Alphabetical Index to Advertisers

For Appointments (Wanted or Vacant), Competitions Open, Drawings, Tracings, etc., Educational Legal Notices, Miscellaneous, Property and Land Sales—*see* pages xxvi and xxviii.

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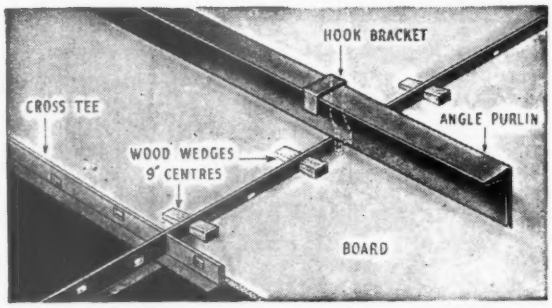

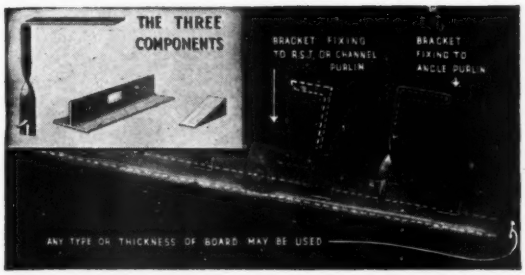

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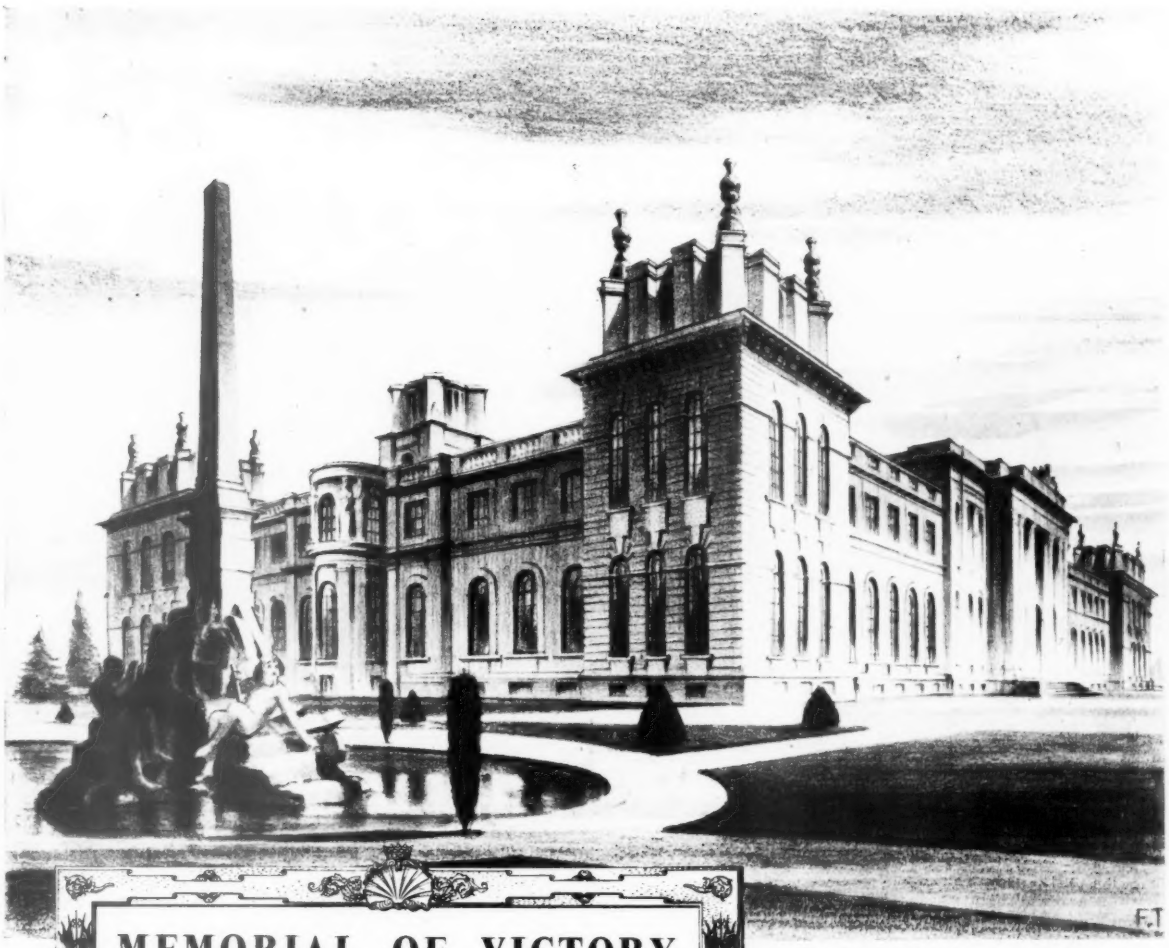

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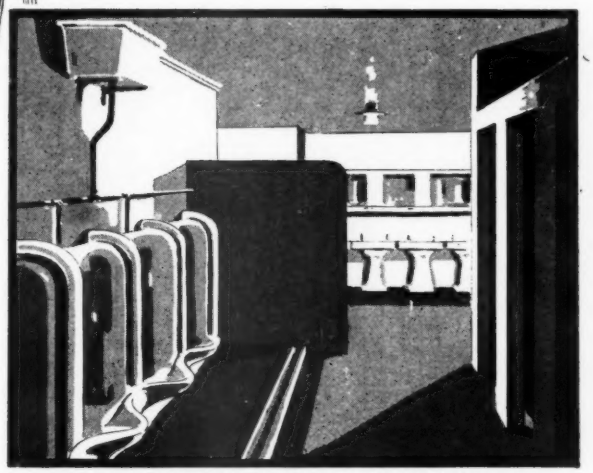

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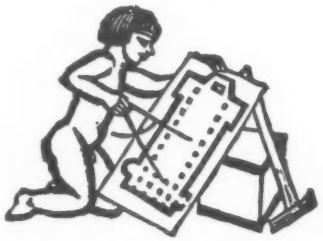


DIARY FOR JANUARY, FEBRUARY AND MARCH

Titles of exhibitions, lectures and papers are printed in italics. In the case of papers and lectures the authors' names come first. Sponsors are represented by their initials as given in the glossary of abbreviations on the front cover.

CAMELFORD, Cornwall. *Twenty Women at Home Exhibition.* (Sponsor, HC.) JAN. 22-31

CARDIFF. *Rebuilding Britain Exhibition.* (Sponsor, BIAE.) JAN. 13-17

CROYDON. *Homes to Live In Exhibition.* (Sponsors, HC and CEMA.) JAN. 29-30

DICKLEBURGH, Diss. *Twenty Women at Home Exhibition.* (Sponsor. HC) JAN. 13-FEB. 8

EASTCHURCH. *Living in Cities Exhibition.* (Sponsors, HC and CEMA.) JAN. 17-31

ERITH, KENT. *When We Build Again.* Exhibition at the Electricity Showrooms, (Sponsor, TCPA.) JAN. 29 to FEB. 5

GLASGOW. Meeting to inaugurate a new District Section of the Institute of Fuel. At the Royal Technical College, Glasgow. The President, Dr. E. W. Smith, will give an address on *Education in the Fuel Industries*, followed by a discussion. Professor A. M. Bryan will take the chair. 5.45 p.m. JAN. 21

HYDE, Cheshire. *Twenty Women at Home Exhibition.* (Sponsor, HC.) JAN. 17-22

LONDON. *Colour in the Home.* Exhibition at the Royal Academy, Piccadilly, W. There will be units representing dining, sitting, nursery and bedrooms, colour in everyday ware, and some building materials such as paints. There will also be suggestions for the interior decoration of civil aircraft. (Sponsor, British Colour Council.). JAN. 15 to FEB. 26

Science in the Art of Lighting. Discussion at a joint meeting of the RIBA and the IES. The subject will be introduced by R. O. Ackerley, Past-President of the IES, and A. G. Macdonald, F.R.I.B.A., Chairman of the Architectural Science Board of the RIBA. At 66, Portland Place, W.1. 5.30 p.m. (Sponsors, RIBA and IES.) JAN. 18

Henry Berry, chairman, Metropolitan Water Board, on *London's Water Supply.* At Royal Society of Arts, John Adam Street, Adelphi, W.C.2. Chairman, Viscount Falmouth. 1.45 p.m. JAN. 19

Gilbert McAllister. *Wanted—a National Planning Policy.* Lunch-time meeting at 1, Grosvenor Place, Hyde Park Corner, S.W. (Sponsor, TCPA.) JAN. 20

LMBA Annual Meeting. At Connaught Rooms. JAN. 20

Film Evening. Films selected by Paul Rotha, who will give an informal talk. At 34-36, Bedford Square, W.C.1. 6 p.m. (Sponsor AA.). Postponed until March 14.

County of London Plan. Light Touring Exhibition, prepared in collaboration with LCC by Erno Goldfinger and Ursula Blackwell. At 13, Suffolk Street, Haymarket, S.W.1. Informal opening January 19, at 2.30 p.m.. Professor C. H. Reilly in the chair. JAN. 20-FEB. 12

Post-War Planning and Reconstruction. Series of six lectures, beginning on January 20, at 6.30 p.m. Speakers, Miss E. E. Halton and Miss P. J. Owen. At Morley College, S.E.1. JAN. 20

NFBTE Annual General Meeting. At Connaught Rooms. JAN. 26

SHEFFIELD. *Your Inheritance Exhibition.* (Sponsor, HC.) JAN. 22-29

WEST HAM. *Conference on Planning for Living.* At Town Hall. Speakers: F. J. Osborn, Alderman Mrs. Elizabeth Gregory, chairman of the Extra Metropolitan (Essex) Post-War Reconstruction Standing Joint Committee; Councillor E. J. Fox, chairman of the Post- War Reconstruction Committee; H. C. Willig, president of the West Ham Trades Council. (Sponsor, TCPA.) JAN. 15

When We Build Again. Town Planning exhibition, held by the County Borough of West Ham, at the Social Services Hall, West Ham Lane, E.15. The exhibition can be divided into two sections. Section I dealing with town planning generally and composed of posters and models, has been loaned by TCPA in conjunction with Messrs. Cadbury, and is accompanied by a film shown daily. Section II illustrates the progress made in the preparation of schemes for reconstruction in West Ham. The maps indicate part of the research necessary prior to the preparation of schemes for reconstruction, and other maps show the tentative proposals for redeveloping the existing unplanned areas. Plans for the redevelopment of one area as a community to house 12,500 people are presented in the form of models, built by members of the staff of the Borough Architect, Thomas E. North. Two full-size kitchens have been loaned by Gas Industries and the Electrical Development Association respectively, each containing up-to-date equipment. A small room has been erected to demonstrate one of the many known methods of reducing sound transmission. Other exhibits include photographs of housing both at home and abroad and the treatment of open spaces, parks and children's playgrounds; and progress photographs show an experiment in prefabricated houses recently undertaken. 11 a.m. to 8 p.m. JAN. 13-20

NEWS

THURSDAY, JANUARY 13, 1944
No. 2555. VOL. 99

Though no feature in the JOURNAL *is without value for someone, there are often good reasons why certain news calls for special emphasis. The* JOURNAL's *starring system is designed to give this emphasis, but without prejudice to the unstarred items which are often no less important.*

★ *means spare a second for this it will probably be worth it.*

★★ *means important news, for reasons which may or may not be obvious.*

Any feature marked with more than two stars is very big building news indeed.

The building industry is taking steps to endow a CHAIR OF BUILDING AT CAMBRIDGE UNIVERSITY.

Meetings have been held with the University, M.P.s, Professor A. V. Hill and Mr. Kenneth Pickthorn, and with the Vice-Chancellor. According to the *Evening Standard* University authorities are expected soon to give the scheme their official blessing. When he took office at the beginning of the year, Mr. Leslie Wallis, President of NFBTE, expressed the hope that one day there would be Chairs of Building in all the Universities. Mr. Harland, President of LMBA, took the matter in hand. It was he who interviewed the Vice-Chancellor. Already he has promises of considerable financial support. Founding a Chair is a very costly business, particularly if, as with the builders, it is intended to be the centre of a complete department. The figure the builders have in mind is £250,000.

Owing to his many other pressing duties, Dr. C. F. Garbett, the ARCHBISHOP OF YORK, HAS RESIGNED from the Central Housing Advisory Committee.

Dr. Garbett has been a member of the Committee since its formation in 1935, and was formerly chairman of the Rural Housing Sub-Committee. MOH has accepted the Archbishop's resignation with great regret; and to fill the vacancy on the Committee has appointed the Rev. St. John B. Groser, Vicar of Christ Church, Watney Street, London, E. Father Groser has worked in East End parishes for more than 20 years.

from AN ARCHITECT'S *Commonplace Book*

HOTEL IN HERAT. [*From* The Road to Oxiana, *by Robert Byron.*] Downstairs three large rooms with glass fronts give on to the street. The first is the kitchen, indicated by a pool of blood and a decapitated cock's head on the pavement. The second and third are filled with marble-topped tables and hung with European scenes painted on glass by an Indian familiar with the early numbers of the *Illustrated London News*. . . . My room is at the back . . . a square box with a ceiling of bare poles and laths, white walls and a sky-blue dado. The floor is paved with tiles whose interstices secrete a cloud of dust and straw. . . . If the door and the window were not opposite one another, if the door would shut and the window had its full complement of panes, I should be comfortable enough.

Mr. Everard J. Haynes has resumed his appointment as SECRETARY TO THE RIBA BOARD OF ARCHITECTURAL EDUCATION, having been granted indefinite release from his duties as a Lieut.-Colonel on the Staff of the War Office.

At Ashby de la Zouch OLD TENANTS ARE TO HELP PAY FOR NEW.
This decision has been taken by the Rural District Council so that the tenants of six farm workers' cottages will each pay a rent of 10s. 10d. inclusive of rates instead of 14s. 4d., a difference of 3s. 6d. The increase in rent, 3d. a week, is to be made to each of the tenants of the 320 council houses. The council take the view that farm workers' wages will not enable them to pay 14s. 4d.

Secretary of the Royal Fine Art Commission, Mr. H. CHALTON BRADSHAW left £4,331, net personalty £4,115.
Mr. Chalton Bradshaw was architect, with Mr. Gilbert Ledward, of the Guards' Memorial London, and designed War Grave memorials at Cambrai and Plogsteert Wood.

On Thursday last the FUNERAL SERVICE FOR SIR EDWIN LUTYENS was held in Westminster Abbey. On the way to the Abbey the coffin was taken along Whitehall past the Cenotaph, which he designed.
The King was represented by Rear-Admiral Sir Basil Brooke; Princess Helena Victoria and Princess Marie Louise were represented by Mrs. Hugh Adams; the Prime Minister was represented by Major John Churchill; and Mr. W. T. Boston represented the Lord Mayor. The pall-bearers were: The Earl of Lytton, Viscount Ridley, Mr. Robert Lutyens (son), Sir William Reid Dick, R.A., Mr. W. Russell Flint, R.A., Sir William Goscombe John, R.A., Mr. S. Lee, R.A., and Mr. W. Curtis Green, R.A. Mr. E. V. Harris, R.A. (Treasurer of the Royal Academy) and Sir Giles Gilbert Scott, R.A., carried the insignia of Sir Edwin Lutyens. A wreath from the Royal Academy was carried by Mr. G. F. Kelly, R.A. (Keeper) and Sir Walter R. M. Lamb (Secretary). Members of the Royal Academy and many other architects and artists were in the large congregation as well as official representatives. Later the body was taken to Finchley for cremation. Sir Edwin Lutyens died on January 1. See A.J., January 6.

Much work has been done in repairing war damage and in RE-BUILDING IN SPAIN since the civil war.
Among the repaired buildings are the cathedrals of Siguenza, Vich and Oviedo, the Holy Chamber at Oviedo, and the episcopal palace at Tarragona. The new buildings completed between January and September, 1943, consist of 2 vicarages, 4 churches, 2 convents, 9 groups of schools, 5 slaughter houses, 3 public laundries, 1 cemetery, 1 hospital, 88 houses, 2 blocks of flats and 8 other important buildings. Since the end of the civil war Regiones Devastadas have repaired 2,749 churches and rebuilt 302, at a total cost of 44,840,500 ptas. New buildings erected in the same period include 8 town halls, 41 groups of schools, 24 convents and charitable institutions, 11 post offices, 6 barracks, 213 agricultural buildings, 20 clinics, 57 churches, 1,600 dwellings, 11 drainage and water systems. Dwellings repaired number 8,742 in addition to palaces and monuments, at a total cost of 113,984,774,300 ptas. Most of the 679 bridges destroyed during the civil war have also been rebuilt.

An appeal is to be launched for £100,000 TO RE-BUILD THE CITY TEMPLE.
The City Temple was burnt out in the bombing of London in 1941. The appeal is being made by the minister, the Rev. Leslie D. Weatherhead. On the site of the ruined church he wants to build a church seating 1,600 worshippers; lecture hall; children's church; rest-rooms, where refreshments can be served; a room equipped as a psychological clinic; accommodation for work among the poor. In pre-war days the City Temple was among the most crowded of London's churches. It was not unusual for the minister to address congregations numbering 3,000 twice a day.

Plans are being considered to provide HOSTELS FOR BEVIN'S MINING TRAINEES in the Doncaster coalfield area.
Accommodation is suggested for from four to eight hundred trainees. The plans are being designed by the local authorities, in conjunction with the Ministry of Labour and Ministry of Fuel and Power. A recent survey of billeting accommodation yielded only 300 acceptances from about 5,000 inquiries for lodgings.

Lord Woolton, Minister of Reconstruction (left), and Sir Harold Bellman at a luncheon held to celebrate the amalgamation of two of the biggest London building societies—the Abbey Road and the National. The new organization will be known as the Abbey National Building Society. Sir Harold Bellman is chairman and Mr. Stanley C. Ramsey, deputy chairman. Until the amalgamation Sir Harold Bellman was chairman and managing director of the Abbey Road Society and Mr. Stanley C. Ramsey, F.R.I.B.A. (of Adshead and Ramsey), chairman of the National. (*See* JOURNAL, *September* 23, 1943.)

Replanning Canterbury

Preliminary plans for post-war Canterbury have been prepared by Mr. H. M. Enderby, the city surveyor and town planning officer, and a model of the scheme has been made in his office by Mr. H. E. Olle. Constructed in four sections to a scale of 1/1250, the model—in the photograph Mr. Enderby is seen facing the camera—can be nested for easy transport, and is so devised that alterations in the layout or new suggestions can readily be tried out. To provide adequate facilities for transport—Canterbury has always been the hub of road communications for East Kent—and still retain the traditional character of the city, the scheme provides both by-pass and relief roads. The by-pass roads will eventually form a complete ring round the city approached by the main radial roads, and the relief roads, within the city, are parallel with some of the main mediæval roads, which are left as history has shaped them. In the core of the city is a new shopping centre, with civic buildings and assembly halls ; outside, adjoining the railway, a new cattle market ; on the higher land, away from the river valley, are new and extensive housing schemes, with schools, recreational facilities and community centres ; and the river valley is developed as a recreational belt, with ornamental gardens, walks, swimming pool, boating lake and tennis courts. Further lengths of the city wall are opened to view, the adjoining moat gardens are extended, and the opportunity has been taken to present the ancient monuments in special settings. There is a proposal to establish a university. It is also proposed that a theatre be built at the birthplace of Christopher Marlowe. Canterbury enjoys a unique place in the history and affection of the English-speaking world, and the Council feels that it would be acting selfishly if the new city were designed only to meet the needs of the inhabitants. The Council, therefore, has appointed Dr. Charles Holden to undertake, in full collaboration with the city surveyor, the work of preparing a town planning scheme for the city.

At the prize distribution at the Department of Building, Leicester College of Art School of Architecture, Mr. Kenneth Holmes, principal, welcomed the guarantee that the INDUSTRY WILL TAKE ALL THE BOYS trained in the School. Mr. Holmes pointed out that Leicester is one of the two Schools of Building in a College of Art, in which all sections of the building trade have been considered to be crafts which depend on good design. He pointed out the importance of the year to the building trade and the support given to day apprentice training by the plumbers for one full day per week, carpentry and joinery, bricklaying and painting and decorating for two half-days per week, and cabinet makers with early release in the evening for attendance at evening classes. A local committee, under the chairmanship of the Director of Education, has already prepared a memorandum as a basis for discussion with the various industries, for day continuation and the junior colleges, and the building trades have put forward a scheme in which the time for day continuation shall be 50 per cent. vocational and 50 per cent. cultural, all of which will come under the purview of the head of the department, and the full Advisory Committee of the building trades. Mr. W. H. Forsdike, chairman of the National Joint Apprenticeship Board, who presented the prizes, said the national apprentice scheme guaranteed that every boy going into the building trade is properly indentured and properly trained, not only to be a craftsman, but to be a good citizen.

Liverpool Cathedral Committee is ANXIOUS TO KEEP THE NUCLEUS of the body of skilled masons trained in the Gothic tradition and with a life-long experience of working sandstone. These masons, says the Committee in its quarterly bulletin, have for close on 40 years been employed on the cathedral and once dispersed, cannot possibly be reassembled. The average age of the masons and carvers employed is 59. The committee has been concerned to make possible a reduction of the large amount of scaffolding round the tower. Two of the four corner turrets are finished and progress has been made with the third. The two vestries at the west end of the cathedral have been roofed.

ARCUK offer for award in June, certain MAINTENANCE SCHOLARSHIPS IN ARCHITECTURE.
The scholarships will consist of a grant for the payment, in whole or in part, of the school fees and necessary subscriptions, instruments, books, etc., and, when necessary, a maintenance allowance not to exceed as a rule £100 a year. The scholarships will be renewable from year to year until the student has finished his or her school training. They will be available for students of British nationality who could not otherwise afford such training to enable them to attend architectural schools approved by the Council. The scholarships will be available both for students who have already begun their training and for students wishing to begin their training. Scholarships will not be granted to students who will be less than 17 years of age on October 1, 1944. Particulars and forms of application may be obtained from the Secretary to the Board of Architectural Education, Architects' Registration Council of the United Kingdom, 68, Portland Place, London, W.1. Copies of previous years' examination papers may be obtained on payment of 6d. The closing date for the receipt of applications, duly completed, is February 29, 1944.

In a report just issued the Select Committee on National Expenditure states that £663,000,000 has been SPENT ON WAR FACTORIES.
The biggest spenders have been the Supply Ministry (£133,227,000), the Ministry of Aircraft Production (£128,739,000), Ministry of Works (£129,000,000), and the Food Ministry (£199,000,000). Work on ordnance factories and agency and shadow factories for the Supply Ministry and the Ministry of Aircraft Production, all owned by the Government, cost £381,500,000.

In a letter to Mrs. Jennie Anderson, M.P. for Dartford, Mr. George Hicks, Parliamentary Secretary to MOW, says the rebuilding of demolished or BADLY DAMAGED HOUSES MUST WAIT for increased building resources.
Regarding the granting of licences for the rebuilding of properties which now qualify for a cost of works instead of a value payment, Mr. Hicks states the claims on available labour and materials are so many that it is necessary to restrict work to property which can be repaired for £250.

Mr. J. M. Henderson, Town Planning Officer for Rutherglen, has been APPOINTED COUNTY ARCHITECT OF CAITHNESS.
Mr. Henderson, who is 30 years of age, was with two private firms of architects before taking up the position of assistant architect at Rutherglen. He was later put in charge of the town planning scheme.

CHRISTMAS AT CLYDEBANK

ON Christmas Day a Housing and Town Planning Exhibition was opened to the public at Janetta Street School, Clydebank. This is the first exhibition of its kind to be held in Scotland, and the first time that the Scottish public has been asked to consider schemes for the large-scale reconstruction of a part of its environment. The English public has long since recovered from the first impact of "planning." Some now have a nodding, if suspicious, acquaintance with neighbourhood units, satellite cities, precincts and adequate amenities, and others more fully initiated, with potential unit systems, linear theories and even gross and nett densities. Exhibitions have been held of local and regional surveys, town and country plans, and theories and principles behind the plans. Scotland, on the other hand, has held exhibitions neither of surveys nor of plans, for few have been produced, and, so far as theory and principles are concerned, Sir Patrick Geddes, its great town-planner, in company with Charles Rennie Mackintosh, its great architect, is left to be more fully acclaimed elsewhere. But Clydebank has now produced a plan; has translated it into a medium through which it can gain popular support, and, what is more, has started to build part of the housing proposed in the plan. It is thus the first post-blitz reconstruction scheme to be started in Britain during the war on the new principles of positive physical planning. Other wartime houses have been built—permanent, transitional, temporary and experimental—on new sites, blitzed sites, and previously zoned sites, but the Scottish Burgh of Clydebank provides the first lesson and example to blitzed cities in a step towards the realization of a positive town plan which will satisfy more than just the need for shelter. The progress will be watched with great interest.

The Burgh of Clydebank is in the County of Dumbartonshire and is part of the industrial area of Glasgow. It presents a magnificent site for a town, with a southward slope descending to the Clyde where the heavy industries are based from which the Burgh has grown. Parallel and close to the Clyde are the main lines of communication—road, rail and canal—and a by-pass arterial road skirts the site to the North. Up to 1941, a large part of the industrial population lived in conditions of squalor, although a fortunate few had been re-housed in new estates which, by comparison, were brave attempts at semi-detachment. In March 1941, Clydebank suffered three successive and severe blitzes; 40% of the houses were wiped out and nearly every house was damaged. An acute housing shortage arose, which, in spite of the 7,500 houses already repaired under the direction of Mr. Sam Bunton, appears still to be very serious. The new plan which incorporates the estates built before the war into a scheme of eight neighbourhood units, each to house about four to five thousand people, was fully described in an article

in last week's JOURNAL. It serves to draw attention once more to the necessity for such activities taking place within a national framework and as part of a national policy. For there appears to have been singularly little co-operation between this particular Burgh and the adjoining planning authorities, and although it is healthy and praiseworthy that Scotland as well as England should have started its planning in true democratic fashion at the lower end of the administrative scale, it is now up to the national authority in Scotland to evolve efficient machinery for co-ordinating local effort and encouraging collaboration. The recent appointments of Professor Abercrombie as Town Planning Consultant to the Clyde Valley Regional Planning Committee, and Mr. F. C. Mears to that of Central and South-East Scotland are encouraging. It is to be hoped that the enthusiasm shown at Clydebank will appear elsewhere and that the Scottish Office will harness the efforts of the local planning authorities so that each one makes its full contribution to the production of a Scottish National Plan.

The Architects' Journal

War Address: 45, The Avenue, Cheam, Surrey

Telephone: Vigilant 0087-9

NOTES & TOPICS

RIBA CONFERENCE

A conference on the Teaching of Architectural Appreciation in schools, held last week at the RIBA, passed the following resolution :—

"This Conference of school teachers and others interested in education has met at the invitation of the Royal Institute of British Architects to discuss the teaching of architectural appreciation in schools.

"The Conference wishes to record its conviction that an appreciation of the ways in which men have built—as spirit and ambitions have developed, and under varying conditions of climate, of materials and of mechanical skill—should be used to link together such subjects as history, geography and art, and relate them to a child's own experience of familiar things.

"The Conference fully realizes that appreciation of this type cannot be evoked in children on any wide scale unless it is first evoked in their teachers, and appeals to the Board of Education to consider how this might best be achieved."

★

The discussion which took place before the motion was put to the vote, made it clear that the teaching profession is quite as anxious to use the history of architecture to impart greater realism to the usual set subjects and stress their underlying unity (an urgent problem particularly in senior schools) as architects are to have their subject popularized. The motion was carried unanimously.

★

It is understood that methods of putting the subject across, which will be suggested to the Board of Education for their serious consideration will include (i) films; (ii) courses of lectures for teachers.

★

This conference marks an important stage in the movement which began with the Berkshire experiment. Architects who are tempted to belittle its significance should study attentively Sir Kenneth Clark's article on Ornament in Modern Architecture in the current number of *The Architectural Review*, which makes it more than usually clear how little hope there is of architects being called upon to do anything more than design their own straitjackets, until such time as the public can be brought to appreciate the importance of values which cannot be measured scientifically.

9,000,000 LIKE THIS?

I have received a copy of a recent issue of the *Lynn News*, containing the front-page photo seen on the next page. The title reads, "There'll be 900 like this," and the caption, "This typical Hulton Road house is to be the kind of house Lynn Corporation will build—with several improvements—in the immediate post-war period."

★

In the same paper is a report of a meeting of Lynn Town Council, from which it is clear that the Council is mightily pleased with its proposed post-war plans and houses. Lynn Council's taste in house design is, I'm afraid, depressingly typical.

★

But to give Lynn Council its due, it must be added that it is tackling the housing problem seriously. It has accepted the idea of community planning and is not afraid to propose a temporary "Timber Town" to supply immediate housing relief. Said Alderman Catleugh, "We have plans for the possible development of a site where we shall put in minor roads and services and a water supply —a timber-town estate on which people who buy discarded Army huts can get quick housing accommodation. There will, of course, have to be all sorts of safeguards, but our object will be to prevent the unrestricted putting up of these temporary dwellings on odd sites scattered about on the outskirts of the borough, as we had after the last war."

★

One feels in those remarks that Mr. Catleugh looks on temporary housing, as so many others do, as an unfortunate necessity—a shambles that will be anything but pleasant to look at and to live in. But even certain types of Army huts, if laid out intelligently, properly adapted and having local communal facilities, could provide a pleasanter environment than most of our people have been compelled to suffer in the past.

I saw recently a standard timber army hut, the kind that is covered outside with horizontal creosoted boards and measuring 30 ft. by 20 ft., which was re-erected at the beginning of the war on a country site as a private dwelling. It was originally built during the last war and formed part of a rather sordid temporary " timber town " for factory workers. On its old site it looked unprepossessing, not because of its intrinsic design but because of its setting. The roads were muddy and badly kept, the gardens were weedy and unkempt, and the paintwork had not been touched for many years. Besides that, the prospect had not been improved by a number of bomb explosions.

*

Now the hut stands on sloping, wooded ground. It rests on a new distempered brick plinth. New window frames have been added and the internal arrangement has been altered. A brick chimney stack has replaced the former stove pipe and the new roofing felt looks cheerful in its coat of green bituminous paint. A projecting porch, bike shed and entrance steps in local brick give form to the building and relieve the otherwise dull elevation. I saw this hut on a sunny autumn afternoon when the garden was already beginning to take shape, and a row of sun-flowers seven feet high were well set off by the background of the walls. This " temporary dwelling," merely an old, converted Army hut, had not only far more character than all the local builder's " permanent " work in the district, but it was quite as warm, convenient and comfortable to live in.

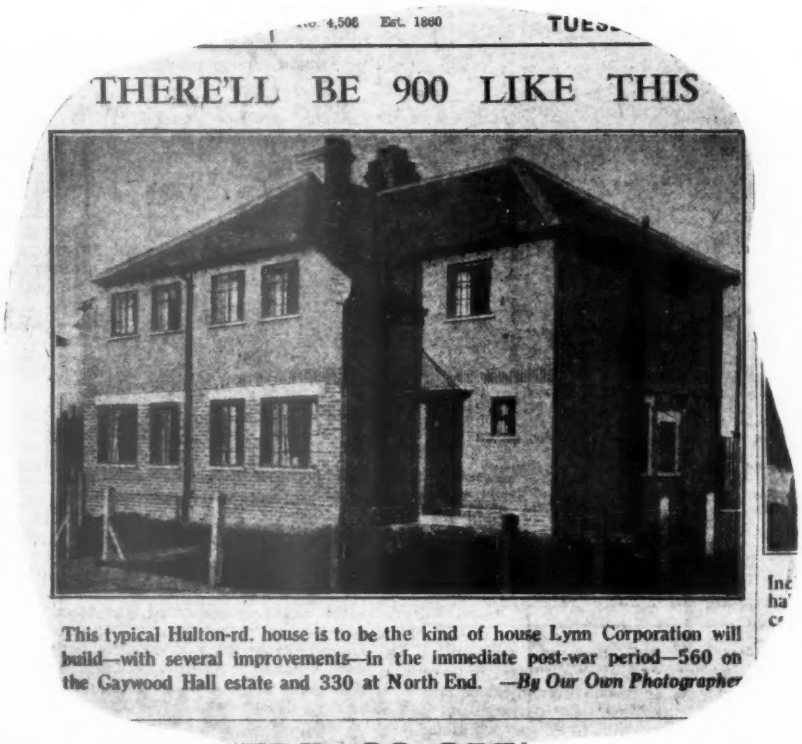
*

The moral of this story is clear. It is that since a hut, originally designed for army uses, if sensibly adapted, can provide a charming and comfortable home, there is no need for demountable, temporary houses to be regarded as necessarily " cheap and nasty," " squalid " or even " unfortunately necessary."

TAILPIECE ON TIMBER

The following has been suggested by the Timber Development Association as a useful piece of copy for advertising timber : " . . . Furthermore, it can be nailed, bored, cut or sawn—just like a substitute."

ASTRAGAL



Reproducton from a recent issue of the Lynn News. See Astragal's note above.

LETTERS

Sir Ian MacAlister
W. J. Cassidy
Colin Ward, Spr. R.E.

Sir Ian MacAlister: Changing the Pilot

SIR,—I am afraid that I cannot " allow a member to know better than the Secretary," and I must again warn members that the picture of the working of the RIBA and of my alleged " reign " is fantastically removed from the actual facts.

In his first letter Middle-Aged Member gave a list of things which he thought the RIBA ought now to take up. I pointed out that they *had* all been taken up already. He replies : " That is not quite the point." I leave it to your readers.

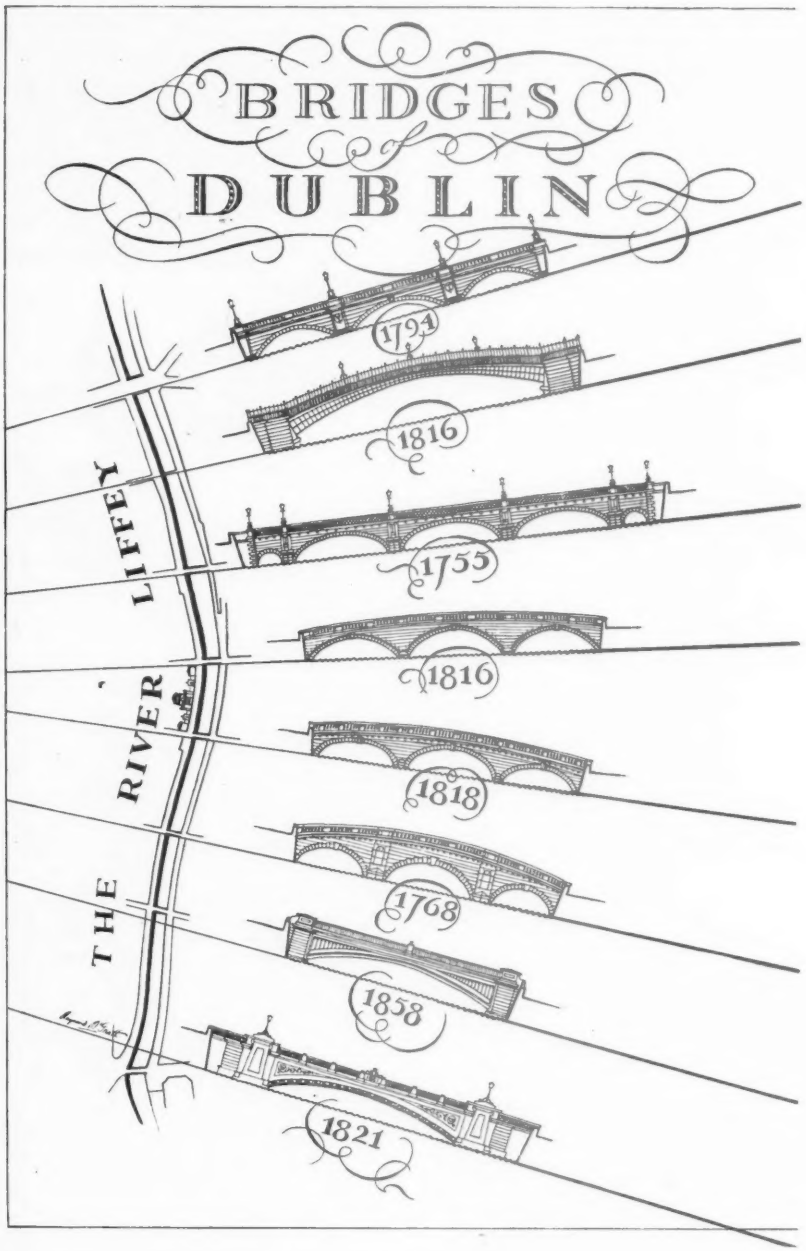
IAN MACALISTER,
London. Secretary, RIBA.

Striking a New Note

SIR,—In the past few weeks the correspondence columns of the JOURNAL have been monopolised by letters condemning in no uncertain terms the *RIBA Memorandum on Housing Construction of a Definite Limited Life*. I do not know whether you have received any letters of approval ; if so, you have not published them.* I also do not know whether you will consider this letter sufficiently interesting for publication, but I propose to " strike a new note " by expressing myself in complete favour of the views expressed by the RIBA. I rather think your readers have read the memorandum very superficially and then, for some reason or other, have " flown off the handle." There is such a thing as reading " between the lines " ; may I, therefore, suggest your correspondents apply this method to the memorandum, instead of merely picking out the points with which they disagree, and then holding them up to ridicule.

According to my reading, the RIBA do not unreasonably condemn prefabrication ; rather do they draw attention to the dangers inherent in too whole-hearted an adoption of it by the profession. Some years ago I enjoyed (?) the rather unique experience, for an architect, of acting as building surveyor to a local authority parts of whose area was a happy hunting ground for the dubious type of speculative builder more popularly known as the jerry builder. I know what went on then

* We have not received any.—ED., A.J.



for
Christmas
1943
from Reginald and Eileen Ross Williamson
Collinstown Park, Clondalkin
Co. Dublin

A Christmas card designed by Raymond McGrath for Reginald and Eileen Ross Williamson, showing the eight Dublin bridges across the River Liffey.

and I can easily visualize what is likely to happen again, if we are not very careful. Many of my old jerry builders will be blossoming forth again as smart business men, pushing their shoddy catch-penny prefabricated houses for all they are worth. To permit the erection of prefabricated houses will require some relaxation of the existing building by-laws, and when once this starts no one knows where it will end. A similar thing happened after the last war, and when it became necessary for the local authorities to tighten up, it became almost impossible to do so. A builder who had perhaps worked as a tradesman on council houses and knew, for example, that undersize roofing or flooring timber had been used, was very difficult to convince that he could not be permitted to adopt the same tactics. In the first instance the reason was probably quite legitimate, namely, shortage of materials, whereas in the second case, it was a case of saving money, which actually, of course, found its way into the builder's pocket. Let us modernize the by-laws by all means, but heaven preserve us from a policy of relaxing them. Another point which appears to have been overlooked by your correspondents in their almost passionate defence of prefabrication is that they are, to a great extent, cutting the ground from under their own feet. I cannot conceive it being necessary to go through a five years course at a University, as many of us have done, to qualify for permission to erect a row of prefabricated houses.

Your correspondent who endeavours to strike an analogy between the production of a Spitfire and the mass production of houses is, if I may say so, stretching the argument beyond the limit of elasticity. The Spitfire, although now admittedly manufactured by off the line methods, undergoes a most intensive inspection during every stage of manufacture. I cannot see this being applied to prefabricated buildings, for the simple reason that human nature being what it is you will be up against the argument that whereas the pilot who is to take over the Spitfire depends for his life on the care with which it has been manufactured, the purchaser of the prefabricated house does not. I see no reason why, on the cessation of hostilities, and during the interim period until the nation swings over to peacetime occupations, the war-time hostels could not be used for housing the people. In those areas where hostels are not already in existence they could be built as a temporary measure. There would then be no danger of these so-called temporary buildings becoming permanent—the people living in them would see to that. If, however, we are going to build prefabricated houses until such time as the people can be housed permanently, where on earth (literally and figuratively) are we going to build the permanent houses?

A short time ago you published a letter from Mr. Calveley Cotton in which he appealed for unity in the profession. I accord him my whole-hearted support. Having served for three out of the four years of war in the Forces, it seems to me that many members of the profession are expending a great deal of energy in the gentle art of mud-slinging at the RIBA. Whilst healthy and constructive criticism is always useful, it is a very easy thing to fall into the habit of criticising for the sake of criticising. Mark Twain once said that there are two sides to every question—your own and the wrong one. If you substitute "right" for "wrong," there is a useful lesson to be learned. We have squabbled about the Registration Act, the Royal Academy Plan for post-war London and now about prefabrication. Is it too much to ask that, for a change, we should sink our own petty differences for the good of the profession as a whole?

Ruislip. W. J. CASSIDY.

Housing at Ilford

SIR,—It is alarming to read in your issue for November 18, that the LCC intends to build a £1,600,000 housing scheme on the Grange Hill site, near Ilford. In the last 15 years the radius of Greater London has been increased by miles in this north-east direction. Thousands of acres of London's invaluable market-gardening land have been swallowed up.

It is generally conceded that London is far too big a city and that further developments should be confined to making better use of sites within the Greater London area. The LCC's intentions, and the extension of the District Line railway in this direction will have, as their effect, the growth of an enormous and shapeless new dormitory areas extending past Epping and perhaps up to Ongar.

COLIN WARD, SPR. R.E.

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

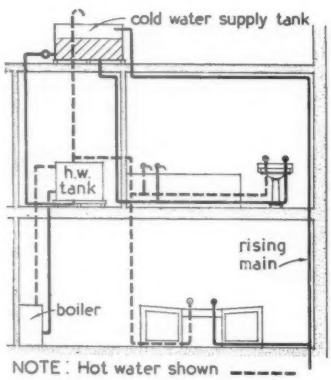
DOMESTIC WATER HEATING 13: INSTALLATION OF INSTANTANEOUS GAS WATER HEATERS (B)

INSTALLATION OF MULTI-POINT APPLIANCES CONNECTED TO BOILER SYSTEMS.

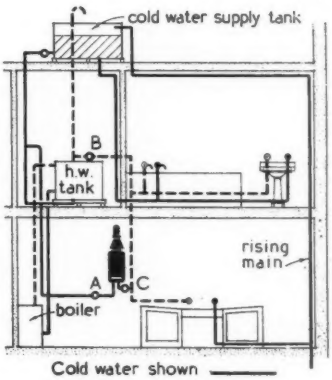
An instantaneous multi-point water heater may be used as a useful adjunct to a solid fuel fired installation, to provide immediate and continuous hot water for summer months or at other times when the boiler is out of operation.

The installation is simple since the existing hot water pipes may be used, either system being brought into operation by the opening or closing of one or more stop taps.

The diagrams below illustrate the principle as applied to a common type of domestic hot water installation.



BEFORE INSTALLING MULTI-POINT HEATER.



MULTI-POINT HEATER INSTALLED AS ALTERNATIVE.

When designing an installation of this type, certain fundamental rules should be observed :—

(*a*) The cold water supply to the instantaneous gas water heater should be from the cold tank feeding the boiler system.[1] *The appliance should never be supplied direct from the main when inter-connected with a boiler system.*

(*b*) All hot water draw-off points should be connected to an expansion pipe. No draw-offs should be supplied from the boiler primary flow.[2]

(*c*) The isolating stop tap between the boiler system and the instantaneous gas water heater should not at any time obstruct the expansion pipe. The hot water storage tank should always be open to the atmosphere.[3]

(*d*) Full diameter stop taps (A) and (C) should be provided close to the appliance on both the cold water inlet and hot water outlet.[4]

Where the head of water available from the tank is found to be insufficient, and it is impracticable to raise the level of the tank, the appliance may be supplied from the main if connected

1. As it is possible (either inadvertently or through failure of the stop tap) for both systems to be connected and in operation simultaneously, it is necessary to ensure that the water cannot flow through the instantaneous appliance into the hot water storage cylinder of the boiler system. If the pressure of the cold water supply to the instantaneous heater were greater than that available from the cold water cistern, there would be an unchecked flow into the cistern through the expansion pipe. For this reason *when instantaneous gas water heaters are supplied directly from the main, no connection should be made between the outlet of the heater and any pipe connected with any tank.* The cold water supply to the instantaneous gas water heater should be made in one of the following ways :

(*a*) By an independent cold water supply from the cold water storage cistern.
(*b*) By a pipe taken off from the cold water supply to the hot water storage cylinder above the level of the top of the cylinder.
(*c*) By a pipe taken off the feed pipe from the cold water storage tank to the cold taps in the bathroom.

In practice it may be found that the latter method may only be adopted where a considerable head of water is available owing to the small size of pipe which it is customary to use to supply the bathroom basins. A head of 10 ft.—12 ft. measured vertically from the highest draw-off water tap to the level of water in the tank should normally be provided where (*a*) or (*b*) is adopted ; the cold feed being 1 in. pipe and the hot water draw-off pipes ¾ in. with a ½ in. branch to the kitchen tap.

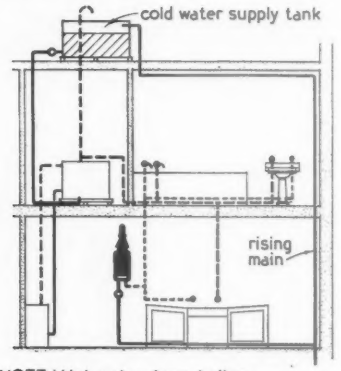
2. Normally it is good practice for all hot water draw-offs to be connected to the expansion pipe. However, it will sometimes be found that one or more draw-offs are taken from the primary flow from the boiler and the storage cylinder. With such an arrangement no hot water would be available from these taps when the instantaneous appliance was in use. It is also desirable that not more than one stop tap should be used to isolate the two systems, and this is only possible where all hot water draw-offs originate from the expansion pipe.

3. The expansion pipe should at all times be open to the hot water tank and the atmosphere, to permit the boiler being put into operation while maintaining the instantaneous appliance in use until the storage system has reached the desired temperature. There would be considerable danger if it were possible to obstruct the expansion pipe, were this inadvertently left closed and the boiler lit.

4. When the instantaneous appliance is put out of operation, the isolating stop tap (B) should first be shut, and then the cold water feed to the instantaneous appliance (A) closed. It is desirable to have in addition a further stop tap (C) on the outlet from this appliance in order to facilitate the inspection and cleaning of the appliance while the boiler is in use.

[TURN OVER

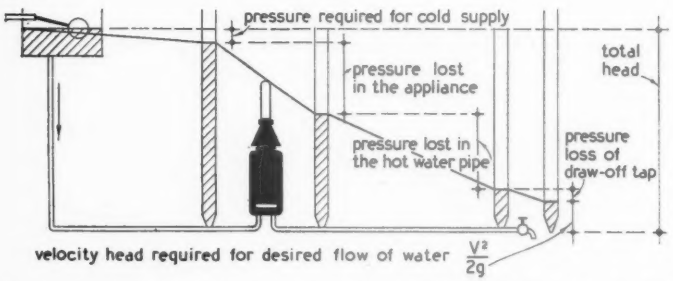
to the cold water taps as shown in the diagram below : the two systems are then completely separated.



NOTE : Hot water from boiler ———
Hot water from multipoint - - - -
Cold water ———

INSTANTANEOUS HEATER CONNECTED TO MAIN AS ALTERNATIVE TO A BOILER.

A certain head or pressure of water is required to produce a given flow of water through any system of pipes and taps.[5] This is required (*a*) to give the moving water energy proportional to its velocity, and (*b*) to overcome the resistance of the system. As frictional losses increase with velocity, the lower the velocity (i.e., larger the pipes) the lower the frictional losses.[6] The various sources of frictional loss are illustrated in the diagram below :—



HEAD OF WATER REQUIRED WITH VARIOUS APPLIANCES[8]

ASCOT Heaters	Gals./min. average flow	Pressure for heater alone	Head required per foot run of pipe in feet ½″	¾″	1″
Sink heaters					
R 12/4* ...	0·7	40 ft.*	·02	·003	·0008
RS 52/1* ...	0·7	20 ft.*			
Bath heater					
SG 32/1* ...	2·0	8-10 ft.			
Multipoint					
NEA 32T1* ...	2·0	Mains connection	·17	·028	·007
NEA 32/6 ...	2·0	6 ft.			
NEA 38 ...	2·3	7 ft. 6 in.	·22	·035	·009

Each bend ½″ add ½ ft. ; ¾″ and 1″ add 1 ft.
Each tee ½″ and ¾″ add 1 ft. ; 1″ add ½ ft.
Each tap ½″ add 10 ft. ; ¾″ add 30 ft. ; 1″ add 35 ft.

} Add these to the total length of pipes before calculating the head of water and add the total to that required for heater only.

* SEE NOTE 7

5. The pressure required to produce a flow of water in a system of pipes is usually referred to as the head of water. This is the difference between the level of the water in the supply tank and that of the draw-off. In the case of a supply from the main, this would be the difference between the level of water in the reservoir and the draw-off. It is measured in feet : 1 ft. head of water being equal to 0.4325 lbs./sq. in. The energy required to give the water motion in the pipes is proportional to $\frac{V^2}{2G}$ where V = the velocity in feet/second and G = 32.2 feet/second (acceleration due to gravity at sea level). This energy is small and may be neglected when calculating minimum heads required to produce the low velocity flows required by domestic installations.
The pressure required to overcome the resistance set up by friction between the water and the pipe walls, elbows, tees, taps and other fittings is of greater importance. The diameter of the pipe is the factor having the largest influence on the frictional losses and consequently on the discharge rate.

6. Although large diameter pipes offer a low resistance to flow, it is not always practicable or desirable on grounds of economy and efficiency to use very large pipes for the complete installation. Some frictional losses in the hot water installation are unavoidable, but they should be kept to a minimum where the use of large size pipes is practicable. The cold water services to instantaneous appliances should be run in ¾ in. or 1 in. pipe to reduce frictional losses to the lowest possible level. The hot water distributing pipes must be of a size compatible with reasonable pressure loss but at the same time have a small cubic content to avoid waste of water.

7. Single point appliances, particularly sink heaters, are intended for direct connection to the main. For this reason the pressure loss or the head of water required to operate the appliance is often considerable. Bath heaters may also be connected direct to the main as mains pressure fluctuations are not important, the appliances are not remotely controlled, and consequently any variation in temperature which may result from the change in pressure will be immediately apparent. The multi-point appliance type NEA 32T1 is specifically designed for direct connection to the main and incorporates a water pressure governor and temperature selector. It is not suitable for tank connection owing to the high pressure required for operation.

8. To use the table : Measure the total length of supply and distributing pipes which will be necessary, counting the bends, tees and taps ; convert the latter to equivalent feet length of straight pipe using the factors at the bottom of the table, and multiply the total length of pipe by the appropriate factor found against the average flow in gallons per minute and size of pipe. The resulting figure will be the foot head of water required to give the specified flow through the system excluding the appliance.

Issued by Ascot Gas Water Heaters Ltd., North Circular Road, Neasden, N.W.10. Telephone : Willesden 5121 (14 lines).

PHYSICAL PLANNING

THE JOBS TO BE DONE

22

index

Dr. L. Dudley Stamp, whose article on Land Use is published this week, is a B.A. and D.Sc. (London), a reader in Economic Geography at the University of London, and Director of the Land Utilization Survey. He was Geological Adviser to the Indo-Burma Petroleum Company in 1922, and Professor of Geography and Geology, Rangoon University, 1923-6. He carried out research on soil erosion and land use in America, Africa and Burma, 1934-8, and was Vice-Chairman of the Scott Committee. He is now Chief Adviser on Rural Land Utilization to the Ministry of Agriculture.

In 'Britain Must Rebuild' Frank Pick stated: "It is idle to deny that in a developed country land has not become a monopoly, simply because it is held in many hands. It is a monopoly, bearing all the evils of monopoly, and insisting upon control because its quantity is strictly limited and demand outruns supply . . . a definite change in the nation's attitude towards land must be realized at some moment. This seems to be the moment." That was written in 1941; since then we have had some very constructive thinking on the problems of land, but very little constructive action. The Government parries, feints, thrusts and retires, but so far avoids tackling the main issues.

Dr. L. Dudley Stamp, to whom we owe much for his work in this sphere, enumerates in the article on land use this week, the five basic needs of the people which the land must satisfy, and stresses that competing demands must be carefully weighed and balanced. The article is accompanied by illustrations of the Suffolk Reconstruction Survey, the story of which is given in Planning Review on page 32.

WE MUST BALANCE COMPETING DEMANDS FOR THE LAND

by Dr. L. Dudley Stamp

the five competitors

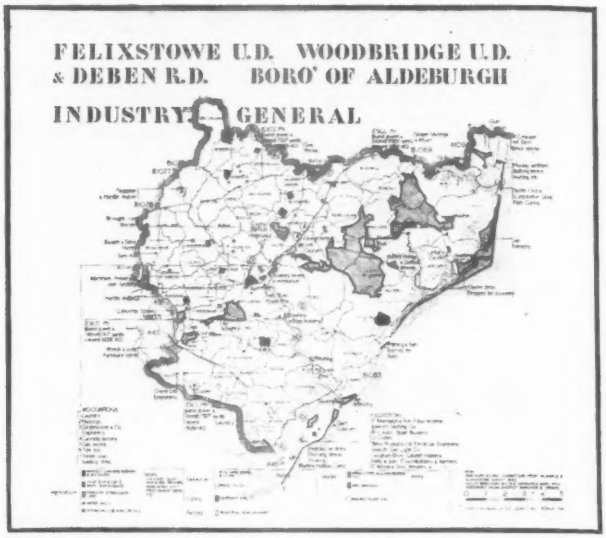
The object of all planning is surely to secure for the individual and the nation a life which shall be truer, fuller and better than that enjoyed or suffered by previous generations. Since it has been truthfully said that the one great ultimate material asset of a nation is its land it follows that physical planning is, in essence, the determination of the right use in the national interest of every acre of its land surface. In determining the right use, or the optimum use, of any given area there are often competing claims not infrequently nicely balanced, and we do well to think out and apply what may be called first principles of land use.

In the first place land is precious: in England and Wales less than one acre per head of population and only one and a quarter acres per head if we include the whole of Britain with the vast moorland stretches of Scotland. Broadly the area is fixed and inextensible except for relatively minor land reclamation of salt-marshes and similar areas. There is no land which we can afford to see lying wasted or idle.

In the second place Nature has been exceptionally kind to the country in providing an unrivalled variety of land and scenery. Some is to be classed as amongst the most fertile in the world: some so intractable as to be uncultivated and uninhabited. Broadly speaking it is possible to find as much variety of scenery in 25 miles in England and Wales as one may find in ten times that distance in many, if not most, countries. We who accept as natural a coastline where cliffs and sandy bays, muddy inlets and lofty headlands succeed one another with bewildering rapidity should reflect that for 3,000 miles the eastern seaboard of the United States has not a single cliff. To make the fullest use of this varied natural environment means detailed study and a careful balancing of the needs of mankind.

FOOD

WORK



The survey on the left above made from figures obtained from the Ministry of Agriculture and Fisheries Returns, June, 1939, is intended to be compared with a year of war-time production for the purpose of arriving at an accurate understanding of the market towns and their supply areas. The map illustrated is one of a set dealing with livestock and crop production and embracing the whole of Suffolk. Diagrammatic symbols indicate cattle, sheep, pigs and poultry and each symbol represents 100 head. The survey on the right is based on information from many sources; this map is intended to deal mainly with rural industry. The following classes of industry are dealt with: "Agriculture," including market gardens, top and soft fruit, etc., osier beds, Forestry Commission, land and water and steam mills. "Extractive" covering all types of pit brickfields, lime kilns and cement works. Tourist attractions are noted and the fishing industry is located. Urban industrial development is briefly indicated for reference purposes.

What are the varied needs of our people which our land must satisfy? We may list them as the need for work, shelter, food, and recreation.

Taking work first, nine-tenths of the people of this country live on one-tenth of the land. They are urban dwellers: they find their work and have their homes in the towns. We must realize that the wealth and prosperity of this country is bound up in large measure with its manufacturing industries and export trade. It follows that industry has a prior claim to the land necessary for its proper and efficient development. The extractive industries are naturally tied to those areas where the minerals occur which it is desired to extract from the earth's crust. There are some minerals, such as coal and iron ore, of which we shall eventually require to extract *all* that is physically or economically possible. Thus in coalfields and ironfields the extraction of the minerals must be an over-riding consideration in the planning of land use. In such areas we cannot, as a nation, afford to reserve large tracts as national parks or public open spaces or even to consecrate small areas to model towns if by so doing the exploitation of the mineral is prevented. In the past, however, we have been wasteful and profligate by paying insufficient attention to the *restoration* of land after mining. Dumps can be levelled, reclothed with vegetation, subsidence areas can be redrained and so on, and the cost should be met by money accumulated, after the nature of an amortization policy, during the prosperous period of the industry's development. Then there are the minerals, such as chalk for lime and cement or clays for bricks and tiles, of which we shall never require to use *all* our natural resources. In these cases the location of the extractive industries can be subject to planning. There are many heavy industries and "linked" industries which are tied by one factor or another to limited areas. Only a small number of industries are really "mobile" and the Scott Report showed that these are usually best located in existing or new towns rather than in villages or the open country.

In general, then, wherever is shown to be the right location for the best development of an industry, it must have the requisite land but the decision must be in the national interest, not necessarily of the individual industrial concern.

In the second place our people need shelter—the right homes in the right places. We must look forward to the elimination of slums, to the re-creation of cities and towns where the needless pall of smoke and the sordid monotony of drab, treeless streets are a thing of the past. Land is needed for rehousing. Often the best land for imaginative housing, where the most can be made of natural slopes and varied aspects, is that which is relatively poor for farming.

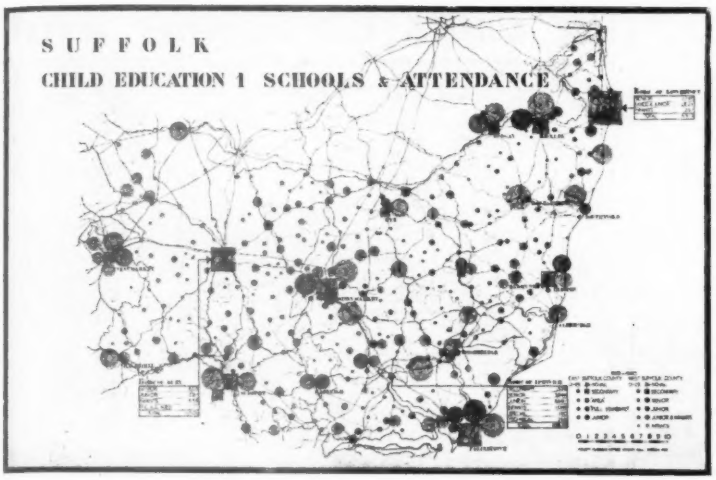
In the third place we need food from our land. Its production is the function of the farmer and the market gardener, but we must not forget that the forester should play a far larger part in utilizing poor land and providing a much needed raw material in timber, plywood and woodpulp, both for housing and industry. It surprises many to learn some of the elementary facts about British farming. As an industry it employs something around a million people—more than are engaged in farming in any of the Dominions, including both Canada and Australia. Farming in this country is very varied, being closely conditioned by the physical environment, and the different types of farming though closely connected have evolved in response to differing environments. In the "new" countries such as Canada or Argentina farming is gradually evolving from the extensive culture of one staple such as wheat to a mixed farming more of British type, for only by a balanced rotation of crops can the all essential conservation of soil fertility be achieved. Those pessimists who see British farming in the future a combination of ranching and prairie farming are putting the clock back and ignoring the march of progress.

The basis of agricultural policy must be the adequate feeding of the people. Never again must it be said that a third of all the people of this country suffer from malnutritional diseases. First must come the essential "protective" foods — fresh fruit and vegetables, milk, butter, home killed meat. These must be produced as part of a proper rotation in which crops such as wheat are by-products.

Agriculture is an industry and must be accorded in common with other industries the essential conditions for successful prosecution. It needs good land—other things being equal, the good lands should be kept for agriculture —and stability of conditions.

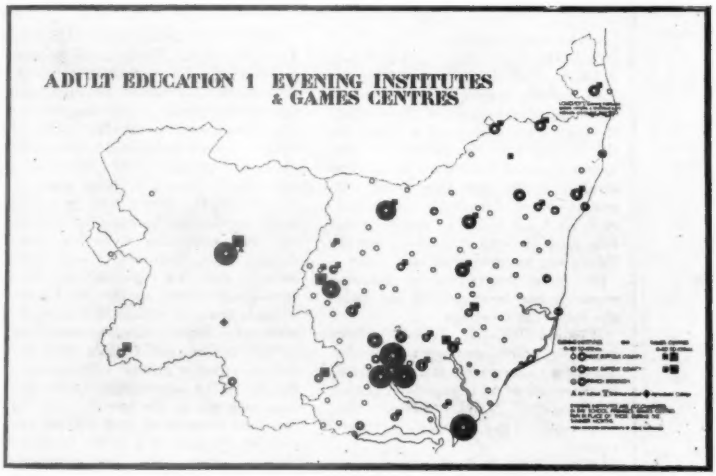
In the fourth place land is needed for recreation, for refreshment of body and mind. According to age and taste different types of land are required. There must be wild open moorland such as the Lakes for the hiker and climber, Blackpool and Margate for the less energetic. The rugged cliffs or quiet secluded sand dunes of a coastline must be preserved from further spoliation as well as commons for picnics and playing fields for sports of all sorts. There is room for all if only the land is properly allocated. We must not forget that the nine-tenths of the land which is rural is what it is because it is *used* and so the farmer, the forester and the landowner are the unpaid stewards of the beauties which

EDUCATION



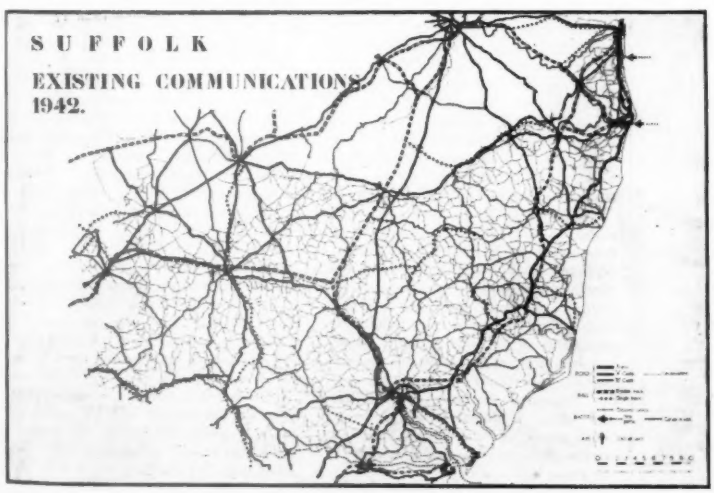
Statistics for this map were obtained from the appropriate Education Secretaries, and its general purpose is to show where the social service nuclei necessary for the proper functioning of communities are to be found, and where the gaps in the pattern lie. The map is one of a set drawn to ½ in. scale covering the whole of Suffolk and dealing with all aspects of social service. The different types of school are shown by means of colour, those of the secondary group being represented in square form and those of the elementary by circles. Each line indicates an attendance of 25 pupils.

RECREATION



Two types of recreation need to be considered in the County—rural recreation for the townsman and urban recreation for the countryman, so that while reserving land of low fertility value, coastal stretches and the like for general holiday use, adequate recreational facilities of an indoor nature must be provided for the agricultural worker if he is to remain on the land. The recreation map shows one aspect of this many sided problem—the evening institutes and games centres organised by the education authorities of the County. Evening institutes are shown by means of a circle and games centres in the form of a square; each line represents an attendance of 50.

COMMUNICATIONS



The functioning of the social and economic structure within a County and the linking of the County with its region and the region with the nation, depends on an efficient system of communication. The classification and design of roads must, therefore, be considered and modified in areas where population and industrial re-distribution is planned, bearing in mind the main types of traffic involved and the demands and function of each. This map examines the present system of A and B class roads, the double and single track rail routes and the used and disused canals. The civilian air ports of pre-war days are noted, but of far greater interest will be the data covering all Air Ministry property that will become available when defence considerations cease to be of first importance.

are the heritage of all. If the townsman demands access by footpath and lane to the countryside he must learn to know and respect its guardians and their ways.

In the fifth place the proper use of the different types of land demands facilities for communication — more land is needed thus for roads and railways and perhaps for airfields. Many of our best roads are those planned nationally by the Romans, and of recent years we have spent far too much energy and money in the patching up of an outworn mediæval road system. It has meant ugly by-passes and the ruination by widening of many a once beautiful country road. What we need are a few main trunk motor roads, for fast traffic only, treated as parkways, with ribbon development entirely prohibited and avoiding all towns. As the new arterial road from Dorking to Leatherhead through the Mole gap now shows, such roads can be beautiful as well as efficient.

Perhaps we may summarize our viewpoint regarding the planning of land use by saying it must be used to satisfy the varied needs of all sections of the populace and that the demands upon any given tract of land must be carefully weighed and balanced. Taking England, Wales and Scotland as a whole — approaching 60,000,000 acres—we may say a minimum of ten per cent. for housing and industry (6,000,000 acres), up to 20 per cent. or 12,000,000 acres for forest and woodland, about 13 per cent. or 8,000,000 acres to remain open moorland and heathland, but mainly for recreation including shooting. The remainder is some 57 per cent. or 34,000,000 acres, and is farmland under grass or arable or improved hill pastures.

Freedom is the essence of democracy and freedom of the individual to choose work and home must be limited only when it offends the majority, as when one selfish owner in studying his own likes ruins for his fellow beings a long stretch of hill or coast by an ill-placed bungalow. Just as there must be a balance between the individual and the nation, between town and country, so there must be between central guidance and local initiative. Only so can we achieve National Planning.

PLANNING REVIEW

WATER SUPPLY

On January 1, the *New Statesman and Nation* published an article on Water by Mr. H. G. Maurice, who was in charge of the Fisheries Department, Ministry of Agriculture and Fisheries, 1919-1938. The third report of the Central Advisory Water Committee was published last August. As the author points out, this Committee is a portent of a national habit of appointing Royal Commissions, Committees and such like at frequent intervals, and sometimes overlapping one another, to report on the various aspects of the condition and use of our inland waters. Nevertheless, in the light of events, it clearly was not the purpose to obtain the best advice and, on this foundation, to build a wise policy of conservation of our naturally abundant, but now sorely depleted and cruelly besmirched, water resources.

The author then asks, if this were not so, if we had a National Government with the vision and the courage to frame and to execute a wise policy for the conservation of our water resources, is there in the Committee's Report the material of such a policy? The answer is "No." The report prescribes no main principles of policy and no guide. The author believes that the claims upon our water resources are so many, often antagonistic, often misguided, that nothing less than a single, powerful administration, fully armed to enforce a comprehensive policy designed to conserve our supplies for the common benefit and to conserve for each the share of water and the amenities of water to which he is in equity entitled, can do justice to the case.

This latest committee has passed over the most essential recommendation which was repeated in one after another of the earliest reports of the long series. That recommendation implied a Ministry of Water with overriding powers over all departments and administrations, central and local. The author concludes: in water the life we know had its beginnings, without water there can be no life. Surely water is worth a Ministry of its own.

In a letter to *The Times* on the same subject Mr. Geoffrey Hutchinson suggests that a new survey of water resources is urgently needed, to be followed by a reappropriation of existing and potential sources of supply. The planning of water supplies for a district is no less urgent than the planning of roads for future development. It was for this reason that the Scott Committee recommended that the Central Planning Authority, in conjunction with the Ministries of Health and Agriculture, should review the whole position of water supply, and that all water undertakings should be brought under national planning control. The Minister of Town and Country Planning now seems to be the right person to undertake this review. The author believes that a survey of water resources would disclose that the problem of affording proper piped supplies is less intractable than it now appears to be.

SIR IAN MACALISTER

In a discussion with a representative of *The Times*, Sir Ian MacAlister, who has retired from the secretaryship of the RIBA after 36 years' service, stated that the RIBA introduced town planning in this country. The first Town Planning Act, introduced by Mr. John Burns in 1909, was a direct result of the pressure and educational influence of the RIBA.

UTHWATT REPORT

Mr. H. C. Edwards, General Secretary of the National Federation of Property Owners, stated in a letter to *The Times* on January 5, that the Federation is in entire agreement with Mr. H. H. Hill, who points out that the recommendation in the Uthwatt Report which will deprive a landowner of his right to a public hearing, when his property becomes the subject of future acquisition, is contrary to our English sense of justice and fair play.

BARLOW REPORT

As the *New Statesman and Nation* points out, the Depressed Areas were rechristened as the "Special Areas" before the war, in the hope of making them sound less depressing. And now Dr. Dalton has more hopefully redubbed them "Development Areas," and has told us that the Government is looking for ways and means of providing the diversified light industries of which they will certainly stand in need after the war. The trouble is that Dr. Dalton said nothing about the wider issues, and dropped no hint concerning the Government's intentions in respect of the location suggestion in the Barlow Report. *The New Statesman* proposes that if the Barlow recommendations are obsolete, as some people suggest, then their fault is that they go not too far but too little of the way; and it is high time to produce something that goes a great deal further.

NEW LITERATURE

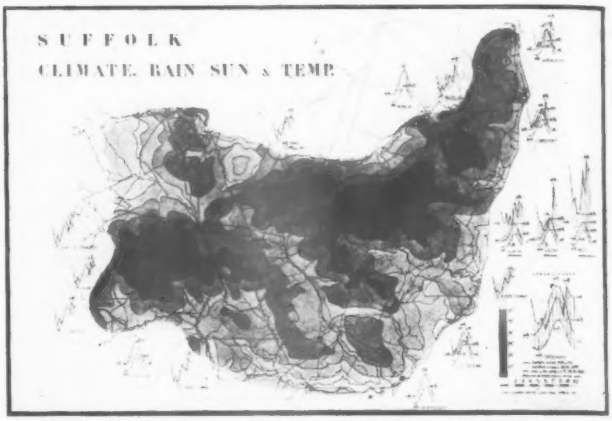
Plan Housing Now: Nat. Federation of Building Trades Operatives. 6d.

PEP Work, 1940-43: Planning No. 215. PEP, 16, Queen Anne's Gate, London, S.W.1.

Grassland Husbandry: H. I. Moore, M.SC., PH.D., N.D.A., DIP. AGRIC. (Cantab.). Allen & Unwin, Ltd. 10s. 6d.

The Post Office in the Replanning of Towns: October 1943. Public Relations Department, General Post Office, London, E.C. 1.

EAST SUFFOLK RECONSTRUCTION SURVEY



The above map shows some of the climatic factors which help to make Suffolk a good corn-growing county; a further map deals with wind and frost. The data was obtained from the Meteorological Office—a general picture of rainfall being mapped over the whole county and rain, sun and temperature charts made at points where information was available. Comparative charts for the north, south and west of England are seen on the right.

In the early months of 1941, T. B. Oxenbury, L.R.I.B.A., A.M.T.P.I., A.I.L.A., County Planning Officer of East Suffolk, sought and obtained the whole-hearted support of the County Council to the making of a survey for the county with the purpose of providing a sound basis for future planning. Since that time, with the assistance of Elizabeth Chesterton, A.R.I.B.A., A.M.T.P.I., much ground has been covered and plans for the future are beginning to take form.

The main programme of planning research has been carried out under the following headings

GEOGRAPHY.—1, *Land*. Solid geology; drift geology; soil distribution; contours; low lying land; land classification; grassland grades. 2, *Climate*. Wind and frost; rain, sun and temperature; coastal erosion.

INDUSTRY.—1, *Agriculture*. Crop and livestock production, 1939 and 1943; market gardening; forestry; non-agricultural areas; areas devoted to cereals, roots and legumes, grazing, cattle, sheep, pigs and fowls, and centres of the allied agricultural industries. 2, *Fishing*. For sport; for marketing; allied industries. 3, *Extractive*. Quarrying; brick-making; cement manufacture. 4, *Constructive*. Rural; urban. 5, *Service*. Public utilities; road, rail, water and air communications; bus services; road accidents and their causes; retail distribution; child and adult education; recreation; village halls; churches. 6, *Tourist*. Reception areas.

POPULATION.—1, *Density*. 1938 estimate. 2, *Trend*. Analysis of tendencies 1851-1931. 3, *Distribution*. Rural; local; district; provincial; regional. 4, *Fresh Food supply*. Acreage required. 5, *Housing*. Property unfit for habitation, repairable or in good repair; future requirements of agricultural population; individual village surveys. 6, *National heritage*. Buildings and other antiquities for preservation; areas of landscape interest; nature-reserves; footpath access to the coast and countryside.

ADMINISTRATION & FINANCE.—1, *Ownership*. Public and private. 2, *Finance*. Land values and rateable values. 3, *Administration*. Local Government units; planning areas.

Supplementary surveys have followed upon the main programme and make up two groups: (1) *Subsidiary County Surveys*, bridging the gaps in the basic survey and providing more specialized information regarding any particular theme or condition. (2) *Detailed town and village surveys* representing a local specialized survey of the life history of each town or village indicating its physical character, existing social and public services and dealing with any facts, having a special bearing upon the life of the community. Accepting most aspects of the survey to be as complete as such an undertaking can ever be, the next step in the formulation of basic planning proposals involves an analysis of the data collected, in the light of the predetermined standards. A series of analysis maps illustrating this stage in the planning process and clarifying the main issues to be faced has therefore been made.

The background of knowledge thus built up has made it clear that with a predominantly agricultural county such as Suffolk the major planning problem resolves itself into one of fostering a healthy and well-housed farming community, of preserving the land upon which it is dependent and of providing for those whom it employs the social amenities already taken for granted in urban areas, while recognizing as important a stimulating admixture of light industry in the small towns.

It is also clear that the country and town communities are interdependent; the towns will need a supply of fresh dairy produce from the country; the farming population will create a need for equipment and feeding stuffs from the smaller towns and larger villages.

It is expected that the broad outline plan for the county will be presented to the Joint Planning Committee early this year. (*See A.J., Nov. 11, 1943, pp. 361-362*).

PRICES

FIFTEENTH WARTIME LIST

EXPLANATORY NOTES

The only important price increases which have occurred since the last wartime list are in connection with Fletton Bricks and Cast Iron Goods.

Rates of Wages have not risen since April 2, 1943, and are now as follows :—

LONDON DISTRICT	*Craftsmen.*	*Labourers.*
Within 12 miles radius	2s. 1½d.	1s. 8d.
From 12-15 „ „	2s. 1d.	1s. 7¾d.

GRADE CLASSIFICATIONS

	A	A¹	A²	A³	B	B¹	B²	B³	C
Craftsmen ..	2s. 0d.	1s. 11½d.	1s. 11d.	1s. 10½d.	1s. 10d.	1s. 9½d.	1s. 9d.	1s. 8½d.	1s. 8d.
Labourers ..	1s. 7d.	1s. 6½d.	1s. 6¼d.	1s. 5¾d.	1s. 5½d.	1s. 5d.	1s. 4¾d.	1s. 4¼d.	1s. 4d.

F.S.I.

CURRENT MARKET PRICES OF MATERIALS

BY DAVIS AND BELFIELD, Chartered Quantity Surveyors

Prices vary according to quality and the quantity ordered.

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

CONCRETOR

Cements

† All delivered in paper bags (20 to the ton) free.

* Paper bags charged at 7/– extra per ton; jute sacks charged at 35/6 per ton and credited on return at 1/6 each, when received in good condition within two weeks.

	6 Tons and over	In 80-ton freights F.A.S. Safe Wharf in River Thames, London Area.
*Portland	per ton 51/–	48/6
*"417" Ultra rapid hardening	per ton 71/–	—
*Rapid hardening ...	per ton 57/–	54/6
*Water repellent ...	per ton 81/–	—
Atlas White (1 barrel 376 lb.)		per barrel — 6 ton upwards
*Colorcrete rapid hardening, buff and red		per ton 91/–
*Colorcrete rapid hardening khaki ...		per ton 91/–
†Colorcrete rapid hardening dark ...		per ton —
†Colorcrete non-rapid hardening ...		per ton from 175/– to 339/–
†Snowcrete (paper bags free)... ...		per ton 225/–

	1–9 cwts.	10–19 cwts.	1 ton and upwards
*Ciment Fondu, delivered Central London area	per cwt. 15/3	14/9	12/8

Aggregate and Sands (Full Loads)

2″ Unscreened ballast	per yard cube 10/10
¾″(Down) Washed, crushed and graded shingle	per yard cube 11/4
¾″ (Down) Ditto	per yard cube 12/4
2″ Broken brick	per yard cube 14/6
¾″ Ditto	per yard cube 16/–
Washed pan breeze	per yard cube 9/6
Coke breeze 1″ to dust	per yard cube —
3/16″ Sharp washed sand	per yard cube 13/10
White Silver Sand for white cement (one ton lots)	per yard 40/–

(For Sands for Bricklaying and Plastering *see* respective trades)

Pavings

Brick hardcore	per yard cube —
Concrete ditto	per yard cube —
Clean furnace clinker and boiler ashes ...	per yard cube 4/6
Coarse gravel for paths	per yard cube —
Fine ditto	per yard cube —
Clean granite chippings	per ton 38/2

CONCRETOR—(*continued*)

Pavings—continued

Red quarry tiles, 6″ × 6″ × 7/8″	per yard super	8/1
Ditto 6″ × 6″ × 5/8″	per yard super	6/9
Buff ditto 6″ × 6″ × 7/8″	per yard super	8/10
Ditto 6″ × 6″ × 5/8″	per yard super	7/5
Hard red paving bricks, 2″	per 1,000	230/6
Ditto 1½″	per 1,000	208/3

Reinforcement

Home trade maximum basis price for mild steel rods, ⅜″ diameter and upwards, ex mills delivered to station or siding	per ton £16 19 6
Extras for :—	
7/16″ and ½″ diameter...	per ton 10/–
7/16″ diameter	per ton 15/–
⅜″ diameter	per ton 20/–
5/16″ diameter	per ton 30/–
¼″ diameter	per ton 40/–
3/16″ diameter	per ton 60/–
Lengths of 40 ft. to 45 ft.	per ton 10/–
Lengths of 45 ft. to 50 ft.	per ton 15/–

Sundries

Retarding liquid, in 5-gallon drums (for exposing aggregate)	per gallon 21/–	Ex Warehouse, Southwark Bridge. Drums chargeable and credited, if returned.
Ditto (for obtaining a bond)	per gallon 13/1¼	

BRICKLAYER

Common Bricks

†Rough stocks	per 1,000 —
†Third stocks	per 1,000 —
†Mild stocks	per 1,000 —
Sand limes	per 1,000 —
‡Phorpres pressed Flettons	per 1,000 60/–
‡Phorpres keyed Flettons	per 1,000 62/–
Blue Staffordshire wirecuts	per 1,000 275/6
†Lingfield engineering wirecuts	per 1,000 93/–
Firebricks, best Stourbridge 2½″	per 1,000 365/6
Firebricks, best Stourbridge 3″	per 1,000 465/6

Facing and Engineering Bricks

Sand Limes, No. 1	per 1,000 —
Sand Limes, No. 2	per 1,000 —
‡Phorpres rustic Flettons	per 1,000 80/–

‡ At King's Cross (Maiden Lane) Stn. For delivery in W.C. district add 10/- per 1,000. † Price ex works, delivery extra.

BRICKLAYER—(*continued*)

Facing and Engineering Bricks—continued

Midhurst Whites	per 1,000	121/–
†Hard stocks, firsts	per 1,000	—
†Hard stocks, seconds	per 1,000	—
Sand-faced, hand-made reds	per 1,000 from	153/–
Sand-faced, machine-made reds	per 1,000 from	—
Red rubbers (9¾-in.)	per 1,000	—
Uxbridge Flints (white)	from per 1,000	86/–
Uxbridge Flints (creams, light greys, etc.) per 1,000	from	113/–
Dunbriks (concrete), standard greys, ex works	per 1,000	63/–
Dunbriks (concrete), in various colours, ex works	per 1,000	—
†Southwater engineering No. 1 (first quality red pressed)	per 1,000	138/–
†Southwater engineering No. 2 (second quality red pressed)	per 1,000	118/–
Blue pressed	per 1,000	303/–

† Price ex works, delivery extra.

Limes and Sand

		1-ton lots	6-ton lots
Lime, greystone	per ton	61/–	—
Lime, chalk	per ton	61/–	—
Lime, blue Lias (including paper bags)	per ton	—	—
Lime, hydrated (including paper bags)	per ton	70/6	—
Washed pit sand	per yard cube		13/–

(For cements, *see* "Concretor.")

Hire of jute sacks charged at 1/6 and credited at 1/6. If left charged at 1/9.

Sundries

Wall ties, self coloured	per cwt.	—
Wall ties, galvanized	per cwt.	—
D.P.C. slates, size 18″ × 9″	per 100	44/9
D.P.C. slates, size 14″ × 9″	per 100	38/3
D.P.C. slates, size 14″ × 4½″	per 100	11/6
‡Ledkore D.P.C. Grade A	per foot super	8½d.
‡Ledkore D.P.C. Grade B	per foot super	10½d.
‡Ledkore D.P.C. Grade C	per foot super	1/–

‡ Trade discount 5 per cent. and cash discount 5 per cent. Prices include delivery on minimum of £5 orders.

Earthenware airbricks: Red, blue, vitrified and buff terra cotta ... each	9″×3″ 1/–	9″×6″ 2/1	9″×9″ 4/7	12″×9″ —	14″×9″ 12/7
Black cast iron, School Board pattern airbricks per doz.	9″×3″ —	9″×6″ —	9″×9″ —	12″×6″ —	12″×9″ —
Galvanized ditto per doz.	—	—	—	—	—
Black hit and miss cast iron ventilators per doz.	—	—	—	—	—
Galvanized ditto per doz.	—	—	—	—	—

Buff terra cotta chimney pots ... each	1′ 0″ 3/8	1′ 6″ 4/4	2′ 0″ 6/4	2′ 6″ 8/4	3′ 6″ 19/–	5′ 0″ 32/5
Fireclay ... per ton 67/6						

Wall reinforcement supplied in standard rolls containing 25 yards lin.

*2″ wide black japanned	per roll	2/5
*2″ wide galvanized	per roll	—
*2½″ wide black japanned	per roll	3/–
*2½″ wide galvanized	per roll	—

Greater widths pro rata 2½″ price carriage paid on orders of £5. Discounts for quantities

Partitions

		2″	2½″	3″	4″
Breeze	per yard super	2/4	2/9	3/4	4/4
Pumice	per yard super	3/9	4/9	5/6	6/–
Hollow Block	per yard super	2/8	2/11	3/6	4/–
Plaster	per yard super	5/–	5/8	6/11	7/3

Gas Flue Blocks

		Single Flues	Double Flues
Straight blocks	each	1/3	2/3
Backing Block	per set of 3	3/1	5/6
Cover blocks	each	1/7	3/4
Raking blocks 45°	each	3/–	4/8
Raking blocks 60°	each	2/1	3/3
Offset blocks	each	3/8	5/3
Closer blocks	each	1/3	2/3
Closer flashing blocks	each	1/1	1/9
Straight flashing blocks	each	1/1	1/9
Terminal and cap	per set	7/–	12/–
Middle terminal and cap	per set	6/6	11/3
End terminal and cap	per set	6/9	11/9
Corbel block	each	5/2	10/9
Gathering block	each	—	3/5

DRAINLAYER

Agricultural Pipes

		2″	3″	4″	6″
Pipes in 12″ lengths	per 1,000	77/6	110/–	147/6	285/–

(Delivered in full loads Central London Area.)

Salt Glazed Stoneware Pipes and Fittings

		4″	6″	9″
Pipes (2′ lengths)	each	1/8	2/6	4/6
Bends, ordinary	each	2/6	3/9	6/9
Single Junction, 2′ long	each	3/4	5/–	9/–
Yard Gulley, without grating	each	6/3	6/10½	11/3
Ordinary round or square Grating, painted	each	–/7½	1/3	2/6
Ordinary round or square Grating, galvanized	each	1/0½	2/1	4/4½
Extra for Inlets, horizontal	each	1/6	1/6	1/6
Extra for Inlets, vertical	each	2/3	2/3	2/3
Intercepting Trap with Stanford Stopper	each	17/6	22/6	37/6
Grease and mud interceptor with bucket for removing silt and grease for 6″, 9″ and 12″ drains, with iron grating, painted	each			20/–
Ditto, with iron grating galvanized	each			21/10½

The above prices to be varied by the following percentages for the different qualities given. All subject to 2½ per cent. cash discount.

	British Standard	British Standard Tested
Orders for 2 tons and over	Plus 15%	Plus 40%
Orders under 2 tons, 100 pieces upwards	Plus 32½%	Plus 57½%
Orders under 2 tons, less than 100 pieces	Plus 42½%	Plus 67½%

	Best	Seconds
Orders for 2 tons and over	Plus 7½%	Subject to 15% off the price of best quality for all sizes
Orders under 2 tons, 100 pieces upwards	Plus 25%	
Orders under 2 tons, less than 100 pieces	Plus 35%	

Cast Iron Drain Pipes and Fittings

Socket and Spigot Pipes :—

Weight (per 9 ft.)	Size	9 fts. each	6 fts. each	4 fts. each	3 fts. each
1 . 1 . 8	4″ per yard	8/3	9/3	14/9	11/2
1 . 1 . 20	4″ per yard	3/7	9/6	15/1	11/6
2 . 0 . 6	6″ per yard	12/9	15/2	24/5	19/6
4 . 0 . 2	9″ per yard	23/1	30/3	52/6	49/–

	2 fts. each	18 ins. each	12 ins. each	9 ins. each
1 . 1 . 8 4″ each	9/3	7/10	7/3	6/6
1 . 1 . 20 4″ each	9/5	—	—	—
2 . 0 . 6 6″ each	14/8	—	—	—
4 . 0 . 2 9″ each	—	—	—	—

Tonnage Allowances :—
Orders up to 2 tons nett.
Orders 2 to 4 tons less 2½%
Orders 4 tons or over less 5%

		4″	6″	9″
Bends	each	8/2½	17/1	52/9
Single junctions	each	14/6	30/–	91/3
Intercepting traps	each	39/7	66/–	162/3
Gulleys ordinary trapped	each	19/2	—	—
Extra for inlet 4″	each	5/3	—	—
Grease Gulley trap	each	182/6	—	—
H.M.O.W. large socket gulley trap with 9″ gulley top and heavy grating and one back inlet	each	33/3	61/8	—

Channels in Brown Glazed Ware

		4″	6″	9″
Half round straight channels 24″ long	each	1/3	1/10½	3/4½
Half round straight channels 30″ long	each	—	—	4/2¾
Ditto, short lengths	each	1/3	1/10½	—
Half round ordinary channel bends		1/10½	2/9¾	5/0¾
Ditto, short	each	1/10½	2/9¾	—
Ditto, long	each	3/9	5/7½	10/1½
Three-quarter round branch bends	each	5/–	7/6	—

		6″×4″	9″×6″
Half round taper channels 24″ long	each	3/9	6/9
Half round taper channel bends	each	4/8½	8/5½

The above prices are subject to the same discounts as those given for "Best" quality salt glazed stoneware pipes.

Manhole Covers, etc.

	Black	Galvanized
24″ × 18″ single seal for foot traffic. (Weight 0.0.3 in lots of 24) each	16/6	33/1
24″ × 18″ single seal for light car traffic. (Weight 2 cwts. in lots of 24) each	49/7	88/2
24″ × 18″ Wood Block pattern. For road traffic. (Weight 3 cwts.) each	Coated 79/3	

DRAINLAYER—(*continued*)

Manhole Covers, etc.—(continued)

		Fine Cast	Galv.
Cast iron steps, 13½″ long, 6″ wide, 9″ in wall, approximate weight 5½ lb. each	per dozen	17/4	28/11
Galvanized fresh air inlets with cast brass fronts (L.C.C. pattern)	each	7/7	31/–

MASON

Yorkstone

Building quality Robin Hood and Woodkirk Blue Stone.		
Blocks scrappled, random sizes... ...	per foot cube	6/1
Add for blocks to dimension sizes ...	per foot cube	8d. (each dimension)
Templates with sawn beds, edges rough (up to 4 ft. super and not over 2′ 6″ long) ...	per foot cube	6/9
Templates with sawn beds, sawn one edge, per foot cube		8/1½
Templates with sawn beds, sawn two edges, per foot cube		9/5½
Prices f.o.r. Yorkshire, railway rate to London Station per ton. (Minimum 4-ton loads.)		29/1

Artificial Stone

6″ × 3″ Copings and sills	per foot run	1/11
6″ × 6″ Copings and sills	per foot run	2/11
9″ × 3″ Copings and sills	per foot run	2/3½
9″ × 6″ Copings and sills	per foot run	4/2
12″ × 3″ Copings and sills	per foot run	3/–
12″ × 6″ Copings and sills	per foot run	4/9
Cornices according to detail, per foot cube (from)		8/6

SLATER, TILER AND ROOFER

Best Bangor Slates

	£ s. d.
24″ × 12″ ... ... per 1,000 actual	—
20″ × 10″ ... ... per 1,000 actual	—

Prices include for delivery to site in lots of 1,000 and upwards.

Tiles

	£ s. d
Hand-made sandfaced 10½″ × 6½″ red roofing tiles per 1,000	—
Machine-made sandfaced 10½″ × 6½″ red roofing tiles per 1,000	—
Berkshire rustic pantiles... ... ... per 1,000	—

Asbestos-cement

†6″ corrugated sheets, grey	per yard super	3/0¾
†Standard 3″ corrugated sheets, grey ...	per yard super	2/9½
Slates (*Manufacture temporarily suspended*) :—		
* 15¾″ × 7¾″ grey	per 1,000	£6 15 9
* 15¾″ × 15¾″ diagonal, grey ...	per 1,000	£13 11 6
* 15¾″ × 15¾″ diagonal, russet or brindled	per 1,000	£21 19 6
Pantiles (*Manufacture temporarily suspended*).		
* Large russet brown	per 1,000	—

* Prices are for minimum two-ton loads, and are subject to 5% trade discount.

† Do., but 3¾% advance and 5% trade discount.

JOINER

Asbestos-cement and Asbestos Products

†$\frac{5}{32}$″ Semi-compressed flat building sheets, grey per yard super	1/3½
†$\frac{3}{16}$″ Ditto ... ... per yard super	1/4
†¼″ Ditto ... ... per yard super	1/11

†Prices are for orders of two tons and over and are subject to 10% advance and 5% trade discount.

⅛″ Asbestos wallboard (in sheets 8′ 0″ × 4′ 0″), per foot super	–/4⅝
$\frac{3}{16}$″ Ditto ... ... per foot super	–/3¾
*$\frac{3}{16}$″ Asbestos wood (in sheets 8′ 0″ × 4′ 0″) per yard super	2/2¾

*Prices are for orders of 2 tons and over and are subject to 5% advance.

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

Asbestos-cement stipple glazed sheets (in sheets 8′ 0″ × 4′ 0″ and 4′ 0″ × 4′ 0″) ... per yard super	8/–
Marble glazed sheets (in sheets 8′ 0″ × 4′ 0″ and 4′ 0″ × 4′ 0″) ... per yard super	8/–
½″ Asbestos Insulating Board ... ... per foot super	—

		25–75 yards	150–300 yards	Over 600 yards
⅛″ Fireproof plaster board	per yard super	2/5	2/1	1/9
¼″ Ditto	per yard super	2/3	1/11	1/7
Joint tape (approx. 250 feet run)	per roll	—	—	1/6
Joint filler	per lb.	—	—	–/4

Sundries

Slaters or sarking felt	per yard run– /9
Roofing felt (1-ply bitumen)	per yard sup 1/–
Bituminous hair felt	per roll 58/–

All rolls 25 yards long by 32″ wide.

JOINER—(*continued*)

Sundries—(continued)

Building paper, 50″ wide (B.I. 20)	per yard run	1/1
,, (K. 40)	per yard run	–/5½
" Cabots " Quilt :—(Ex Works) Twenty roll lots delivered carr. free.		
Double ply ... ... per roll —	per half-roll	—

All rolls 28 yards long by 36″ wide. Special terms for quantities.

Cut steel clasp nails	1″ per cwt.	40/3	4″ per cwt.	31/3
,, ,, floor brads	2″ ,,	30/9	3″ ,,	29/6
Bright oval wire nails	1″ ,,	43/4	4″ ,,	31/3

Galvanized wire staples with slice cut points ... ... 1″ × 12 gauge	per cwt. 52/–
Scotch glue	per cwt. —

STEEL AND IRONWORKER

Steelwork £ s. d.

Basis price for rolled steel joists sections 5″ × 3″ to 16″ × 6″, in 10 ft. to 50 ft. lengths	ex mills per ton 15 10 6

PLASTERER

Plaster and Cement

		1-ton loads
Sirapite (coarse)	per ton	88/6
,, (fine)	per ton	87/6
Victorite No. 1	per ton	110/–
,, No. 2 or non-sweat	per ton	105/–
Thistle (browning) ...	per ton	88/6
Thistle (haired)	per ton	—
Pink plaster	per ton	84/–
White plaster	per ton	93/–
Keene's pink	per ton	138/–
Keene's white	per ton	—
Super Carbo	per ton	—
Carbo-setting	per ton	—
Snowcrete (Tyrolean Finish) 1 ton lots and upwards	per ton	149/–

Sundries

Sharp washed sand	per yard cube	13/10
Cow hair	per cwt.	64/–
Goat's hair	per cwt.	93/–
Expanded metal lathing, 9′ 0″ × 2′ 0″ ⅜″ mesh × 26 gauge	per sheet	2/9
Wire Slate nails (galvanized) 1¼″ × 15 gauge	per cwt.	62/5
,, ,, ,, (bright wire) ,, ,,	per cwt.	—

	Less than 150 yds.	Less than 300 yds.	Over 300 yds.	Over 600 yds.
¾″ Plaster board per yard super	2/–	1/8	1/7	1/6
1¼″ Galvanized nails ... per cwt.	58/3			
Scrim cloth in 100-yard rolls per roll	3/10			

Wall Tiles

The following prices are subject to 75 per cent. addition :

Commercial quality.		
Ivory, white, etc., glazed 6″ × 6″ × ¾″ ...	per yard super	10/1
Angle beads (1½″ wide)	per yard run	1/2¾
,, ,, (1″ ,,)	per yard run	–/10
Rounded edge tiles	per yard run	2/6½
Coloured enamelled bright glazed, 6″ × 6″ × ¾″	per yard super	14/3
Angle beads (1½″ wide)	per yard run	1/4¾
,, ,, (1″ ,,)	per yard run	–/11½
Rounded edge tiles	per yard run	2/7
Eggshell gloss enamelled, 6″ × 6″ × ¾″ ...	per yard super	15/–
Angle beads (1½″ wide)	per yard run	1/7½
,, ,, (1″ ,,)	per yard run	1/0¾
Rounded edge tiles	per yard run	2/8½
Special rates for quantities		

PLUMBER

Lead

3½ lb. and upwards milled sheet lead in quantities of 5 cwts. and upwards	per cwt.	38/–
Add if cut to sizes	per cwt.	3/–
Lead ternary alloy, No. 2 quality extra over sheet lead	per cwt.	7/–
Allowance for old lead delivered to merchant	per cwt.	18/–

PLUMBER—(*continued*)

Cast Iron Goods

	Percentage Adjustment on List No. 3100 A.B, 1/2/40
Rainwater Goods (painted or unpainted) ...	*Plus* 17½%
Soil goods (coated or uncoated)	*Plus* 17½%

Mild Steel Rainwater Goods

The following prices are subject to 2½ per cent. trade discount and 40 per cent. advance.

24 gauge rainwater slip jointed pipes.

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

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

Asbestos-Cement Rainwater Goods

The following prices are subject to 15 per cent. advance and 12½ per cent. trade discount.

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

Rainwater pipes.

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

Round pipes.

2″	per yard run	1/10
2½″	per yard run	2/0½
3″	per yard run	2/5½
3½″	per yard run	2/11¼
4″	per yard run	3/4½
4½″	per yard run	4/10¼
5″	per yard run	5/9½
6″	per yard run	7/1½

Gutters.

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

Half round gutters	3″	4″	4½″	5″	6″	8″
per yard run	1/3¾	1/6¾	1/7½	1/11	2/8	3/3½
Ogee gutters per yard run	—	1/11	2/0½	2/5½	3/0½	3/11½

INTERNAL PLUMBER

Lead pipe in coils, 5 cwts. and upwards ...	per cwt. 38/6
Lead soil pipe	per cwt. 42/6
Add if ribbon marked	per cwt. –/6
Lead ternary alloy, No. 2 quality extra over lead pipe	per cwt. 7/–
Plumber's solder	per cwt. 145/–
Tinman's solder	per cwt. 200/–

Drawn lead traps with brass screw eye, 6 lb.

	1″	1½″	1¾″	2″
S. trap ... ... each	2/9	3/2	3/11	5/8
P. trap ... ... each	2/5	2/7	3/3	4/7
Extra for 3″ deep seal ... each	–/8	–/8	–/8	–/8

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

Tubes.

Tubes 2 ft. long and over	½″	¾″	1″	1¼″	1½″	2″
per ft.	–/5½	–/6¾	–/9¼	1/1	1/4½	1/10
Pieces 12″ to 23½″ long each	1/1	1/5	1/11	2/8	3/4	4/9
Bends ... ... each	–/11	1/2	1/7½	2/7½	3/2	5/2

Fittings.

Elbows, square ... each	1/1	1/3	1/6	2/2	2/7	4/3
Elbows, round ... each	1/2	1/5	1/8	2/4	2/10	4/8
Tees ... ... each	1/3	1/7	1/10	2/6	3/1	5/1
Crosses ... ... each	2/9	3/3	4/1	5/6	6/7	10/6
Sockets, plain ... each	–/4	–/5	–/6	–/8	–/10½	1/3
Sockets, diminished each	–/6	–/7	–/9	1/–	1/4	2/–
Flanges ... ... each	1/–	1/2	1/4	1/9	2/–	2/9
Caps ... ... each	–/5	–/6	–/8	1/–	1/3	2/–
Plugs ... ... each	–/4	–/5	–/6	–/8	–/10	1/3

INTERNAL PLUMBER—(*continued*)

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

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

	Tubes	Fittings	Flanges
"Light Weight" ...	51½%	47½%	28%
"Heavy Weight" ...	44%	39¾%	15¾%

COPPERSMITH AND ZINC WORKER

Copper

Hot rolled copper sheeting in 1 cwt. lots, all gauges to 24 wire gauge	per lb.	1/0½
Light gauge copper tube, solid drawn	per lb.	1/3½
Copper tube, solid drawn screwing sizes ...	per lb.	1/2½
Copper wire, 10 and 12 gauge	per lb.	1/2
Copper nails, 1″ and up	per lb.	—

GLAZIER

Sheet Glass cut to size (ordinary glazing quality)

18 oz. clear sheet	per foot super	3½d.
24 oz. ditto or "R" quality	,, ,, ,,	4½d.
26 oz. ditto	,, ,, ,,	5½d.
32 oz. ditto	,, ,, ,,	7½d.
⅛″ figured rolled and cathedral glass (white)	,, ,, ,,	6¾d.
⅛″ ditto, approved tints	,, ,, ,,	9½d.

British Polished Plate Glass cut to size

Ordinary ¼″ Substance In Plates not exceeding		Glazing for Glazing Purposes	Selected Glazing Quality	Silvering Quality
2 ft. super ...	per foot super	2/2	2/4	2/10
3 ,, ...	per foot super	2/9	3/–	3/9
5 ,, ...	per foot super	3/–	3/6	4/3
*45 ,, ...	per foot super	3/6	4/–	5/5
*100 ,, ...	per foot super	4/6	5/7	7/2

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

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

Wired Glass Cut to Sizes

¼″ Wired rolled or wired cast	per ft. super	9½d.
‡¼″ Georgian wired cast	per ft. super	10d.
‡¼″ Polished Georgian wired plate	per ft. super	3/2

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

PAINTER

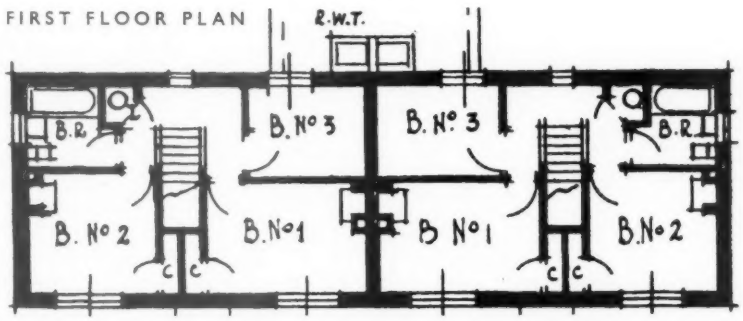
Snowcem paint	per cwt.	56/–
White ceiling distemper	per cwt.	22/–
Washable distemper	per cwt. from 44/– to	66/–
Ready mixed white lead paint (best), 5 cwt. lots, 14 lb. tins	per cwt.	96/6
Aluminium paint	per gallon	—
White enamel	per gallon	—
White enamel paint	per gallon	30/–
Stiff white lead (genuine English stack process, 1 ton lots, 1 cwt. kegs)	per cwt.	68/3
Liquid driers	per gallon	23/–
Linseed oil raw (5 gallon drums)	per gallon	6/6
,, ,, boiled (5-gallon drums)	per gallon	6/9
French polish	per gallon	15/–
Knotting	per gallon	24/–
Oil stain (scumble)	per lb.	3/–
,, ,, red oxide	per cwt.	84/–
,, ,, middle Brunswick green	per cwt.	93/4
,, ,, dark umber	per cwt.	112/–
,, ,, golden ochre	per cwt.	93/4
Varnish (outside quality) oak	per gallon	22/–
,, ,, ,, copal	per gallon	22/–
,, ,, ,, flatting	per gallon	26/–
Turpentine, genuine American 5 gallon lots	per gallon	—
,, substitute	per gallon	4/–
Creosote, 1 gallon lots	per gallon	1/6
Putty	per cwt.	22/9
Utility Glazing Putty	per cwt.	21/3
Size	Per ¼ cwt.	30/–
Best quality English gold leaf, 23 carat ...	per book	3/6
Extra thick, ditto	per book	4/2

Accommodation—Ground floor: large living room, parlour, working kitchen, larder, wash-house, store and outside w.c. First floor: three bedrooms, bathroom with lavatory basin and w.c. and linen cupboard. There are two built-in cupboards on the ground floor and two on the first. In the living-room is a grate with oven, high pressure boiler for domestic hot-water system, open and close fire and wood-burning trivet. Other fireplaces are of sand-faced bricks with fire brick backs.

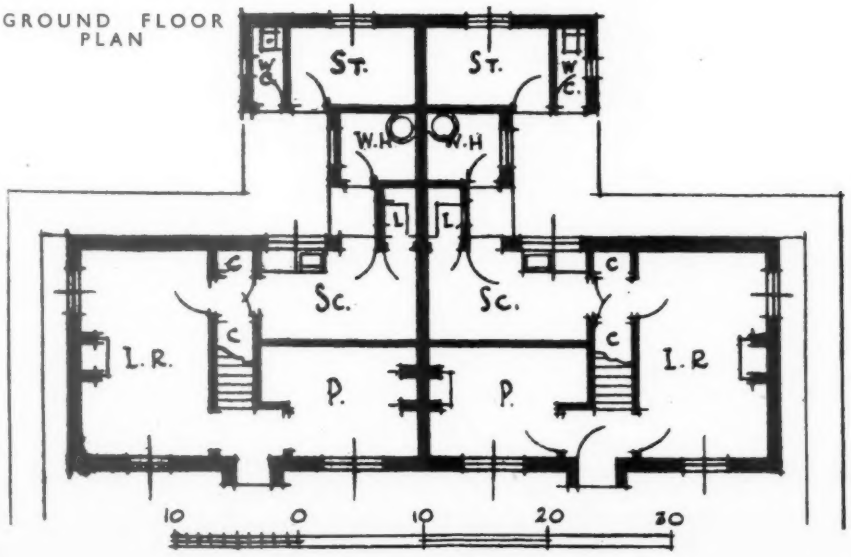
FARM WORKERS' COTTAGES

DESIGNED BY P. W. EDWARDS

FIRST FLOOR PLAN



GROUND FLOOR PLAN



GENERAL—The first pair of agricultural workers' cottages to be occupied of the hundred to be built in Wiltshire under the MOH scheme. The scheme, of which these two are part, is for eight cottages in pairs, designed by P. W. Edwards, of Walter Rudman and Edwards, of Chippenham, architects, in four villages in the Rural District of Devizes. The pair of cottages occupied and illustrated on this page are at Bishops Cannings. They were begun at the end of July and completed practically within the contract time. The pair at Great Cheverell are ready for occupation, and the two other pairs at Cherton and Stanton St. Bernard respectively are nearly completed.

CONSTRUCTION—Walls are sand-faced bricks, roofs Marley tiles (other cottages dun-coloured tiles); windows metal with concrete surrounds. The outbuildings have flat roofs of pre-cast beams covered with asphalt. Floors are: ground, 6 in. by 6 in. red tiles; parlour, wood block; first, tongued and grooved flooring on wood joists. Drainage is by septic tank; electric light is installed and water laid on. The contractors were F. Rendell & Sons, Ltd., of Devizes.

INFORMATION CENTRE

The function of this feature is to supply an index and a digest of all current developments in planning and building technique throughout the world as recorded in technical publications, and statements of every kind whether official, private or commercial. Items are written by specialists of the highest authority who are not on the permanent staff of the Journal and views expressed are disinterested and objective. The Editors welcome information on all developments from any source, including manufacturers and contractors.

PHYSICAL PLANNING

1359 — New York Traffic

TRAFFIC AND PARKING STUDY. *Regional Plan Association.* (*New York*, 1942). Analysis and recommendations to deal with New York's congestion of automobiles at the centre.

The Problem :

1. Of 3,331,000 people who enter New York central business district every day, only a quarter come by car.
2. However, there were 80 per cent. more motor vehicles entering in 1940 than in 1924, although the population only increased by 24 per cent.
3. Even so, pre-war congestion was so great that traffic delays were estimated to cost business concerns half a million dollars a day.
4. Adequate parking facilities are an essential part of the road system. In the main they must be off the streets.
5. Some special facilities must be provided for pedestrians in key areas.
6. Two-thirds of passenger cars parked in central areas were used by people on business and only 10 per cent. belonged to shoppers (representing one in six of the shoppers).
7. Business cars were parked for twice as long as shoppers' cars. Half the shoppers who parked by the curb stayed for less than an hour.
8. Street side loading and unloading of lorries are an important cause of congestion.

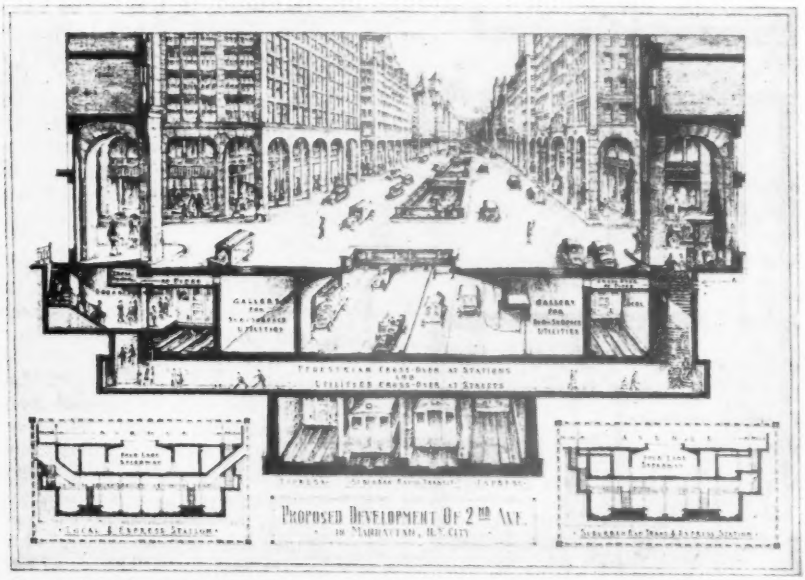
Recommendations :

1. Buildings should be required to provide off-street loading and unloading space on a sliding scale according to their floor area.
2. The provision of public parking garages should be regularized and increased.
3. Institute parking meters.
4. Freight loading and unloading from the street should be forbidden, except in certain streets at certain times.
5. Establish 5 pairs of improved express streets across Manhattan.
6. Concentrate taxicab stands on the other streets. Ban taxi cruising.
7. Exclude large lorries from certain areas.
8. Encourage car parking at key points on periphery of central area.
9. Expand provision of pedestrian ways through buildings with connections above and below street level.

1360 — The Pub in the Future

THE PUB IN THE FUTURE. (*True Temperance Associations, London, November*, 1943, *6d.*). The new pub must be properly equipped to serve also as a club.

1. In 1900 there were 32 on-licences per 10,000 people ; in 1938 there were 18 per 10,000. In fact pubs were growing bigger and fewer.
2. It may be questioned in the light of experience, whether the needs of residents on housing estates have been best met by a single central pub ; and whether two or three smaller houses might not have been better.
3. Even the smallest pub should have facilities for telephoning, writing letters and reading a variety of newspapers. They are also suitable places for display of paintings by local talent or circulated by the brewery companies.
4. Pubs should cater for youth. They will visit the public-houses anyway. If the public-houses cater for their special needs (which include soft drinks as well as swimming baths and tennis courts and perhaps educational amenities such as meetings of discussion groups), the young people are less likely to make their visits occasions for drinking more than is good for them than they might if there were nothing else to do but drink.



Proposed development in Second Avenue, Manhattan, to provide an expressway for commercial vehicles, pedestrian subways, galleries for services, and railways. (*From* Traffic and Parking Study ; *see No.* 1359.)

LIGHTING

1361 — Public Lighting

PUBLIC LIGHTING. (*Electrical Times, September* 30, 1943.) Report of a conference of public lighting engineers.

The conference dealt mainly with street lighting.

The question of mounting height was among those discussed. It seems generally agreed that kerbside lights are disadvantageous, and that normal or higher mounting heights are needed. An interesting suggestion was made that to get height economically, fixing brackets should be fitted on the faces of buildings. (One can imagine it might work very well in streets which are uniformly built-up, such as Kingsway, and would remove an expensive nuisance from the pavements.)

It does not appear that the now common fluorescent tube is likely to be used in its present form for street lighting. The colour is right, but it is too fragile, and accurate control of the direction of the light is difficult because of the length of the tube.

In respect of residential street lighting, it was remarked that much more study is required, and town planners will be interested to know that this problem is recognized as a serious one by lighting engineers. Highway lighting is another field for study, and one in which America is further advanced than England.

1362 — Accidents

LIGHTING IN ACCIDENT PREVENTION. *H. L. Logan.* (*Light and Lighting, August*, 1943, *p.* 120.) The relation of accidents to lighting.

Mr. Logan begins by saying that since the USA entered the war almost as many people have been killed by accidents as have been killed in England by the blitz. The number includes 42,600 war workers. Of this surprisingly large number, defective eyes and lighting are said to account for 20 per cent. and instances are quoted from the statistics on which the estimate is based. In one striking case an increase from 2 to 19 ft. c. diminished the accident rate 54 per cent.

Partly on his data, and partly from theory Mr. Logan builds up an interesting curve showing the relative accident rate compared with illumination intensity.

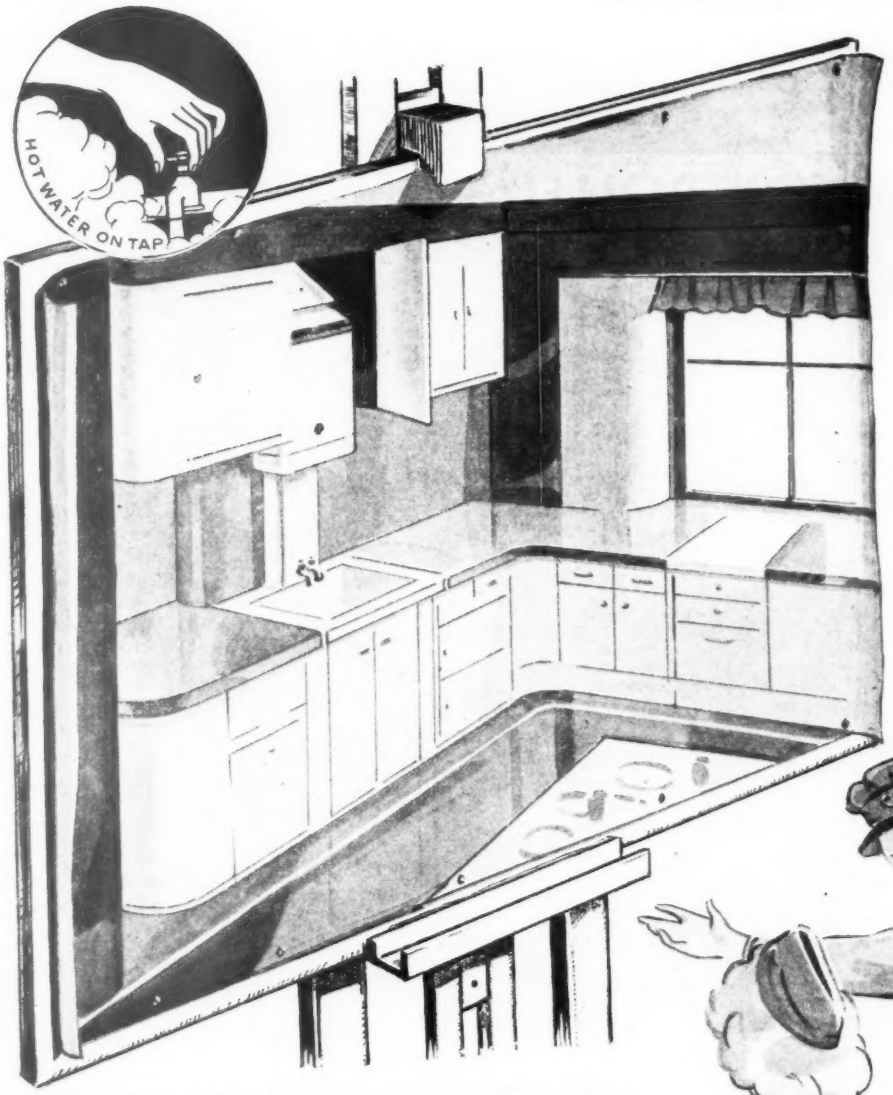
1363 — Hospitals

ELECTRICAL INSTALLATIONS IN HOSPITALS. *F. C. Raphael.* (*Journal, Institution of Electrical Engineers, September*, 1943, *April*, 1943.) Wiring systems, lighting, electro-medical apparatus.

For hospital wiring systems, sunk heavy-gauge screwed conduit is recommended by the author, and under-floor ducts deprecated. In this he is supported by contributors to the discussion.

Ward lighting and operating theatre lighting is treated at some length.

The general average illumination of a ward has been found satisfactory at levels as low as 2 ft. candles, in conjunction with bracket lamps at the beds and light decorations, though the author emphasizes that with darker decorations the illumination values



WHAT DO YOU THINK OF THIS READER'S IDEA?

MR. LEACH writes: "A water heater should be considered as part of a built-in-kitchen equipment and not as a separate item to be provided afterwards. A place should be allocated for it—not on an external wall—but, for example, over the sink (*see sketch*), fitted between cupboards, open at bottom for ventilation and with a removable front access panel. Water services would be enclosed in a duct at back of sink and heater."

IF you have an interesting idea on Hot Water Heaters in Kitchen, Bathroom, the Flat or the House send it to Ewart. If considered useful Ewart will use it in this series of advertisements.

Meanwhile Ewart research continues and the range of Ewart post-war heaters will meet every demand of architect, builder and public.

EWART GAS WATER HEATERS

Instantaneous AND STORAGE TYPES

EWART & SON, LTD. LETCHWORTH, Herts.—Letchworth 1191—Established 1834

1911

mentioned would have been inadequate. He discusses the future use of fluorescent lamps in hospitals, suggesting flush fittings let into the ceiling. Problems of dimming are mentioned.

In the operating theatre, illumination values of 600 ft. candles are now obtained with modern shadowless lamps, and are desirable.

The most important problem in the operating theatre is the reduction of explosion risk. The author and contributors to the discussion were unable to agree fully on measures to be taken, which indicates that no finality has been reached in the treatment. The risk comes from the ignition of gaseous mixtures arising from anæsthetics. Sparkless switches are mentioned, as well as the use of metal-tyred trolleys to reduce risk of sparks from static electricity. A contributor emphasizes the value in this connection of an air humidifying treatment with a low limit on humidity.

X-ray apparatus for diagnostic and deep therapy are mentioned.

Comments may be made on two points.

In the first place, the ward lighting is in line with the illumination recommended by the IES, whose code suggests 2-4 ft. candles, with special lighting for the beds.

The second point concerns the suggestion for the use of fluorescent flush panels in the ceiling. The disadvantage of this arrangement would appear to be, as with all-flush ceiling lights, that the ceiling itself remains unilluminated, and the light sources, set in the otherwise dark plane, may produce a sensation of glare. The proper relation between the brightness of the source and the brightness of the background is known and is an important comfort factor in the design of lighting systems.

QUESTIONS and Answers

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. 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 to : THE ARCHITECTS' JOURNAL, 45, *The Avenue, Cheam, Surrey.*

1364 — *Shopping Centres*

Q *I am engaged in the preparation of a Town Planning Thesis, on the subject of Shopping Centres. I have been advised that the scheme for the replanning of Coventry illustrates a good solution to the planning of a main shopping centre. Is there available any account of this part of the scheme in any of the periodicals such as* THE ARCHITECTS' JOURNAL ? *Can you also inform me of any other possible source of information* ?

A We have extracted from the RIBA Library catalogues the following list of articles :

The Architects' Journal, April 24, 1941, p. 277 ; The Architect & Building News, March 21, 1941, p. 188 ; Journal of the RIBA, March 17, 1941, pp. 73 & 76 : Extracts from D. E. E. Gibson's Report to the City of Coventry Redevelopment Committee with immediate and ultimate plans.

Journal of the Institute of Municipal and County Engineers, November 11, 1941, pp. 148-151.

Coventry Redevelopment, article by W. L. Hutley, of the City Engineer's Office.

Pencil Points (New York), February, 1942, pp. 67-71 : *Design Standards in Wartime*, article by T. F. Hamlin, including Coventry replanning scheme and temporary shops.

In addition, the following are articles on planning shopping centres, other than at Coventry :

Architectural Record, June, 1940, p. 99 : *Shopping Centres*—general and detailed planning data and some USA examples mostly with parking spaces.

Architectural Record, February, 1934, p. 175: *Shopping Centres*.

The Builder, June 11, 1943, p. 514 : *Southampton—Proposed Flats and Shopping Circus*, in connection with the planning scheme by Professor Adshead and H. T. Cook.

Replanning (Political and Economic Planning), February 23, 1943 : *Retail Distribution and Town Planning*, article on provision of shopping centres, with statistics.

1365 — *Approval of Plans*

Q *Numerous small buildings have been erected in my district without the owners first obtaining approval by having plans, etc., approved by the Council. The practice has gone on for a number of years.*

Referring to The Law of Public Health, 1936, *by W. Ivor Jennings, the Notes given following Section* 64 *of the P.H.A.*, 1936, *page* 150, *state* : " *There is nothing in the Act to prevent a person from building when the plans have not been approved or have been rejected, though there may be something in bye-laws to prevent building before reasonable notice has been given to the local authority.*"

Building bye-laws of the Council made under this Act of 1936, *Section* 123 (1), *have the usual references to giving notices, etc.*

Should proceedings be taken against such offenders ? *Under what section of the P.H.A.* 1936, *would they be taken* ? *I presume, of course, that any offence or contravention of the building bye-laws would be taken through the P.H.A. as the bye-laws are made under that Act.*

A The answer would appear to be in Section 65 of the Public Health Act, 1936. For simplicity, we quote certain passages but, of course, the section should be read in full before any action is taken.

Section 65 (2). " If . . . any work to which building bye-laws are applicable is executed either without plans having been deposited or . . . the authority may by notice to the owners either require him to pull down or remove the work or, if he so elects, to comply with any other requirements specified in the notice. . . ."

Section 65 (3). " If a person to whom a notice has been given . . . fails to comply with the notice . . . the local authority may pull down or remove the work in question or effect such alteration therein as they deem necessary, and may recover from him the expenses reasonably incurred by them in so doing."

Section 65 (4). " No such notice . . . shall be given after the expiration of twelve months from the completion of the work in question. . . ."

Section 65 (5). " Nothing in this section shall affect the right of a local authority . . . to apply for an injunction for the removal or alteration of any work on the ground that it contravenes any bye-law or any enactment in this Act, but . . ."

1366 — *Approximate Estimating*

Q *Have the Approximate Estimating Sheets issued as Information Sheets Nos.* 62, 464-513, *etc., been issued in revised form and has any schedule of prices similar to the Supplement of January* 18, 1940, *since been issued*?

Also, has MOW published a booklet enlarging upon the extract given in the JOURNAL *on May* 23 *last, showing analysis of Rates of the Standard Schedule—or a booklet to report recommendation for Post-War Building* ? *I would be glad to know where and at what cost they may be obtained.*

A The Approximate Estimating Sheets were published in bound form by The Architectural Press in 1937, but have not been issued in a revised form since then. In addition, no schedule of prices similar to the Supplement of January 18, 1940, has been issued since.

There has been no publication by the Ministry of Works enlarging upon the extract in the ARCHITECTS' JOURNAL of May 23 last on the Specimen Analysis of Rates.

SOCIETIES AND INSTITUTIONS

Speeches and lectures delivered before societies, as well as reports of their activities, are dealt with under this title, which includes trade associations, Government departments, Parliament and professional societies. To economise space the bodies concerned are represented by their initials, but a glossary of abbreviations will be found on the front cover. Except where inverted commas are used, the reports are summaries and not verbatim.

EAW

A. C. Bossom

December 10, at the Institution of Electrical Engineers, Victoria Embankment, W.C.2. Address to a meeting of the Electrical Association for Women on MODERN AND POST-WAR BUILDING, by Alfred C. Bossom, F.R.I.B.A, J.P., M.P. Chairman : Miss Caroline Haslett, C.B.E., Comp.I.E.E., Director of EAW. Vote of thanks by the Dowager Lady Swaythling, President of EAW.

A. C. Bossom : There are something like ten million women in England who spend considerably more than half their time in the kitchen. Yet not until quite recent years has any intensive study been made of the proper planning of this most important part of the household.

Electric Apparatus

The war has gone a long way to make certain our younger women will be able to handle apparatus and mechanical contraptions run by electricity, in which hot water and steam form the motive power.

1. As yet, however, there is not universal acceptance of the electric stove, though there are few to-day who would not prefer either an electric or gas stove in their post-war home, rather than carry coals, clean out ashes, blacklead grates, and do all the bending in-

separable from the management of the old-fashioned cookers our mothers used.

With the appliances of a horizontal cooker, with its readily accessible ovens, doors of transparent plastic and thermostatic control to prevent burning, the problems of cooking are materially reduced.

2. Next on the list of things the majority of women would like to see in their kitchens—though here I speak as a mere man—is a device for washing-up. I have yet to meet the man who likes taking hold of greasy plates, soiled knives and forks or dirty glasses, and who likes washing and wiping them up. Why should he or his wife do this when to-day it is readily possible, at no great expense, to introduce the electric dish-washer into the home, in which can be placed all the soiled accoutrements of a meal, the lid closed, a switch turned, and in ten minutes the articles taken out and put into the racks ready for use again ?

3. Next in priority I assume would be the refrigerator. I know there are many who still think the old larder is best and, in very large establishments, this may well be the case, but how many large establishments are there going to be when the bank accounts are examined at the end of the war ?

Here, again, a first-class refrigerator with ample capacity, not too deep, and with transparent doors would, I believe, be a welcome addition in this country.

It is an indespensable essential in every American home, not only because it keeps things in good condition until it is desired to use them, but it also saves money by enabling larger quantities of perishable goods to be bought at a time.

4. Another item should definitely be a clothes-washing machine, and this, too, is procurable for the black-coated worker. It is not an elaborate piece of apparatus, nor is it unduly expensive, but in the lesser home—the home where the great majority of our workers will live—it is rather questionable whether the washing machine that can be used by many families is not more desirable.

In America to-day, in response to 10 cents. in the slot and a piece of soap, these machines care for the washing of a family consisting of husband, wife and two children in about 30 to 40 minutes, without damaging the articles, with no more effort than is required to turn the switch.

5. After wringing, the clothes can be hung in a hot-air drier, gas or electric, which is invariably provided. After about another half-an-hour or so, they can be taken out and need no further attention other than the amount of ironing required.

In other words, the entire week's wash can be handled simply by 10 cents., or 6d., a piece of soap, a little wringing and ironing and the time saved can be used in darning, mending or reading a novel.

6. Everyone to-day should, of course, have a proper ironing board. This can be let down from its cupboard, in close proximity is an electric plug for the iron, and the one doing the ironing can walk around with ease.

7. Women will, no doubt, want to see a proper base plug ready for a vacuum cleaner in each room, and this ought certainly to be possible.

8. It is also possible to have an electric sewing machine which nowadays not only sews, but has an attachment for stitching on buttons and darning socks, etc.

9. Then there is that apparatus for the kitchen called an electric pig, because it is such a pig for work. There is hardly a thing it cannot do in the kitchen. It will peel and mash potatoes, beat eggs, string beans, scrape carrots and other root vegetables, mix up puddings ; in fact, do a dozen time-taking culinary services which make the preparation of a meal such an irksome business and take up so much of the housewife's time.

10. There is also, of course, the electric hair curler and razor.

11. There is a machine in existence which will look after garbage, and grind it so fine that even bones can be washed down the sink, though at the present time, when smaller and smaller pipes are being used, this machine is not yet considered to be in such a condition as to be really worth while considering.

Sinks

Every kitchen should have at least two sinks, a deep and a shallow, and these should be at exactly the right height to end needless back-ache.

There should be a swinging arm so that hot or cold water can be run into either, and a sliding draining board that can be moved freely from one to the other.

In the shallow sink any ordinary washing-up can be done, which leaves the other for clothes and household fabrics.

This does away with the old-fashioned copper and gives far more satisfaction.

Cupboards

Of course, the question of ample cupboards with adequate shelves and, if on the ground, toe-space so that one can stand against them, is also one about which every housewife has very definite views. If cupboards are high the handles should be put on low down so that they can be reached, and vice versa, if cupboards are low, let the handles be high, again to save endless bending.

Let us have cupboards for china, groceries, saucepans, brooms and brushes and vegetable racks. Don't let them be dark, and they should certainly be ventilated and protectively lined with some non-absorbent plastic material against dust and insects. Let the corners be rounded to allow a damp rag, wiped around quickly, to clean them thoroughly. There should be room for the storage of food as well as for jams, bottled fruits and vegetables.

The Ministry of Works has practically decided that a 10 ft. by 8 ft. kitchen should be the standard size in smaller homes, and into this space there is no difficulty in putting all of these appliances.

In America it is quite common to find the kitchen little more than an alcove, shielded from the dining room so that all the food needed can be rapidly handled with the least number of steps.

With regard to the rest of the house, I suppose the majority would prefer base plugs for lighting purposes, rather than hanging fixtures that never seem to give light in the place wanted.

They would also like the necessary connections for radio, or even television ; in fact, any devices this age of invention is putting at our disposal in ever greater numbers every few months.

Built-in fitments, particularly substantial cupboards in bedrooms, and linen cupboards properly warmed by a hot-water pipe, would be looked upon as most desirable ; they not only save the purchase of heavy furniture, but they also occupy less space, do not collect dirt and dust and, if properly designed, fit much more congenially into their environment than do the inheritances that have come, in many instances, from very different places.

District Heating

There should be unlimited hot water from a central heating plant to serve each district, and even district heating. This will save endless work. Think of always having hot water without bothering about the boilers.

Future Electricity Supplies

Mr. E. E. Hoadby, Chairman of the British Electrical Development Association, proposes a six-point post-war programme that would be of great benefit to the country. I believe everyone will endorse these recommendations.

These points are :

1. That all voltages should be standardized and thus enable consumers to use their apparatus anywhere ;

2. There should be a standardized form of tariff so that people will understand what they are paying for ;

3. Easy facilities for hire-purchase and maintenance of apparatus by the supplying authority ;

4. Development of the industrial off-peak load so that the industrial consumers can have cheap supplies ;

5. Service by the industry's experts to help industrial consumers with any technical problems ;

6. Increased facilities to the public for advice and guidance from its electric authorities.

To carry out these recommendations will, of course, entail :

(i) A larger supply of electricity all over the country than is at present available ;

(ii) A lower charge for electricity consumption ;

(iii) To make this possible it is essential, of course, that there shall be some suitable adjustment in the general grid lines, which will be practical and can readily be made.

There are a great many electrical supply authorities and, some years ago, in fact in 1926, it was agreed that there should be a standard frequency instead of six or eight, which was then the case.

This was undertaken and is being accomplished over a period of years, at a cost of about £20 millions. The charge was assumed by the supply industry and is being repaid.

Now comes the question of standardizing the voltage. Once this is done, and the cycle standardized, any electrical appliance will be usable anywhere in Great Britain.

But here again this will cost something like £17 million, and the industry, I am assured, will again be willing to assume this charge and, in due course, will repay it.

Once this is done, lamp bulbs, all apparatus, wirelesses, refrigerators, stoves, in fact, any electrical device, would be inter-changeable and usable anywhere in the country.

Women in the Building Industry

Our normal building force in pre-war years, to carry out the normal requirements of the building industry, was about 1,250,000 with an additional 2 million in the ancillary trades. This has now been reduced to about 400,000, which number includes a large proportion of older men. Nobody needs reminding that the demand for operatives in the building trades in post-war years, and for a great many years to come, will be much greater than before.

Therefore, should women desire to join this vast army, I should think it highly probable that, after a certain time, they will be appropriately received and given the opportunity of doing the work of which they proved themselves so capable. Women have many qualities they can bring to bear, not only on the job itself, but also in the " back room," in the interior decorator's office, and in the architect's and engineer's office.

Storing Food in the USA

While I was in America I saw another very interesting development. For a little more than a shilling a week it is possible for the American housewife to rent an ice-cooled roomlet of about 3 ft. by 3 ft. by 3 ft. in which to store and keep wide varieties of different foodstuffs. Thousands of these small individual freezing roomlets are built in groups of from five hundred to one thousand and they are being established in all the towns and cities where electrical energy can be carried and is now available.

Think of the possibilities this offers. The idea is spreading like wildfire in the States. Undoubtedly many of you will have seen records of their existence and, it is estimated, that something over 50 per cent. of food in America is passed through this process at some time or another. Having just returned from a three-months' tour of the States, I can assure you that their food is pretty good.

HC

Leslie Hardern

December 18, at the Housing Centre, 13, Suffolk Street, S.W.1. Talk on REFRIGERATORS FOR THE SMALL HOUSE, by Leslie Hardern.

L. Hardern: Up to 1934 the installation of domestic refrigerators in this country was on a very small scale and was limited to well-to-do households. This was due partly to the high price of refrigerators and partly to insistence on sales for cash. In 1935 hire-purchase system was applied to domestic refrigerators in the London area, and the much larger middle-class market was tapped. Some idea of the effect on installations can be seen from the figures for the Gas Light and Coke Company, which rose from 1,350 refrigerators in 1934 to 9,535 refrigerators in 1935 and 15,647 refrigerators in 1936.

It was clear, however, that the working-class households could not afford even these more favourable terms, and as we did not want the benefits of refrigeration to remain an upper and middle-class luxury, we decided to try and design what we would now call a utility model which could be afforded by the working classes.

We selected the smallest domestic model, of one cubic foot interior, for our experiment. In June, 1937, we introduced this model in the Roehampton Estate of the LCC, the tenants of which are generally of well paid working-class type.

How can we apply the lessons learned at Roehampton to the post-war housing problem? The answer falls under a series of headings:

1. *Size*

It seems desirable to provide a minimum size of 1½ cu. ft. capacity to preserve the essential perishable foods like milk, meat, fish, butter, eggs and green stuffs, for the average size working-class household.

2. *Space*

Instead of squeezing an additional independent unit into an existing crowded kitchen, it will be easy to install a built-in model when building the house.

3. *Cost*

It will be difficult to supply refrigerators for 1s. per week all in. As I mentioned earlier, we had to feel our way when fixing the original price, and as it turned out, we found that we had under-estimated and that we ought to be charging 1s. 3d. per week to cover the cost of the refrigerator, transport, fixing, maintenance, depreciation and gas consumed. This would consist of 10d. per week for the appliance and 5d. per week for the gas, charging gas at 6d. a therm—a low figure. Whether the 10d. a week could be equalled or reduced would depend entirely on national buying policy. The normal pre-war system was for the builder to supply the minimum of equipment, and for the unfortunate tenant to hire or hire-purchase such things as cookers, water heaters and refrigerators, at higher prices and much higher installation costs than it would have cost the builder. It seems incredible, in view of the need for cheap houses after the war, that such a system will be continued. The obvious system is for manufacturers to supply at mass production prices to the builders, whether local authorities, housing societies, building societies or Government departments. I can see no economic justification for intermediate charges, whether by utility undertakings, builders' merchants or retailers in this essential national programme.

4. *Justification*

Assuming then that refrigerators can be supplied in small working-class houses for 1s. 3d. per week, or equivalent post-war figure, can this outlay be justified? The balance is difficult to assess owing to the absence of statistics. There are certain savings—avoidance of waste, quantity buying on the cheapest shopping days, fares to shopping centres, etc., but these are difficult to express in terms of pence per week. Then there is the question of health. An eminent doctor has said:

"Many foods, especially those derived from living creatures (such foods as milk, butter, meat and fish) may through the action of bacteria and/or mildews, lose much of their health value, and even become dangerous to health, without this being obvious to sight, smell or taste.

"Above a certain temperature food deteriorates in quality and health value from the moment it comes into the home. Food goes bad through two causes—the growth of tiny germs (bacteria) and the growth of microscopic funguses (mildews). These impair the value of food and make it slightly harmful and if developed far enough, spoil its flavour, make it smell and make it actively poisonous.

"Both bacteria and mildews can only flourish at temperatures above 50° Fahrenheit. The vast majority of English kitchens and larders are above this temperature during the summer and on many days during the winter too.

"As the law now forbids chemical preservatives in many foods, refrigerator storage is even more important to-day than in the past."

Beveridge, in his report, suggests an allocation of 10d. a week for each adult male contributor and 8d. a week for each adult woman for health services. If only a fraction of these amounts could be saved by cutting out tainted foods, it would help the balance.

CLASSIFIED ADVERTISEMENTS

Advertisements should be addressed to the Advt. Manager, "The Architects' Journal." War Address: 45 The Avenue, Cheam, Surrey, and should reach there by first post on Monday morning for inclusion in the following week's paper.

Replies to Box Numbers should be addressed care of "The Architects' Journal." War Address: 45 The Avenue, Cheam, Surrey.

Public and Official Announcements

Six lines or under, 8s.; each additional line, 1s.

The Incorporated Association of Architects and Surveyors maintains a register of qualified architects and surveyors (including assistants) requiring posts, and invites applications from public authorities and private practitioners having staff vacancies. Address: **75 Eaton Place, London, S.W.1. Tel.: Sloane 5615** 991

CITY OF MANCHESTER.

APPOINTMENT OF SENIOR TECHNICAL ASSISTANT (PLANNING).

Applications are invited for a Senior Technical Assistant in the City Surveyor's Department, who will be seconded by the Corporation to the service of the South Lancashire and North Cheshire Advisory Planning Committee (as Principal Planning Assistant), to which Committee the City Surveyor of Manchester is the Honorary Surveyor.

Basic Salary £1,050 per annum, rising by two biennial increments of £100 to a maximum of £1,250. (The present cost of living bonus amounts to £33 16s. per annum).

Applicants should have had Planning experience in areas which are largely industrial in character. The person appointed will be required to devote the whole of his time to the performance of such duties as the Advisory Committee and the Honorary Surveyor shall require of him. Such duties will necessitate close contact with the Honorary Surveyors and Planning Officers to some ten Statutory Regional Planning Committees within the Advisory Area. The responsibilities attached to the position will be considerable.

Preference will be given to candidates who possess satisfactory engineering and/or architectural, together with Town Planning, qualifications.

The applicant selected for the position will be required to pass a medical examination and to become a contributor to the Manchester Corporation Superannuation Fund; he will also be required to execute a Deed of Service which all officers of the Corporation are required to execute; copies of the Superannuation Scheme and of the Deed of Service will be supplied on request.

Canvassing in any form, oral or written, direct or indirect, is prohibited and will be regarded as a disqualification.

Applications, which must be made on the appropriate form obtainable from the undersigned, accompanied by copies of three testimonials, to be delivered to my office in an envelope endorsed "Senior Technical Assistant," not later than Monday, 31st January, 1944.

R. H. ADCOCK,
Town Clerk.

Town Hall,
Manchester.
30*th December*, 1943.
CS/IMR. 20

COUNTY COUNCIL OF THE COUNTY OF LANARK.

ASSISTANT COUNTY HOUSING ARCHITECT AND ENGINEER.

The above appointment which was advertised in the *Architects' Journal* in October last has now been filled.

W. H. RODGER,
County Clerk.

Lanarkshire House,
191, Ingram Street, Glasgow.
January, 1944. 28

COUNTY BOROUGH OF EAST HAM EDUCATION COMMITTEE.

EAST HAM TECHNICAL COLLEGE.

PRINCIPAL: A. J. JINKINGS, B.SC., PH.D., A.I.C.

APPLICATIONS are invited for the following vacancies at the SCHOOL OF BUILDING:—

1. Required as soon as possible full-time teacher of ART SUBJECTS as applied to building and architecture. Knowledge of appropriate craft work an advantage.
2. Required at Easter, 1944, full-time teacher of GENERAL BUILDING SUBJECTS including TECHNICAL DRAWING. Experience of Architecture or Brickwork desirable.

Salary in accordance with the Burnham Scale (London area), i.e., for Graduates £276 × £15—£528 or for Non-Graduates £204 × £12—£432. Experience in industry will be taken into consideration in fixing commencing salary.

Further particulars and forms of application may be obtained on receipt of stamped addressed envelope from the undersigned, to whom completed applications must be returned not later than 22nd January, 1944.

A. A. GARRARD,
Secretary for Education.

Education Office,
Town Hall Annexe,
Barking Road,
East Ham, E.6.
24*th December*, 1943. 19

GLAMORGAN COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of a temporary architectural assistant.

Candidates should have had good general experience and be ineligible for military service.

Salary offered is £255, rising by increments of £15 to £300 per annum, plus present war bonus of 15s. weekly, and proportionate hourly rate for authorised increase of working hours.

Applications, stating age, qualifications and experience, should be made out on forms obtainable from the County Architect, Glamorgan County Hall, Cardiff, and received by him not later than Monday, the 17th January, 1944.

D. J. PARRY,
Clerk of the County Council.

Glamorgan County Hall,
Cardiff.
3rd January, 1944. 24

Architectural Appointments Vacant

Advertisements from Architects requiring Assistants or Draughtsmen, and from Assistants and Draughtsmen seeking positions in Architects' offices will be printed in "The Architects' Journal" free of charge until further notice. Other "Appointments Vacant" and "Wanted" will be found under later headings, and are subject to the charge given under each heading.

Wherever possible prospective employers are urged to give in their advertisement full information about the duty and responsibilities involved, the location of the office, and the salary offered. The inclusion of the Advertiser's name in lieu of a box number is welcomed.

ARCHITECTURAL AND SURVEYING ASSISTANT required in S.E. Greater London area. Experience building works, specifications, quantities and land surveys. Good draughtsman. Good and durable prospects to suitable person. Must be exempt military service. Apply Box 233.

REQUIRED ARCHITECTURAL ASSISTANT or Architectural Draughtsman, to help Architect Industrial Designer. Interest in industrial design, modern outlook and good draughtsmanship essential. Please write to Box 26, stating age, experience and salary required.

Architectural Appointments Wanted

ARCHITECT AND SURVEYOR offers services in spare time; London office, car, own assistant; moderate terms. Box 214.

A.R.I.B.A., exempt military service on medical grounds, requires controlling position with post-war interests, in commercial or private enterprise. Development of materials, pre-fabrication and research. Possessor of keen brain and desire to use it. London area preferred. Salary according to work offered. Box 218.

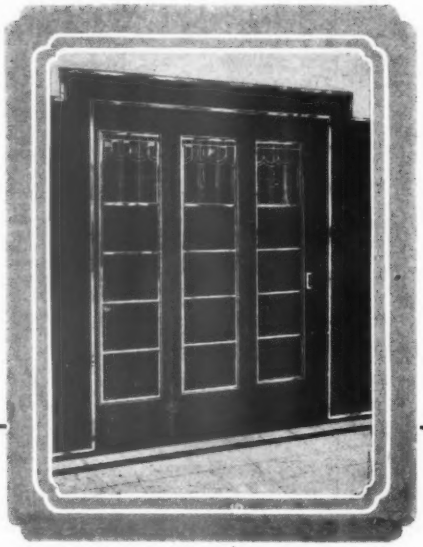
ARCHITECT, experienced in carrying through works complete, specialized in large industrial and commercial building. Box 216.

ARCHITECT AND SURVEYOR, with own office near Exeter, seeks free lance or part-time work. Experience in all branches of the profession, especially in brewery, licensed premises, domestic, war damage and maintenance work, schedules of condition and dilapidation. Speedy, accurate draughtsman with high capabilities in design and construction. Box 217.

THOROUGHLY EXPERIENCED ESTATE CLERK OF WORKS, BUILDING SURVEYOR, etc., desires position, Midlands preferred; over 30 years' experience, with qualifications, practical and theoretical. Not liable for military service; rendered war service during 1914-18, first Great War. Controlled large, important, ane extensive first-class contracts, etc. Estate management, general property maintenance, supervision all branches of the building trades and the profession; local authorities experience. Full particulars, testimonials, etc., on request. Box 227.

ARCHITECT, with 20 years' experience in all branches of the profession, with special qualifications in domestic work and decoration, desires to change from his present position. Write Box 220.

Classified Advertisements continued on page xxviii



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William Wadsworth and Sons Ltd. *Bolton and London*

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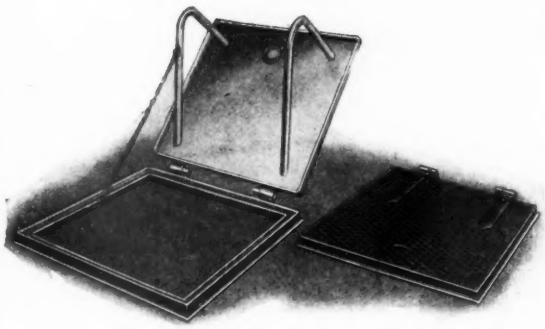

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DIP. ARCH., A.R.I.B.A., 38, exempt, is looking for an appointment with responsibility and prospects. Box 219.

PERSPECTIVE AND ARCHITECTURAL DRAWINGS carried out by architect, with good experience in this work, for moderate charges. Box 228.

ARCHITECTURAL ASSISTANT, R.I.B.A., Intermediate standard, requires work in London, post-war housing preferred. Box 229.

ARCHITECT'S SENIOR ASSISTANT AND BUILDING SURVEYOR. Age 29. Medically exempt. Wide experience architectural planning and design. Capable of controlling large public works and Government building contracts. Salary by arrangement. Box 231.

LONDON AREA, Senior Assistant, A.R.I.B.A., aged 38, offers part-time services. Wide experience in most branches of the profession. Own office accommodation. Box 232.

Other Appointments Vacant

Four lines or under, 4s.; each additional line, 1s.

ASSISTANT EDITOR wanted for Architectural Paper. Write, with full particulars of qualifications, salary required, &c., to Box 51.

MAN required with contacts and knowledge of Contracting, Public Works, docks, roads and similar undertakings; able to collect and prepare reports on these subjects. Experience of preparation of matter for printer an advantage. Write Hughes & Allen, 6, Arlington Street, London, S.W.1. 23

Other Appointments Wanted

Four lines or under, 2s. 6d.; each additional line, 6d.

ADVERTISER of proven ability and with valuable existing contacts with Architects, Government Departments and the building industry generally, would like to hear from progressive and well-established company requiring the services of a keen and responsible sales executive. Box 205.

Competitions

Six lines or under, 8s.; each additional line, 1s.

COMHAIRLE CATHRACH ATHA CLIATH, EIRE.

DUBLIN CORPORATION, IRELAND.

The Dublin Corporation invite competitive designs for a new Tuberculosis Sanatorium (to accommodate 320 patients) to be erected at Ballyowen, Lucan, County Dublin.

The competition is open to all qualified Architects who are Members of :—

The Royal Institute of the Architects of Ireland,
The Royal Institute of British Architects,
The American Institute of Architects,
Registered Architects in any of the above countries, or are
Members of a similar body or society elsewhere.

The Assessors are : Messrs. Harry Allberry, A.R.I.B.A., (Chairman) ; Vincent Kelly, B.ARCH., President, R.I.A.I., F.R.I.B.A. ; John Murray Easton, F.R.I.B.A. ; Ralph Byrne, F.R.I.A.I. ; and Dr. A. J. Walsh, M.B., CH.B., D.P.H., Resident Medical Superintendent, Crooksling Sanatorium, Co. Dublin.

The premiums are : £500, £350, £250, £150.

Applications for the Conditions should be made to "The City Manager and Town Clerk, Corporation of Dublin, Public Health Department, Municipal Buildings, Dublin," and should be received by him not later than the 13th March, 1944. A deposit of £3 3s., made payable to the "City Treasurer, Dublin, Ireland," should accompany the application. Deposit will be returned on receipt of a bona fide design or on the return of the Conditions.

P. J. HERNON,
City Manager and Town Clerk.
22

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