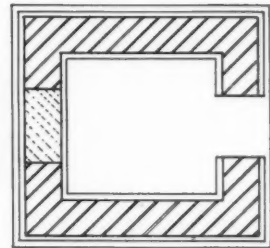
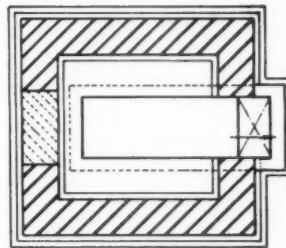
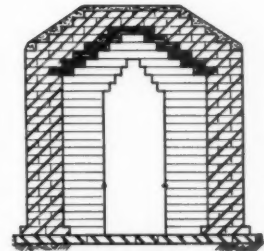
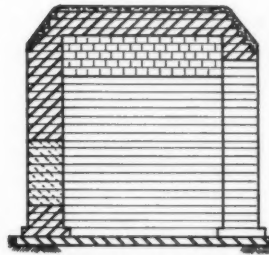
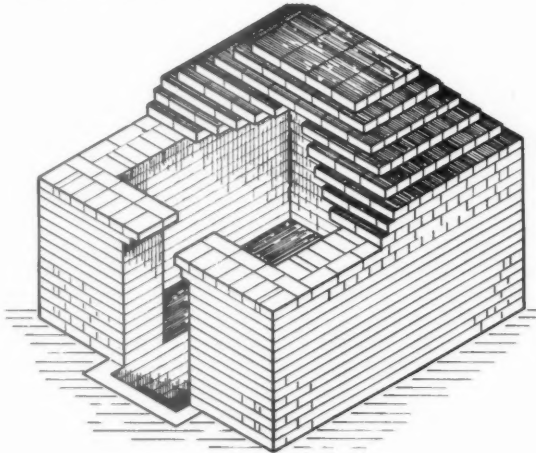


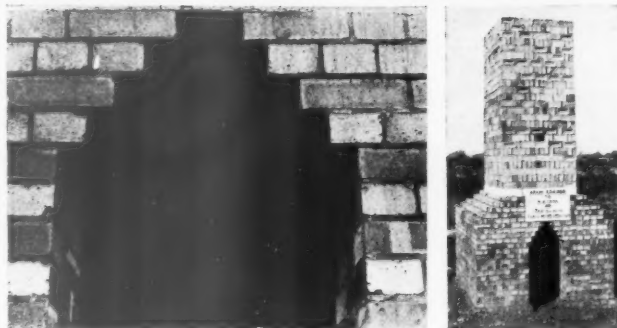
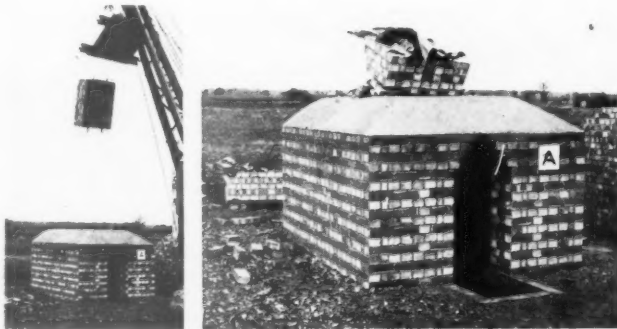
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THE ARCHITECTS'



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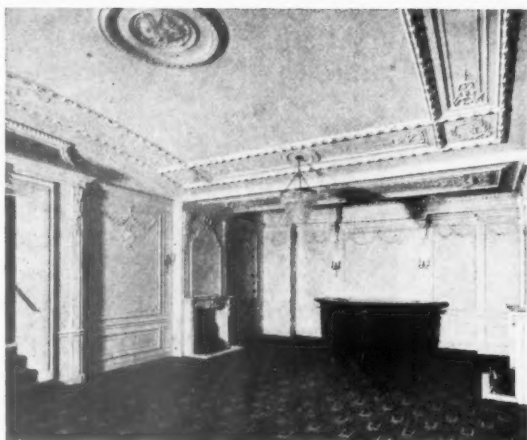
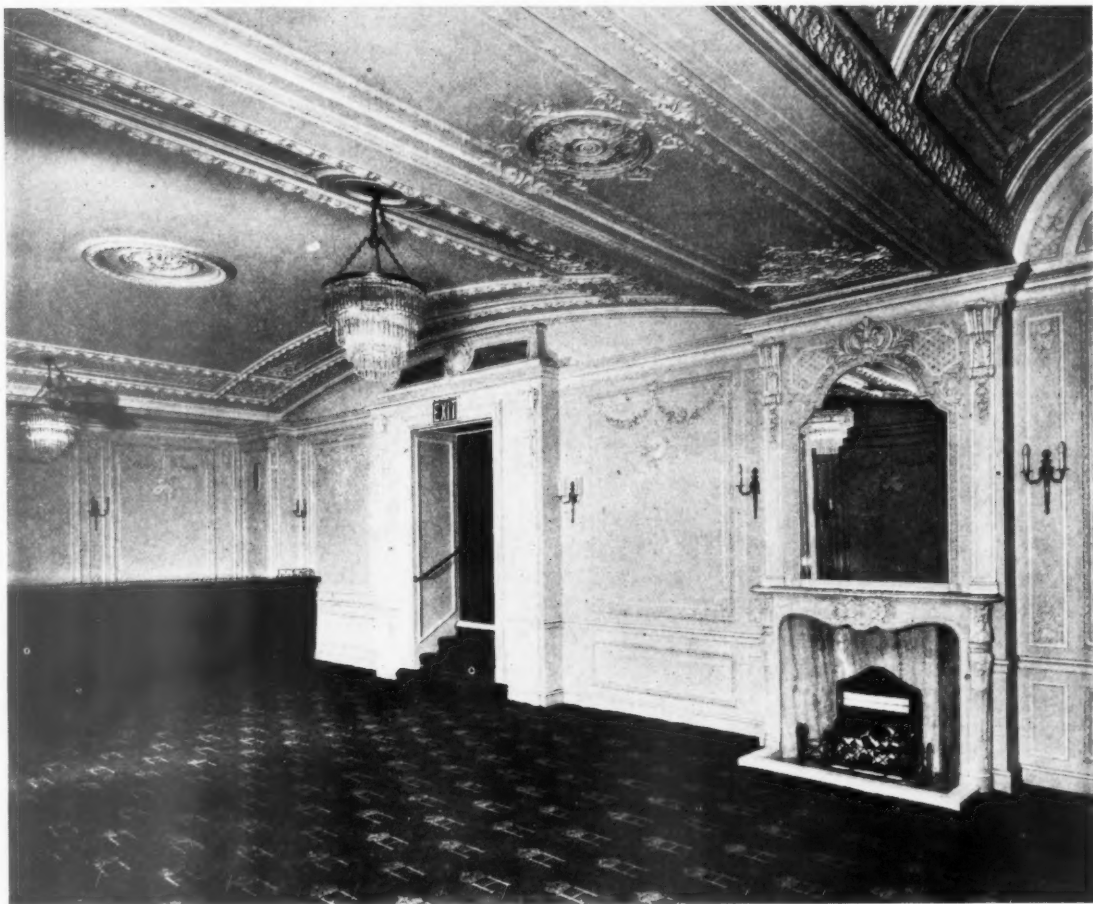
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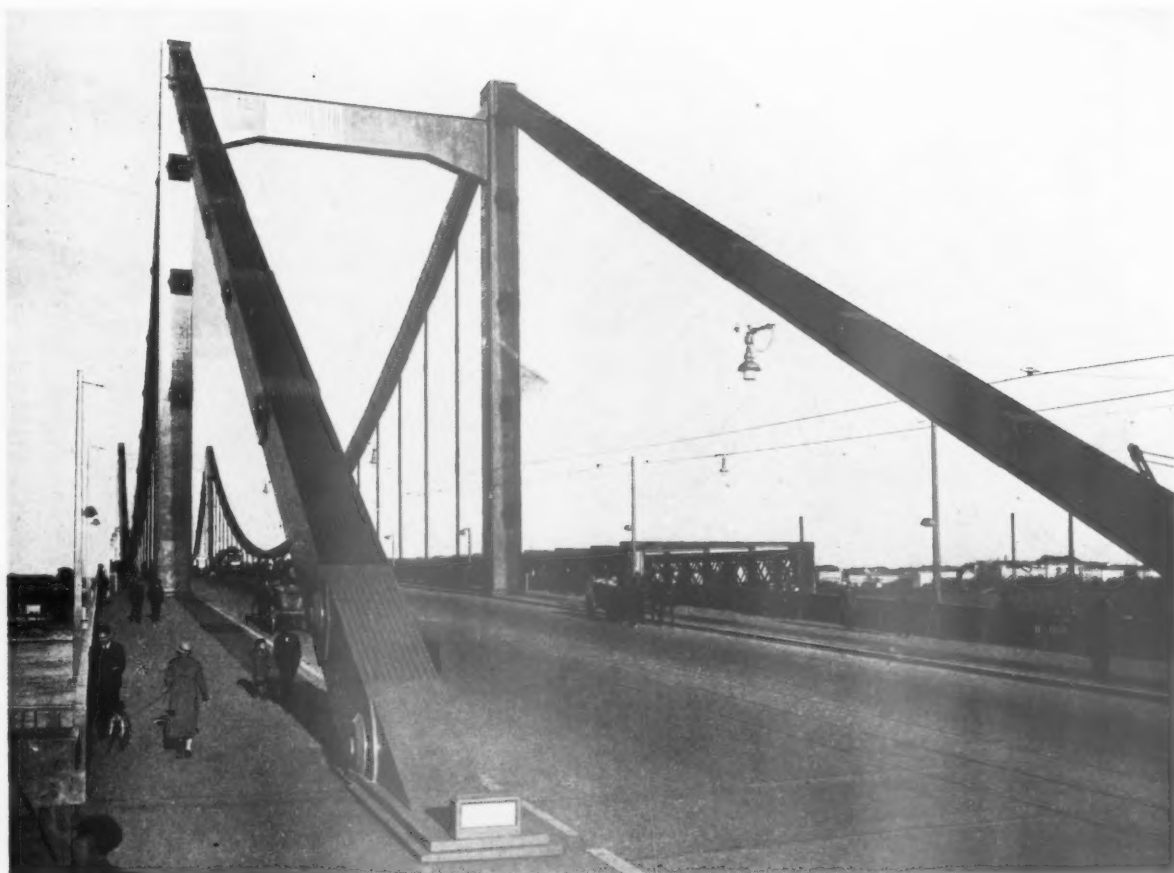
The Editor will be glad to receive MS. articles
and also illustrations of current architecture in this
country and abroad with a view to publication.
Though every care will be taken, the Editor cannot
hold himself responsible for material sent him.

LOUIS XIV IN THE HAYMARKET



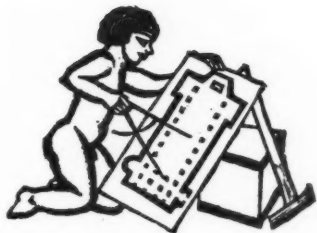
Some extensive alterations providing considerable improvements have been carried out during the last few months at the Theatre Royal, Haymarket, S.W.1. Alterations include the enlargement of the cloakrooms for the stalls and the construction of a lounge bar under the floor of the stalls, which has been decorated in harmony with the theatre in late Louis XIV style. Its colour scheme is a combination of blue and ivory and the lighting is effected by glass electroliers, and brass wall-brackets with electric candle lamps.

The stalls foyer has been enlarged and redecorated, producing a panelled walnut effect.



BRIDGE IN VIENNA

This new steel suspension bridge in Vienna took three years to build and has a total length of 1,150 feet and an actual suspension width of 785 feet. It is 80 feet wide and the pylons are 120 feet high. The bridge was constructed in five sections.



LOCAL BUILDING COUNCILS: 2

LAST week the JOURNAL suggested that a Local Building Council should be set up in each large town or district in Great Britain.

During the past seven days a great deal has happened. And in the JOURNAL's view, everything that has happened makes the establishment of these Councils more desirable and more urgent. After the past week, everyone in the building industry will agree that, if we are to win this war, a great speed-up and a great expansion of the war building programme must take place. The new works will include an extension of the existing programmes of Service and Supply Departments, and a new programme of military and semi-military works throughout the country. The fulfilment of these demands may be interrupted by calls on the industry to execute air raid repairs and by a demand for skilled men for the Royal Engineers and Pioneer Corps.

This programme can be carried out with the necessary speed only by using the whole industry—and by using it flexibly and intelligently. The jobs that need doing in any area will have to be adjusted to the local skill, local methods and local resources of that area. Success will need inspired improvisation: and the abandonment of demands that a camp next a brickfield should be built in concrete blocks, or that one between a cement works and a sand and gravel pit should be built in brick, because it was so laid down in drawings prepared last September.

It seems certain that both wide distribution of contracts and their adjustment to suit local resources will be used and must be used in the execution of the new war building works. And the JOURNAL believes that if Local Building Councils were set up throughout the country they could give invaluable help in this distribution and this adjustment.

Local Building Councils,* as they are now suggested, would not rival any existing organization, and their watchword would be SIMPLICITY. They are intended to consist of representatives of local organizations of the building industry, who would between them have full knowledge of local building resources, conditions, and methods.

Once set up, their first job would be the preparation of two reference files. One of these would contain the names of all local building contractors, the size of contract each firm could handle, its special skill and

experience, amount of work in hand, the architects and other consultants with whom it was accustomed to work, and number of employees. And the second file would contain information concerning local manufacturers and merchants and their output and stocks. The information required for these files could be obtained by two questionnaires.†

The average architect or builder will probably admit that these Councils could be set up and could give most valuable help in allotting the right job to the right firm in each area. He may even admit that local authorities and perhaps Regional Commissioners could be persuaded to recognize the potential value of the Councils during air raids and to make arrangements to use them. But he will almost certainly express disbelief that Service and Supply Departments will use them. And if he has had experience of how such Departments each make separate inquiries, compile separate references, and take pains to hide from each other all that they are doing, he may feel that the war will be over long before any Local Building Council is consulted by them.

Two months ago this argument would have been unanswerable. But a lot has happened in two months. It is now plain that it will only be possible to carry out the bulk of future war building works by making the best of local resources. It will become more and more difficult to move materials, labour and plant about the country in large quantities. Local methods, knowledge, and enterprise will have to be used fully and intelligently.

The JOURNAL is certain that if Local Building Councils are set up, they would become, very soon, the recognized means of ensuring this intelligent use: for two reasons. First, the existence of a Council of experts in local building problems for the sole purpose of suggesting the best solutions to those problems is a powerful argument for their advice being used. Second, if that advice is not used and not asked for, the Local Council will know it, and—much more to the point—will be in a position to ask the reason why in very compelling tones. It will be able to approach local M.P.s with facts and details which, backed by the expert local knowledge of its members, will result in questions in the House of Commons that cannot be evaded. And it is at least probable that after fifty such questions have appeared on the Order Paper, Local Building Councils will discover that their advice is being asked for and followed by Government Departments.

But before this can happen Local Building Councils must exist throughout the country. And so far only one has been set up.

* It must be made clear that credit for the idea of Local Building Councils does not belong to the JOURNAL.

† The information required for the second file has already been returned to one Government Department. So in this case the firms concerned would only have to send a duplicate copy to their Local Building Council.



The Architects' Journal

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N O T E S

&

T O P I C S

BUILDING FROM NOW ON

FROM now on, all designers of buildings and structures for war purposes will have to set to work in the same way—and a very different way from that used even two months ago. Other kinds of buildings need not be considered: few or none will be built.

The new approach is made necessary by the shortage of steel and timber. In future, the use of these materials must be drastically reduced even in buildings for war purposes. And so the designer, new style, will have to come to a full stop after plotting the general dimensions of a proposed building and do some very hard thinking.

He will have to reconcile four factors before going further: minimum use of steel and timber; maximum use of substitutes; the materials and skill available near the site; the time available for building. Cost still enters into the matter—but it is now one factor, not *the* factor.

Until the best compromise between these four has been evolved, preparing working drawings may prove a waste of time.

At the R.I.B.A., on June 18, Mr. Fitzmaurice, of the Building Research Station, described some of the problems of the new situation and the solutions suggested by the Station.

He pointed out that it is the tensile properties of steel and timber which cannot be replaced, and that thus it was essential to use these materials only to resist tensile stresses, and that as sparingly as possible.

Where large spans are unavoidable he advocated lightly reinforced concrete vaults—but emphasized that large spans should be used only where work cannot proceed without them. For posts, beams and slabs in buildings

of more than one floor, Mr. Fitzmaurice believed that the saving in steel made possible by continuous *in situ* reinforced concrete construction would outweigh the advantages of pre-cast systems if enough attention is given to formwork.

But most of all he stressed the paramount necessity, in future, of collaboration from the outset between architect, engineer and contractor. "Any scheme drawn up without reference to the best method of erection at the time of erection will start at a grave disadvantage."

THE NEW SCHEDULE

The revised Schedule of Reserved Occupations* was published last week, and its pages have all of an encyclopædia's power to make one forget what one set out to look for. Fascinating speculations about other people's jobs crowd the mind: what does a blanket-raiser do, or a twister? And has a tippler attendant anything in common with an onsetter's mate? It is the price that has to be paid for a strong imagination.

Returning after a time—as one must—to architecture and building, the following snapshot of the present position is obtained:

Architects	—	Bricklayers	18
Civil Engineers ..	18	Carpenters and Joiners	25
Surveyors (Building, Quantity and Land)	18	Concretors (skilled) ..	30

It will be noticed that people who in peacetime do most of the design of buildings, who have been accustomed to think of their contribution as the first and most essential in a building scheme, are the only major group of the industry to be unreserved at all ages.

We know of course that architects asked to be unreserved, and that very many of them are employed on war building work. Yet their omission from this Schedule still seems to point a moral for post-war days.

There remains the question of architects who are in the whole-time employment of local authorities. These architects are reserved at 30 (and at 25 until August 1 this year) if they are local government officers within the meaning of the Superannuation Act 1937.

I am told on the authority of the National Association of Local Government Officers that this means that: (1) An architect who holds a permanent appointment on a local authority's staff is reserved at 30 from the date of the appointment; (2) an architect who holds a similar temporary appointment is reserved at 30 provided his periods of service with one or more local authorities amount in the aggregate to more than two years.

It all seems very involved.

WESTWARD HO!

I had to drive last week down to Cornwall and back. A long motor journey in these days of petrol rationing is unusual enough, and since the parachutist scare it has become an undertaking almost as romantic as a journey

* H.M. Stationery Office. Price 1s.

across Europe. Demands for identity cards are constant, and if barricades of barbed wire and rusty motor-cars are not as picturesque as striped frontier poles, at least they have no tiresome associations with changes of language and currency.

★

Then there was the absence of signposts, milestones, A.A. signs. Strict attention to a map, and inevitable wrong turns when entering or leaving towns, were amusing for the first hour. After that they became by no means so amusing. The sequence of looking for someone, looking for someone not actually drooling or twitching, suspicious looks, evasive replies, and, finally, abject appeals—becomes exhausting. "It is better," one of my companions quoted at the outset, "that three hundred innocent persons should be inconvenienced. . . ." He did not quote it after lunch.

★

In the late afternoon we pounced on a trim, alert figure whose tweeds and grey moustache suggested expert knowledge of the neighbourhood. To readers in the quiet of wartime offices it may seem funny that this person proved to be stone deaf. It was not funny to us; in low, dry voices we abused him to his face.

★

Near midday we pulled in at a car park at Salisbury. The adjoining car was a military one, open, heavily camouflaged and covered with official badges. It was unattended. On the back seat, alone and well within arm's reach of passers-by, was a bulging buff portfolio which bore on its cover the significant words: WAR OFFICE: VERY SECRET.

CONTAGION SPREADS

The Battle of the Styles, which in England had almost been won, is showing bursts of sporadic activity in the Empire (British, not Leicester Square). A brief skirmish has taken place at Johannesburg where the Transvaal Institute held their annual general meeting. Protagonists were the retiring president, Mr. Rex Martienssen, fair, youthful-looking friend of Le Corbusier, chief supporter of "avant garde" design in South Africa, and lecturer and instructor at the Johannesburg School of Architecture, and Mr. Gordon Leith, sometimes described as the Lutyens of South Africa. The dispute, reprinted in a recent issue of the *South African Architectural Record*, concerned the Sir Herbert Baker scholarship, founded many years ago "to advance the study of architecture in South Africa."

★

Mr. Martienssen suggested that it would be of great benefit if Sir Herbert could be induced to reconsider the basis of this scholarship, for which competitors now have to submit jig-saw solutions to such retrospective subjects as vice-regal palaces or monasteries on an island. What, in fact, applied in 1910 must surely have been modified during the past thirty years.

★

Mr. Leith contended that the basic principles of architecture had not undergone any change since 1910, and that to remodel the basis of the Baker Scholarship was to depart from the spirit in which Sir Herbert made the gift. Furthermore, while he was on the subject, he was not at all sure that the lines on which the younger generation were now being trained (presumably by Mr. Martienssen) were right.

Mr. Sinclair then rose to the attack, and said the present system was completely hit-and-miss, and divorced from the present position in architecture. Mr. Leith repeated that what Sir Herbert wanted was for the winner to go to Rome and "see how the ancients did it." At this point everybody apparently avoided the temptation of asking "did what?"

★

Mr. Fleming then remarked that Sir Herbert would probably welcome a report on the situation, and Mr. Martienssen concluded the meeting by saying he wasn't just being wilfully provocative, but was only expressing a general dissatisfaction.

SMALL HOUSES

While writing of South Africa, it is worth noticing an undertaking sponsored by the Transvaal Institute which was discussed at the same meeting—the Small House Bureau. This is designed to meet the needs of the small-salaried man who feels professional fees are beyond his means. An album of designs, plans and specifications is being prepared, and the building societies have promised their support.

★

This sounds like a thoroughly workmanlike and enterprising scheme which, after the war, might well be initiated over here.

THOUGHTS FOR THE WEEK

The celebrations of Thomas Hardy's centenary are a reminder of the apparently peculiar lack of jealousy on the part of the spirit of architecture. She not only gives way graciously, as with Hardy, to a rival claimant for the heart, but in case after case is content to share or to take without questioning the place long reserved for another consort. What a number of dons, doctors and astronomers, advanced in their careers, have abandoned them in order to see "the vivid air . . . signed with their honour." How many painters, sculptors and playwrights have oscillated between their more malleable media and the illusory permanence and certain publicity of encased and habitable space. The names of those who, like Hardy, took architecture as first mistress and abandoned her, are, to her glory, fewer or less illustrious. Another example, which may be a useful inspiration at the moment, is that of Kléber, who rose to be a general in Napoleon's army.

★

Trying to visualize Thomas Hardy as architect's assistant and builder's son reminds me of those early Wessex builders who put up the earth walls of Wareham to keep the cuckoo from leaving them, and exclaimed as he skimmed south over the ramparts, "Why darn us, Joe, if we beaint made she 'arf cubit too low."

★

We ourselves are busily adding to the stature of defences which are being designed, this time, to discourage those birds who lay their eggs in nests not their own. If anyone is in need of a chant to keep the rhythm of the work, I would suggest: "In August away he must." And, as a text for the higher executives, that you can by taking thought see that the extra cubit is in the right place.

ASTRAGAL

NEWS

L.C.C.

At last Tuesday's meeting of the L.C.C., it was announced that Mr. Herbert Morrison, M.P., Minister of Supply, had resigned the position of Leader of the Council, and that Mr. Charles Latham had been selected in his place. It was also announced that further areas are to be added to the Green Belt in Buckinghamshire, Hertfordshire and Kent, amounting to more than 550 acres.

TIMBER CONTROL

Following notice has been received from Minister of Supply:

Timber problem in time of war falls into three parts. The first is the importation of timber having regard to the necessity of finding new sources of supply in place of Scandinavia and Russia and the difficulties of shipping. The second is the development of increased production in this country. The third is the distribution of timber having regard to the necessity of restricting its use to the most essential purposes.

Importation of timber is in the hands of the Timber Control. They also administer the control of the distribution and use of timber acting in accordance with the decisions and the allocations of the Government Priority Organization. The production of home-grown timber has been largely increased both by the home-grown timber merchants and by the Forestry Commission, who are primarily responsible for the development of our home resources. The output of home-grown softwoods is now at a rate four times as great as before the war. It is vitally necessary, however, greatly to increase still further this output and the importance of doing so has been emphasized by recent events, both in connection with mining timber and with sawn timber. This development raises large problems of organization and of the provision of labour and equipment, and one of the prime functions of the Timber Control Board which has been appointed under the chairmanship of Mr. George Dallas, J.P., will be to solve these problems and to secure a systematic, large and rapid increase in the utilization of our home resources. It is necessary to make the best possible use of the skilled labour already available, to bring in fresh unskilled labour for training and to import further workers from overseas.

One of the most important requirements is the increased output of mining timber, and a representative of the Mines Department is to be associated with the Control Board in relation to the problems of the production and distribution of such timber.

LIMITATION OF SUPPLIES

Following notice has been received from the Board of Trade:

Trade organizations have rendered valuable service to the Board of Trade in explaining to their members the requirements of the recent Order restricting home supplies of a wide range of non-essential goods. They have represented to the Board, however, that the various enquiries by manufacturers and traders have recently been so numerous that many have not yet been able to make application for registration. Accordingly the Board have decided that the final date for registration shall be 30th June. The Order provides that no person shall carry on business in controlled goods unless he has registered

and there are heavy penalties for failure to comply. Manufacturers or wholesalers who are in any doubt about their obligations should purchase copies of the Explanatory Memoranda issued by H.M. Stationery Office and should where necessary consult a trade organization.

CHANGE OF ADDRESS

Mr. C. B. Smith, F.R.I.B.A., of 1 New Court, W.C.2, has temporarily removed his office to 9 Eastern Road, London, N.2. Telephone: Tudor 1070.

CARDIFF CIVIC SOCIETY

Owing to the war most of the activities of this society had to be postponed for the time being.

As however one interesting building in Cardiff had been completed recently and another was just nearing completion, it was felt that no harm would be done by, and probably some slight good might result from, the arranging of a meeting of any members who were free at an inspection of these buildings. Consequently, on the afternoon of Wednesday, 10th June, a visit was paid to the new gymnasium being constructed for the University College of South Wales and Monmouthshire in Cathays Park from the design of Mr. T. Alwyn Lloyd, F.R.I.B.A., and the extension to Aberdare Hall, Cathays Park for the same College from the design of Mr. Verner O. Rees, F.R.I.B.A. The visitors were shown round the two buildings by the architects who in each case explained the scheme and at the close of the visit tea was provided in the delightful garden of Aberdare Hall.

CENTERLESS ARCH CONSTRUCTION

At 12 noon next Thursday, July 4, a demonstration will be given at the Building Centre of centerless arch construction as described in the Building Research Station's Wartime Bulletin No. 6, which will be published next month. The centerless arch is of concrete blocks and has been developed by the Research Station in order to reduce the need for timber or steel formwork in wartime building construction. The result of next Thursday's demonstration will remain on exhibition at the Building Centre for three weeks, together with illustrations of the application of centerless arches to various war building types.

INSTITUTION OF STRUCTURAL ENGINEERS

MEMBERS ELECTED

Students: C. R. Chorley, Prescott; G. C. Cottrill, Birmingham; I. H. V. Hayes, London; K. A. Parrish, Ilford, Essex; E. Rogers, Liverpool; E. Spencer, Manchester; D. E. Summers, Harrogate.

Graduates: D. O. Hall, Winchester; G. C. Harvell, Boston, Lincs; K. Stimpson, Leicester; J. Ward, Dudley, Worcs.

Associate Members: B. M. Archibald, Captain R.E., Camberley; *A. V. Dadlani, Liverpool and India; *G. T. Gregorian, Iran; *†N. E.

Hough, London; S. G. Rikof, B.Sc., A.M.INST.C.E., Bromsgrove, Worcs.; †R. Turner, Harrow, Middlesex.

Members: §W. C. Andrews, M.INST.C.E., Sutton, Surrey; §D. D. J. Clarke, B.Sc., St. Albans; §H. Houghton, Birmingham; A. F. Jones, Keighley, Yorks; R. Mitchell, Bradford; §M. F. Palmer, A.M.INST.C.E., Bromley, Kent; §R. B. M. Potter, B.Sc., A.C.G.I., Beckenham, Kent; A. J. Thomas, F.R.I.B.A., London; §C. H. Williams, Bristol; §W. V. Zinn, B.Sc., M.INST.C.E., Tadworth, Surrey.

* Passed Associate-Membership Examination. † Transfer from Graduateship. ‡ Re-admission. § Transfer from Associate-Membership.

R.I.B.A.

LOCAL DEFENCE VOLUNTEERS

It has been suggested that a company of architects should be formed to man a blockhouse in the Central London district. Thirty would be required for this purpose, and it would necessitate each volunteer undertaking two eight-hour shifts every three days. Men experienced in the handling of firearms are needed. It is thought that it should be possible to form such a company from architects living in the Central London area or in the near suburbs. The matter is urgent, and members of the R.I.B.A. who are interested in the proposal are asked to submit their names to the Secretary, R.I.B.A., without delay.

BOOKS FOR FORCES

Following note has been received from Mr. Edward Carter, Librarian R.I.B.A.:

SIR,—You have no doubt seen reference to the scheme which has been organized by a Central Committee for the collection and distribution of books to members of the Forces.

The demand is enormous and certainly is not likely to decrease just yet, and there is plenty of evidence received by the R.I.B.A. Library that architects are eager to get architectural and other technical books. Can we have your help in making the scheme known? Two things particularly need publicity:

(1) Anybody sending books need do no more than hand them in unwrapped at any Post Office. They will then be forwarded free of charge, by arrangement with the Postmaster General, to the officially recognized central book depot.

(2) We have been able to arrange that books specially marked "R.I.B.A. Books" will be set aside for distribution, on the advice of the R.I.B.A., to architects. This means that architect donors to the scheme can be certain that whatever books they send marked in this way will be used for the benefit of members of their own profession. It will make it possible for architects to send architectural books which they might otherwise not feel it worth their while to include.

Although this special concession to the R.I.B.A. on the part of the organizers of the Service Libraries and Books Fund refers specially to architectural books, the need for books of a general recreative character cannot be overstressed. Architects who want to send books of this kind should not mark them "R.I.B.A. Books," so that they can go into the general pool.

DIARY

Thursday, June 27. SOCIETY OF WOMEN ARTISTS. At the Royal Institute Galleries, 195 Piccadilly, W.1. Exhibition of pictures, sculpture and crafts. Until June 28. 10 a.m. to 5 p.m. *HOUSING CENTRE.* 13 Suffolk Street, S.W.1. A.R.P. Exhibition: "Protect Your Homes." Until July 12. 10 a.m. to 5 p.m. (Saturday, 10 a.m. to 12 noon). *L.C.C. CENTRAL SCHOOL OF ARTS AND CRAFTS,* Southampton Row, W.C.1. Annual School Exhibition entitled "Design's Contribution to Export and Industry." Until July 17. 10 a.m. to 5 p.m.

Friday, June 28. ARCHITECTS' REGISTRATION COUNCIL. Quarterly Meeting.

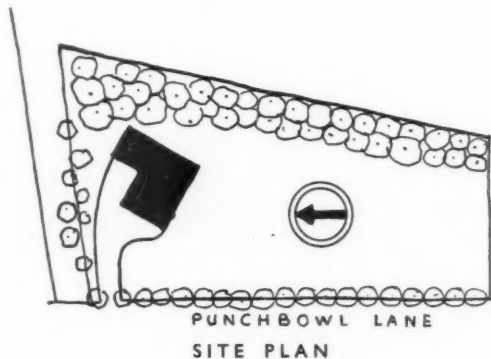
Tuesday, July 2. HOUSING CENTRE. "Family Allowances." By Mrs. Hubback. 1 p.m.



From the R.A. Exhibition: Premises at The Tything, Worcestershire. By W. B. Sinclair and V. Barton



North-west front



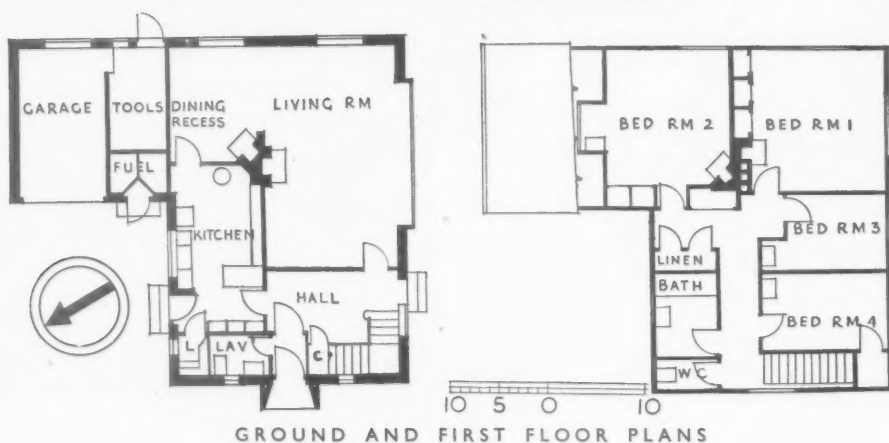
SITE—Approximately half acre in extent, the site runs north and south, with Punchbowl Lane on the long (west) side. Well wooded on the east side, the ground rises steeply and the trees had to be preserved. For these two reasons the building line was kept to 35 ft. from the lane and the house sited to face south-west.

HOUSE IN DORKING

DESIGNED BY R. D. HUNT



Left, south-west front



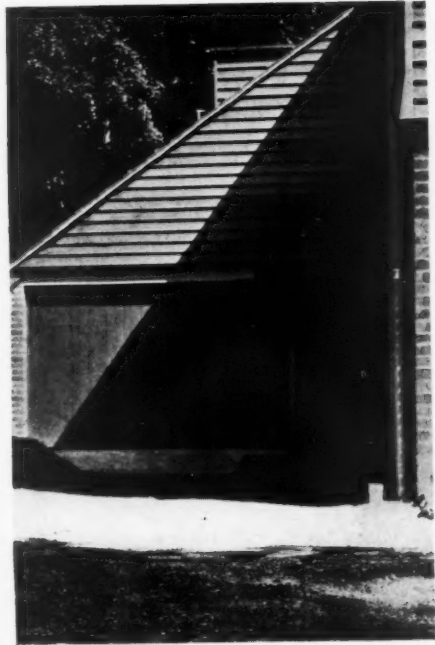
GROUND AND FIRST FLOOR PLANS

PLAN—A simple rectangular plan with lean-to extension (for garage, etc.). Provision has been made for possible future extensions.

CONSTRUCTION AND EXTERNAL FINISHES—Walls : 11-in. cavity, with sand-faced wire-cut bricks externally up to ground floor window heads ; 4-in. timber framed, with $\frac{3}{4}$ -in. diagonal sheathing, building paper and cedar weatherboarding up to eaves. Roof : red sand-faced double Roman tiles to a pitch of 35 degrees on battens and felt. Internal walls : $4\frac{1}{2}$ -in. brick and hollow tile on ground floor ; 4-in. stud partitions on first floor. Floors : T. and G. Columbian pine, with the exception of the living-room and dining recess, which are maple strip. Lavatory, larder and portions of kitchen floor are of red quarry tiles. Windows : standard metal casements with no glazing bars.

INTERNAL FINISHES—Living-room, dining recess and hall : walls, plaster finished with wood float, distempered warm grey. Remaining walls plastered to smooth finish, distempered ; the plastering to first floor walls being a skimming coat on plasterboard. Ceilings throughout $\frac{1}{2}$ -in. wall-board jointed with V-joint, distempered ivory. Staircase : deal (stained) treads and risers with painted newels and horizontal tube members in lieu of balustrade. Joinery generally is painted, flush doors being finished in eggshell gloss.

H O U S E I N D O R K I N G



Above, another view of south-west front; top, detail of north-west front; right, entrance to garage and (below) living-room window

SECTION



SERVICES—Direct hot-water system from boiler in kitchen. Coal fires to living-room, dining recess, bedrooms 1 and 2.

COST—£1,220, including drive and paths around house. Price per ft. cube, just under 1s. General contractors were A. P. Bowley and Sons; for list of sub-contractors see page xx.

D E S I G N E D B Y R . D . H U N T



Mr. Val Harding's house at Farnham Common, designed by himself when a partner in Tecton. An obituary notice of Mr. Harding appears below.

OBITUARY

E. STANLEY HALL

[By W. H. ANSELL]

The death of Edwin Stanley Hall, at a time when his great gifts were being used for the good of the national war effort, the architectural profession and the Institute of which he was President, is a loss which will be severely felt. His Presidency was the fitting culmination to years of self-denying work on behalf of the R.I.B.A. He had filled the offices of Vice-President and Honorary Secretary and had taken a leading part in almost all the activities of the Institute.

When at last the Presidency came to him, in obviously difficult times, he cheerfully shouldered its responsibilities with no thought of self, but welcoming it for the opportunities it would give to advance the good of architecture and of architects.

The outbreak of war so soon after the beginning of his term of office enormously increased the difficulties of his position and the work it involved.

Without hesitation he gave up almost the whole of his time to working for the good of the profession. It was his letter to *The Times* that inaugurated the correspondence on the right way of using the Building Industry in the war effort; he never ceased to impress on the Government and the great Services and spending departments that the architectural profession had a most valuable contribution to make to the building programme of the nation. Incidentally, the successive reports of the Select Committee on National Expenditure justify to an amazing extent every criticism which the Building Industry put forward.

Stanley Hall possessed a balanced and well-ordered mind, with a power of

assimilating detail and broad principles alike.

His was a friendly nature, both giving and inspiring affection, and all these qualities made him an ideal ambassador of the profession.

His Presidential term was short in time but notable for the value of the work done.

His professional work, much of which consisted of hospital design, showed the same comprehension of sound planning allied to the most careful attention to detail: and these were qualities very characteristic of the man himself.

H. S. DIXON

The death has occurred of Mr. Herbert Selwyn Dixon, L.R.I.B.A., of Whitley Bay.

Born in North Shields where he lived for 30 years, he was articled to his uncle, the late Mr. Henry Gibson. He later became a partner in the firm of Dixon and Bell, architects, with offices in North Shields and Newcastle. Latterly the practice has only been carried on at Newcastle.

O.N. ACTIVE SERVICE

VAL HARDING

The JOURNAL regrets to announce the death of Valentine Harding, who was killed in action on May 30 while serving as a 2nd Lieutenant in a Field Company, R.E. He was born in 1905 and was educated at Rugby, Corpus Christi College (Oxford), and the A.A. School. He was a good pianist and excellent painter in water colours. Harding was one of the group of young architects who, in 1932, founded the firm of Tecton, in which he remained a partner until 1936. During this period he designed his own house at Farnham Common and was principally responsible for the altera-

tions to the Vega Restaurant, W.I. He also worked with Tecton on the Highpoint flats and other buildings.

In 1936 Harding left Tecton and set up in partnership with Godfrey Samuel, and this partnership continued until the outbreak of war. Harding's own work since included the Dulwich Nursery School, an evacuation camp for that school, and several houses. He also collaborated with Godfrey Samuel in the design of two houses, at Withyham, Sussex, and at Hampstead, and various other works. He was a member of the MARS group and, at various times, of its Executive Committee.

Valentine Harding was one of the most important of younger British architects. He had great enthusiasm for modern architecture—but it was an enthusiasm alert to detect and dislike pretentiousness or mannerism. All his own work was simple, unpretentious and most scrupulously related to surroundings. His death is a great loss to modern architecture in this country.

Mr. Harding was married in 1930 and had three children.

BOOKS

QUANTITY SURVEYING

More Advanced Quantity Surveying. By Arthur J. Willis, F.S.I. London: Crosby, Lockwood and Son, Ltd. Price 21s.

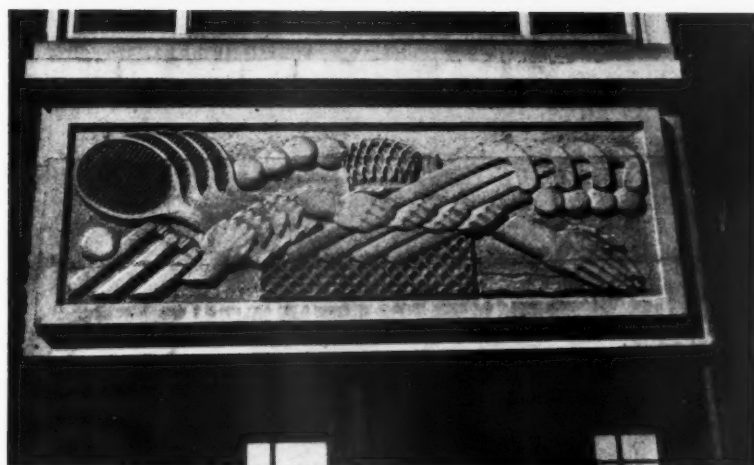
THIS book is a sequel to the *Elements of Quantity Surveying*, and the author has made several departures from the arrangement of the earlier book. Mr. Willis has introduced on facing pages a "running commentary" on the examples of taking off which, he hopes, "will both guide the student's train of thought and elucidate the text of the examples." He has tried to anticipate questions which might be asked by a student, and has also set down points to which he would himself draw attention in lecturing. Each note is cross-referenced with the examples.

The drawings referred to in the examples are provided as loose sheets in a separate cover for more convenient use. Mr. Willis states:

The type of drawing necessary for more advanced work is of such size that it cannot be reproduced on a page, if it is to be kept to a scale used in practice, and this I consider essential. Plates folding into the book are awkward in use, and I feel sure that the student will appreciate the advantage of being able to follow through the examples with a separate drawing open in front of him.

The sheets are to a standard size of 25 in. by 20 in., and all are reproduced to a scale suitable for practical purposes.

One of the most interesting features of the book is the chapter devoted to writing the specification from the bill of quantities, illustrating a suggested method of combining the bill and specification as well as the more conventional method of writing a separate specification.



Three of the five artificial stone panels, by Mr. John Bickerdike, over the doors on the south-east front of the assembly hall block. Panels represent the activities of the School.

EXTENSION TO GIRLS' SCHOOL, DULWICH, S.E.

DESIGNED BY J. E. K. HARRISON



Top, view from east ; bottom, assembly hall block

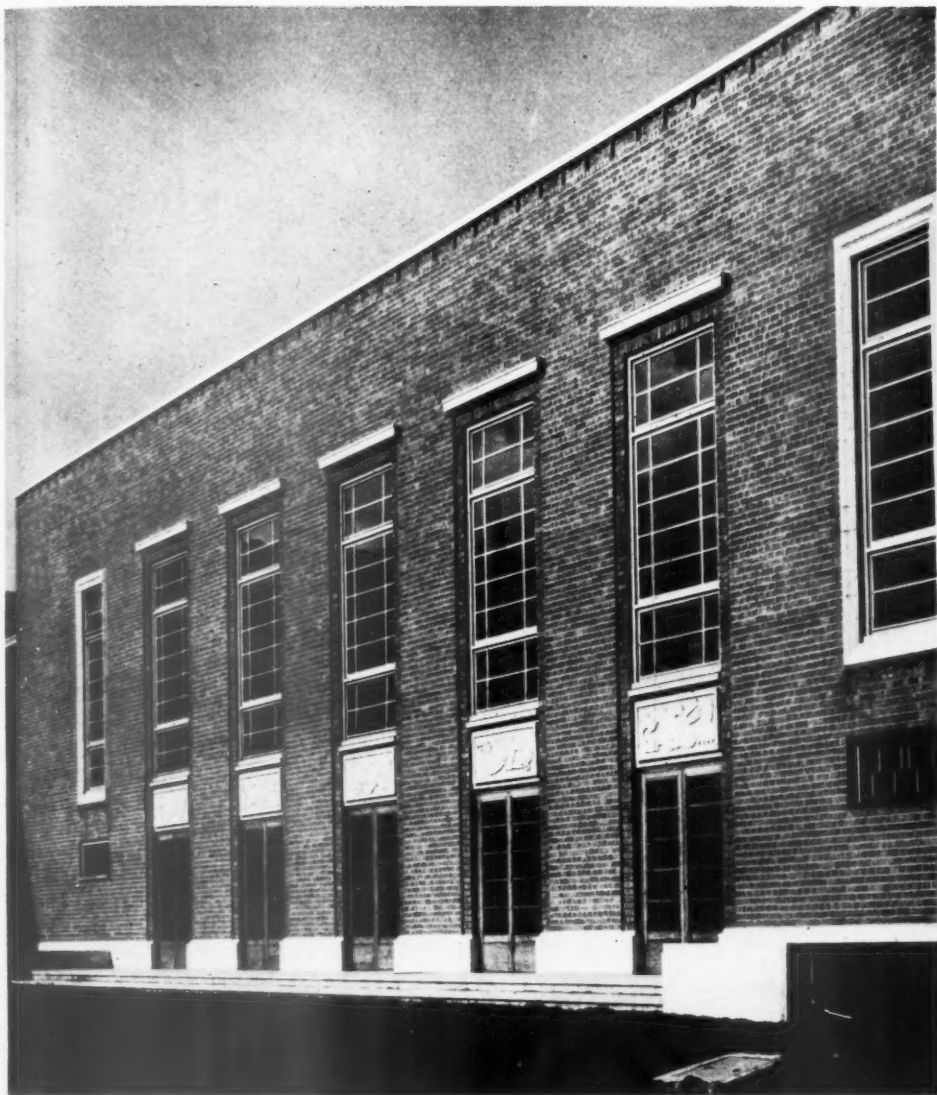
GENERAL—Extensions and alterations to existing buildings to provide accommodation for 500 girls. New assembly hall and a swimming bath (75 ft. by 25 ft.) were required, but it was decided finally to combine these into one hall which could be used as an assembly hall throughout the autumn and winter (when nearly all important school functions take place) and as a swimming bath during the summer, the old hall then being used for assembly. Changing room, showers and lavatories adjoining the swimming bath were also required for changing for games and arranged for use in connection with school matches on Saturday afternoons, when this could be shut off from the remainder of the school. Music room planned to avoid disturbance of other classes, having flat roof over (for use in conjunction with art room) and separated from classrooms. **SITE**—Extensions have been planned to link up with old building. It had been found that, owing to heavy traffic in the

main road, classrooms facing the road were unsatisfactory. For this reason, new teaching rooms were planned to face south-west. A total fall of 13 ft. from ground floor level in the old building to ground level at end of new assembly hall necessitated several changes of level.

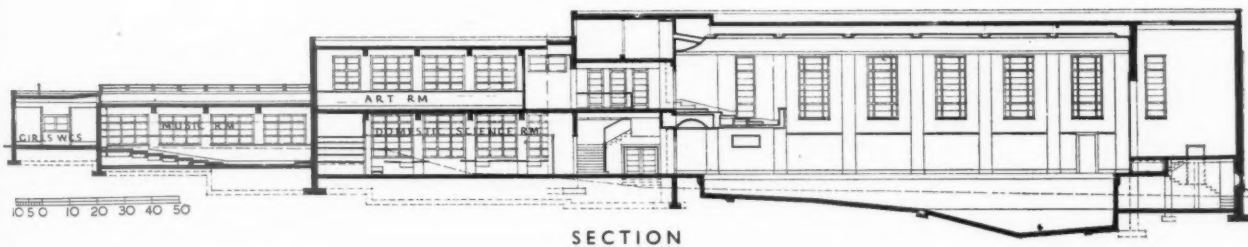
CONSTRUCTION—Solid brick walls with R.C. floors and roofs supported on steel beams. Roofs covered generally with built-up roofing on insulation board. Ground floor partition, 4½-in. brick ; 4-in. partition blocks were used for first floor partitions to reduce weight. Swimming bath constructed in R.C. with expansion joint around floor. Partitions separating practice rooms from music room and domestic science room are double, with inner leaf of breeze blocks built directly off 1-in. cork sub-floor and finished with cork dado.

EXTERNAL FINISHES—No attempt has been made to follow elevational treatment of existing building, but part of extension

EXTENSION TO JAMES ALLEN'S GIRLS' SCHOOL,



South-east elevation of the assembly hall block

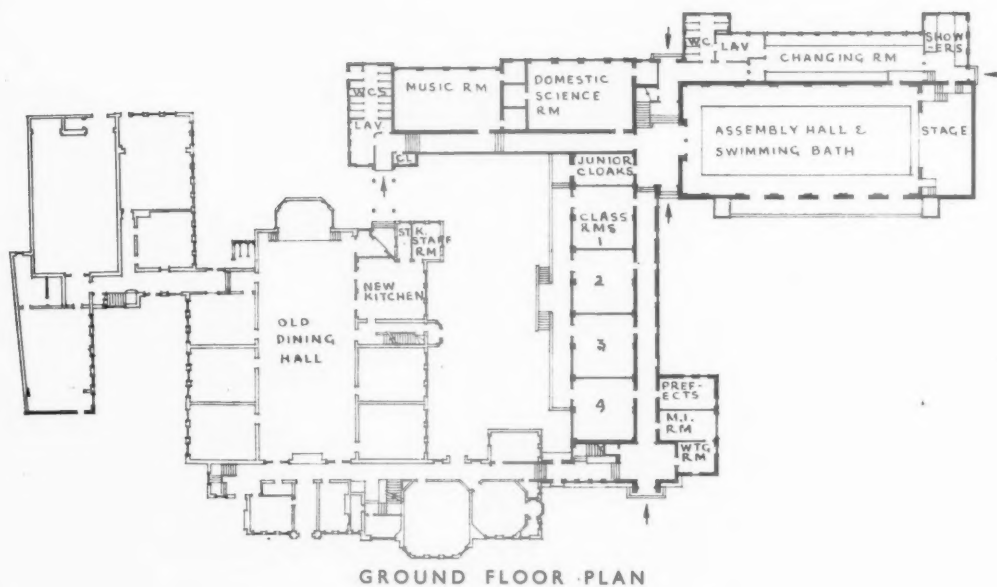


nearest road and connecting with old building is faced with red bricks to harmonize with those of old building, remainder of elevations being faced generally with multi-coloured facings; piers between ranges of windows are faced in rustic flettons treated with stone paint. Dressings are in artificial stone, also

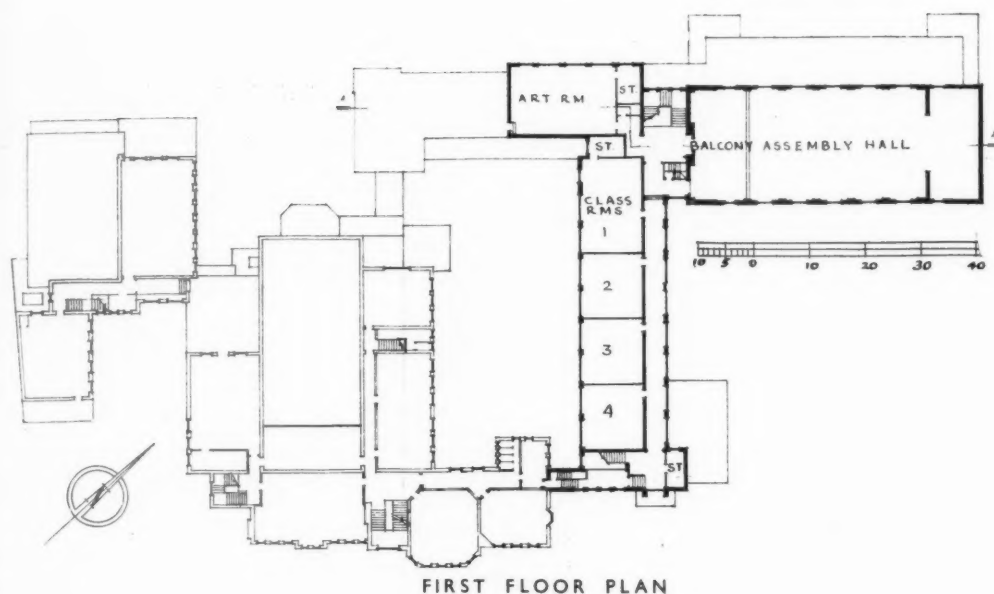
used for the panels over the five doors on the south-east side of the assembly hall which were carved by Mr. John Bickerdike. Steel windows in wood frames; wrought iron grilles in main entrance doors, window above entrance and in some windows of the assembly hall.



The assembly hall which, as shown in the illustration on the right, can be adapted for use as a swimming bath



EXTENSION TO JAMES ALLEN'S GIRLS' SCHOOL, DULWICH:



FIRST FLOOR PLAN

INTERNAL FINISHES—Swimming bath is lined with white glazed tiles, with band of blue-green tiles below scum-trough. Bath surround and floors of changing room and showers are of special non-slip composition consisting of rubber latex and cement. Dado round hall 7 ft. 6 in. high in cement cold-glaze finish of pale oyster shade, used also for full height of projecting piers and around proscenium opening. Walls between piers and above dado are covered with acoustic tiles which are applied also across back of balcony and on balcony front. Ceiling is suspended from main roof. In winter, bath can be filled in with oak sectional floor supported on tubular steel staging and diving stage is dismantled and stage extended forward to proscenium opening. Steel staging and sectional flooring, etc., is accommodated in a store beneath the stage. Corridors have beech block floors, egg-shell glazed tiled dados and distempered plastered walls above. Teaching rooms generally are finished similarly, but with linoleum dados in various colours. Beech blocks have been used for treads and risers of main staircases, and walls of staircases of entrance hall and crush hall are finished in cement cold-glaze to ceiling height; same finish is used for walls of changing room, showers and lavatories. Floors of entrance and crush halls are of terrazzo tiles. Domestic science room has linoleum floor with surround of buff quarry tiles, tiled dado 7 ft. high and ceiling of insulation board, cut to form squares and fixed to battens, to prevent condensation. All external and main internal doors are in oak, doors to rooms generally being flush with small observation panel. Library fittings are also of oak.

SERVICES—Heating is by low-pressure hot-water system with coke-fired boilers incorporating the system in the old buildings. Bath water is heated by a calorifier supplied by

the same boilers which, in the summer, can be used for this purpose and for supplying a moderate amount of heating to the building as well, if desired. Filtration plant installed is situated under the stage and deals with the whole volume of water in six hours. Electrical installation includes a system of clocks and bells arranged to ring automatically on a pre-determined programme and also to serve as fire alarms. Main lighting fittings over the swimming bath have been designed to enable them to be lowered from above for re-lamping, etc. A cinematograph projection room is situated at the back of the balcony at ceiling level. Extract ventilation ducting has been installed in the re-equipped cloakrooms and scullery in the basement of the old building and these rooms have also been adapted and protected to provide accommodation as air-raid shelters.

General contractors were L. and W. Whitehead, Ltd. For list of sub-contractors, see page xx.

Below, view from west



DESIGNED BY J. E. K. HARRISON

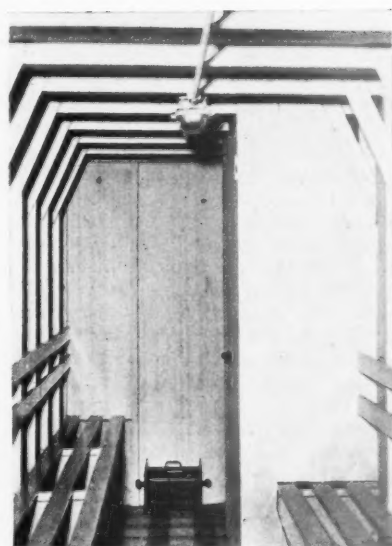
AIR RAID SHELTER, PARK ROYAL

DESIGNED BY
H. G. HUCKLE

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2



3



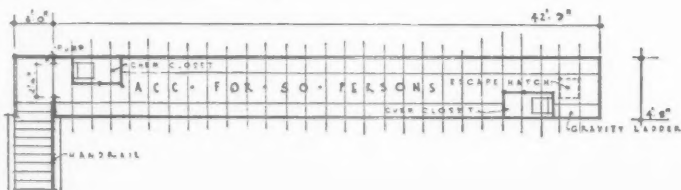
4

1 : entrance ; 2 : general view from entrance ; 3 and 4 : collapsible steel ladder, closed (3) and open (4)

GENERAL—Air raid shelter for 50 persons at the British Rola's factory, Park Royal. Owing to the restricted nature of the site it was necessary to build the shelter within the factory, and in order not to interfere with the organization of the plant layout, this was placed underneath the factory floor.

CONSTRUCTION AND FINISHES—Standard steel unit type with sections bolted together and bedded in mastic, the seating being supported on brackets incorporated with the steel units. Floor, formed of concrete and hollow blocks, enables any water to run underneath the floor to the sump, which is fitted with an automatic pump. Shelter is

treated internally with a cream paint. This paint incorporates a powdered cork which prevents condensation forming. Entrance is by means of concrete steps, and an emergency exit is provided at the opposite end with a patent steel collapsible ladder.



SOME QUESTIONS ANSWERED THIS WEEK:

- ★ *AS there have been so many variations in the Schedule of Reserved Occupations I should be obliged if you would inform me of the present position of architects and of surveyors* - - Q₃₈₂
- ★ *IN a specification I am pricing it is mentioned that areas of roof lighting are to be blacked out using bitumen scrim. What is this and from which firms is it available?* - - Q₃₈₉
- ★ *CAN you give me the address of a firm or firms supplying slate slabs for w.c. partitions and the short brass standards to keep them clear of the floor?* - - - - Q₃₉₁
- ★ *FROM what firms could we obtain prices for the supply in London of sand lime bricks?* - Q₃₉₄

THE ARCHITECTS' JOURNAL INFORMATION CENTRE

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

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

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

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

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

Any questions about building or architecture may be sent to:

THE ARCHITECTS' JOURNAL

45 THE AVENUE, CHEAM, SURREY.

Telephone:

VIGILANT 0087

or ring the Architects' Journal Information Centre at

R E G E N T 6 8 8 8

Q₃₈₀ SURVEYOR, LONDON PROPERTY COMPANY.—*I have been making a number of enquiries regarding the degree of RESISTANCE TO SHATTERING which is given to glass by the application of the many transparent coatings now available, and also about the permanency of flexibility of the applied film. From what information I can glean from official literature and from various conversations I have had with people who should know, I am not at all satisfied that the results expected will be obtained. The matter is one of considerable importance to my company since it controls a very large number of flats, and I hesitate at the moment to make any sort of recommendation. What are your feelings in the matter?*

The Information Centre has no authoritative information on the subject of this enquiry. The latest publication of the Ministry of Home Security* cannot be said to recommend the use of liquid preparations very strongly, and suggests that at least some of them may become brittle after a period. At the same time, transparent coatings fall into several classes—rubber latex solutions, cellulose, heavy oil varnishes, liquified plastics—and it may well be

* Your House as an Air Raid Shelter. H.M. Stationery Office. Price 3d.

that the efficiency of the various preparations varies greatly. It would appear possible for a Government Department to arrange tests of all ways of preventing glass flying and to give publicity to those which were most successful. This does not seem to have been done: and it must be admitted that the conditions and distances at which glass is broken or remains unbroken after a bomb explosion seem infinitely variable: and therefore the efficiency of protective methods is likely to vary equally. It therefore seems that at present no authoritative verdict can be given on any glass splinter protection device—with the possible exception of strong, half-inch mesh wire netting.

land valuation surveyors) are reserved from the age of 18. In the preamble to the schedule it is stated that the schedule "is applicable to any person, irrespective of the industry in which he is engaged, who follows as his primary occupation" one of the occupations contained in the schedule. It should be carefully noted that this does not mean "irrespective of what he is doing at the moment." A person who has changed from a reserved to an unreserved occupation does not continue to be reserved under his old occupation. It thus appears that the test of classification under any particular group or section is that the individual should have been engaged to do, and now be doing, the work of a person of such classification.

tion, has been used in cleansing station work. No doubt, therefore, if individual application is made to the department concerned the construction may be approved, although there is no official recommendation on this point.

Q381 ARCHITECT, A.R.P. LOCAL ADVISORY PANEL.—*In dealing with INCENDIARY BOMB FIRES, why can't householders use a hose with a fine rose attached to the mains water supply?*

A hose with either a rose or jet nozzle would be a useful ancillary to a stirrup pump and bucket. But as a substitute it has disadvantages. It will require a greater length of hose in order to ensure that any part of the house can be reached, and it is useless for helping a neighbour. Moreover, any house which has a cold water storage tank or a full bath will have water available to fill a number of buckets; whereas water mains may be fractured, or their pressure be greatly diminished by withdrawals by fire engines working in the same neighbourhood.

Q382 CHARTERED ARCHITECT, CHELTENHAM.—*As there have been so many variations in the Schedule of RESERVED OCCUPATIONS I should be obliged if you would give me some information about the present position of architects or surveyors. I am a chartered architect but served articles as an architect and surveyor, and at present am engaged in a surveying capacity with a firm of architects dealing with surveys, quantities, valuations, estimating and pricing, dilapidations, etc. Would you inform me what my position is; and, if either of these professions is reserved, what the reservation age is—also whether it is anticipated there will be any alterations in the near future?*

The revised Schedule of Reserved Occupations was published on June 18 (H.M. Stationery Office. Price 1s.). In it architects are unreserved at all ages, and surveyors (building, quantity, estimating, measuring, and

Q383 ARCHITECT, LONDON.—*I have moved my family to a SMALL house in the country where I wish to instal a SEPTIC TANK sewage disposal system. Where may I obtain particulars of a small system (five persons)? Also, as the water is from a deep well, which firms supply small electrically-operated pumps?*

With small capacity septic tanks these are usually constructed by a local builder and the special fittings obtained from firms such as Winsor, Ltd., Terminal House, Grosvenor Gardens, London, S.W.1, or Burn Bros. (London), Ltd., 6-8 Stamford Street, Blackfriars, London, S.E.1. These firms, in addition to supplying the fittings, will provide drawings and data showing suitable layout. Small electrically operated pumps for raising water from deep wells are obtainable from R. A. Lister & Co., Ltd., Dursley, Gloucester, or James Beresford and Son, Ltd., Birmingham, 7.

Q384 ARCHITECT, LONDON.—*In connection with a cleansing station scheme which we are preparing, we are contemplating the use of individual GLASS LENSES LET INTO the concrete ROOF to provide a small amount of daylight inside the building. Do you know of any provision under the Civil Defence recommendations approving of such a construction?*

No. At the moment the extent of such regulations provides only for the use of glass brick or lens in the walls and in a position at least 6 ft. from the ground. It would appear, however, that such a roof treatment, carried out in isolated individual toughened lens of double construc-

Q385 R.E., YORKS.—*In view of the timber shortage I wish to consider ALTERNATIVES TO HARDWOOD for FLOORING in barrack blocks now under construction. I shall therefore be obliged if you can make any suggestions for floor finishings other than wood, submitting the names of manufacturers. These floors will have to stand up to hard wear.*

There are a wide number of alternatives, but these may be further limited by the necessity to have some degree of comfortable conditions underfoot. Of the materials available, however, the following would seem to be the most likely alternatives:—
Hardened cement pavings: Laid in situ and, if necessary, integrally coloured.

Jointless floorings: The magnesium oxychloride type. These can form quite a durable flooring under severe conditions of wear. Where these conditions obtain it is usual to specify the material to be laid in an "earth dry" condition and tamped into position—that is, the raw materials are mixed together and just moistened, tamped into position and trowelled smooth. The ordinary method of laying is for the material to be thoroughly wetted and the mix spread over by trowel.

Coloured asphalts: Could be laid direct to the concrete surface.

Thin plastic rubber coatings: These, with mineral fillers, might be adopted for the work.

Ruberoid flooring: The Ruberoid Co., Ltd., Lincoln House, 296 High Holborn, London, W.C.1, produce a floor covering in a bitumen-impregnated material. The material normally is supplied in grey and in colours, but we believe due to export commitments the supply of the coloured material will take time, but the ordinary standard grey is available from stock. The Celotex Co., Ltd., North Circular Road, London, N.W.10, also produce a coloured surface bitumen-impregnated fibre board used for flooring purposes.

Tiles: Of the tile type of floors, asphalt tiles are available from Highways Construction Co., Iddesleigh House, Caxton Street, London, S.W.1. Coloured cement tiles could also be used, or quarry tiles. Two forms of composition tiles of interest for this work are: Granwood, by the Granwood Flooring Co., Ltd.,

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DIAGRAMS ILLUSTRATING ACTION OF BENDING MOMENTS IN COLUMNS :

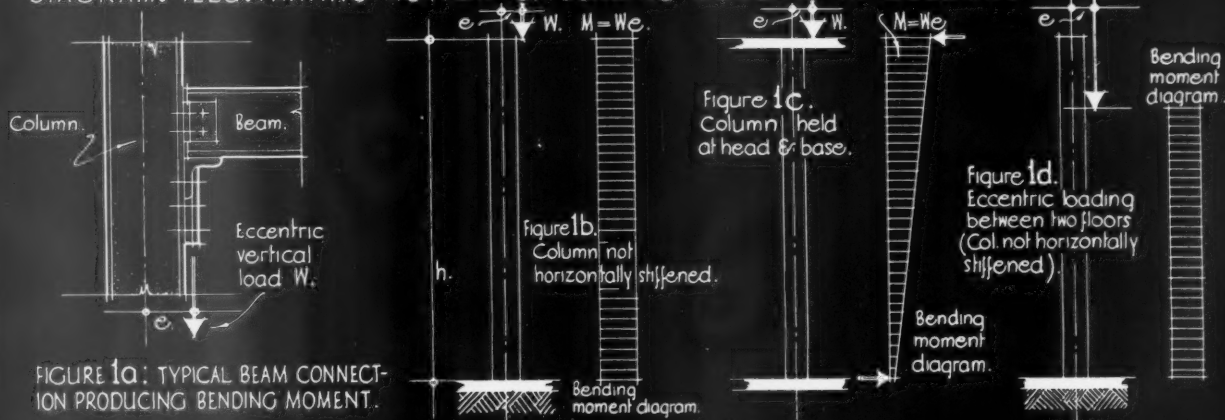


FIGURE 1a: TYPICAL BEAM CONNECTION PRODUCING BENDING MOMENT.

FIGURE 1b. Column not horizontally stiffened.

FIGURE 1c. Column held at head & base.

FIGURE 1d. Eccentric loading between two floors (Col. not horizontally stiffened).

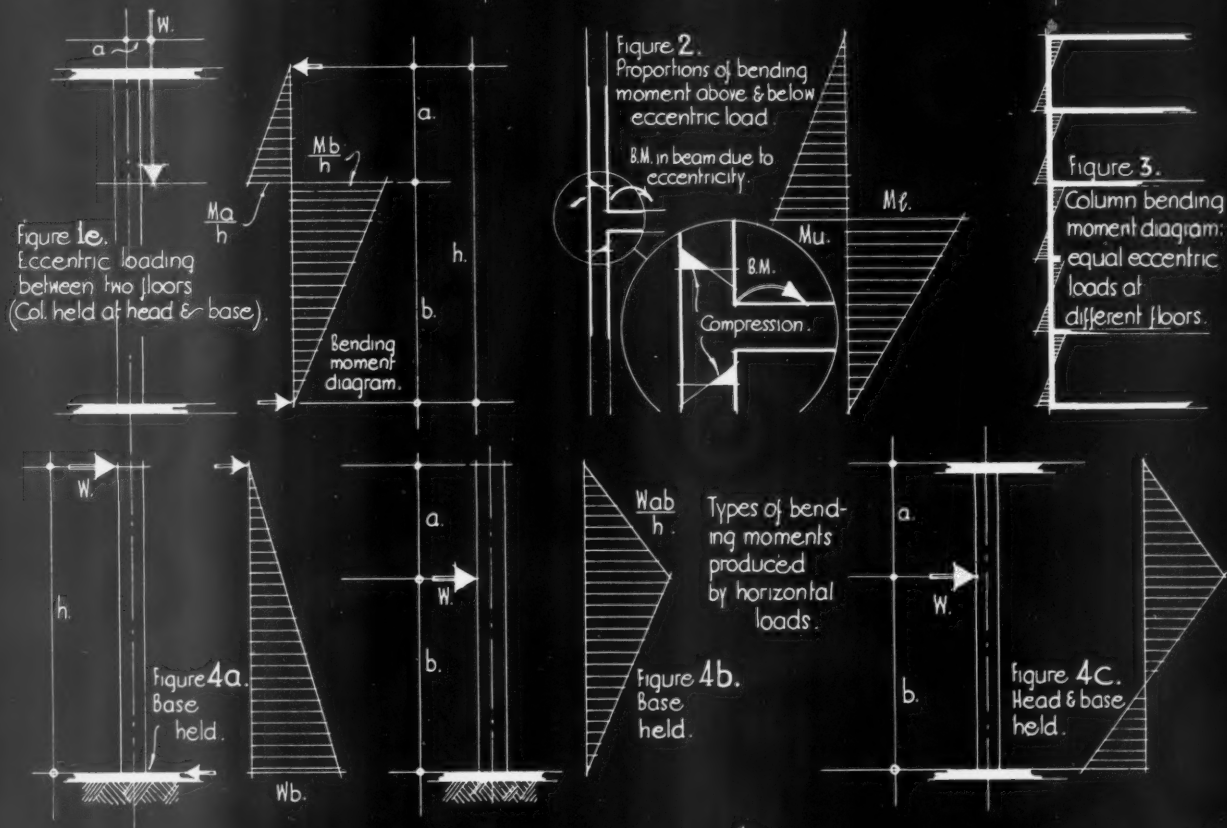


FIGURE 1e. Eccentric loading between two floors (Col. held at head & base).

FIGURE 2. Proportions of bending moment above & below eccentric load.

B.M. in beam due to eccentricity.

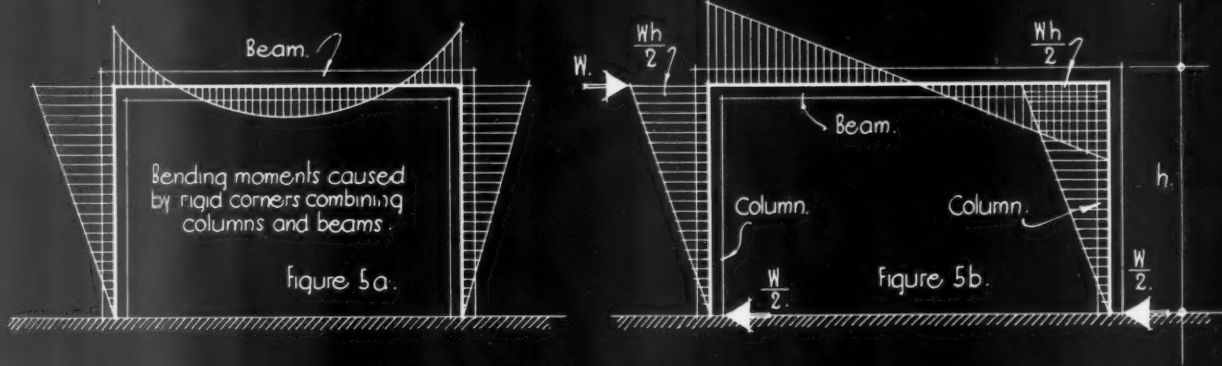
FIGURE 3.

Column bending moment diagram: equal eccentric loads at different floors.

FIGURE 4a. Base held.

FIGURE 4b. Base held.

FIGURE 4c. Head & base held.



Issued by Braithwaite & Co., Engineers Ltd. Compiled by C.W. Hamann, Consulting Engineer.

INFORMATION SHEET: STEEL FRAME CONSTRUCTION: No. 27.
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS, ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WCI

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INFORMATION SHEET

• 798 •

STRUCTURAL STEELWORK

Subject : Columns to Withstand Bending Moments as well as Direct Load : I, Action of Bending Moments in Columns.

General :

This series of Sheets on steel construction is not intended to cover the whole field of engineering design in steel, but to deal with those general principles governing economical design which affect or are affected by the general planning of the building. It also deals with a number of details of steel construction which have an important effect upon the design of steelwork.

Both principles and details are considered in relation to the surrounding masonry or concrete construction, and are intended to serve in the preliminary design of a building so that a maximum economy may be obtained in the design of the steel framing.

This Sheet is the twenty-seventh of the series, and illustrates the action of bending moments in columns.

Bending Moments :

The efficiency coefficients given in the tables on Sheets Nos. 11 to 17 of this series for columns and struts refer to centrally loaded columns only ; but many columns have to transmit bending moments as well as central loads, and thus have to be of a larger section for the same load than if they had been centrally loaded only.

Bending moments in columns can be caused in three ways :—

- (A) By eccentric vertical loads (Figure 1).
- (B) By one or several horizontal loads (Figure 4).
- (C) By the application of rigid corners combining columns and beams to frames (Figure 5).

(A) Eccentric Vertical Loads :

Where a load rests eccentrically on a column (Figure 1a) it is equivalent to the combined action of a central load and a bending moment. Such a bending moment will act equally for the entire length of the column if the column is not horizontally stiffened (Figure 1b). If the head and base of the column are held in position, for instance in a steel frame building, it can be assumed that the bending moment gradually disappears. The triangular moment diagram is shown in Figure 1c.

If a column is eccentrically loaded on a point between two floors, the bending moment diagram refers to the lower part only if the column is not stiffened sideways (Figure 1d), but if it is held horizontally in the upper and lower floors (Figure 1e), bending moments can be assumed to be distributed to the upper and lower parts of the column in proportion to the length of these parts.

If such eccentricity occurs at the intermediate floor level, the upper length as well as the lower length is affected (Figure 2), and the proportions of the bending moment taken by the upper and lower parts are as follows :—

$$M_u = \frac{M \times I_u}{I_u}$$

$$M_l = \frac{M \times I_l}{I_l}$$

where I_u and I_l = the moments of inertia of the upper and lower column referring to the same axis on which the bending moment acts,

and l_u and l_l = the length of the upper and lower parts of the column respectively,

and M_u and M_l = the bending moments in the upper and lower lengths.

In general, it is not necessary to give such an exact calculation, and as an approximation, the following formula will serve :—

$$M_u = \frac{3}{8} M$$

$$M_l = \frac{5}{8} M$$

It is important to realize that the bending moment in the upper part of the column always acts in the opposite sense to the lower bending moment. (Figure 1e and as explained in Figure 2.) If, therefore, the same moment or eccentricity acts for one column at different floors, the bending moment is produced, as shown in Figure 3.

(B) By One or Several Horizontal Loads :

The second method of producing bending moments (by horizontal loads) is shown in Figure 4, and in this case the column acts as a vertical beam. For reasons of simplicity, columns are usually calculated as if they were hinged at the floors and their continuity is not taken into account.

(C) Rigid Corners combining Columns and Beams :

In some cases rigid frames are formed from beams and columns, producing bending moments as shown in Figure 5.

The general aspects, the application and economy of rigid frames will be dealt with in another Sheet, and in this connection it is important to realize that in every such frame the column is identical with an ordinary column which has to withstand a bending moment larger than where no such rigidity occurs.

For ordinary steel skeleton frame buildings, the first mentioned origin of bending moments (eccentricity) is by far the most important, and Figure 1a shows how such a bending moment is produced by a typical connection.

Previous Sheets :

Previous Sheets of this series dealing with structural steelwork are Nos. 729, 733, 736, 737, 741, 745, 751, 755, 759, 763, 765, 769, 770, 772, 773, 774, 775, 776, 777, 780, 783, 785, 789, 790, 793, and 796.

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Riddings, Derbyshire, and Durablock, by Terradura Flooring Co., Ltd., Providence Works, Miles Platting, Manchester.

Cottage, Stratton Road, Beaconsfield; and the scrim cloth from C. F. Anderson and Sons, Ltd., Harris Wharf, Graham Street, London, N.1.

also be obliged if you can inform me of the formalities to be observed at the present time in connection with controlled materials, priority orders, contract numbers, etc., and to whom and by whom the applications are to be made.

Q386 BUILDING PERIODICAL, LONDON.—On page 9 of *Building Research War-time Bulletin*, No. 3, there is illustrated the "Fidler" system of wall ties for **HOLDING BREEZE SLABS IN POSITION**. From which firm are these ties available?

The name "Fidler" is applied to the system of building and was the name of the original patentee. It is learned from the authorities, however, that the system is no longer protected by patents. Similarly with the wall ties and spacers used, these are not necessarily the product of any particular firm; they may be made up from hoop iron by any local firm.

Q387 EMBASSY, LONDON.—Who provides the "Bell" look-out shelters?

There would seem to be no record of any shelter of this name, but the bell-shaped steel look-out shelters are produced by the firms given below.*

Q388 MERCHANTS, LONDON.—What is the present address of the Val de Travers Asphalte Paving Co., Ltd.?

The emergency address is the Val de Travers Asphalte Paving Co., Merle Wood, Mount Harry Road, Seven-oaks.

Q389 BUILDERS, LONDON.—In a specification I am pricing it is mentioned that areas of roof lighting are to be blacked out using **BITUMEN SCRIM**. What is this and from which firms is it available?

The term bitumen scrim is used no doubt to indicate the use of bitumen emulsion and embedded scrim cloth. The usual practice is for a heavy coating of bitumen emulsion to be applied over the glass and for a butter cloth type of fabric or a loosely woven canvas to be embedded into this coating, a further coating of the bitumen emulsion being afterwards applied. Bitumen emulsion for this purpose could be obtained from the Merchant Trading Co., Columbia House, Aldwych, London, W.C.2, or Macartney, Ltd., Stratton

* Richard Costain, Ltd., 18 Upper Woburn Place, London, W.C.1; Solent Engineering Co., Ltd., Bush House, Aldwych, London, W.C.2; Constructors, Ltd., Nickel Works, Erdington, Birmingham; John Booth and Sons, Hulton Steel Works, Bolton, Lancs.

Q390 TELEGRAPH COMPANY, LONDON.—Can you give me an approximate figure for the **INCREASE IN COST** due to rise in labour and materials **FOR BUILDING CONTRACTS** placed before the war and now about to start?

The percentage increase will vary enormously with the type of construction. For example, a factory—essentially a shell and of reinforced concrete—will show an entirely different percentage increase from a structure of brick elaborately equipped internally. To obtain any degree of accuracy the tender amount for any particular building would require to be split up into trades, then for the trades to be further divided into ratio of labour and materials (see question No. 328, published in *ARCHITECTS' JOURNAL*, May 23rd last). A constant percentage could be added to the entire labour cost; and to the materials cost percentages could be added as shown in the *Prices Supplement* published in the *ARCHITECTS' JOURNAL* of June 6.

Q391 ARCHITECT, BLACKBURN.—Can you give me the address of a firm or firms supplying **SLATE SLABS FOR W.C. PARTITIONS** and the short brass standards to keep them clear of the floor?

The slate slabs for the partitions are available from Westmorland Green Slate Quarries, Ltd., Keswick on Derwentwater, or the Oakeley Slate Quarries Co., Ltd., 332 Abbey House, Victoria Street, London, S.W.1. The short brass standards could be made up locally using short lengths of brass tube and screwed flanges. If difficulties are experienced in obtaining these, enquiries can be made from James Gibbons & Co., Ltd., St. Johns Works, Wolverhampton, or Comyn Ching & Co., Ltd., 22 Little St. Andrew Street, London, W.C.1.

Q392 ARCHITECT, STRET福德.—I am designing an office block for a firm engaged on work of national importance. If I am called up for **MILITARY SERVICE** before the job is completed is it possible to postpone this until the end of the contract, as I am attending to the work alone? I shall

Q393 BUILDING CONTRACTORS, LONDON.—From what firms could we obtain prices for the supply in London of **SAND LIME BRICKS**?

The names of suitable firms are given below.† The names have been chosen so as to provide as complete a circle as possible round the London area.

Q394 ARCHITECT, STAFFS.—Like most architects I have had no architectural work to do since the war commenced. I am now engaged full time on technical journalism, the subjects being confined to war production problems—building under war conditions for example. This work I am doing as a free-lance. Is this occupation reserved? I am also doing a little work as an A.R.P. consultant. Is this a reserved occupation?

Architects are entirely unreserved. Journalists are reserved at 30 if they are members of the editorial staffs of newspapers. Free-lance journalists are unreserved. Architects engaged in A.R.P. work are reserved at 30

† Kentish White Brick Co., Ightham, near Sevenoaks, Kent; Uxbridge Flint Brick Co., Cowley Bridge Works, Uxbridge; M. McCarthy and Sons, Ltd., Bulwell, Nottingham; Cement Marketing Co., Ltd., Caxton Works, Coldhams Lane, Cambridge; Midhurst Whites, Ltd., Midhurst, Sussex; S. and E. Collier, Ltd., Grovelands, Reading; Ryarsh Brick and Sand Co., Ryarsh, W. Malling, Kent; Stonehenge Brick, Ltd., Leighton Buzzard, Beds; The Adamite Co., Ltd., Manfield House, Strand, London, W.C.2.

if they are in the full-time employment of local authorities. Those acting as consultants can only obtain postponement if a local authority, Government department or firm engaged on vital work gives evidence that their services cannot be spared for a certain period.

REFERENCE BACK

[This section deals with previous questions and answers.]

Q358. June 6, 1940.

In our answer to this enquiry, which was for reasonably cheap alternatives to timber doors, we suggested that no such product was as yet available and that the enquirer should ask leading door marketing firms whether stocks of

"damaged" doors had been exhausted. A leading firm of timber door importers now states definitely that large stocks of standard doors are still available, both for priority and private work.

Q367. June 13, 1940.

The enquirer, an architect, now engaged as a record map draughtsman by an electricity undertaking, enquired about the salary normally obtained in such a post. The answer given has been added to since publication of the enquiry. The Centre is now informed that this post is graded as Mains Assistant in the National Joint Board Schedule of the Electrical Power Engineers' Association, 102 St. George's Square, London, S.W.1, and the rates of salary are laid down therein and depend upon (1) the standing of the undertaking, and (2) the grade of assistantship. It is suggested that the enquirer communicates with the Association.

MANUFACTURERS' ITEMS

Messrs. Herbert Terry and Sons, Redditch, makers of the Anglepoise lamps, inform us they have with great reluctance been compelled to increase their lamp prices. A study of these new prices shows that they represent approximately a 15 per cent. rise.

Banister, Walton and Co., Ltd., steel constructional engineers, of Trafford Park, Manchester, announce a final dividend of 10 per cent., less tax, on the ordinary shares, making with the interim dividend of 5 per cent. a total of 15 per cent., less tax, for the year ended March 31, 1940.

Mr. Cecil Kahn, of the Adamite Co., Ltd., informs us that, as representative of numerous brickworks throughout the country, he is now in the position to quote for bricks of all types and prices from brickworks near the site. Types

include: Sand-faced hand-made, sand-faced machine-made, sand-faced wire-cut, sand-faced brick-on-edge, sand lime, stocks, footings and engineering. Enquiries should be addressed to Mr. Cecil Kahn at the firm's head office, Manfield House, Strand, W.C.2.

War-time Construction: Building with Asbestos Cement, is the title of booklet just issued by Turner's Asbestos Cement Co., branch of Turner and Newall, Ltd. It is clear from a glance at this booklet that the manufacturers have devoted themselves with great thoroughness to producing in asbestos-cement many new products and devising new methods of applying standard materials in a manner which either eliminates or greatly minimizes the need for timber and steel. In this they have collaborated with the Department of Scientific and Industrial Research of the Building Research Station; the value of such co-operation is apparent in this

booklet. There are many ways in which this material can be used: for instance, in the construction of cubicles for shower-baths and lavatories, as sand-boxes to replace rotting sand-bags, seat tops, shelving, skirting, etc., in which situations they replace timber satisfactorily. The most interesting is the use of Everite asbestos-cement tubular purlins and roof trusses. These units are manufactured in accordance with British Standard Specification, so that their strength and reliability is assured, and they make it possible to construct the entire roof with practically no metal or timber. Copies of the booklet may be obtained from the Trafford Park offices of the company.

Realizing the importance of the proper maintenance of rubber flooring, the British Rubber Association has recently issued a pamphlet entitled *The Care and Treatment of Rubber Flooring*, which gives full information on this subject. Copies of this pamphlet are being sent to hospitals, hotels, banks, stores, offices, etc., where rubber flooring has been installed, and will be supplied, free of charge, to any of our readers on application to the Association, 19 Fenchurch Street, London, E.C.3.

British Insulated Cables, Ltd., announce that, acting on medical advice, Mr. G. H. Nisbett has relinquished his duties as managing director, but will continue to act as deputy-chairman of the company.

His retirement from the former office brings to a close 46 years' service as an executive officer of the company, during the last 12 years of which he has filled the position of managing-director with conspicuous success. As deputy-chairman, he will continue to be in close touch with the affairs of the company.

Mr. T. H. Martin-Harvey and Mr. W. Travis have been appointed joint managing-directors of the company.

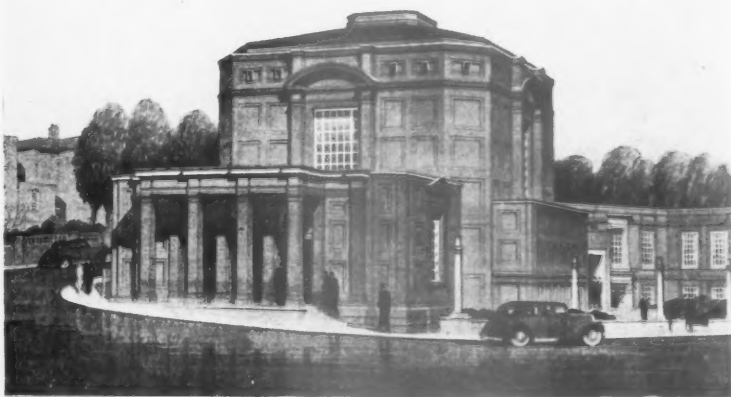
The Colt blackout ventilator, which was illustrated and described on page 552 of our issue for May 30 last, is the subject of a booklet just issued by Colt Ventilation, Ltd., of Bush House, Strand, W.C.2. The firm have also issued in booklet form reports on the ventilator by Dr. Oscar Faber, O.B.E., Mr. A. H. Barker and Professor A. M. Low. Dr. Faber writes:

"The variety of applications of the ventilator is very considerable and includes the following: (a) Inserted in blackout curtains, when the control of ventilation by the opening or shutting of windows remains as normal. (b) Insertion in a blackout panel of wallboard, or 3-ply, inserted inside or outside a normal window. (c) Fixed in the window-frame itself in lieu of a panel of glazing. (d) Insertion in hinged blackout shutters which would fold back on the window after dark. (e) Insertion in north-light windows in factory construction. (f) Introduced in the front or top of a pelmet box so that even when the blackout curtains are completely drawn, thorough ventilation through the top of the windows continues. (g) Insertion in a piece of 3-ply or wallboard fixed to the bottom 12 in. or so of a sash-window opening, the lower sash of which is kept open to this extent and the blackout curtain drawn down to this extent only.

"Great ingenuity has been exercised in finding applications which will solve all problems of natural ventilation under blackout conditions, and Messrs. Colt Ventilation, Ltd., are to be congratulated on having found a very ingenious and efficient arrangement of louvres which appears to solve the problem in the best way."

We have received from the Coke Producers' Federation, Ltd., of Norfolk Chambers, Norfolk Row, Sheffield 1, a four-page leaflet explaining how their Technical and Advisory Bureau can be of service to architects, builders, engineers and the consumer. Under the heading, "A Few Hints," the leaflet states:

It is important that the correct size of fuel should be supplied for all apparatus burning coke. Coke producers go to much trouble to separate the fuel into various



From the R.A. Exhibition: First Church of Christ Scientist, Richmond, Surrey. By W. B. Sinclair and V. Barton. Perspective by Cyril A. Farey (No. 1474).



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M-W.67

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

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well-defined sizes, and the use of the correct size increases efficiency, avoids trouble, and makes for carefree working.

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A well insulated appliance will very often allow the use of larger sized pieces of coke.

In general, the more expensive the appliance the more exactly must coke size conform to that stipulated by the makers.

When in doubt as to the correct size of coke for small domestic appliances always use the rule that the largest size should not be more than about one-sixth of the diameter of the firepot.

ESSAY ON ARCHITECTURE

Mr. Cecil G. Stewart, a member of the staff of the School of Architecture in Dundee College of Art, has been awarded first prize (£15) in the "Quarterly" essay competition held annually by the Royal Incorporation of Architects in Scotland. This competition is open to students and members of the Royal Incorporation under the age of 35. Title of Mr. Stewart's essay was "Mistra, a Byzantine City in Greece."

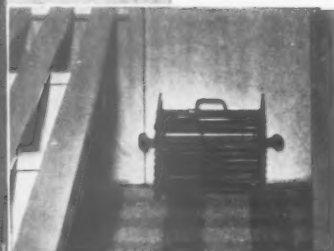
THE BUILDINGS ILLUSTRATED

HOUSE, DORKING (pages 631-633). Architect: R. D. Hunt, A.R.I.B.A. General contractors were A. P. Bowley and Sons, who were also responsible for the excavation, foundations, dampcourses, plumbing, joinery and tiling. Sub-contractors and suppliers included: Wiggins, Sankey, Ltd., bricks, sanitary fittings, roofing felt and grates; Colthurst, Symons & Co., Ltd., tiles; Hollis Bros. & Co., Ltd., maple strip flooring; H. A. Oakeshott, grates and mantels; East Surrey Gas Co., gasfitting; Beeston Boiler Co., Ltd., boilers; H. V. Stone & Co., electric wiring and bells; Wilec, Ltd., electric light fixtures; N. F. Ramsay & Co., Ltd., door furniture; Williams and Williams, Ltd., casements and window furniture; Joseph Sandell & Co., Ltd., flush front doors; Joinery and Builders' Supplies, Ltd., flush doors.

EXTENSIONS TO THE JAMES ALLEN'S GIRLS' SCHOOL, DULWICH (pages 635-639). Architect: J. E. K. Harrison, A.R.I.B.A. General contractors were L. and W. Whitehead, Ltd. Sub-contractors and suppliers included: British

Reinforced Concrete Co., Ltd., B.R.C. reinforcement for foundations, concrete floors and roofs; Henry C. Parker & Co., bricks; Stuart's Granolithic Co., artificial stone; Redpath, Brown & Co., Ltd., structural steel; Carter & Co., Ltd., swimming bath tiling and tiled dados; Camden Tile and Mosaic Co., other tiling; F. McNeill & Co., Ltd., flat roofs—Combinite-Bitumen on insulation board and Solartile roofing; G. R. Speaker & Co., Ltd., Eonit blocks; James Clark and Son, Ltd., glass; Hollis Bros. & Co., Ltd., floor over swimming bath; Horsley, Smith & Co. (London), Ltd., stage flooring; Cement Marketing Co., waterproofing materials; J. Jeffreys & Co., Ltd., central heating, ventilation; South Metropolitan Gas Co., gas fittings; Ideal Boilers and Radiators, Ltd., boilers; Hume, Atkins & Co., Ltd., electric light fittings; John Bolding and Sons, Ltd., sanitary fittings; Adrian Stokes & Co., Ltd., door furniture, folding gates and metalwork; Hills Patent Glazing Co., Ltd., casements; H. J. Cash & Co., Ltd., electric wiring and bells; E. Shipton & Co., Ltd., telephones; Fire Doors, Ltd., rolling shutters; R. Cattle, Ltd., flush doors and folding screen; Potter Rax Gate Co., Ltd., cloakroom fittings; Andrew Bentley, Ltd., laboratory fittings; Aldous and Campbell, Ltd., lifts; Smith's English Clocks, Ltd., clocks; Paterson Engineering Co., Ltd., filtration plant for swimming bath; Lenscrete, Ltd., concrete rooflights; Haywards, Ltd., diving stage; Francis Morton, Junr., & Co., bath floor structure; Catesbys, Ltd., linoleum dados; May Acoustics, Ltd., acoustic tiles in hall; Semtex, Ltd., flooring to bath surround; Lockerbie and Wilkinson, Ltd., bicycle shelters.

AIR RAID SHELTER, PARK ROYAL (page 640). Architect: H. G. Huckle. Sub-contractors and suppliers included: Gravity Ladders, Ltd., patent collapsible ladder; British Antifouling Paint Co., paints.



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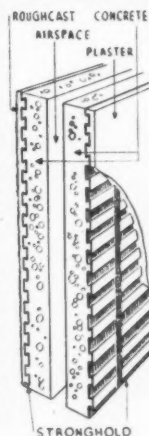
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Advertisements should be addressed to the Advt. Manager, "The Architects' Journal," 45 The Avenue, Cheam, Surrey, and should reach there by first post on Monday morning for inclusion in the following week's paper.

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

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 charges 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.

CAPABLE ARCHITECTURAL ASSISTANT required for temporary post. Experienced in industrial work. Knowledge of reinforced concrete and quantities an advantage. Must be neat and quick Draughtsman. Write only, giving experience and salary required, to Thomas Anders, 100 High Road, Ilford. 100

DRAUGHTSMAN. Experienced steelwork design for industrial building required. Wembley. Age, experience, salary required, to Box 103.

Architectural Appointments Wanted

CHARTERED ARCHITECT, over military age, and having wide experience, desires suitable whole or part-time engagement. Box 41.

COMPETENT ASSISTANT (32) will take anything, anywhere. J. O. W., 104 Euston Road, Morecambe, Lancs. 55

ARCHITECT'S ASSISTANT (20) requires temporary or permanent employment; about 3 years' experience in working drawings for factories, offices, exhibitions, etc., also in interior design and perspectives. H. J. Pagel, 139 Adelaide Road, N.W.3. 70

EVENING AND SPARE-TIME WORK required by quick and accurate draughtsman; experienced in all scale working drawings, colouring and surveys; fees by arrangement. Box 73.

CHARTERED ARCHITECT, over military age, B.Arch., A.R.I.B.A., A.M.I.Struct.E., Civic Design (Cert.), highest references and accustomed to direct control of large building schemes desires suitable post, preferably in North; salary by arrangement. Box 76.

REGISTERED ARCHITECT (over military age) now disengaged, desires post in London for duration of war in architects', civil engineers' and/or municipal office; expert and very rapid draughtsman; experienced in all kinds of commercial and heavy type constructions, flats, both municipal and luxury, public buildings, etc.; just vacated appointment with Metropolitan Borough Council after completion of various A.R.P. schemes; specifications and supervision; excellent knowledge of structural steelwork and R.C. work; salary approximately £400 per annum; would consider opportunity of evening and spare time work; fees by arrangement. Apply "F," 69a Ferntower Road, Highbury, N.5. 86

ARCHITECT'S ASSISTANT, 3 years' day at N. Polytechnic; good knowledge of design and building construction, with considerable practical experience in all branches of A.R.P. Apply P. L., 17 Penshurst Gardens, Edware. 85

JUNIOR ARCHITECT'S ASSISTANT (18½), 2½ years in architect's office and 1½ years in engineer's office; practical experience in factories, business premises, and extensive A.R.P. work, also surveying of existing buildings; neat and accurate draughtsman; salary by arrangement. H. Adams, 35 Lodge Lane, Beeston, Leeds, 11. 91

JUNIOR DRAUGHTSMAN (age 17½), now disengaged, requires post in London architect's office; 6 months' experience and 3 years at junior technical school. Apply T. Dye, 13 Wincanton Road, Southfields, S.W.18. 90

CLERK OF WORKS. Fully qualified; last 10 years with Railway Company; just completed one million contract; work carried out under civil engineers and architects; salary to mutual arrangement. Box 89.

ARCHITECT'S ASSISTANT (22), Inter. R.I.B.A., desires position. Varied experience in Structural, Mechanical and Architectural Draughtsmanship. Surveying and works inspection. Exempt from Military Service. Box 93.

ARCHITECT'S SENIOR ASSISTANT, CHARTERED, requires position. Considerable experience industrial and commercial work all parts country. Box 95.

DRAUGHTSMAN (over military age) seeks engagement in architectural drawing office; good general experience, accurate surveys, working and detail drawings; available immediately, town or country. "S," 36 Brighton Road, Horsham, Sussex. Box 98.

SURVEYOR & ARCHITECTURAL ASSISTANT, P.A.S.I. (Building Sub-division, reserved), at present studying for R.I.B.A. examinations, age 26, married, seeks position in near future; ten years' wide experience London and provinces; all types of work, sketch designs to full-size details; shops, flats, factories, houses, alterations, estate development, roads and sewers; surveys of all kinds land and buildings; specializing in A.R.P. work; keen, quick and adaptable. Box 99.

OWING TO THE WAR.—Clerk of Works and Building Surveyor, disengaged, requires an appointment; over military age, rendered War Service during 1914-18 Great War; over 20 years' experience, practical, and theoretical; extensive experience, expert knowledge of all trades; keen and strict; highest testimonials, etc., from well-known architects, and also municipal engineers and surveyors; acted as sole Clerk of Works, etc., for large important high-class Public and Municipal Buildings, also Schools, in first-class Work; including Air Raid Shelters, having Air Conditioning Plants, etc., in London, Yorkshire, Birmingham, etc. One Birmingham contract costing over £200,000. Further particulars, etc., on request. Box 101.

ARCHITECT (age 30), Czech-Slovakian, exempt military service, 4 years' practice in London, desires suitable whole- or part-time engagement as draughtsman. Box 102.

B.A. (ARCH.), 1st class hon., A.R.I.B.A., T.P. certificate, taking A.M.T.P.I., R.I.B.A. prize-man, requires position in London or provinces; varied experience, including schools, churches, factories, domestic work and town planning, working drawings and full supervision; salary by arrangement. "F," 12 Ridley Road, N.W.10. 104

Other Appointments Wanted

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

ADVERTISEMENT MANAGER, 18 years with well-known firm of lighting engineers, 11 years as sales representative and 7 years in charge of advertising and publicity, now owing to the war seeks new position. Thorough knowledge of sales promotion and some experience of journalism both for trade and general press. Box 78.

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