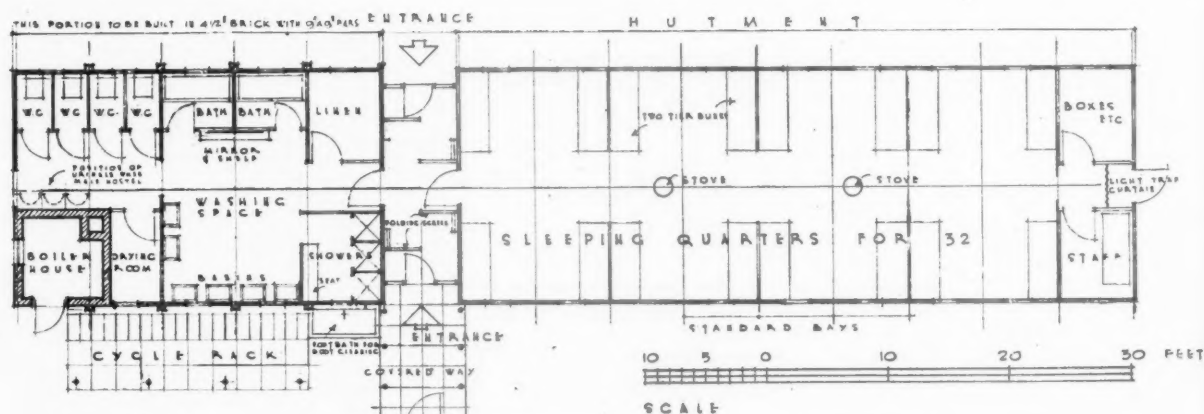


GENERAL—Hostel for fifty agricultural workers, the first of 289 to be built in various parts of England and Wales by the Ministry of Works for the Ministry of Agriculture. It was completed in eleven weeks.

CONSTRUCTION—External walls, 11 in. cavity brick with rustic Fletton facings; internal walls, 9 in. or 4½ brick; partition, plaster board, on 3 in. studding; roof, corrugated asbestos sheeting on timber trusses; windows, metal casements; doors, flush.

Above: view from the south-east; left: Mr. George Hicks, M.P., Parliamentary Secretary to the Ministry of Works, handing the hostel key to Mr. R. S. Hudson, Minister of Agriculture. On the extreme left is Mr. C. A. Minoprio, architect, and next to him Lord Addison.

HOSTEL FOR AGRICULTURAL WORKERS



STANDARD
PLAN FOR
A HOSTEL
FOR 32
AGRICULTURAL
WORKERS, ISSUED
BY THE MINISTRY
OF WORKS.

PLAN—The standard plan, reproduced on this page, was prepared by the Ministry of Works in consultation with the Ministries interested, and issued to the architects in various parts of the country charged with the erection of the hostels. To reduce the amount of material and facilitate erection the accommodation was designed to fit into standardised hutting units, and arrangements were made with contractors for the manufacture at their works of the prefabricated sections. These prefabricated sections are delivered to the sites indicated by the Ministry of Works ready for immediate assembly and erection on the concrete foundations. The standard plan is sufficiently flexible to permit the architects to use the materials most readily obtainable in their districts and to rearrange the grouping of the prefabricated units to conform with the configuration of each individual site. Essential furniture, including bedding, kitchen equipment, crockery and cleaning equipment is supplied.

Below : South-east corner.



D E S I G N E D B Y M I N O P R I O A

AT PRINCES RISBOROUGH

LETTERS

R. PADDICK

Constructive Criticism

SIR,—There has been a terrific amount of paper and energy expended in the discussion of the forms architecture shall take in the rebuilding of our cities after the war. In spite of all this (perhaps because of it) we, do not let us delude ourselves, are not getting anywhere near an ideal. We are presented with an opportunity which has never been given any age before, yet I have fear that we, like complacent fools, will throw it away.

It's an opportunity for us to become a country whose architecture is the ideal of the whole world, a country to whom every other sends students to study, not its antiquity but its modernity. We are still thinking in terms of bricks and mortar because we can only see bricks and mortar in front of us. We must not become a nation void of any architectural vision.

When the Government passed the Bill preventing anyone other than those registered by the R.I.B.A. from practising as an architect, I think it dealt progressive elements a hard blow.

For instance, an artist and designer is forced to take a secondary position, perhaps not even a place, as his ideas may not be called upon. I know the ostensible reason why the Bill was passed, namely, to prevent speculative builders from erecting infinitesimal rows of monstrosities. It should have not needed the Bill to prevent that, the town planning authorities should have taken care of it. And if architects had racked their brains for outstanding designs, especially for small dwelling-houses, instead of reversing an already existing plan and making a few slight alterations, then presenting it to a client as an entirely new design, the speculative builder would have had at least to raise his standard.

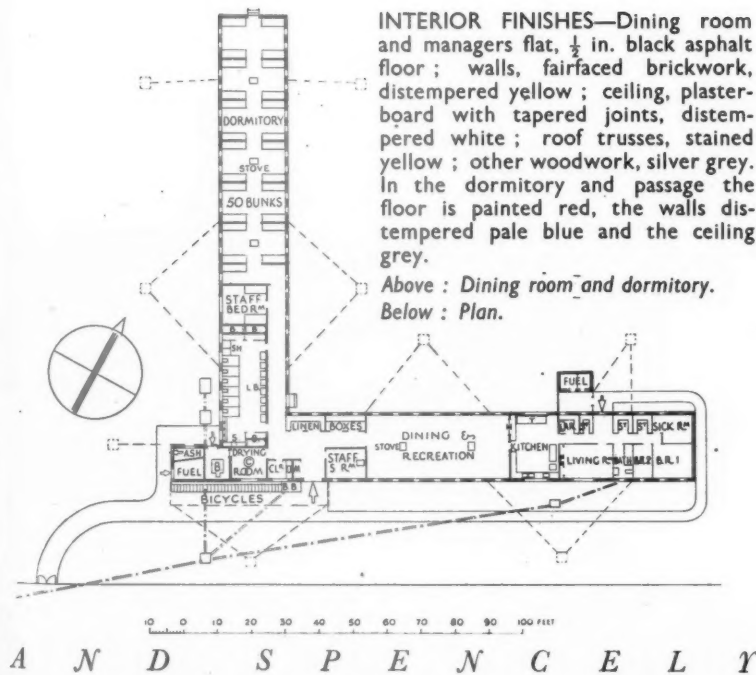
All the Bill at present does is to enable and encourage a mental decline but at the same time enable architects to remain secure in their fastnesses. Gentlemen, now is the time to rise to the heights (justifiably) in an honoured profession. Go the whole way, no mediocre efforts. Do not rest with what you have done in the past, you were noted well at the time—that is sufficient.

The Royal Academy exhibition was a tragic farce for the designs it portrayed. We must realize the possibilities of entirely new mediums. The usefulness of plastics, fire-proof talc reinforced with perforated zinc. Heating by



INTERIOR FINISHES—Dining room and managers flat, $\frac{1}{2}$ in. black asphalt floor; walls, fairfaced brickwork, distempered yellow; ceiling, plaster-board with tapered joints, distempered white; roof trusses, stained yellow; other woodwork, silver grey. In the dormitory and passage the floor is painted red, the walls distempered pale blue and the ceiling grey.

Above: Dining room and dormitory.
Below: Plan.



neon tubes, painting with metallic cellulose. Dust collectors, thermostatically controlled heating, air conditioning, even for the smallest buildings.

I know that opinions expressed here may run against the respected policy of your journal, but as a challenge to its broadness of policy, I submit this for publication.

Matlock

R. PADDICK

DEFERMENT

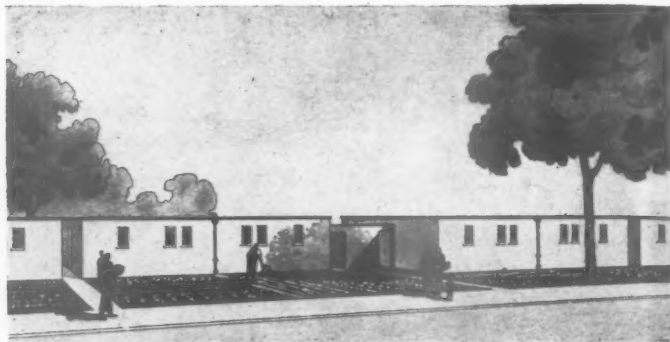
The following notes have now been supplied to the R.I.B.A. by the Ministry of Works and Buildings, giving complete particulars of the procedure to be followed in making application for deferment of military service or release from the Armed Forces in the case of architects or architectural assistants engaged on work of national importance:—

- (1) A firm wishing to apply for the deferment or release of an architect or architectural assistant in its employment should first attempt to find a substitute from the Central Register.
- (2) If this fails, the firm should make an application in duplicate (a) for deferment on form N.S. 100, to be got from the local office of the Ministry of Labour; or (b) for release on form N.S. 183, to be obtained from the Ministry of Works and Buildings. These forms should be filled in by the firm and sent to the professional Institute or Association of which the firm or its head is a member.
- (3) The Institute or Association on receiving a form of deferment sends to the Ministry of Works and Buildings the full name of the man for whom the application is made, his occupation, the number of his Registration Certificate, the date of his birth, the address of the Ministry of Labour Office on the address side of his Registration Certificate. The Ministry of Works and Buildings will then see that the man is not immediately called up before his case can be considered.
- (4) The Institute or Association then considers the merits of the application and passes the duplicate forms on to the Ministry of Works and Buildings, saying whether the application is really justified or not and what period of deferment or release is recommended (for a release an even stricter standard of judging is required).
- (5) The Ministry of Works and Buildings then takes the matter up.

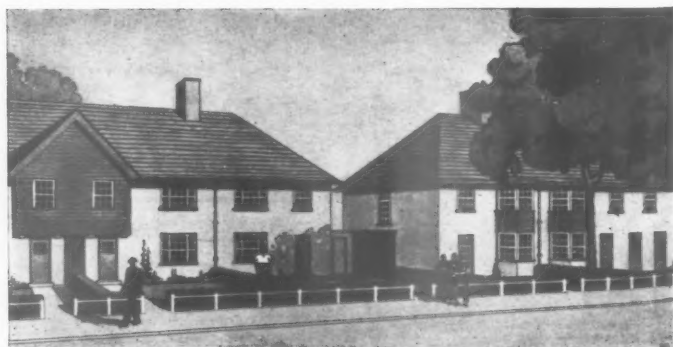
NOTES.—

- (a) If a man is liable to be called up but has not received an enlistment notice, the proper procedure is to apply for deferment. If a man has received an enlistment notice, whether or not he has been called up, application for release is necessary.
- (b) A firm wishing to retain the services of a man liable to be called up should apply for his deferment without delay; some firms have left it to the last moment.
- (c) Applications for extension of deferment or release should be dealt with as in the case of first applications, and should reach the Ministry of Works and Buildings not less than three weeks before the current period of deferment or release is due to expire.

CONVERTIBLE PA DESIGNED BY L. H. K



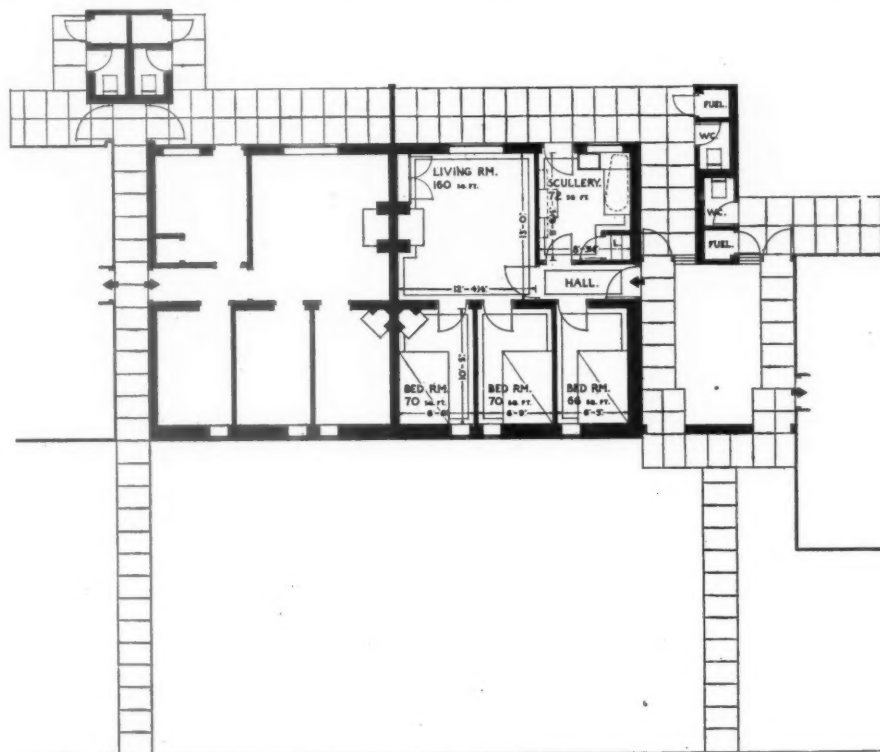
● Part houses for war-time use which can in peace-time be converted into the normal house shown in figure 2. Between two and three hundred of these part houses are to be built by the Liverpool Corporation and 158 are now under construction. Each of the three bedroom shelters are capable in emergency of accommodating a double bed. The bath, in the scullery, when not in use is covered by a table top. Walls to bedroom shelters are of brick consisting of an external skin of $4\frac{1}{2}$ in. a $2\frac{1}{2}$ in. cavity and an internal skin of 9 in. Brickwork is in cement and reinforced every four courses. The reinforced concrete slab over the shelter bedrooms is calculated to withstand a load of 400 lb. per sq. ft.



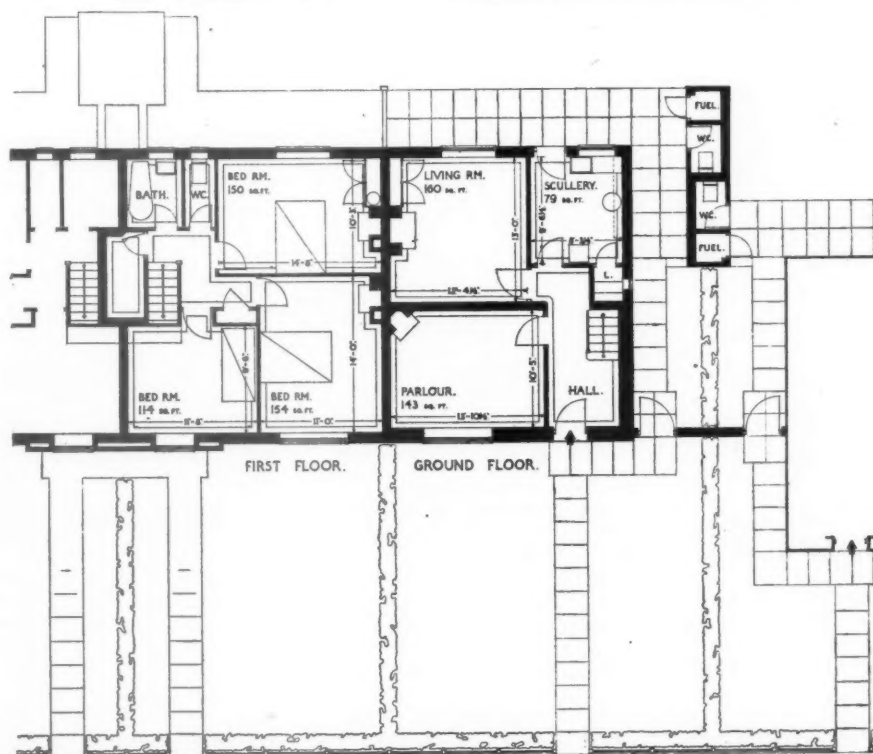
2 ● The part house converted into a peace-time house. The conversion can be made without any considerable waste of material or labour. In fact the part house forms with certain modifications the ground floor of a normal house of the parlour type.

PART HOUSES AT LIVERPOOL

KEAY, CITY ARCHITECT



WAR EMERGENCY PLAN.



POST WAR PLAN.

SOME QUESTIONS ANSWERED THIS WEEK:

★ *WHAT Precautions are necessary when Camouflaging an Asphalt Roof?* - - - Q 783

★ *WHO makes Asbestos Silos?* - - - Q 784

★ *HOW can I harden a Granitized Floor?* - - - Q 787

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 help is available to any member of the industry.

Enquirers do not have to wait for an answer until their question is published in the JOURNAL. Answers are sent direct to enquirers 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.

Questions should be sent by post to—

THE ARCHITECTS' JOURNAL
45 THE AVENUE, CHEAM, SURREY

—but in cases where an enquirer urgently requires an answer to a simple question, he may save time by telephoning the question to—

VIGILANT 0087

The reply will come by post.

Q 780

ARCHITECT, LONDON.—*I have done a great deal of War Damage work, and have prepared claims in some detail. I am told by fellow architects that they are not submitting their claims in nearly so much detail now, and should like to know what you consider necessary to ensure that my clients' interests are not neglected.*

The War Damage Act has changed matters a great deal. Under the previous Government Compensation Scheme it was necessary to submit a claim for compensation within 30 days from the date of the damage (subject to an extension of time being granted) and the claim, when submitted, had to be for an estimated amount based on 1939 prices.

Under the War Damage Act only a Notification of Damage is required in the first instance and this is done on the C.1 Form. The questions on the form are superficially, at any rate, very simple to answer and in view of the many public statements to the effect that the answers will be considered as expressions of opinion only and not binding on the owner, it is doubtful whether professional advice is required in most cases.

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IN

In due course if a "Cost of Works" payment is to be made it is only necessary for the architect to certify the actual cost of work done. A value payment will probably not be agreed until after the war.

There are, of course, many instances in which a professional man can safeguard his client. For instance, if there is doubt as to whether a "Cost of Works" or "Value" payment will be made it is advisable to obtain the War Damage Commission's decision before embarking on extensive repairs. Also, the owner is under an obligation to take the necessary steps to minimise further damage from weather and other causes and the architect's advice may be useful here.

Apart from particular points such as these and the ordinary supervision of repairs, we think that the most useful service an architect can render is to write a report on the structure.

Several years may elapse before a claim is settled and it may be difficult to determine at some future date, what was "War Damage." In such cases a report written by an architect soon after the damage occurred, certifying that certain cracks were new and were obviously caused by blast, that the state of repairs and decorations had obviously been excellent, prior to the damage, etc., etc., might be of great value.

A report of this kind is not required by the War Damage Act or by the Commissioners, and compensation will not be paid for any fees involved. If, however, you are asked to look after your client's interests, without being given explicit instructions, we think that the preparation of such a report would be a reasonable step to take.

Q 781

ARCHITECT, SUSSEX.—*This enquiry, too long to be published in detail, dealt with compensation for LAND COMPULSORILY ACQUIRED and the compensation to be paid under the Acquisition of Land (Assessment of Compensation) Act, 1919.*

The enquirer cited the case of Horn v. Sunderland Corporation. Sunderland Corporation compulsorily acquired land belonging to Horn and the Court of Appeal decided that compensation could not be paid for the disturbance of the owner's business (one of horse breeding) as the land was being valued as building land and such value could only be obtained by sale in the open market with vacant possession.

The enquirer thought the decision might lead to the belief that a farmer,

whose land had a value as building land, might be forced to take as compensation the value of the land as buildings land in spite of the fact that the value of the land as farm land together with an allowance for the disturbance of his business, might be greater; a belief which he did not share.

Apparently you are of the opinion that the owner would elect to have the value as farm land, if the value of this (including compensation for business disturbance) would exceed the value of the land, as building land, but you feel that this was not made sufficiently clear in the case of *Horn v. Sunderland Corporation* and might give rise to doubt.

The Master of the Rolls (as reported) gave the example as follows:—

Suppose that the agricultural value of the land taken was £10,000 and that it had a potential building value of £11,000. Suppose, also, that the loss caused by disturbance was £2,000. Then the owner could purchase similar land and transfer his business thereto for £12,000; and, if the value of the land taken was assessed at £11,000, there should be added to this £1,000 to give complete compensation to the owner. If the full cost of disturbance was added to the value of the land itself, the owner would be making a profit. In other words, the owner is entitled in any case to the agricultural value of the land together with any loss caused by disturbance; but if the building value of the land is greater than the sum of these, he is entitled to that value, with no addition for disturbance.

Again, in connection with minerals, the Master of the Rolls said:—

These might have an independent value not inconsistent with the agricultural use of the land, though inconsistent with building use. If so, this value should be added to the agricultural value of the land.

We think you will agree that the point you raise was adequately dealt with.

Q 782

Can you supply me with a list of the STANDARD BRITISH SPECIFICATIONS relating to A.R.P. WORK.

This should include, in particular, lighting.

A complete list of British Standard A.R.P. Specifications is too long to include here, but you can obtain one from the British Standards Institution, Publications Dept., 28, Victoria Street, London, S.W.1.

The following may be useful to you in connection with lighting:—

A.R.P. 6. Shelter lighting (shelter for 50–200 persons), price 8d.

A.R.P. 7. Electric lighting of Report and Control Centres, price 8d.

A.R.P. 26. A reduced scheme for lighting of shelters where A.C. mains are available, price 4d.

A.R.P. 16. Methods of providing low values of illumination (not exceeding .002 Foot-candle), price 8d.

A.R.P. 20. Methods of providing even illumination of low intensity (not exceeding .02 Foot-candle), price 4d.

A.R.P. 21. Ditto (not exceeding .2 Foot-candle), price 4d.

The above prices include postage.

Q 783

ARCHITECT, LONDON.—*An asphalt roof laid some years ago was CAMOUFLAGED with a BITUMINOUS EMULSION PAINT. The ASPHALT has cracked and I have been asked to investigate the cause.*

The questions in mind are:—

1. What is the cause of the trouble?
2. What precaution should be adopted when treating asphalt roofs with this paint?
3. Do colours affect the action of the paint?
4. Effect of alternative paints upon asphalt (a) Flat Oil; (b) Oil bound Distemper; (c) Wool Grease Emulsion paints.
5. Is new asphalt subject to similar action?

1. The trouble is almost certainly caused by the contraction of the paint which tends to tear the asphalt apart.
2. No special precautions are necessary.
3. No. The pigments should have no effect upon the asphalt.
4. No oil-bound paints should be used as any free oil tends to dissolve bitumen and the bitumen will bleed through the paint; moreover the differential expansions of the asphalt surface and the paint film causes crazing.

A.R.P. Handbook No. 11 (Camouflage of Large Installations) points out that only bituminous paints should be used on a bituminous surface. The differential expansions of the asphalt surface and this type of paint are not so great but crazing or cracking is not unknown or even unusual.

The best type of paint to use is a Wool Grease emulsion paint.

5. New asphalt is likely to be more affected than old.

The names of three manufacturers of Wool Grease Emulsion paints are given below:—

Champion Druce & Co., Ltd., 35, Southgate Road, London, N.7.

Smith & Walton, Halt Whistle, Northumberland.

Walpamur Co., Ltd., 35, Rathbone Place, London, W.1.

Q 784

ESTATE MANAGER, HERTS.—*Can you furnish me with particulars of ASBESTOS SILOS and the names of the MANUFACTURERS.*

Asbestos Silos are sold by Messrs. Wiggins-Sankey, Ltd., of Lysia Street, Fulham, London, S.W.6, under the name of the Flexilo Silo.

The Silos are made of Flexible Compressed Asbestos Sheet $\frac{1}{8}$ in. thick which will bend to a 5 ft. radius; they are made 10 ft., 12 ft. 6 in. and 15 ft. in diameter and either 7 ft. 6 in. or 11 ft. high. The smallest has a capacity of 589 cu. ft. and costs £5 11s. 2d. and the largest has a capacity of 1,943 cu. ft. and costs £11 18s. 0d. (prices at Local Distributors Depots).

Erection is simple and can be done by three people. The whole of the strain is taken up by encircling wires and apart from the wires, which are supplied in different lengths, identical sheets and fittings are used for any of the different sizes mentioned above.

With ordinary care the Silos can be dismantled and subsequently re-erected; when not in use the sheets can be stored flat or on edge, either in the open or under cover.

Full particulars can be obtained from the firm mentioned above.

Q 785

ARCHITECT, SURREY.—*Buff quarry tiles on a kitchen floor laid about five years ago have become badly pitted and are LOSING THEIR GLAZE with wear, with the result that they need constant scrubbing to keep them clean.*

Is there any preparation which may be applied in fluid form to the surface of the tiles, to fill the pitted surface and restore a glazed finish? If any preparation exists no doubt the surface would have to be retained by polishing.

There is no preparation capable of restoring the glaze to worn and pitted quarry tiles.

Q 786

ARCHITECTS, BIRMINGHAM.—*Can you give us information as to the relative and, if possible, actual COSTS of GAS AND ELECTRIC REFRIGERATORS, say, about 7 cubic feet capacity, with regard to:—*

- Running costs at average unit prices;*
- Maintenance costs;*
- Noise, especially after a period of use?*

Running costs depend, to a great extent, on the gas and electricity

charges in the district, and any comments we could make upon the maintenance costs would be based on individual examples which might not present the case fairly. We suggest that you ask for particulars from the Electrical Development Association, 2 Savoy Hill, London, W.C.2, and from Gas Industry House, 1 Grosvenor Place, London, S.W.1. Information coming from these sources is likely to be more comprehensive than that coming from individual manufacturers.

Q 787

ENGINEERS, CROYDON.—*We have in our works a $\frac{3}{4}$ in. hard GRANITIZED FLOOR (25%— $\frac{1}{8}$ in. granite chip-pings) which is a great source of trouble owing to its softness. Can you suggest a surface treatment likely TO HARDEN it so that stool legs or heavy hobnailed boots do not mark it.*

A reliable opinion cannot be given without examining the floor. In order to obtain confirmation of this view we telephoned Mr. Hancock, Secretary of the Natural Asphalt Mine-Owners' and Manufacturers' Council, 91 Petty France, London, S.W.1 (telephone Abbey 1010), who agreed with us, but stated that he would be very willing to visit your premises himself, without charge.

PRICES

BY DAVIS AND BELFIELD, CHARTERED QUANTITY SURVEYORS

There has been no change during August either in prices of basic materials given below or in the Rates of Wages.

The Rates of Wages for the Central Area remain at 2s. 0d. per hour for craftsmen and 1s. 6 $\frac{3}{4}$ d. per hour for labourers.

BASIC MATERIALS	Increases over pre-war prices at end of							
	Jan., 1941	Feb., 1941	Mar., 1941	April, 1941	May, 1941	June, 1941	July, 1941	Aug. 1941
Portland cement	per cent. +35.37	per cent. +35.37	per cent. +35.37	per cent. +35.37	per cent. +35.37	per cent. +35.37	per cent. +35.37	per cent. +35.37
2-in. unscreened ballast	+47.8	+47.8	+47.8	+60.9	+60.9	+60.9	+60.9	+60.9
Fletton bricks (at station)	+11.89	+11.89	+11.89	+11.89	+11.89	+11.89	+11.89	+11.89
Stoneware drain-pipes (British Standard) 2 tons and over	+18 $\frac{1}{2}$	+18 $\frac{1}{2}$	+18 $\frac{1}{2}$	+18 $\frac{1}{2}$	+18 $\frac{1}{2}$	+18 $\frac{1}{2}$	+18 $\frac{1}{2}$	+18 $\frac{1}{2}$
Roofing tiles	+20	+20	+20	+20	+20	+20	+30	+30
Steel joists (basic sections) ex mills	+47.5	+47.5	+47.5	+47.5	+47.5	+47.5	+47.5	+47.5
Lime grey-stone	+29.76	+29.76	+29.76	+29.76	+33.33	+33.33	+33.33	+33.33
Sheet lead	+50	+50	+50	+50	+50	+54.35	+54.35	+54.35
Iron rainwater goods and soil pipes	+18	+18	+18	+21	+21	+21	+21	+21
Copper tubes	+27.66	+27.66	+27.66	+27.66	+27.66	+27.66	+27.66	+27.66
White lead paint	+26 $\frac{1}{2}$	+26 $\frac{1}{2}$	+26 $\frac{1}{2}$	+26 $\frac{1}{2}$	+26 $\frac{1}{2}$	+26 $\frac{1}{2}$	+26 $\frac{1}{2}$	+26 $\frac{1}{2}$
RATES OF WAGES (Central London Area)								
Labourers	+12.70	+15.87	+15.87	+15.87	+15.87	+19.05	+19.05	+19.05
Craftsmen	+9.52	+11.90	+11.90	+11.90	+11.90	+14.29	+14.29	+14.29

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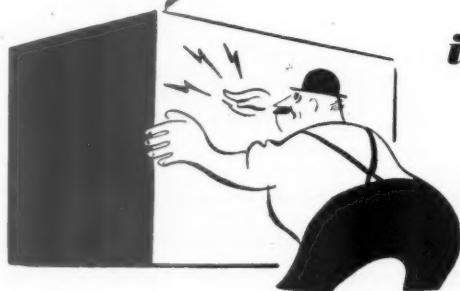


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TRADE NOTES

3000 B.C. and A.D. 1941

Time marches, but not always on, and such a war as the present pays small compliments to the intelligence of so-called civilized man. It is a bitter reflection that "progress," higher education and scientific advancement, has created a world in the throes of international distrust, strife and mass destruction. Post-war reconstruction must indeed be moral as well as physical.

This unhappy train of thought resulted from the perusal of a recent leaflet issued by The Limmer & Trinidad Lake Asphalte Company, in which they instance an example of the similarity of some contemporary building methods with those of ancient civilization. The waterproofing of

tanks with asphalte was practised over 4,000 years ago—the tanks in those less civilized days were built for the purpose of storing water for washing, drinking and irrigation. To-day, man's inventiveness having risen to the creation of the aeroplane and the incendiary bomb, tanks of similar construction (brick lined with mastic asphalt) hold water for fire fighting. These tanks form efficient auxiliary fire-fighting weapons and can be quickly and simply built, to any size or shape, in places not immediately accessible to the fire brigade though most vulnerable to the incendiary bombs—on the flat roof of a factory, for instance.

The accompanying illustration shows a present-day view of the great bath at Mohenjodaro Larkana, Sind, India, built about 3000 B.C.—the arrows indicate the location of the bitumen lining.

A.B.



The Great Bath at Mohenjodaro, Sind, India, built about 3000 B.C., showing the bitumen lining.

War Damage to Architects' Drawings

Architects' plans and drawings are not insurable under Part II of the War Damage Act. In an official ruling received by R.I.B.A. from the Board of Trade, architectural plans and drawings are regarded as "documents as used for the purpose of a business" under Section 85 of the Act, and are not insurable. Architects, therefore—and builders and other firms—should consider the advisability of having all their irreplaceable plans, drawings and records duplicated by Dufayrecord, so that if the originals are destroyed the profession or business can instantly carry on. A qualified Dufayrecord technician can begin by copying of your own originals at once. He can work on your own premises and bring all apparatus and materials. Your part is simply to select the material for reproduction. Drawings, tracings, plans, blue prints, sheets, cards or folders can be copied at the average rate of 1,400 photographs a day, depending on the size. Bound volumes can be copied almost as quickly. Engineering and architectural drawings photographically copied on this system can be readily enlarged again to make complete working plans.

This means that the whole of a firm's plans, specifications and designs which take enormous storage space can be compressed into the space of a little cabinet, and in case of disaster to the originals, can be reproduced quickly in full size from the photographic miniature. Further particulars can be obtained from Dufay-Chromex Ltd., Rythe Works, Thames Ditton.

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