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THE
ARCHITECTS'



JOURNAL

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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.

NEW GERMAN CHANCELLERY



*The Cabinet room in the new Reich Chancellery
in Berlin The building was designed by
Professor Albert Speer.*



C A M O U F L A G E

The cooling towers of the central generating station of the Leicester City Electricity Service which have recently been camouflaged. The tone and colour values of the designs match the trees and fields which surround the station. The towers are 120 ft. high and over two tons of patent concrete paint was used on each. The scheme was prepared by Mr. Ernest Townsend, a Leicester artist.



OUR HALF OF BUILDING

IN the *R.I.B.A. Journal* for July 17 there are published the results of an enquiry by the Public Relations Committee into the proportion of all building work carried out by architects.

The importance of accurate knowledge about this question is obvious. If a portion of the energies of the profession is to be devoted, as it has been for some time, to explaining to the public the usefulness of architects, it is essential to know fairly accurately how many building owners already recognize this usefulness and how many do not. And it is equally desirable, when once entrance to the profession has been restricted to those qualifying by examination, for the Registration Council, as well as the whole profession, to know the total amount of work which may be expected to be available in any one year.

In their present enquiry the Public Relations Committee have gone some way towards answering these questions.

Their method of procedure was to obtain from the Building Industries National Council and other sources the total official figures for new constructional work under various headings, and to estimate, with the aid of such expert advice as was obtainable, what proportion of the work under each of these headings might fairly be considered to have been designed and supervised by architects.

The results are so unexpected that it is worth quoting the figures stated and deductions made at some length.

The Committee calculate the total expenditure on new building work of all kinds in an average year to be £255,000,000. Of this, £160,000,000 is expended on houses and flats, and the remaining £95,000,000 on all other types of building.

The £160,000,000 spent on housing can be divided, in the Committee's opinion, into £55,000,000 spent by local authorities and £105,000,000 spent by private enterprise.

Of the £55,000,000 spent by local authorities, it has been estimated that £25,000,000 is expended on works designed either by private architects or by fully responsible salaried architects; the remaining £30,000,000 being expended on works designed by local authorities' engineers and surveyors with or without trained architectural assistants. Thus, of all the housing work of local authorities, architects at present are considered to execute just over 45 per cent.

The £105,000,000 worth of housing erected by private enterprise shows, however, a different story. Only 10 per cent. of this work (in the form of flats) is believed to be designed by architects.

There remains the £95,000,000 of new building work which is non-residential. This again is roughly divided into two sections.

£30,000,000 goes on buildings for Government

Departments—Post offices, factories, aerodromes, barracks and so on. The whole of this work is held to be designed by architects.

The remaining £65,000,000 goes on factories, office blocks, shops, theatres, schools, churches, garages, and similar essential non-residential buildings. The Committee hold that all save 10 per cent. of these buildings are now designed by architects.

In this last estimate it may be thought that the Committee has placed the percentage of architecturally supervised work too high, since the number of factories, garages and filling stations, shops and public baths which have not been designed by an architect appears large. On the other hand, the profession has obviously been making great headway in these fields during the last five years, and the total number of factories employing more than 50 persons is much smaller than the average architect would imagine.*

The final results of the Committee's enquiry is that architects design and supervise £125,000,000 of work out of a grand total of £255,000,000—or just under half. And if housing of all kinds is omitted, architects now design 85 per cent. of new work.

These figures are based on estimates. They are estimates which the R.I.B.A. has taken pains to make as accurate as possible, but it is still open to anyone to disagree with them. Yet it is doubtful whether any architect, examining them one by one in the light of his own experience and local knowledge, will feel inclined to lower them to an extent which substantially alters the total.

Such a conclusion is of first-class professional consequence. It puts an end to the statement so often repeated by architects that the profession only carries a microscopic proportion of all building work; and it ends the easiest of professional excuses for the bad building throughout the country.

If half the building work of Britain is executed by architects, its general badness cannot be because architects are not employed. The bad siting, layout and appearance of much new building must be caused in some degree by the present state of town planning and the public's tolerance of that state, and in some degree by architects not being all they should be. The profession is doing its best to remove the second cause by the operation of the Registration Act, but the first cause—the developer's right to build anywhere and everywhere and chiefly in endless strings along main roads—remains practically unaltered. Until it is altered (as the Ministry of Health's own publication, *Houses We Live In*, so clearly showed) good architecture in the wide sense can never be general or even common.

* There are only about 550 factories and works which employ 1,000 workers and over.



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N O T E S & T O P I C S

COLLECTIVE ART

THE Federal Theatre Project of the United States, called (even by *The Times*) "the most courageous and far-reaching national theatre of our time," has been killed by the U.S. Congress. The Federal Theatre was born of Roosevelt's New Deal in 1935. A succession of fiercely Left propaganda plays has provided a large red herring for Roosevelt's critics, and now Congress, impatient with New Deal emergency spending, has decided to put an end to State sponsorship of the Arts.

For the Federal Theatre is not the only Art Project to be ordered to the chair. The Painters and the Writers Projects are to go, too. All these projects have not merely given unemployed mediocre artists a chance to survive: they were magnificent collective efforts to bring alive an awareness of American cultural life, and to revive a sense of regional vernacular.

The Theatre Project, for instance, brought real theatre to hundreds of rural communities and encouraged the regional interpretation of theatre classics. The Writers Project produced a remarkably fine series of guides to individual States, some of which turned into really valuable regional surveys—geological, industrial, sociological. The Painters Project maintained a reasonably high standard of enrichment for schools and other public buildings, and in the process brought to life much hidden talent.

No longer is it true that art flourishes only in prosperous times. Now, in America, prosperity returns . . . and art declines.

"A TOWN IS BORN"

Thirty years ago the White City was as world-famous as the New York Fair. Today its white encrusted gaiety is rapidly being replaced by long, insistent 5-storey blocks of flats. An impressive booklet,* commendable example

* "A Town is Born," published by the British Commercial Gas Association.

of good advertising, extols this great L.C.C. enterprise: In only twelve months 1,193 flats have been built—3,910 rooms for 5,800 people. Twice as many are to be built, in addition to schools and a community centre, at a cost of nearly 1½ million pounds. Rents: from 5s. 6d. to 17s. 6d. a week.

Very good. No doubt the flats are conveniently planned, with just the necessary soupçon of humanity in the form of individual balconies. (See opposite page.)

But why all 5-storey blocks? Why the long obsolete courtyard planning? Why the soulless mechanism of the layout? . . . Why not, with this golden opportunity of unhampered space, some really high flat blocks (with lifts instead of ten dreary flights of stairs) making way for terraced houses for the larger families? Why not a more reasoned attempt at orientation? Why not a free, expansive landscaping, instead of the dull, compartmental limitation of space?

I seem to remember (not very well) a scheme by Mendlesohn and Chermayeff for the redevelopment of the White City. It was they, I believe, who first suggested it should be used for re-housing. But not quite like this.

SCHOOLS AND LOCAL AUTHORITIES

The circular letter (reprinted on p. 130 of this issue) which has been sent to all education authorities by the Board of Education will arouse suspicion in the breasts of architects.

In brief, the letter says local education authorities apparently regard the Board's publication, *Suggestions for the Planning of Elementary Schools*, as laying down minimum standards, and that because of their holding this view many education authorities are not proceeding with new building schemes. It then goes on to say that the *Suggestions* are suggestions; and it is open to any authority to submit schemes showing "less complete" accommodation.

The last paragraph of the circular attempts to meet possible trouble by stating that it is not the purpose of the circular to suggest lowering the present standard of school buildings—but it is doubtful whether this will deceive anyone. If the circular suggests anything, it suggests just that.

There is a powerful minority on all education committees which believes that any money spent on schools beyond the most squalid minimum is waste of the ratepayers' money, etc. The efforts of the Board and its architects to bring about a better attitude of mind have been the most hopeful of all the activities of government departments in the last ten years. This circular looks like a partial victory for those committee men who refuse water-closets in schools on the ground that the children will only make a mess of them.

RONES AND COOMS

There are such things as rones and coom ceilings, after all. As a result of my remarks last week I have received the following letter:

DEAR ASTRAGAL,—With reference to your comments on Scots technical idioms, perhaps I can enlighten you. Having served my



articles in Cornwall and practising in London and Edinburgh, where I was born, I can perhaps claim to be bi-dialectal.

Coom-ceiled means a room built in the roof where the slopes thereof form part of the ceiling (what you would call an attic) and rones are just rain-water gutters. In Cornwall these have special names also. Another Scots name is siver, meaning a gully.

DAVID STEVENSON

★

Another correspondent mentions that in the north country stud partitions are called stoothed partitions. Perhaps readers can add more terms to this glossary.

★

Still another correspondent complains that a builder writes to ask how to cope with a delay caused by the goggle coming off a pump. Not knowing what a goggle is, he asks how he should reply.

★

The answer is obvious. Be firm—write to the builder, telling him either to fit one of those aluminium chitters that are designed to prevent the goggle from working loose, or else to invest in one of the new fluid spindle-drive pumps that have the whole of the storm-flop enclosed in a bath of spirit, which does away with the necessity for a goggle altogether.

WIN MONEY WITH YOUR SHELTER

At last (doubtless owing to powerful leaders in this JOURNAL) we have a competition in which no perspective is needed and in which the plan is already settled. View for a brief space the Camberwell Beauty (above) and then go and do better. Just "a photograph and description" to the *Sunday Dispatch* and £10 to the winner.

STUDENTS' WORK

This is the season of end-of-term exhibitions. That at the A.A. is the one that particularly should not be missed. The A.A. in spite of stormy internal politics—or possibly because of the lively spirit they engender—seems to go from strength to strength.

★

What is specially impressive is the success of the group

system of working, which seems to inspire extra enthusiasm; the disappearance of the "personal expression" factor being a gain, not a loss.

★

Typical of the A.A.'s new ideas is one that was carried out for the first time this year. A group of students not only designed an addition to an old cottage in the Home Counties, but built it with their own hands. A film of the job was also made, which from the educational point of view is worth a dozen lectures on elementary construction. I am told that this practical form of training is now to be a permanent feature of the curriculum.

★

If you want to be convinced how far the A.A. has really advanced, go on from Bedford Square to South Kensington, where the Royal College of Art has its show. The R.C.A. Architectural School's efforts in the way of conventional design exercises are especially a waste of opportunity as the idea on which the School is based is such a good one: to make every student at the College—painters, sculptors and designers—study architecture during their first years.

★

But for this purpose surely what they want to be taught is the bones of architecture. The one aspect—of polite pictorial "design"—that the Architecture School concentrates on exclusively is just the one that could be ignored altogether.

★

It should be added that the Design School Exhibition at the R.C.A. (independently housed in Prince Consort Road) is first rate, in spite of the lack of any inspiration from the Architecture School; indeed, there seems to be no contact between the two at all—a fantastic state of affairs. The Design School needs model rooms built to display its mural decorations; it needs settings and stands of all kinds for its exhibition. These have to be contrived by the Design School staff and built by H.M. Office of Works, while the architecture students, for whom it would provide ideal practical experience, are only concerning themselves with their dream projects.

ASTRAGAL

NEWS

POINTS FROM
THIS ISSUE

- The final results of the Committee's enquiry is that architects design and supervise £125,000,000 of work out of a grand total of £255,000,000 — or just under half* 127
- The U.S. Department of Agriculture estimates that properly fitted weatherstrips (in windows) can decrease the heating bill by about 25 per cent.* 149

NEW COMPETITIONS

The Northern Aluminium Co. are to erect a new shopfront for the Building Centre and have requested the Directors of the Building Centre to organize on their behalf a competition for a suitable design. The assessors are Messrs. Robert Atkinson, F.R.I.B.A., Maurice E. Webb, D.S.O., M.C., F.R.I.B.A., R. S. Lavers, A.R.I.B.A. and F. R. Yerbury. Premiums are offered of £100 and £50 for the designs placed first and second, respectively. The shopfront is to be designed to meet the requirements of the Building Centre and must have a canopy extending its full length. The Building Centre symbol is to be incorporated in the design and also the words "The Building Centre." Provision is also to be made for a small plaque or notice stating that the shopfront is constructed of materials supplied by the Northern Aluminium Co. Particulars of the competition, with plan and section of the building and diagrams of the façade to be dealt with, can be obtained from the Building Centre, 158 New Bond Street, W.1. Designs are to be delivered by September 18, 1939.

The Gosport Education Committee invite architects of British nationality only to submit in competition designs for a new senior school for 480 boys at Elson, Gosport. Assessor: Mr. Julian Leathart, F.R.I.B.A. Premiums: £100, £50 and £25. Last day for submitting designs: November 11, 1939. Last day for questions: August 19, 1939.

Conditions of the competition may be obtained on application to Mr. Geo. R. Walker, Secretary to the Education Committee, Education Offices, Station Road, Gosport, Hants, on receipt of a deposit of £1 1s., made payable to the Gosport Borough Council.

NEW SCHOOL ACCOMMODATION

The Circular which follows has been sent to all local education authorities by the Board of Education.

It has recently been brought to the Board's notice by a deputation from an Association of Local Authorities, that the Board's pamphlet entitled "Suggestions for the Planning of Buildings for Public Elementary Schools" is regarded by many authorities as constituting a statement of the Board's minimum requirements. It was represented that in consequence of this view being widely held, many authorities were being deterred from proceeding with the provision of the buildings required for the purposes of reorganization and the raising of the school-leaving age, on account of the expenditure involved in a strict adherence to the schedules of accommodation given in the pamphlet.

While the suggestions in the Board's pamphlet were framed with a view to the avoidance of unnecessary expenditure, it cannot be too strongly emphasized that they do not represent

THE
ARCHITECTS'
DIARY

Saturday, August 19

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS. *Visit to Russia.* Until September 10.

Saturday, September 2

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS. *Visit to France.* Until September 17.

Thursday, September 11

INSTITUTE OF HOUSING. *Annual Conference.* Brighton. Until September 23.

NATIONAL SMOKE ABATEMENT SOCIETY. *Eleventh Annual Conference. Blackpool.* Until September 23.

Friday, September 29

FACULTY OF ARCHITECTS AND SURVEYORS. *Annual Conference.* Brighton. Until October 2.

Thursday, October 19

COUNCIL FOR THE PRESERVATION OF RURAL ENGLAND. *Twelfth National Conference.* Tunbridge Wells.

irreducible minima, but are suggestions and not regulations. It is therefore open to any authority to submit plans which provide less complete accommodation than that set out in the pamphlet, and such plans will be sympathetically considered, provided always that the provision proposed is suitable and sufficient for the needs of the particular school.

The Board are themselves concerned at the high cost per place of many of the building proposals submitted to them, and they are anxious to co-operate with authorities with a view to reducing such cost where this can be effected without loss of efficiency. In this connection reference should be made to the Board's recent Circular No. 1468 dealing with light construction buildings.

In conclusion the Board desire to make it clear that the purpose of this circular is not to suggest a lowering of the present standard of school buildings, a standard which has done much not only to raise the level of educational efficiency, but also to create a new conception of education. They are, however, concerned to know that considerations of cost are leading some authorities to postpone necessary new buildings, and it is hoped that the present Circular may encourage such authorities to submit proposals.

THE ROME SCHOLARSHIP

The Faculty of Architecture of the British School at Rome have awarded the Rome Scholarship in Architecture for 1939 to Mr. Ralph Cowan (Student R.I.B.A.) of the School of Architecture, Edinburgh College of Art. The Faculty have, in addition, commended the plan presented by Mr. R. W. Cave, formerly of the Bartlett School of Architecture, University College, London.

Mr. Cowan, who is 22 years of age, was educated at George Heriot's School, Edinburgh, and, since 1934, at the School of Architecture, Edinburgh College of Art.

The Rome Scholarship in Architecture is now provided for by an annual grant made to the British School at Rome by the Council of the R.I.B.A. and is normally tenable for two years, but may be prolonged in exceptional cases for a third year.

An exhibition of the competition designs is being held at the R.I.B.A., 66 Portland Place, London, W.1, until July 28, inclusive, between the hours of 10 a.m. and 8 p.m.

FIRST SCOTTISH EVACUATION
CAMP

A start was made on the first of Scotland's School and Evacuation Camps on July 22, when Mr. John Colville, M.P., the Secretary of

State for Scotland, unveiled a tablet at Broomlee Camp, West Linton. The camp has been designed by Mr. Thomas S. Tait and will consist of six dormitories, a hospital for six beds, a dining-hall, a recreation-hall and ablution blocks for girls and boys. Class-rooms may be added later. Altogether, 342 children will be accommodated. The Special Housing Association, who are responsible for the Scottish camps, expect to have this one completed in the late autumn.

The camp will be situated on the estate of Broomlee House. The site is already well wooded, and the buildings will be sufficiently screened from aerial observation. In peacetime the camp will be used by the Edinburgh Education Committee as a school camp and in the event of war will be available for any purpose.

The main buildings and the bungalows and staff-rooms, which will have ceiling heights of 10 ft. and 8 ft. respectively, will be of timber construction on concrete piers. The outer walls will be covered with red cedar weather-boarding and the roof with a bitumen felt, finished with camouflaged ground slate of a green or red colour.

When completed the camp will be composed of a central green and 14 self-contained units placed 30 ft. apart.

Sites for three other camps have been secured at Dounans Farm, Aberfoyle; Middleton, near Gorebridge; and Belmont Castle, near Alyth. Negotiations are proceeding in connection with two other sites.

C.P.R.E. CONFERENCE

The Twelfth National Conference for the Preservation of the Countryside, organized by the C.P.R.E., will be held this year at Tunbridge Wells, October 19-22. Principal events at the Conference will be:—

Friday, October 20, at 10.30 a.m. First Session. Sir Ronald Davison will address the Conference on Camps: Their Social Value to Rural England, and move a resolution. In the Chair: The Earl of Crawford and Balcarres, K.T. (President of the C.P.R.E.).

Friday, October 20, at 2.30 p.m. Second Session. Mr. F. G. Thomas (in charge of the extra-mural work at the University College of the South-West) will address the Conference on Rural Industry in Relation to the Agricultural Community, and move a resolution. In the Chair: Professor Patrick Abercrombie, M.A. (Chairman of the C.P.R.E.).

Friday, October 20, at 9 p.m. An informal debate on "The effect of death duties on agricultural land" will take place in the Spa Hotel.

Saturday, October 21, at 10.30 a.m. Third Session. The Hon. Nigel Orde-Powlett (President of the Royal English Forestry Society) will address the Conference on The Social Value of Afforestation and Existing Woodlands. In the Chair: The Rt. Hon. Sir George Courthope, Bt., M.P. (Forestry Commission).

AWARD FOR SCULPTURE

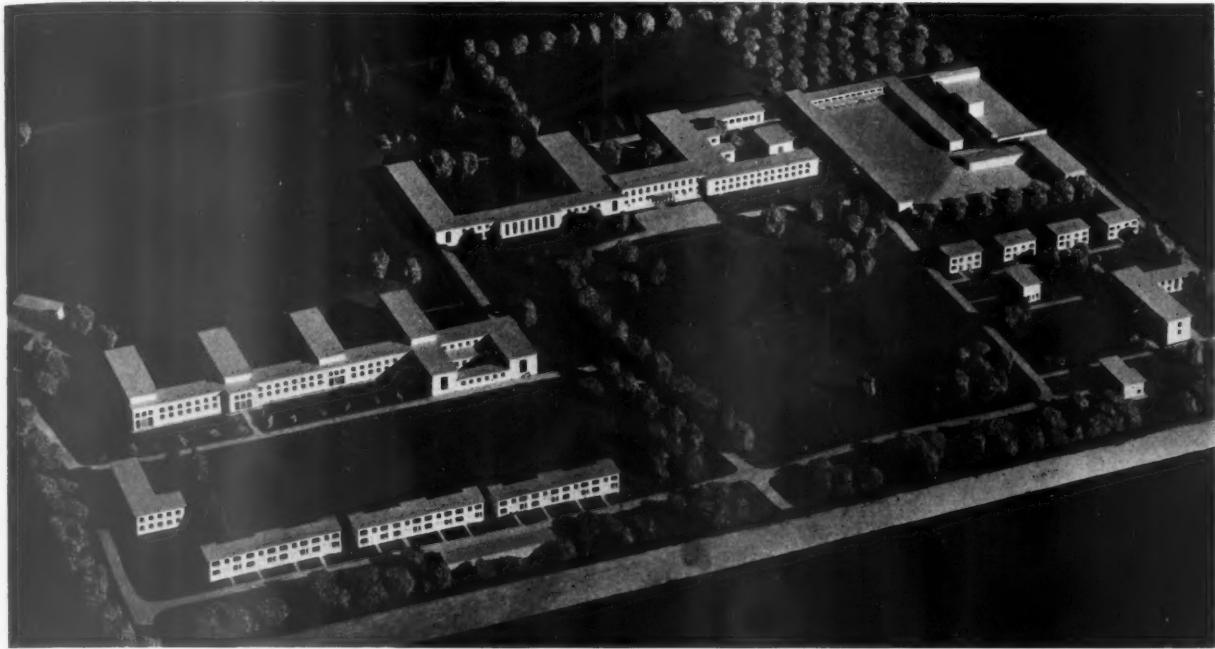
The award by the Feodora Gleichen Memorial Committee of the Royal Society of British Sculptors has been made this year to Miss Winifred Turner, A.R.B.S., for her statue entitled "Young Girl," No. 1292, at present on exhibition at the Royal Academy.

R.I.B.A. NEW MEMBERS

At a Council meeting of the R.I.B.A., held on Monday, July 10, 1939, the following members were elected:—

As Fellows (22)

Atlee, T. S., M.A. OXON. (Truro); Bates, C. F. (Newport, Mon.); Bryan, A. F. (Leicester); Carr, T. (Woking, Surrey); Eberlin, A. E., M.C. (Nottingham); Jones, W. H. (London); Blunt, H. A. (Birmingham); Bullivant, L. F. (Birmingham); Fox, H. L. (Oswestry); Haine, P. W. (London); Hickson, H. A. (Doncaster); Huson, W. (Newton Hill, near Wakefield); Jones, R. W. H. (London); Waterhouse, B. (Manchester); Young, G. C. (Perth)



From the annual exhibition of work of the Liverpool School of Architecture. Model supplementing a Fifth-year Thesis Design, by Miss H. M. Darracott, for an agricultural college at Newport, Shropshire.

Burdwood, S. H. (London); Cobb, T. K. (Northampton); Cooper, H. F. T. (London); Pritlove, S. B. (London); Schofield, R. W. (Nottingham); Shaw, J. E. (Newcastle-upon-Tyne).

As Associates (19)

Baron, D. K., M.A., A.M.T.P.I., DIP.T.P. (School of Architecture, Victoria University, Manchester) (Leeds); Greenwood, S., B.A.R.C.H. (Liverpool School of Architecture, University of Liverpool) (Leeds); Hyde, C. H. (Birmingham School of Architecture) (Birmingham); Jones, I. N., DIP.ARCH. CARDIFF (Welsh School of Architecture, The Technical College, Cardiff) (Cardiff); Lake, H. J. (Liverpool School of Architecture, University of Liverpool) (Cardiff); Lindsay, W. H. (School of Architecture, King's College (University of Durham) Newcastle-upon-Tyne, and the Bartlett School of Architecture, University of London) (Cheshire); Longdin, C. E. (Sunbury-on-Thames, Middlesex); Maynard, B. C. (Bartlett School of Architecture, University of London) (Coulson, Surrey); Mytton, J. (Birmingham School of Architecture) (Wolverhampton, Staffs.); Rhodes, G. S. (Architectural Association) (London); Slater, Miss K. P. (Architectural Association) (London); Weston, Miss R. N. W., DIP.ARCH. LEEDS (Leeds School of Architecture) (London).

As Licentiatees (17)

Batten, G. (Reading); Bond, L. H. (Grantham, Lincs.); Bostock, H. S. (Southall, Middlesex); Brannen, E. W., M.M. (Dornoch, Sutherland); Day, F. G. (Twickenham, Middlesex); Gammans, R. A. N. (Shoreham-by-Sea); Hollins, W. E. (Southall, Middlesex); James, F. W. (Narborough, Leicestershire); Miller, A. E. (London); Moore, E. C. (Wellingborough); Muras, A. Q. (Newcastle-upon-Tyne); Pester, G. S. (London); Ransom, S. F. (London); Roberts, A. H. (Sevenoaks, Kent); Searley, F. J. (London); Stock, B. H. (London); Wallace, R. (Paisley).

PROFESSIONAL ANNOUNCEMENTS

The partnership between Mr. Kenneth Anns, L.R.I.B.A., and Mr. Martin Haigh, A.R.I.B.A., has been dissolved. Mr. Haigh will remain at 58 Grosvenor Street and Mr. Anns has removed to 126 Wigmore Street, W.1.

Mr. Rolf Jensen, B.A.R.C.H. (LIVERPOOL), A.R.I.B.A., will be sailing on August 11 for Singapore, where, for three years, he will be

engaged on work in connection with the naval base for the Civil-Engineer-in-Chief's Department of the Admiralty.

EXHIBITIONS

[By D. COSENS]

FROM every point of view, the Cézanne exhibition at the Wildenstein Galleries could hardly be better. It is not composed of a few selected masterpieces, but illuminates with impartiality every stage of the artist's development from the very early portrait painted somewhere about 1863 to the painting upon which he was at work when he died. And the arrangement in strict chronological sequence makes the study of his work very much easier than the usual haphazard hanging. Personal relics, even the knapsack and the worn hat, pathetic immortelles under their glass case, fall into their natural place in documenting the life of the painter whose vision and stubborn integrity altered the current of all subsequent art.

In the years since Cézanne's death, since controversy died down and he became accepted without hesitation in the succession of the world's great masters, a good deal has been written about this lonely, obstinate little painter, his derivations, his influence and his life. And because he was timid, verbally rather inarticulate, morose through shyness and acute sensitivity, and always uncertain of his work, he is generally credited in the memoirs of those who met him with a limited simplicity that is, surely, belied by his painting. The Cézanne who could see and translate the ever-changing moods of the Sainte Victoire, or through a lifelong research find the means of recording, not only the solid structure, but something of the reality behind the colour and shapes of the world in which he lived, can never have been, in any sense, either simple or limited. But words are the universal exchange, and he could only express what he saw and felt, sublimely, in the less easily understood terms of colour. Pilgrims to the studio of the solitary old painter who hoped for a fluent dexterity in the explanation of his art retreated, disappointed, with their legend. This exhibition recalls Wren's famous epitaph, and academic discussion of the individual paintings may well be left to the textbook.

The Wildenstein should be congratulated on the choice and arrangement of this collection, and on the excellent catalogue.

In the "Entente Cordiale" exhibition at the Lefevre, paintings by contemporary French and English painters are divided according to race, a method which is certainly kind to the English, for though this collection would seem to have been selected with some idea of keeping a reasonable balance we find a common tradition but a sadly unequal performance. Amongst the English work there is nothing to compare with the Vuillard "Interieur," Bonnard's "Le Repas au Jardin," the 1912 Utrillo, the Segonzac, or Rouault's "Les Trois Juges." Against them we can set Sickert only, all the time, and particularly his very fine portrait of Duncan Macdonald; Paul Nash and Wyndham Lewis; and, some of the time, Duncan Grant, with his exceptionally beautiful snow scene and his "Provençal Landscape." The comparison is not, of course, necessary, but where all the painting has so recent a common ancestry it is almost inevitable.

Also in the direct impressionist tradition, untouched by any later developments, is the work of far younger English painters at the Storrans. This is intelligent, thoughtful, often pictorially successful, but somehow uninspired. A Degas, a Vuillard or a Sickert can soften his outline with superb results, but there are moments when paintings by members of this group, so far from gaining in luminosity by this method, merely produce a feeling of short-sightedness in the observer. The most successful paintings are Lynton Lamb's "On the District Railway," Claude Rogers's "View from a Window," Gowing's "On the 'phone,'" Graham Bell's "Whitfield Street Baths," and Tibble's "Regent's Park." The surprise is Anthony Devas, who, in forsaking the fashionable masks he usually paints for a genuine study of an ordinary human face, has added his name to those of serious painters.

Cézanne. Wildenstein, 147 New Bond Street. Until July 29.
"Entente Cordiale." Lefevre, 1A King Street, St. James's. Until August 4.
Young English Painters. Storrans, 25 Albany Court Yard, Piccadilly. Until July 29.



The JOURNAL regrets that in reproducing this illustration to accompany a book review last week it described the chairs in it as Chippendale designs. The chairs are, in fact, variations of Sheraton designs made during the early nineteenth century. Reproduced from "Old Furniture for Modern Rooms." By Edward Wenham. G. Bell and Sons, Ltd. Price 7s. 6d. Illustration by Edgar Holloway.

LETTERS

Rescue and Demolition

SIR,—I should be glad if you would allow me to bring to the notice of the readers of your JOURNAL an A.R.P. service which I feel has, up to the present time, not been in the public eye to the extent which it deserves. I am referring to the Rescue and Demolition Service.

Members of rescue and demolition parties are required to take out casualties from damaged buildings, to clear up debris and to shore up or demolish structures which have become dangerous as a result of aerial bombardment.

The responsibility for the organization of this service has, at the request of the Lord Privy Seal, quite recently been assumed by the London County Council, and a scheme has been prepared providing for about 1,310 parties of men stationed in all parts of London. For the manning of this service the Council must recruit some 15,000 men. Physically fit men generally, thirty years of age and over, are wanted, of the type of builders' foremen (as leaders of parties) and skilled

and unskilled men employed in the building trades and by public works contractors.

Technical training for this essential service will be given in the men's working time. A certain amount of training in first-aid and anti-gas measures will be given out of working hours, but I know that volunteers from the building trades would not wish to be behind other members of the community in giving up a proportion of their spare time to be trained for their war-time jobs.

Should war come, these volunteers will be employed by the London County Council on a whole-time basis at the rate of pay laid down by the Government, namely, £3 a week in the case of unskilled men, and, in the case of skilled men, £3 a week, together with an allowance sufficient to make their wages broadly equivalent to their normal remuneration as skilled operatives, but without overtime.

Any man interested in this work has only to write to the architect of the London County Council, County Hall, S.E.1, when an enrolment form will be sent to him, which will be dealt with in conjunction with the London Master Builders' Association and the National Federation of Building Trades Operatives who are actively co-operating

with the Council in the recruitment of the volunteers required.

I appeal to those of your readers who are eligible to volunteer at once to man this important and essential branch of civil defence.

HERBERT MORRISON

Leader of the London County Council; Chairman, A.R.P. Committee.

The Georgian Ball

SIR,—There were certainly, as *Astragal* notes, many curiosities to be seen among the splendours of the Osterley Ball, *quorum pars non magna fuit!*

But that pervading sense of unreality must evidently have disturbed somebody's perceptions who imagined I was seen *fingering the tapestries*.* In defence of my professional integrity I must point out that there are some things that are not done, at least when notices, "Please do not touch," are so prominently displayed.

CHRISTOPHER HUSSEY

Editor *Country Life*

* The murmur of conversation was like the trained sibilance of supers. Fragments of it drifted across the lawn and through the galleries. "Of course it's *madly Adam*" . . . "My dear, there's wrestling round the front." . . . "Don't look now, but isn't that Christopher Hussey fingering that tapestry?"—*Astragal*, July 20.

A.R.P. Shelters

SIR,—It is reported in to-day's Press that the Finsbury Borough Council is to proceed with the building of one of their deep shelters.

Unless the population is to live underground in time of war, the success of these shelters depends entirely on the possibility of filling them within the warning period. This means that some 7,000 people must be got "down under" in, say, five or six minutes after arrival at the entrances; yet at Piccadilly Circus tube station during the rush hour it takes nearly an hour for this number to get underground.

At Piccadilly Circus station at this hour, the down traffic is served by three escalators (a total width of about 13 ft. 6 in.) and the majority of those using the station at that time of day have had years of practice in getting down to the trains in the minimum of time.

In the Finsbury shelters, even with practice drills, it is difficult to see how crowds seeking shelter, and hampered probably by darkness, will not be caught at street level when the bombs and splinters start to fall.

London.

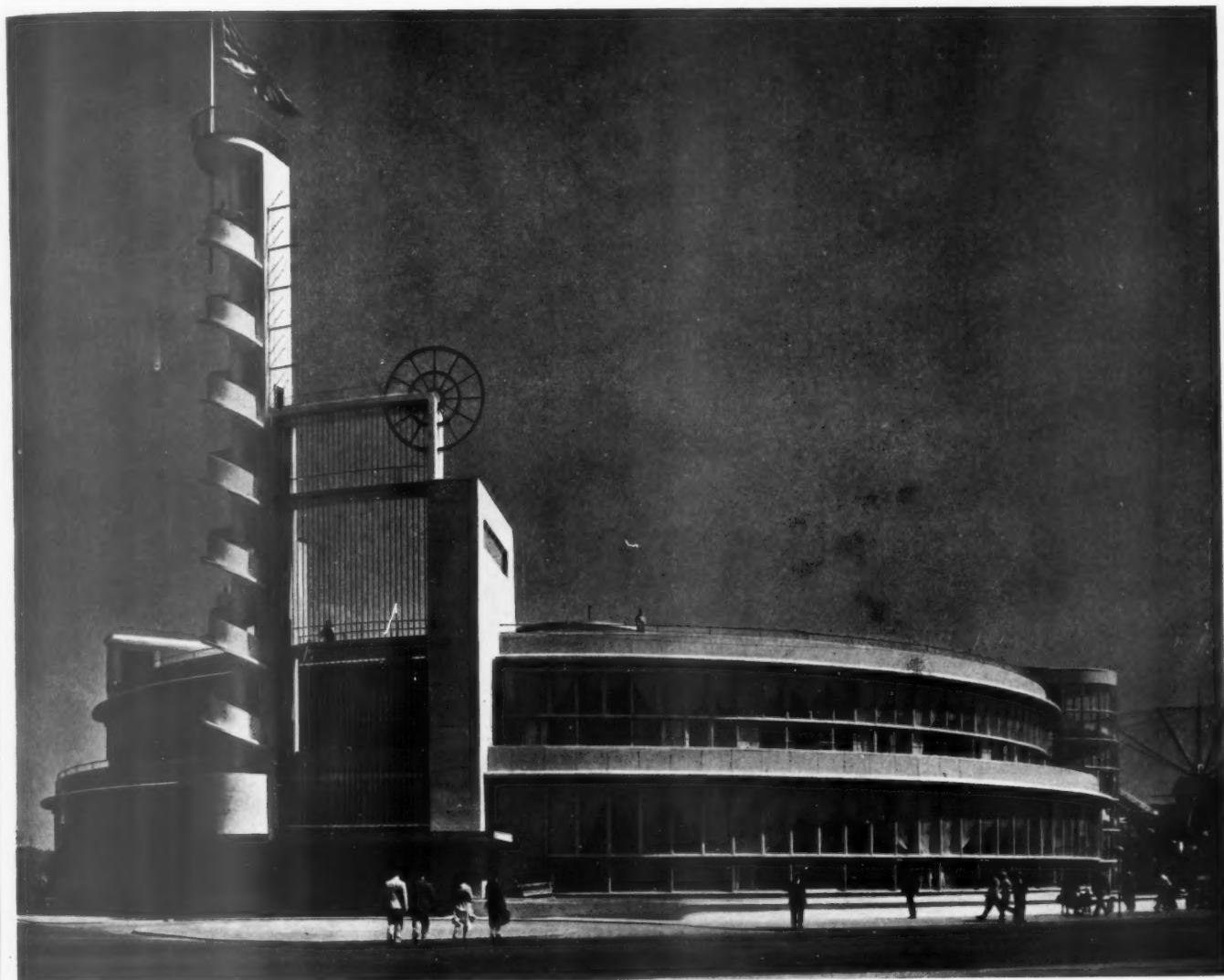
BRIAN O'RORKE

Professional Amalgamation

SIR,—Is it too much to hope that we may yet see the complete unification of the architectural profession and that the R.I.B.A. will take over the two newer societies in the same way as the Society of Architects was incorporated in the Institute?

What a gesture this would be now Sir Edwin Lutyens has renewed his membership of the R.I.B.A.

"ARCHITECTOS"



THE NEW CASINO, BLACKPOOL

BY JOSEPH EMBERTON: ASSOCIATED ARCHITECT, HALSTEAD BEST

PROBLEM—A casino on the pleasure beach, built on the site of its predecessor. A long-term reorganization scheme has been prepared for the whole pleasure beach by Mr. Emberton and is being carried out in stages.

The casino contains bars, games rooms, a restaurant, cafeteria, banqueting hall and roof gardens in its public section; and administrative offices on the first floor.

The flat roof overlooks the sea and pleasure beach and is to be equipped for sunbathing. The hoods over the windows are fitted with floodlights, and the frame next the tower is to be used for signs.

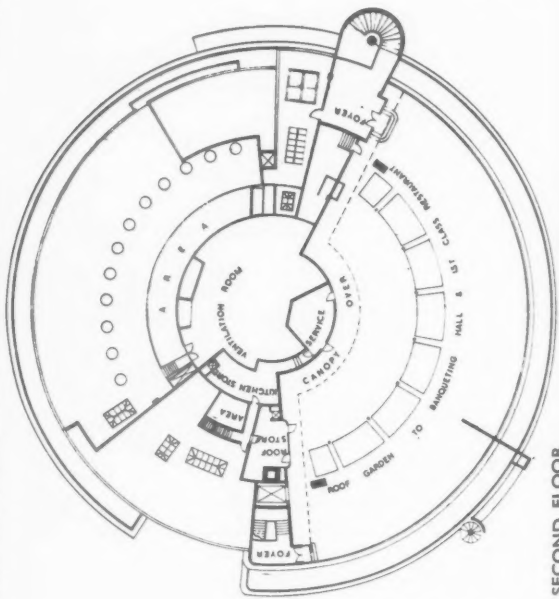
THE NEW CASSINO, BLACKPOOL



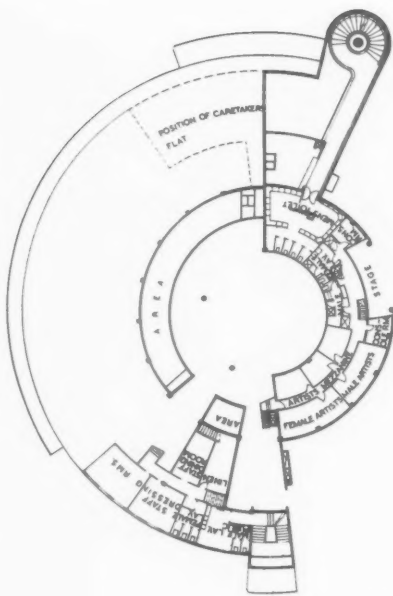
THE MAIN STAIRCASE WITH ONE OF THE PLEASURE BEACH SIDESHOWS IN THE FOREGROUND



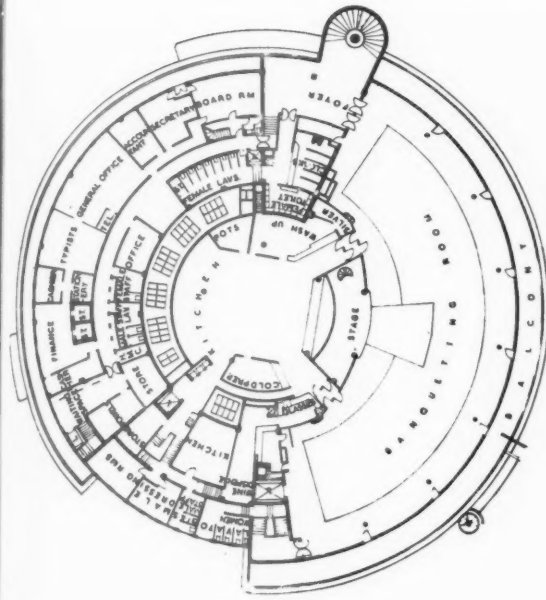
THE FLAT ROOF OVER THE BANQUETING HALL—TO BE EQUIPPED AS A SUNBATHING AREA



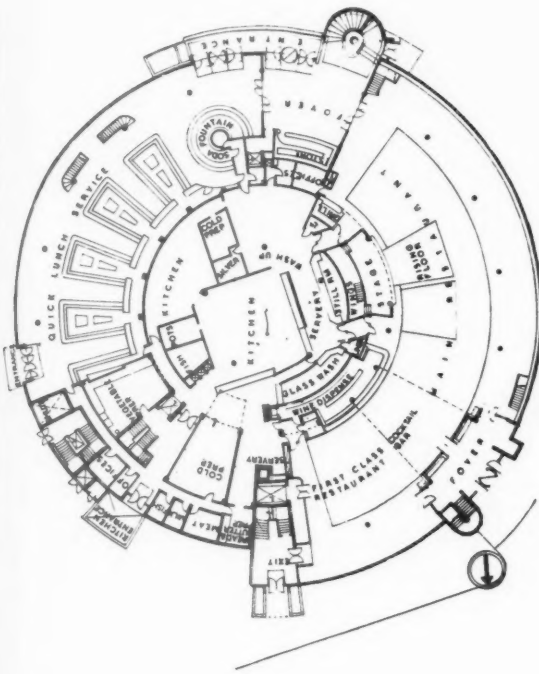
PLAN—The circulation has been carefully studied to keep the various types of patrons separate. Patrons of the bar and billiards rooms enter through a separate door and avoid the main restaurant traffic; the cafeteria has entrances at both ends and its own lavatories. Patrons of the first-class restaurant and cocktail bar also have a separate entrance. Kitchens and services are in the centre of the building. Kitchens are duplicated on each floor, but are served from the same stores and offices by a battery of lifts. Administrative offices have a separate entrance and overlook the pleasure beach, which the management also controls.



BY JOSEPH EMBERTON: ASSOCIATED ARCHITECTS, HALSTEAD BEST



FIRST FLOOR



GROUND FLOOR



BASEMENT



THE MAIN ENTRANCE FROM THE PLEASURE BEACH

CONSTRUCTION—R.C. framed on an R.C. raft with slab floors. The building is faced with patent vibrated concrete slabs, the outer surface being slightly polished. Cornices and window frames are of the same dense vibrated concrete. In most cases glazing is bedded in mastic direct in the concrete.

SECOND FLOOR

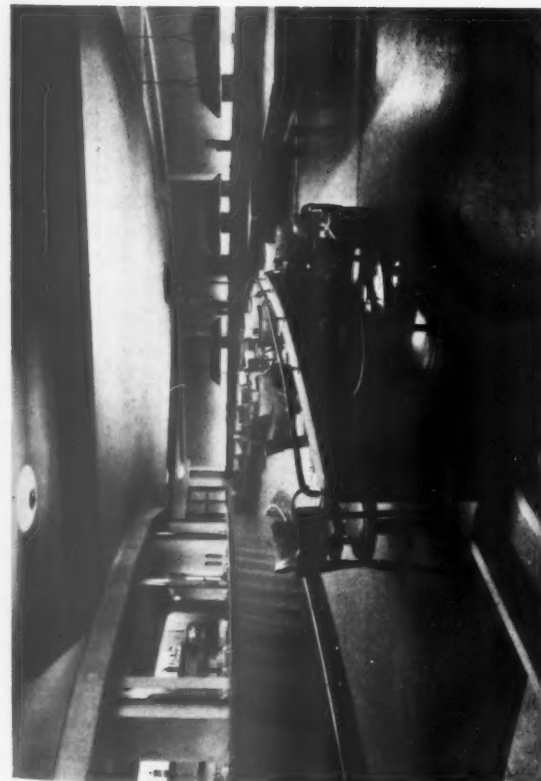
THE NEW CASINO, BLACKPOOL



THE MAIN RESTAURANT

The main restaurant is divided from the cocktail bar by the glazed screen in the background. The stage on the right is used for cabaret shows. Ceiling and walls are broken white, radiator castings are grey and the columns are tomato.

THE MAIN RESTAURANT
The main restaurant is divided from the cocktail bar by the glazed screen in the background. The stage on the right is used for cabaret shows. Ceiling and walls are broken white, radiator casings are grey and the columns are tomato.



BAR AND BILLIARDS ROOM



BANQUETING HALL



OFFICES



SNACK BAR

The bar and billiards room has been planned on two levels so that patrons can watch the games. Joinery is of walnut and lighting is concealed in the billiards room dado. The radiating beams in the banqueting hall carry tracks from which partitions can be hung to subdivide the hall. Administrative offices are double glazed between rooms and floors are of cork. Centre doors to snack bar are automatically controlled by a photo-electric ray. The doors are armour-plate glass. Metal work is grey.

BY JOSEPH EMBERTON: ASSOCIATED ARCHITECT, HALSTEAD BEST



MAIN STAIRCASE

The main staircase gives access to all public rooms from the pleasure beach. It is of reinforced concrete, finished in cream terrazzo, with a black non-slip strip in each step. Walls and ceiling are broken white; one handrail is ivory, the other tomato red. The general contractors were Blackpool Pleasure-Beach, Limited. For sub-contractors, see page 150.

CASINO, BLACKPOOL • BY JOSEPH EMBERTON: ASSOCIATED ARCHITECT, HALSTED BEST

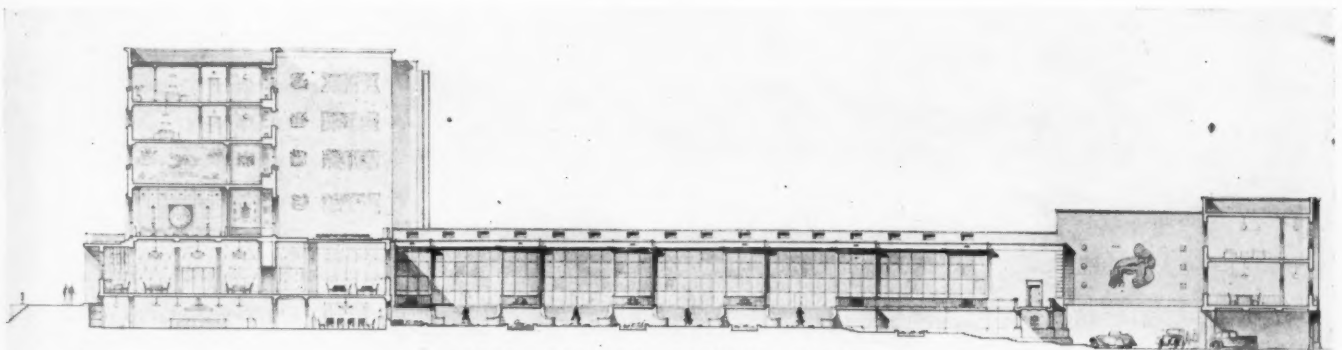
THE ROME SCHOLARSHIP, 1939

A N A T I O N A L A E R O C L U B



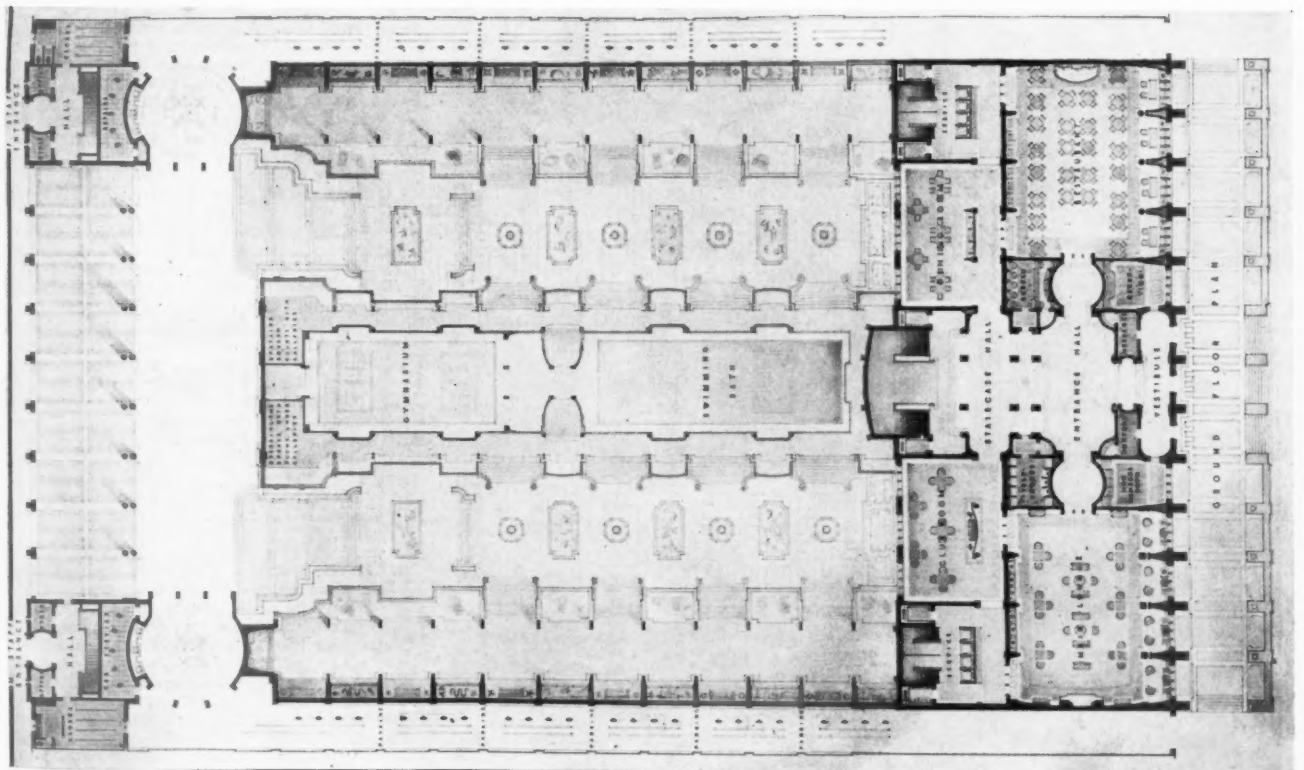
ELEVATION TO PRINCIPAL STREET

Main elevation



LONG SECTION THROUGH SITE

Section



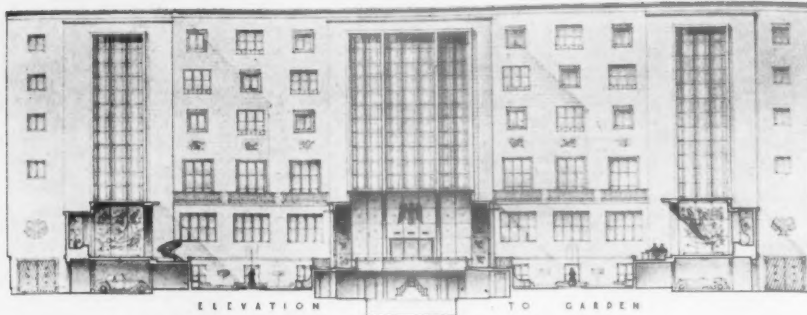
Ground floor plan

W I N N I N G D E S I G N : B Y R A L P H C O W A N

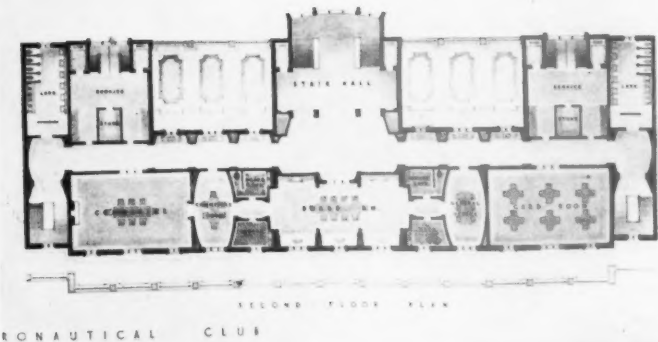
THE ROME SCHOLARSHIP, 1939

A NATIONAL AERO CLUB

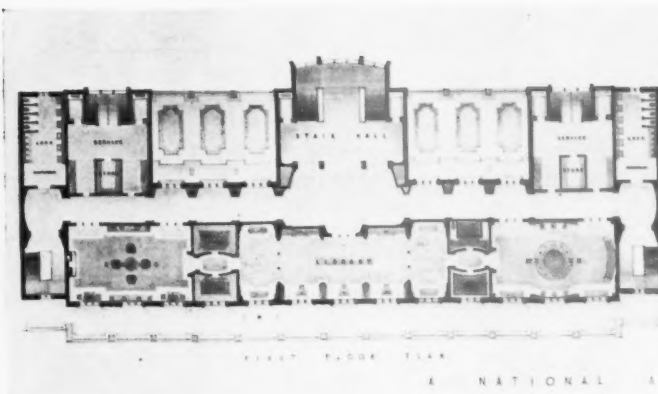
NEWS IN BRIEF



Garden elevation



Second floor plan



First floor plan

W I N N I N G D E S I G N
 B Y
 R A L P H C O W A N

● Mr. H. Connelly, A.R.I.B.A., who has been Acting City Architect at Bradford since the retirement of Mr. J. A. Fletcher, has been appointed City Architect.

● Mr. Hannah (Wolverhampton, Bilston, U.) asked the First Commissioner of Works how much of the old Palace of Whitehall it had been possible to preserve in reoccupying the site; and what steps were being taken to incorporate the river embankment wall and steps constructed by Sir Christopher Wren. In reply Mr. Ramsbotham (Lancaster, U.) said—The Wolsey wine cellar will be preserved in the new building. The steps and river wall of Queen Mary's terrace, constructed by Sir Christopher Wren, will be preserved *in situ* outside the building.

● Finsbury Borough Council have decided to proceed with a £100,000 90 ft. deep shelter in spite of the Government's refusal to approve the proposal and sanction a loan. Alderman Harold Riley, chairman of the A.R.P. committee, said that the method adopted was to grant a lease of the site for 40 years to Shop-Investments, Ltd. The shelter would be erected to the plans of the Council's architect, and the Council would then rent the shelter from the company at £7,400 a year—the equivalent of a 1½d. rate. After 35 years the shelter would revert to the Council by purchase. It would accommodate 7,600 people and would be completed in about seven months.

● Newcastle City Council have approved a motion authorizing the promotion of a Parliamentary Bill for a development scheme for the centre of the town costing £500,000. It is proposed to demolish the triangle of property bounded by Northumberland, Percy, and Prudhoe Streets, and to erect a shopping centre.

● The Minister of Health opened the L.C.C.'s White City housing estate on Friday. The White City estate will, when completed, comprise 49 five-storey blocks of dwellings, housing some 11,000 persons in 2,166 self-contained flats. The estimated cost, including acquisition and clearance of the ground, roads and sewers, shops, administrative buildings, and the laying out of open spaces and playgrounds, is about £1,740,000. A first instalment of 23 blocks of flats is now complete. The layout of the estate and the plans and elevations of the dwellings were designed under the direction of the former architect to the L.C.C. (Mr. E. P. Wheeler) and his successor (Mr. F. R. Hiorns).

● The Privy Council have approved the scheme for a course leading to the degree of bachelor in architecture arranged jointly by the University of Wales and the Welsh School of Architecture, Cardiff Technical College.

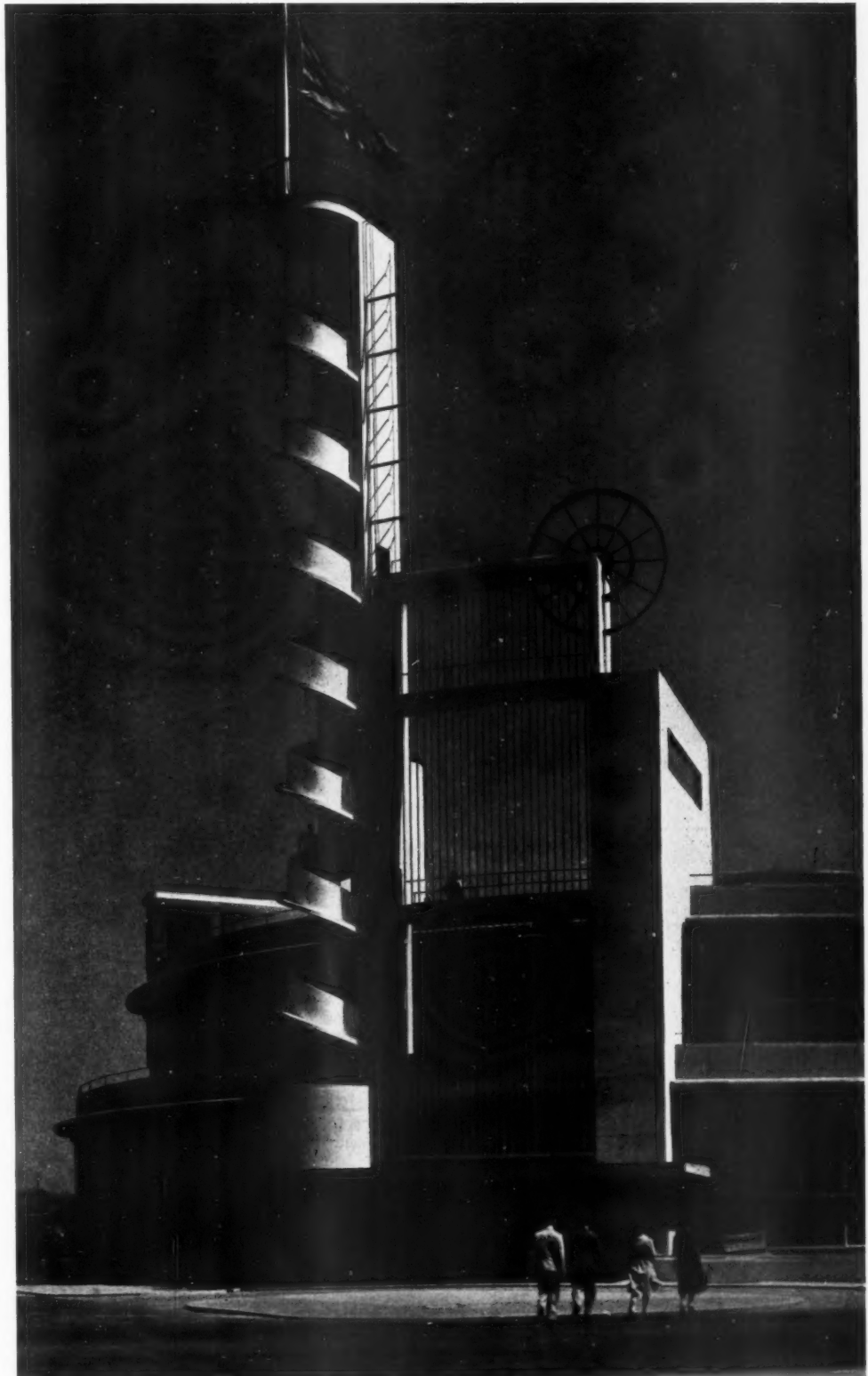
● Lord Derby, president of the Association of Municipal Corporations, will open the new municipal offices at Cambridge on October 9. The building has been erected on the site of the old Guildhall to the designs of Mr. Cowles-Voysey, and will cost, completely equipped and furnished, about £175,000.

● It is proposed to extend Edmonton Junior Girls' Technical School at a cost of £40,000.

● The annual exhibition of architectural plans, drawings, and photographs, arranged by the Hampshire and Isle of Wight Architectural Association, was opened at Southampton Art Gallery on July 19 by Mr. Hubert Lidbetter, F.R.I.B.A., Chairman of the Board of Architectural Education. Mr. Lidbetter congratulated Mr. Lawrence Lavington Cook, of Southsea, on his measured drawing of Gloucester House, Portsmouth, which had won the Association's annual prize of £5 5s. Criticizing others, he said that some competitors had made the mistake of treating buildings as though they had no background. Every building, he said, should be related to its background.

WORKING DETAILS : 765

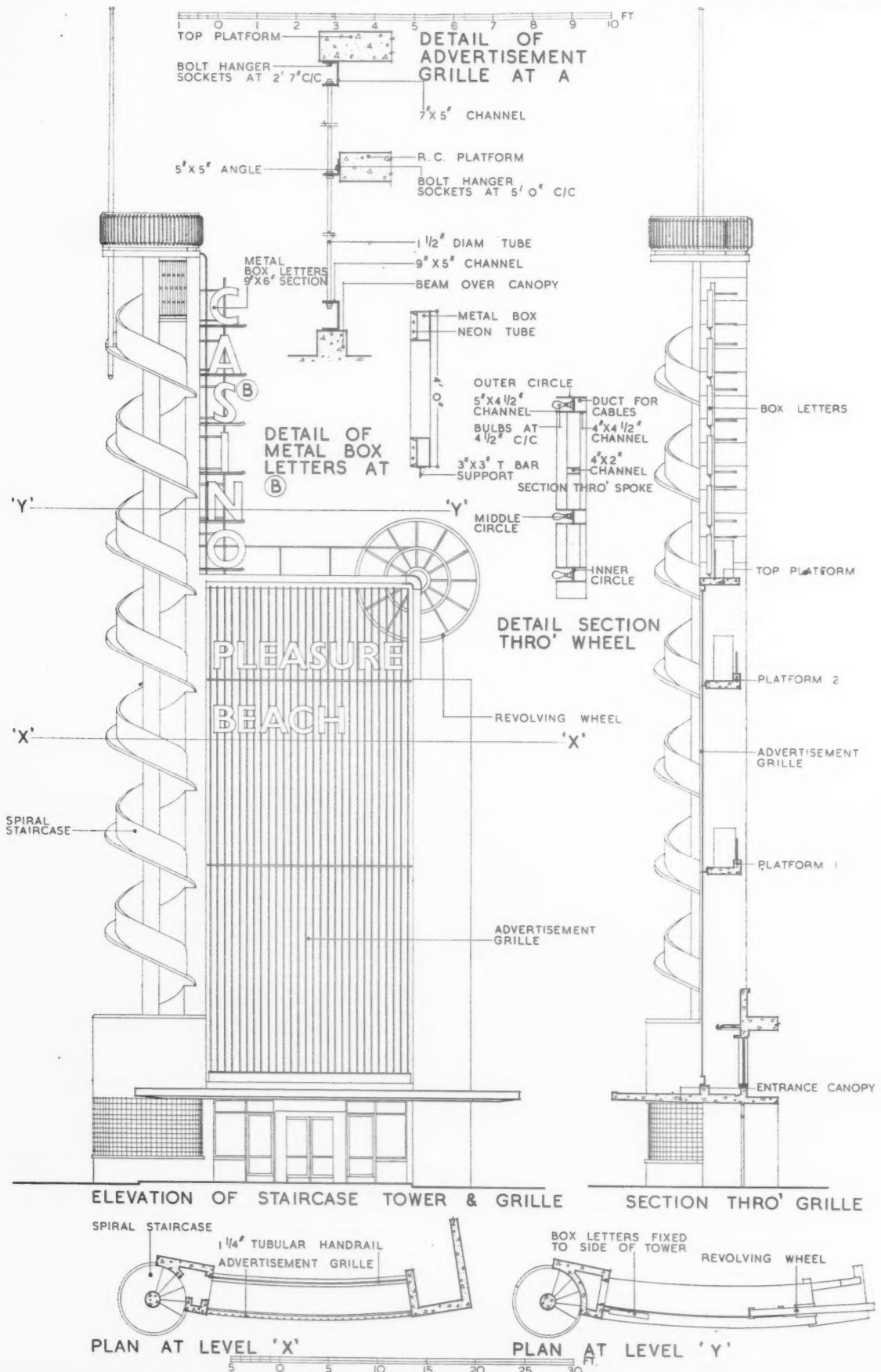
ENTRANCE AND TOWER • CASINO, BLACKPOOL • JOSEPH EMBERTON : ASSOCIATED ARCHITECT, HALSTEAD BEST



The tower, which consists of a reinforced concrete spiral staircase round a central column, and the advertisement grille beside it form the main feature of the circular Casino building. They are situated over one of the two main entrances to the building. The advertisement grille, which is to be used for advertising attractions at the Casino, consists of a reinforced concrete frame in which are fixed vertical tubular steel rods, supported at intervals on the horizontal concrete platforms. To this grille can be attached metal box lettering housing neon tube lighting. At the corner of the reinforced concrete frame, a revolving wheel is fixed constructed in metal section. Additional metal box lettering has been fixed to the side of the tower. Details are shown overleaf.

WORKING DETAILS : 766

ENTRANCE AND TOWER • CASINO, BLACKPOOL • JOSEPH EMBERTON : ASSOCIATED ARCHITECT, HALSTEAD BEST



Details of the entrance and tower illustrated overleaf.

The Architects' Journal Library of Planned Information

INFORMATION SHEET SUPPLEMENT



SHEETS IN THIS ISSUE

749 Metalwork

750 Wall Facing Materials and Wallboards



All the Information Sheets published in The Architects' Journal Library of Planned Information since the inception of the series to the end of 1938 have been reprinted and are available in five volumes. Price 21s. each.

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- 701 : Tile Hanging
- 702 (420 revised) : Fixing Insulating Board
- 703 : Sheet Metals
- 704 : Plan Elements
- 705 : Metal Work
- 706 : Plan Elements
- 707 : Furniture Layout
- 708 : Plan Elements
- 709 : Flue Construction
- 710 : Natural Lighting
- 711 : Glass and Glazing
- 712 (109 revised) : Quarry Tiles
- 713 : Glass and Glazing
- 714 : Metalwork
- 715 (106 revised) : Hot Water Radiators (Pressed Steel)
- 716 : Furniture Layout
- 717 : Metalwork
- 718 : Flooring Materials
- 719 : Plumbing
- 720 : Water Heating
- 721 : Wall Facing Materials and Wallboards
- 722 : Roofing
- 723 : Metalwork
- 724 : Timber Construction
- 725 : Sanitary Fittings
- 726 : Metalwork
- 727 : Waterproof Jointing and Bedding
- 728 : Timber Construction
- 729 : Steelwork
- 730 : Wall Facing Materials and Wallboards
- 731 : Metalwork
- 732 : Concreté Construction
- 733 : Structural Steelwork
- 734 : Metalwork
- 735 : Plumbing
- 736 : Structural Steelwork
- 737 : Structural Steelwork
- 738 : Metalwork
- 739 : Plan Elements
- 740 : Timber Construction
- 741 : Structural Steelwork
- 742 : Metalwork
- 743 : Wall Finishes
- 744 : Waterproofing and Damp-proofing
- 745 : Structural Steelwork
- 746 : Metalwork
- 747 : A. R. P.
- 748 : Waterproofing and Damp-proofing



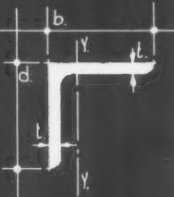
THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

COMMERCIAL SIZES OF ALUMINIUM STRUCTURAL SECTIONS.
CONDENSED LISTS GIVING DIMENSIONS & LOADINGS OF EQUAL & UNEQUAL L USED AS STRUTS :

FABRICATION : These sections are produced by extrusion, & sections falling entirely within a circle of 12" diameter can be produced. Almost all the alloys used develop their maximum physical properties after appropriate heat treatment.
MAX. LENGTHS : (a) Heat treated sections : 70 ft. (b) Other sections : any lengths - generally determined by transport difficulties.

TABLE 1: GIVING TOTAL AXIAL LOADS IN TONS ON EQUAL L USED AS COLUMNS OR STRUTS FOR DIFFERENT LENGTHS.

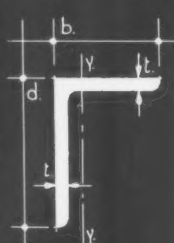
Equal angles,
Alloy : NA.13SQA.



SIZE d x b inches.	THICKNESS t inches.	HEIGHT IN FEET. *													
		2	3	4	5	6	7	8	9	10	11	12	13	14	
1 1/2 x 1 1/2	3/16	1.86	1.11	0.67	*	*	*	*	*	*	*	*	*	*	
1 1/2 x 1 1/2	1/4	2.42	1.45	0.87	*	*	*	*	*	*	*	*	*	*	
1 3/4 x 1 3/4	3/16	2.49	1.63	1.05	0.72	*	*	*	*	*	*	*	*	*	
1 3/4 x 1 3/4	1/4	3.25	2.13	1.37	0.94	*	*	*	*	*	*	*	*	*	
2 x 2	3/16	3.09	2.24	1.50	1.02	0.75	*	*	*	*	*	*	*	*	
2 x 2	1/4	4.09	2.96	1.98	1.35	0.99	*	*	*	*	*	*	*	*	
2 x 2	5/16	4.95	3.49	2.35	1.59	1.12	*	*	*	*	*	*	*	*	
2 1/4 x 2 1/4	3/16	3.71	2.91	2.04	1.47	1.04	0.78	*	*	*	*	*	*	*	
2 1/4 x 2 1/4	1/4	4.86	3.81	2.67	1.92	1.36	1.02	*	*	*	*	*	*	*	
2 1/4 x 2 1/4	5/16	5.95	4.59	3.16	2.26	1.61	1.22	*	*	*	*	*	*	*	
2 1/2 x 2 1/2	1/4	5.65	4.64	3.48	2.53	1.86	1.42	1.11	*	*	*	*	*	*	
2 1/2 x 2 1/2	3/16	6.90	5.63	4.16	3.01	2.19	1.70	1.31	*	*	*	*	*	*	
2 1/2 x 2 1/2	5/16	8.18	6.69	4.94	3.56	2.59	2.01	1.55	*	*	*	*	*	*	
3 x 3	1/4	7.09	6.31	5.22	4.00	3.06	2.41	1.90	1.56	*	*	*	*	*	
3 x 3	3/8	10.40	9.19	7.48	5.70	4.40	3.40	2.65	2.18	*	*	*	*	*	
3 x 3	1/2	13.50	11.90	9.71	7.41	5.72	4.42	3.45	2.84	*	*	*	*	*	
3 1/2 x 3 1/2	1/4	8.55	7.90	6.85	5.68	4.56	3.60	2.95	2.38	1.97	1.63	*	*	*	
3 1/2 x 3 1/2	3/8	12.60	11.50	10.00	8.23	6.52	5.19	4.24	3.19	2.65	2.35	*	*	*	
3 1/2 x 3 1/2	1/2	16.50	15.00	13.10	10.80	8.52	6.77	5.52	4.16	3.72	3.07	*	*	*	
4 x 4	3/8	14.70	13.80	12.40	10.80	9.01	7.30	6.02	5.08	4.11	3.47	3.05	2.57	*	
4 x 4	1/2	19.30	18.10	16.20	14.10	11.80	9.58	7.90	6.64	5.40	4.55	4.00	3.36	*	
4 x 4	5/8	23.80	22.10	19.90	17.30	14.20	11.60	9.51	7.97	6.50	5.50	4.70	*	*	
4 1/2 x 4 1/2	3/8	17.00	16.00	14.80	13.40	11.60	9.82	8.12	6.81	5.89	4.86	4.17	3.71	3.14	
4 1/2 x 4 1/2	1/2	22.40	21.00	19.40	17.60	15.20	12.90	10.70	8.98	7.71	6.40	5.48	4.89	4.11	
4 1/2 x 4 1/2	5/8	27.40	25.90	24.00	21.40	18.40	15.50	13.00	10.90	9.30	7.70	6.60	5.93	5.00	
5 x 5	3/8	19.10	18.10	17.10	15.80	14.20	12.30	10.60	8.94	7.70	6.62	5.66	5.00	4.31	
5 x 5	1/2	25.10	23.80	22.50	20.80	18.60	16.20	13.90	11.70	10.10	8.71	7.42	6.58	5.67	
5 x 5	5/8	31.00	29.40	27.70	25.50	22.90	20.70	18.90	14.50	12.20	10.60	9.06	7.81	6.86	

TABLE 2: GIVING TOTAL AXIAL LOADS IN TONS ON UNEQUAL L USED AS COLUMNS OR STRUTS FOR DIFFERENT LENGTHS.

Unequal angles,
Alloy : NA.13SQA.



2 x 1 1/2	3/16	2.40	1.48	0.95	0.62	*	*	*	*	*	*	*	*	*
2 x 1 1/2	1/4	3.05	1.86	1.16	0.76	*	*	*	*	*	*	*	*	*
2 1/2 x 1 1/2	3/16	2.75	1.70	1.07	0.71	*	*	*	*	*	*	*	*	*
2 1/2 x 1 1/2	1/4	3.64	2.24	1.41	0.94	*	*	*	*	*	*	*	*	*
2 1/2 x 2	3/16	3.66	2.75	1.91	1.34	0.96	0.73	*	*	*	*	*	*	*
2 1/2 x 2	1/4	4.80	3.60	2.50	1.76	1.26	0.96	*	*	*	*	*	*	*
2 1/2 x 2	5/16	5.92	4.45	3.09	2.16	1.55	1.18	*	*	*	*	*	*	*
3 x 2	1/4	5.40	4.16	2.87	2.05	1.46	1.11	*	*	*	*	*	*	*
3 x 2	3/16	6.62	5.10	3.52	2.51	1.79	1.36	*	*	*	*	*	*	*
3 x 2	5/8	7.82	5.89	4.09	2.86	2.05	1.56	*	*	*	*	*	*	*
3 x 2 1/2	1/4	6.31	5.35	4.12	3.05	2.32	1.73	1.39	*	*	*	*	*	*
3 x 2 1/2	5/16	7.80	6.60	5.10	3.76	2.86	2.14	1.72	*	*	*	*	*	*
3 x 2 1/2	3/8	9.25	7.83	6.03	4.46	3.40	2.54	2.04	*	*	*	*	*	*
3 1/2 x 2 1/2	1/4	6.21	5.33	4.20	3.14	2.38	1.81	1.46	1.15	*	*	*	*	*
3 1/2 x 2 1/2	5/16	8.61	7.35	5.68	4.24	3.24	2.45	1.98	*	*	*	*	*	*
3 1/2 x 2 1/2	3/8	10.20	8.71	6.71	5.02	3.84	2.91	2.35	*	*	*	*	*	*
3 1/2 x 3	3/16	9.61	8.67	7.25	5.72	4.45	3.55	2.75	2.26	1.84	*	*	*	*
3 1/2 x 3	5/8	11.50	10.30	8.64	6.82	5.30	4.24	3.28	2.70	2.19	*	*	*	*
3 1/2 x 3	1/2	14.90	13.40	11.10	8.79	6.70	5.31	4.14	3.44	2.72	*	*	*	*
4 x 2 1/2	1/4	7.54	6.50	5.10	3.81	2.90	2.20	1.78	1.40	*	*	*	*	*
4 x 2 1/2	5/16	9.33	8.04	6.30	4.71	3.59	2.73	2.20	1.73	*	*	*	*	*
4 x 2 1/2	3/8	11.10	9.50	7.32	5.48	4.17	3.17	2.55	*	*	*	*	*	*
4 x 3	3/16	10.40	9.50	8.08	6.41	4.96	3.97	3.14	2.54	2.10	*	*	*	*
4 x 3	5/8	12.40	11.30	9.61	7.65	5.92	4.75	3.75	3.03	2.51	*	*	*	*
4 x 3	1/2	16.20	14.70	12.40	9.90	7.63	6.11	4.78	3.88	3.16	*	*	*	*
4 x 3 1/2	5/16	11.50	10.60	9.38	7.90	6.41	5.10	4.18	3.38	2.80	2.45	2.02	*	*
4 x 3 1/2	3/8	13.60	12.60	11.10	9.40	7.62	6.07	4.96	4.01	3.33	2.91	2.40	*	*
4 x 3 1/2	1/2	17.90	16.50	14.60	12.30	10.00	7.95	6.50	5.26	4.36	3.81	3.15	*	*

(A) The loads are based on the 'effective length' specified in the L.C.C. Building Bylaw No. 86 for proper positional restraint at each end but imperfect rotational restraint. For other conditions of end fixing the loads must be modified accordingly.
(B) In the above 2 tables the values given to the right of or above the zig-zag lines may be applied to secondary compressive members but they should not be applied to main structural struts or columns. For the latter the values lie to the left of the zig-zag lines, the criterion being a slenderness ratio of 150.

Information from the Northern Aluminium Company Limited.

THE ARCHITECTS' JOURNAL
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INFORMATION SHEET

• 749 •

METALWORK

Subject : Aluminium Alloy Structural
Sections, 4

General :

This is the last of four Sheets listing the dimensions and loading of the commercial sizes of aluminium alloy structural sections, and deals with equal and unequal angles used as struts.

Loading :

The tabulated values are the total axial loads in tone based on the effective length specified for proper positional restraint at each end but imperfect rotational restraint. For other conditions of end fixing the loads must be modified accordingly. It will be noted that considerations of buckling have determined most of these loads.

Section types :

Many of the sizes enumerated are obtainable from stock dies in several different leg thicknesses. Other stock types are extruded with roots and toes square and not rounded, and others again have the heel, toe and other radii variously placed in relation to the front and back faces. In addition to the 90 degree angles of regular profile shown, a wide range of acute and obtuse angles of irregular profile and thickness are obtainable from extrusion dies held in stock.

Fabrication and use :

For a description of the alloys used for structural sections, the uses of these, and the

methods of insulation and fabrication, see Sheet No. 738, Aluminium Structural Sections, I.

Mechanical properties :

The comparative strengths of the alloys most widely used for structural purposes are given on Sheet 738. Clauses related to assembly, cutting, machining, riveting, and welding of wrought aluminium alloys are given on Sheet 501.

Resistance to corrosion :

For notes on insulation and the resistance of aluminium alloys to galvanic corrosion, see remarks on the reverse side of Sheets Nos. 738 and 742.

Finishing :

For a brief description of surface finishes see Sheet No. 505.

Previous Sheets :

Previous Sheets of this series dealing with the architectural uses of aluminium are Nos. 492, 501, 504, 505, 510, 661, 669, 673, 680, 686, 714, 717, 723, 726, 731, 734, 738, 742 and 746.

Note :

The four Sheets of this series (Nos. 738, 742, 746 and 749) setting out the sizes and loadings of aluminium alloy structural sections have been compiled by the Northern Aluminium Company in conjunction with Messrs. Felix J. Samuely and Conrad W. Hamann, Consulting Engineers, London.

Issued by : The Northern Aluminium
Company, Ltd.

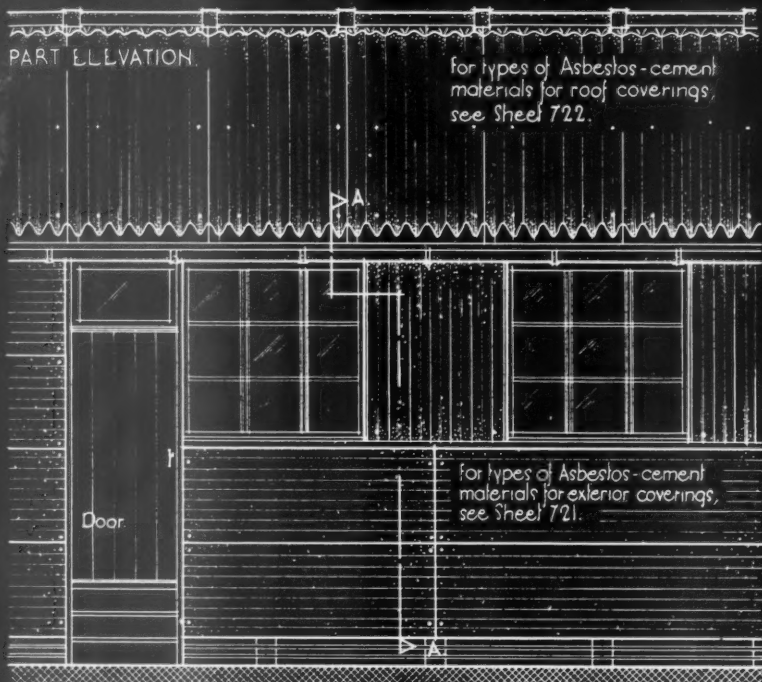
Address : Bush House, Aldwych, London,
W.C.2

Telephone : Temple Bar 8844

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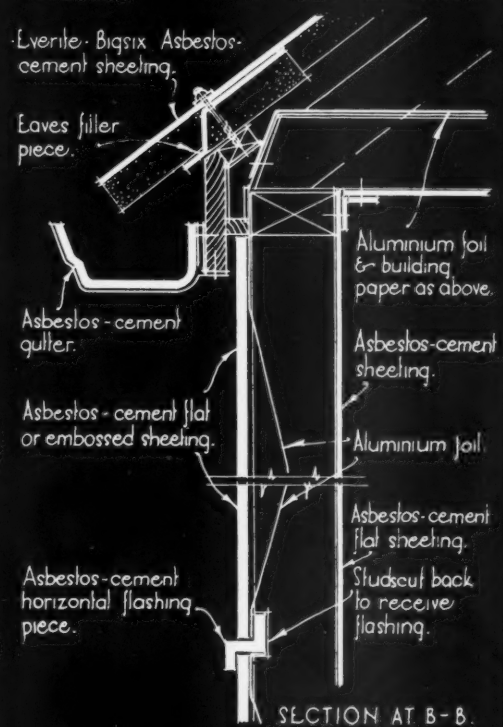
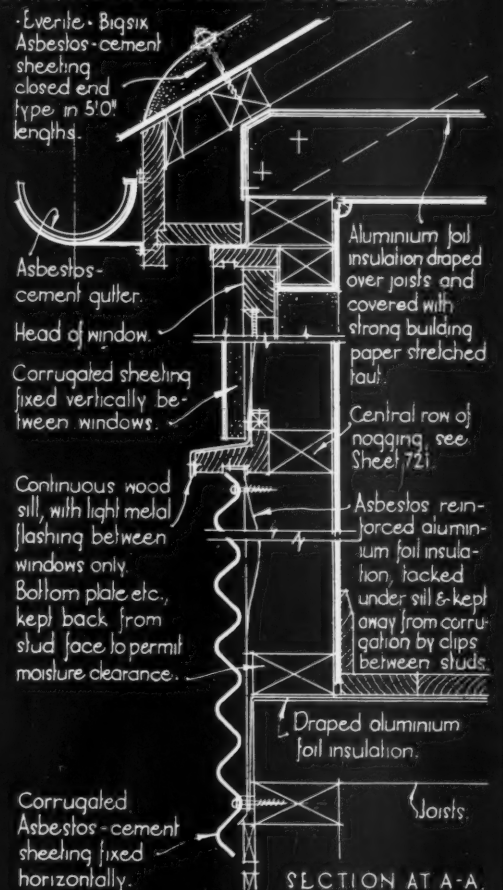
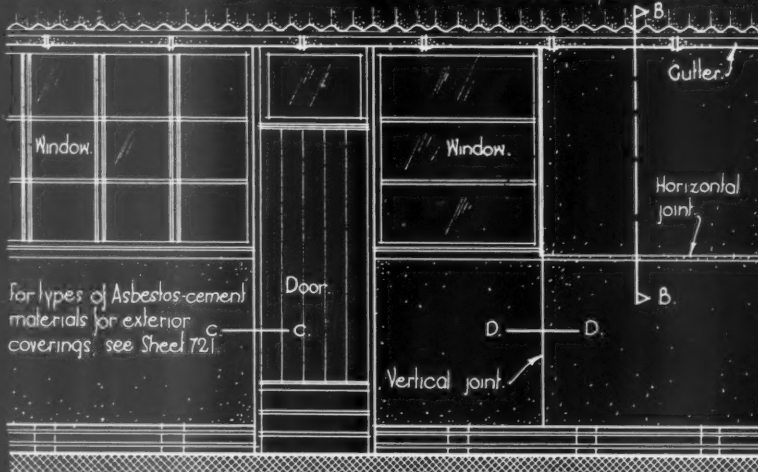
FLAT & HORIZONTALLY-LAID CORRUGATED ASBESTOS-CEMENT EXTERNAL WALL COVERINGS:

Typical framing details when Everite Standard Corrugated sheets, Everite Bigsix sheets or flat and Embossed Asbestos-cement sheets are used.



For treatment at corners, window and door jambs and cills, and horizontal joints when corrugated Asbestos-cement external wall-coverings are used fixed horizontally, see sheet 730.

PART ELEVATION SHOWING THE USE OF FLAT OR EMBOSSED A/C COVERINGS:



Information from Turners Asbestos Cement Co. branch of Turner & Newall Ltd.

INFORMATION SHEET: LIGHT FRAME CONSTRUCTION FOR ASBESTOS-CEMENT MATERIALS: DETAILS. SIR JOHN BURNETT TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1

THE ARCHITECTS' JOURNAL
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INFORMATION SHEET

• 750 •

WALL FACING MATERIALS AND WALLBOARDS

Subject : Wall Construction and Details for Corrugated Asbestos-cement Sheets laid horizontally, 2.

General :

The framing details shown on this Sheet are based on the use of the light prefabricated units illustrated on Sheets 721, 722 and 730. Standard construction consists of a top plate, bottom plate and studs (usually 3 in. by 2 in. or 4 in. by 1½ in.) at 2 ft. centre to centre, with a central row of nogging if the stud is not longer than 10 ft. The roof comprises rafters spaced at 2 ft. centre to centre, tied in at the feet by ceiling joists at corresponding centres.

For buildings with the small roof spans given in this series of Sheets, this general type of construction is found to be the most economical and satisfactory for all forms of asbestos-cement roof, internal lining, and exterior covering materials.

Horizontal Sheeting :

Sheets 721 and 722 dealt mainly with the use of flat and corrugated sheeting fixed vertically to the walls, and Sheet 730 with the use of corrugated sheeting fixed horizontally. The present Sheet gives further details of the framing and construction when the corrugated sheeting is fixed horizontally, and illustrates a typical arrangement of the asbestos-cement materials in relation to fenestration. Details are generally applicable to either Everite Standard asbestos-cement corrugated sheets or Everite Bigsix asbestos-cement corrugated sheets, full particulars of which are given on Sheets 527, 530 and 533.

Insulation :

Floors, walls and ceilings are insulated throughout with Turnall asbestos reinforced aluminium foil, which is made on a core of either asbestos paper or asbestos felt. Further details of this material are given on sheets 403 and 406.

The foil is draped over floor and ceiling joists as indicated in Sheet 722, and fixed to the outer face of the studs, with an air space obtained behind the outer asbestos covering by means of a suitable clip and spacer between each pair of studs as shown on Sheet 730.

The total heat transmittance of the composite wall panel (shown also on plan at the top of Sheet 730) is 0.23 B.Th.U. per hour per square foot for 1 deg. F. difference in air temperature between either side. A full analysis of the heat resistance and transmittance is given on the back of Sheet 721.

The insulation of roofs or ceilings is as important as the insulation of walls, and is shown in detail and described for this form of construction on Sheet 722.

Waterproofing :

Turnall asbestos reinforced aluminium foil, on asbestos felt at corners, openings and joints in the outer coverings, not only provides insulation, but by this method of fixing performs the additional function of forming an impenetrable skin behind the outer covering which waterproofs the framework.

It removes any necessity for using cover fillets or lapping at vertical joints and simplifies the problem of flashing at openings.

Joints :

Before the outer sheeting is fixed, all corners, trimming studs, jamb linings and studs over which the vertical joints will occur should have a strip of asbestos felt tacked down their full length. The strip should be slightly wider than the studs when these occur.

The vertical joints of the horizontal asbestos sheeting are butted as illustrated on Sheet 730. Joints should be arranged to occur at the ends of the prefabricated units wherever possible. Horizontal joints are formed by lapping the sheets one half corrugation, see Sheet 730.

Fixing :

Each end of every sheet should be fixed by drilling the valley of the corrugation and screwing direct to the studs. A flat lead washer over an asbestos felt washer should be used beneath the screw head. Intermediate fixings, if required, should be made to the studs and not to the nogging, drillings being made through the valleys of the corrugations as before.

Openings :

The ends of sheets abutting door or window linings should be flashed with asbestos-cement angles set over the insulating foil and felt wrapping as indicated. All frames and linings should be set forward sufficiently to form a closure for the corrugations of the particular sheeting used, and packed on the inside to obtain the most economical arrangement of the asbestos reveal and sill linings.

Eaves and Base :

The treatment at the eaves may be similar to the detail shown on Sheet 722 for vertically run sheeting. If a projecting eaves is desired, however, the vertical or horizontal sheeting may terminate immediately beneath the eaves soffit board, fixing screws being driven into a suitable stud or an extra nogging piece.

An alternative finish at the base is the use of small round or square block type asbestos washers, one common type having a hole to suit maximum diameter drive screws, i.e. ½-in. The washers are regularly spaced to form distance pieces, and are attached to the bottom of the floor joists, or to the bottom plate, so that a clear space for moisture clearance is obtained between these members and the back plane of the corrugation.

Flat or Embossed Sheets :

The lower half of this Sheet shows the application of flat or embossed asbestos-cement coverings on framing similar to that used for corrugated sheets.

Fixing and treatment of corners and vertical joints is the same for both types of sheeting, but horizontal joints in flat sheets are flashed by means of an asbestos-cement flashing-piece which fits into a special set-back formed in the stud.

Asbestos-cement angle trim pieces must be used at all corners and at the ends of sheets abutting door or window linings.

Issued by : Turners Asbestos Cement Co.
Branch of Turner and Newall Ltd.

Address (Central Office) : Trafford Park,
Manchester, 17

Telephone : Trafford Park 2181

London Office : Asbestos House, Southwark Street,
S.E.1

Telephone : Waterloo 4041

TRADE NOTES

[By PHILIP SCHOLBERG]

Zinc Weatherstripping

IT seems odd that, when many building owners are prepared to spend a fair amount of money in providing insulation to walls and ceilings, more attention is not paid to leakages round doors and windows. Figures in the Building Research Station's book suggest that the heat lost through leakages may be anything up to 40 per cent. of the total loss, and the American Institute of Heating and Ventilating Engineers give 69 cub. ft. of air escaping every hour through every foot of crack in a badly-fitting window in a breeze as low as 10 miles an hour. And, when you come to add it all up, even quite a small window has a surprising length of crack.

Judging by the technical papers, the fitting of some sort of weatherstripping is almost standard practice in the States. Central heating systems over there are generally set to give an internal temperature some five or ten degrees higher than they are in this country, and external temperature variations are much greater, but since the U.S. Department of Agriculture estimates that properly fitted weatherstrips can decrease the heating bill by about 25 per cent., it seems reasonable to assume that a saving of 15 to 20 per cent. might not be unreasonable here. At any rate, the Zinc Development Association has thought it worth while to standardize some eight sections to cover various different applications, and three firms have agreed to manufacture them. The Americans have far more sections, many of them very complicated and not a few patented, the complications being possibly due to a desire to have something which it is possible to patent, the sales value of plus a little something being enough to offset the increased cost of production. The sections so far standardized in this country should cover all reasonable uses, though other ones could doubtless be made if there were a demand for them.

The method of applying these strips is perfectly simple, for it is only necessary to groove the windows, the strips being fixed with panel pins. The price of the strip is 6s. a hundred feet, so that the cost to be added to each window should not be very great, particularly when it is remembered that some of the more elaborate wooden sections may not be necessary. On an existing job, the cost of fitting would, of course, be greater than if the windows were fitted at the works. One or two firms have estimated the time at about half a day per window or, slightly less, and it seems likely that the size of the window would not make much difference to this figure. The sections at the head of this page show a typical application to a sash window and cover most of the sections except for a pair of slightly modified hooks used at the foot of casement windows and a comparatively heavy threshold strip for doors.

Secondary advantages of weatherstripping would be a reduction in sound infiltration, and they should also be good preventers of rattle. There is, of course, nothing new in the idea, for I have recently heard of alterations to a Cubitt house in Belgravia where the French windows had been weatherstripped with great care. Just

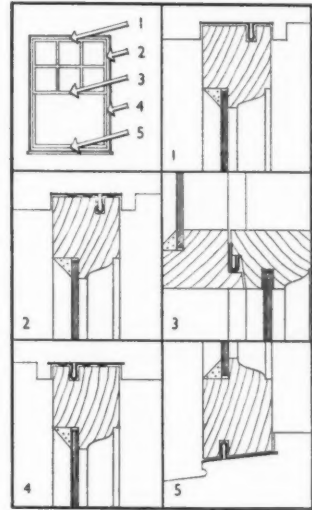
why the practice should have died out it is difficult to see, but there is much to be said for its revival, and the Zinc Development Association and the manufacturers concerned are to be congratulated on having the enterprise to standardize fittings for which there is, as yet, little demand. The Association, by the way, has also published a booklet on the subject, and the illustration in the next column is taken from it. Also given in the booklet are further American figures for air infiltration; with a wind speed of 20 miles an hour the number of cubic feet of air per foot of crack are given as "average wood sash window 150, average metal sash 100, well-fitted sash 60," the corresponding figures after weatherstripping are 50, 45, and 30. There seems to be material here for a jolly discussion between the wood and metal window industries, and I would remind them that August is not far off and that a certain amount of correspondence might help to enliven a dullish month. In the meantime, intending weatherstrippers can make a note of the suppliers below.—(Frederick Braby & Co., Ltd., Euston Road, N.W.1; Enfield Zinc Products, Park View Road, N.17; and G. A. Harvey & Co., Ltd., Woolwich Road, S.E.7.)

Standard Joinery

The Midland Joinery Works has recently issued a sizable catalogue of standard joinery which covers not only windows and combined door and window frames, but external, internal and garage doors, cupboard and wardrobe fronts and gates. Judging by the sections shown, this firm has taken a good deal of trouble to make its windows weatherproof, and it also specializes in purpose-made work in both hard and soft woods. At the end of the list there is a series of useful conversion tables, and, in view of what I said last week about firms who never make any mention of prices, it is perhaps worth adding that full details are given, even down to the price per foot run of mouldings and shelving. A good list which says all that it should without any unnecessary fuss.—(The Midland Joinery Works, Ltd., Burton-on-Trent.)

Rubber Cushioning

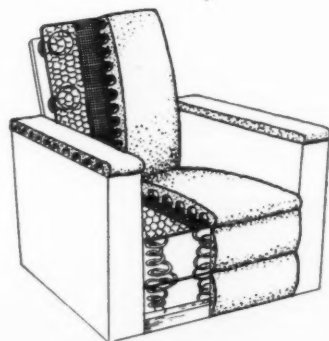
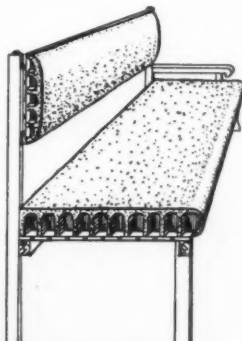
The two sketches at the foot of this page show typical applications of Dunlopillo upholstery to easy chairs and to an open-backed type of bench suitable for waiting-



rooms. The material has been on the market for some years now, and no particular snags seem to arise in practice. London's buses and quite a lot of other transport concerns use it, I have been sleeping on it for the last four or five years, and you sit on it at every meeting in the Henry Jarvis Hall. The booklet in front of me shows various other applications, most of which are fairly familiar by now, and there are also some useful hints on methods of fixing and the most suitable materials for covering.—(The Dunlop Rubber Company, Ltd., Rubber House, Brooke's Market, Holborn, London, E.C.1.)

Barrier Railings

The old type of metal hurdle with rabbit mesh wired to it is no longer good enough for parks and zoos or any other place to which the public has access. Solicitors working on a commission basis have brought their technique to such perfection that anyone who can possibly manage to injure himself in any place owned by a public body or a rich company is almost certain to get heavy damages. Thus a splinter in a wooden handrail, or the ends of a tying wire, can lead to injury and the inevitable compensation. Hence the Wire-worm patent railing, in which the top rail is split on the under side. It is thus possible to run the straining wire inside the split tube, and a mesh barrier can be wired to the strainer without leaving any projecting ends. Standard units of this barrier are made 3 ft. 6 in. high, and in lengths of 10, 12, 15 and 18 ft., though other heights and lengths are obtainable. Uprights are placed at about 5- or 6-ft. centres, and the



result is a neat unit which is strong enough to support people leaning on it.—(Hill and Smith, Ltd., Brierley Hill, Staffordshire.)

THE BUILDINGS ILLUSTRATED

THE CASINO, BLACKPOOL (pages 133-138).

Architect: Joseph Emberton, F.R.I.B.A.
Associated Architect, Halstead Best. General contractor, Blackpool Pleasure Beach, Ltd. Sub-contractors and suppliers included: Armstrong Cork Co., Ltd., cork flooring; Taylor Pearse & Co., Ltd., railing, metalwork, etc., door furniture; Baldwins (Birmingham), Ltd., door furniture to offices; B. and B. Plastering, Ltd., grancrrete; J. D. Beardmore & Co., Ltd., and Bostwick Gate and Shutter Co., Ltd., metalwork; Benham and Sons, Ltd., kitchen equipment; British Vacuum Cleaner and Engineering Co., Ltd., vacuum cleaning plant; Burn Bros., Ltd., drainage; Carrier Engineering Co., Ltd., ventilation; James Clark and Son, Ltd., glazing; Claude-General Neon Lights, Ltd., neon installation; Drake and Gorham, Ltd., electrical wiring; F. and E. Eastman, Ltd., tiling; Fenning & Co., Ltd., terrazzo; Gaskell and Chambers, Ltd., beer services; Granwood Flooring Co., Ltd., wood-block flooring; J. and E. Hall, Ltd., lifts, refrigeration; Henry Hartley & Co., Ltd., plaster; Haskins, shutters, blinds, etc.; Haywards, Ltd., roof lights, pavement lights; Horsley Smith & Co. (Floors), Ltd., Murray end grain flooring; George Jennings (Lambeth), Ltd., sanitary fittings to flat; M. J. C. Johanns, bronze windows; Knight & Co. (Engineers), Ltd., rising stages; Limmer and Trinidad Lake Asphalt Co., Ltd., asphalt; Matthew Hall & Co., Ltd., plumbing; E. Pollard & Co., cash desks; Shanks & Co., Ltd., sanitary fittings; Strand Electric and Engineering Co., Ltd., stage equipment; Thonet Bros., Ltd., chairs, tables; Trussed Concrete Steel Co., Ltd., reinforced concrete structures; Palorit Paints, Ltd., tyloglaze finish in staff lavatories; Western Electric Co., Ltd., loud-speaker equipment; Hall and Dixon, Ltd., stage curtains; J. Starkie Gardner, Ltd., magic doors; Architectural Constructional and Electrical Utilities, Ltd., light fittings; J. Avery & Co., Ltd., office curtains; Horace W. Cullum & Co., Ltd., acoustic plaster; Danks (Nether-ton), Ltd., boilers; Fletcher Russell & Co., Ltd., coke grill; Fleetwood Trawlers Supply Co., Ltd., flagstaff; D. Burkle and Sons, Ltd., doors, counters, panelling, etc.; Liquid Carbolic Corporation, snack bar and soda fountain; Stanley Works, magic door mechanism; T. H. Tonge, Ltd., banqueting hall tables; A. Davey, curtains and carpets; N. V. Schuk-beton, facing slabs.

KINGSBOURNE HOUSE, HIGH HOLBORN (pages 150-151). Architects: Welch and Lander, F.R.I.B.A. General contractors, E. D. Winn & Co., who were also responsible for excavation, foundations, dampcourses, reinforced concrete, partitions, general glazing, plaster, decorative plaster, and joinery. Sub-contractors and suppliers included: Coles Demolition and Excavation, Ltd., demolition; Ragusa Asphalte Paving Co., Ltd., asphalt; R. G. Ward & Co., Ltd., bricks; B.B. Plastering, Ltd., special rendering material; Dawnays, Ltd., structural steel; Celotex, Ltd., special roofing; Pugh Bros., vitrolite glass; A. E. Whitton, woodblock flooring; Constone, Ltd., terrazzo stairtreads; Inlaid Ruboleum Tile Co., ruboleum; Chase & Co., central heating, boilers, ventilation; Gas Light and Coke Co., gas fixtures, gasfitting; Smith and Hammond, electric wiring; Best and Lloyd, electric light fixtures; Beer and Warren, plumbing; W. N. Froy and Sons, sanitary fittings; Speirs & Co., door furniture; Crittall Manufacturing Co., Ltd., casements; G.P.O., telephones; C. A. and A. W. Haward, cat ladder to roof, iron balustrades; Potter Rax Gate Co., lift enclosure; Cashmore Art Workers, metalwork, signs; Fenning & Co., marble; Lamson Engineering Co., Ltd., letter and dust chutes, Etchells, Congdon and Muir, lifts; Daymonds, Ltd., signs.

OFFICE BUILDING, HIGH HOLBORN, W.C.

BY WELCH AND LANDER

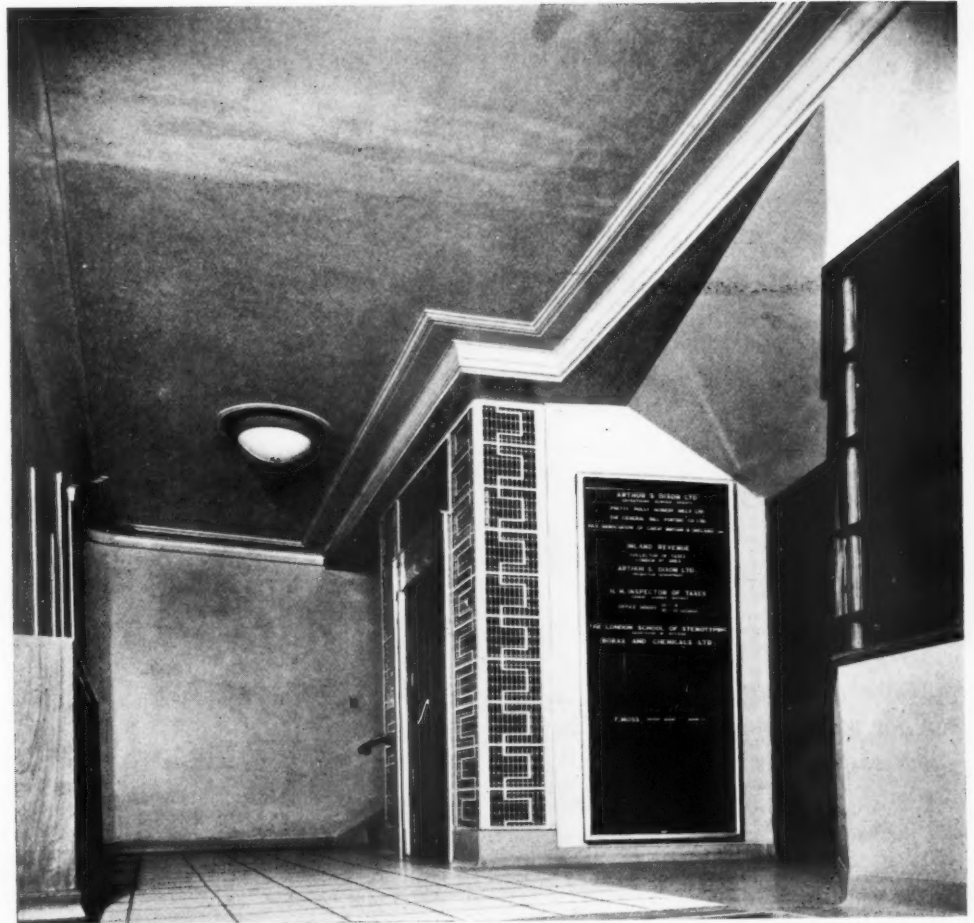
ASSISTANT: E. L. CATHERY

PROBLEM—Office block with shops on ground floor. The tube station adjoining controlled the planning of the basement and ground floors, and rights of light governed the setbacks on the New Turnstile front.

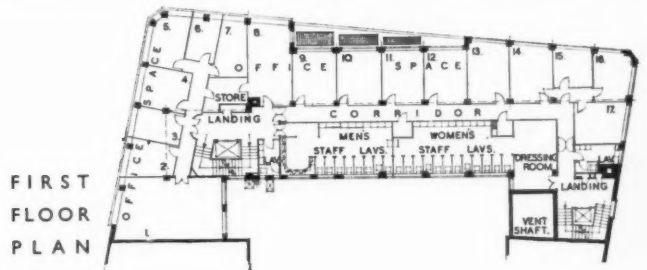
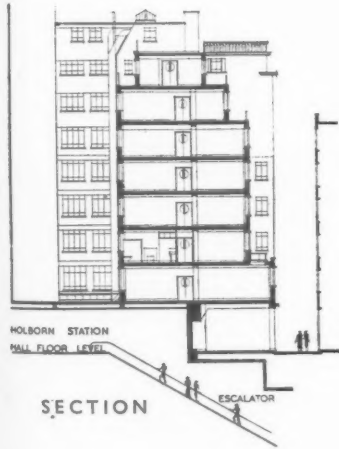
CONSTRUCTION AND EXTERNAL FINISHES—Steel-framed to first floor level and R.C. framed above. External brick panel walls, 13½ and 9 in., are rendered with 1 in. patent granite composition. Floors are hollow-tile, and the roof is of patent slabs, finished with asphalt. Windows are steel casement, painted green; balustrades are wrought iron, painted grey.

ELEVATION TO HOLBORN





MAIN ENTRANCE HALL



INTERNAL FINISHES—Entrance hall, buff terrazzo tiles with green strips; staircase, green terrazzo; lavatory floors, rubber linoleum; office floors, birch block; doors, flush walnut.

COST—1s. 10½d. per cube ft., approximately.

The general contractors were Messrs. E. D. Winn & Co.

For list of sub-contractors see page 150.

GROUND FLOOR PLAN

OFFICE BUILDING, HIGH HOLBORN, W.C. • BY WELCH AND LANDER

P R I C E S

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

★ IMPORTANT NOTE

The prices given below are for work executed complete and are for an average job in the London Area; all prices include overhead charges and profit for the General Contractor.

The prices given in italics are for "Materials Only" and represent the cost of the materials included in the measured rates. They are based on the prices given in "Current Market Prices of Materials" with the addition of 10 per cent. for overhead charges and profit.

The cost of labour (including its proportion of overhead charges and profit) can be ascertained by subtracting the prices in italics from the prices in heavier type.

The complete series of prices consists of four sections, one section being published each week in the following order:—

1. Current Market Prices of Materials, Part I.
2. Current Market Prices of Materials, Part II.
3. Current Prices for Measured Work, Part I.
4. A.—Current Prices for Measured Work, Part II.
B.—Prices for Approximate Estimates.

PART 4

CURRENT PRICES FOR MEASURED WORK—II

BY DAVIS AND BELFIELD

JOINER

		<i>Deal Flooring</i>	
		1"	1½"
Plain edge flooring in batten widths	per square	● 38/7	47/5
		<i>28/7</i>	<i>36/5</i>
Ditto tongued and grooved ditto ..	per square	● 42/3	51/6
		<i>31/2</i>	<i>39/6</i>
T. & G. B.C. Pine rift flooring in narrow widths	per square	● 57/8	—
		<i>44/4</i>	

Wood Block Flooring, laid herringbone, 100 yards and up

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

		1"	1½"
		nominal	nominal
● Burma teak	per yard super	12/7	16/10
● Canadian maple	per yard super	10/8	12/4
● 25-30 per cent. quart Austrian Oak	per yard super	11/10	15/-
● Plain American Oak (no selection made for sap) ..	per yard super	11/-	—
Gurjun	per yard super	*11/3	● 14/-

● Items marked thus have risen since June 22.

JOINER—(continued)

		1"	1½"
		nominal	nominal
● Pitch Pine (50% rift sawn)	per yard super	11/7	13/8
● Ditto (100% ditto)	per yard super	13/8	16/-
British Columbian Pine ..	per yard super	● 8/8	8/11
● Deal, 100 per cent. rift sawn	per yard super	12/1	12/3
● Jarrah	per yard super	11/3	—
Additional straight cutting	5½d. per foot run		

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

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

* Items marked thus have fallen since June 22.

CURRENT PRICES

BY DAVIS AND BELFIELD

JOINER

Wall Linings			
● $\frac{3}{8}$ " Deal tongued and grooved V-jointed Matching in narrow widths	per square	30/11	19/10
$\frac{1}{4}$ " (6 mm.) Birch (B) Plywood and fixing to walls	per square	35/7	25/8
$\frac{3}{16}$ " Asbestos cement sheets butt jointed	per foot super	-4	-2 $\frac{1}{4}$
$\frac{1}{2}$ " Fibre board and fixing to walls	per yard super	2/11	2/4
Deal battens as grounds plugged to brickwork	per foot super	-1 $\frac{1}{2}$	-1/0 $\frac{1}{2}$
2" x $\frac{3}{8}$ " wrot and chamfered fillets	per foot run	-1 $\frac{1}{2}$	-1/0 $\frac{1}{2}$
2" x $\frac{1}{2}$ " wrot and moulded ditto	per foot run	-1 $\frac{1}{2}$	-1/0 $\frac{1}{2}$

Skirtings			
		Deal	Austrian Oak
1" stock chamfered or moulded 4" high, fixed to and including grounds and backings planted on	per foot run	-3 $\frac{1}{2}$	-10 $\frac{1}{4}$
		-2	-7 $\frac{1}{4}$
Add for plugging to brickwork	per foot run	-0 $\frac{1}{2}$	-0 $\frac{1}{4}$
Fitted ends on hardwood price as 4" of skirtings, mitres as 6".			
Fitted ends, etc., on deal skirting included in price per foot run.			

Casements and Fanlights			
		1 $\frac{1}{2}$ "	2"
Deal stock moulded sashes divided into squares with glazing bars	per foot super	1/4 $\frac{1}{2}$	-4 $\frac{1}{4}$
Add for hanging casements (butts measured separately)	each	1/9	2/-

Cased Frames and Sashes			
Deal cased sashed frame, including 2" double hung stock sashes, with 6" x 3" Oak cill and brass axle pulleys, sash line and weights, average 15 feet super	per foot super	3/9	1/7

Doors in Deal			
		$\frac{3}{4}$ "	1"
Matchboarded, ledged and braced door	per foot super	1/-	1/2
		-4 $\frac{3}{4}$	-5 $\frac{3}{4}$
1 $\frac{1}{2}$ " square framed, both sides	per foot super	1/8	-7 $\frac{3}{4}$
2" ditto	per foot super	2/-	-9 $\frac{3}{4}$
1 $\frac{1}{2}$ " bead butt panels one side, but square the other	per foot super	1/9	-7 $\frac{3}{4}$
2" ditto	per foot super	2/2	-10 $\frac{1}{4}$
1 $\frac{1}{2}$ " moulded both sides	per foot super	2/-	-9 $\frac{3}{4}$
2" ditto	per foot super	2/4	-11 $\frac{1}{4}$
For fixing only, stock or p.c. doors, allow	per foot super	-2 $\frac{1}{2}$	

Doors in Hardwood			
Austrian quartered oak:			
Labour, 2 x as much as deal.			
Materials, 3 $\frac{1}{4}$ x ditto.			
Labour and materials, 2 $\frac{1}{2}$ x ditto.			
Cuban mahogany:			
Labour, 3 x as much as deal.			
Materials, 4 $\frac{1}{2}$ x ditto			
Labour and materials, 3 $\frac{1}{2}$ x ditto			
Teak:			
Labour, 3 x as much as deal			
Material, 3 $\frac{1}{2}$ x ditto			
Labour and material, 3 $\frac{1}{4}$ x ditto			
Deal stock glazing beads, mitred and bradded	per foot run	-1 $\frac{1}{2}$	-0 $\frac{1}{2}$
Ditto and fixed with brass cups and screws	per foot run	-3	-1

Window and Door Linings			
		1"	1 $\frac{1}{4}$ "
Deal linings, 6" wide, tongued at angles and planted on including backings	per foot run	-6 $\frac{1}{4}$	-7 $\frac{1}{4}$
		-2 $\frac{3}{4}$	-3 $\frac{1}{4}$
Add for plugging to wall	per foot run	-0 $\frac{1}{2}$	-0 $\frac{1}{2}$
Add for rebating	per foot run	-0 $\frac{1}{2}$	-0 $\frac{1}{2}$
Add for $\frac{3}{4}$ " x 1 $\frac{1}{2}$ " stock Deal stop planted on	per foot run	-1 $\frac{1}{2}$	-1 $\frac{1}{4}$
		-1/0 $\frac{1}{4}$	-1/0 $\frac{3}{4}$
Deal window board 9" wide, with rounded nosing, tongued at back and on and including bearers plugged to brickwork	per foot run	-9 $\frac{1}{4}$	-10 $\frac{1}{4}$
		-4 $\frac{1}{4}$	-6 $\frac{1}{4}$
1" Deal scotia mould	per foot run	-1 $\frac{1}{4}$	-1 $\frac{1}{4}$
		-0 $\frac{3}{4}$	-0 $\frac{3}{4}$

JOINER—(continued)

		1"	1 $\frac{1}{4}$ "	1 $\frac{1}{2}$ "
Austrian quartered oak linings 6" wide tongued at angles and planted on including backings	per foot run	1/2 $\frac{1}{2}$	1/5 $\frac{1}{2}$	1/8 $\frac{1}{2}$
		-8 $\frac{1}{4}$	-10 $\frac{1}{4}$	1/0 $\frac{1}{2}$
Add for plugging to brickwork	per foot run	-1	-1	-1
Add for rebating	per foot run	-1	-1	-1
Add for $\frac{1}{2}$ " x 2" Austrian quartered oak stop planted on	per foot run	-3 $\frac{1}{4}$	-3 $\frac{1}{4}$	-3 $\frac{1}{4}$
		-1 $\frac{1}{4}$	-1 $\frac{1}{4}$	-1 $\frac{1}{4}$

Austrian quartered oak window board 9" wide, with rounded nosing tongued at back and on and including bearers plugged to brickwork	per foot run	1/9	1/11 $\frac{1}{2}$
		1/0 $\frac{1}{2}$	1/3 $\frac{1}{2}$
1" Austrian quartered oak scotia mould	per foot run		-3 $\frac{1}{4}$
			-1 $\frac{1}{4}$

Window and Door Frames			
		Deal	Austrian Quartered Oak
4" x 3" door frames	per foot run	-9 $\frac{1}{2}$	2/2
		-4 $\frac{1}{2}$	1/4 $\frac{1}{2}$
4" x 3" window frames	per foot run	-11 $\frac{1}{2}$	2/6
		-4 $\frac{1}{2}$	1/4 $\frac{1}{2}$
4" x 3" transoms and mullions	per foot run	1/3 $\frac{1}{2}$	3/2
		-4 $\frac{1}{2}$	1/4 $\frac{1}{2}$
6" x 3" door cill, sunk weathered twice throated and grooved for water bar (measured separately)	per foot run	—	3/5 $\frac{1}{2}$
			2/0 $\frac{1}{2}$
6" x 3" window ditto	per foot run	—	2/9 $\frac{1}{2}$
			2/0 $\frac{1}{2}$
Add or deduct for variation in sectional area per square inch	per foot run	-0 $\frac{3}{8}$	-1 $\frac{1}{8}$
Add for each labour, for chamfer, bead or rebate, etc.	per foot run	-0 $\frac{1}{2}$	-1
Add for each moulding	per foot run	-0 $\frac{3}{8}$	-1 $\frac{1}{8}$

Architraves			
		Deal	Japanese Oak
1" x 3" stock chamfered or moulded architraves, including mitres on softwood, planted on	per foot run	-3	-7 $\frac{1}{4}$
		-1 $\frac{1}{4}$	-4 $\frac{1}{2}$
Mitred angles on oak price as 6" of architrave.			
Add for plugging to brickwork	per foot run	-0 $\frac{1}{2}$	-0 $\frac{1}{2}$
Add for narrow splayed grounds	per foot run	-1 $\frac{1}{2}$	-1 $\frac{1}{2}$
		-0 $\frac{1}{4}$	-0 $\frac{1}{4}$

Shelving			
		Deal	Austrian Quartered Oak
Slat shelving of 1" x 2" spaced $\frac{3}{4}$ " apart	per foot super	-9	—
		-3 $\frac{3}{4}$	
1" shelving	per foot super	-10	2/2 $\frac{1}{2}$
		-5	1/4 $\frac{1}{2}$
1 $\frac{1}{4}$ " ditto	per foot super	1/0 $\frac{1}{2}$	2/8 $\frac{1}{2}$
		-6 $\frac{1}{4}$	1/8 $\frac{1}{2}$
1" cross-tongued shelving	per foot super	1/-	2/6 $\frac{1}{2}$
		-5 $\frac{1}{2}$	1/5 $\frac{1}{2}$
1 $\frac{1}{4}$ " ditto	per foot super	1/2 $\frac{1}{2}$	3/0 $\frac{1}{2}$
		-6 $\frac{1}{2}$	1/9 $\frac{1}{4}$
1" x 2" chamfered bearers planted on	per foot run	-2 $\frac{1}{4}$	-5 $\frac{1}{4}$
		-0 $\frac{3}{4}$	-2 $\frac{3}{4}$
Add if bearers plugged to brickwork	per foot run	-0 $\frac{1}{2}$	-0 $\frac{1}{2}$

Teak Draining Boards and Twice Oiling			
1 $\frac{1}{4}$ " Moulmein cross-tongued fluted draining board fixed to slight falls	per foot super	3/9	1/11 $\frac{1}{2}$
$\frac{1}{2}$ " x 2" rounded rim bedded in white lead and screwed to edge of draining board	per foot run	-6 $\frac{1}{2}$	-2 $\frac{1}{2}$
$\frac{1}{2}$ " x 4" rounded skirting fillet ditto	per foot run	-8 $\frac{1}{2}$	-3 $\frac{3}{4}$

Staircases			
		Deal	Austrian quartered Oak
1 $\frac{1}{2}$ " treads and 1" risers	per foot super	2/-	4/6
		-9	2/-
2" strings, fixed	per foot run	1/9 $\frac{1}{2}$	4/6 $\frac{1}{2}$
		-7 $\frac{1}{2}$	2/8 $\frac{1}{2}$
Housing treads and risers to strings	each	-9	1/6
3" x 2 $\frac{1}{2}$ " Moulded handrail	per foot run	—	1/6 $\frac{1}{2}$
			-1/0 $\frac{1}{2}$
1 $\frac{1}{4}$ " x 1 $\frac{1}{4}$ " square balusters 2' 6" long	each	-10	1/9
		-2	-5 $\frac{1}{2}$
4" x 4" Newels with chamfered edges and fixing	per foot run	1/4 $\frac{1}{2}$	3/2
		-8 $\frac{1}{2}$	1/11

● Items marked thus have risen since June 22.

CURRENT PRICES

BY DAVIS AND BELFIELD

Ironmonger, Steel and Ironworker, Plasterer and External Plumber

IRONMONGER

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

STEEL AND IRONWORKER

(For Rainwater Goods—see "Plumber.")

		£ s. d.	
<i>Steework</i>			
Basis for plain rolled steel joists	per ton	16 17 0
			14 2 0
<i>Fabricated Steework</i>			
			£ s. d.
Joists cut and fitted	per ton	20 0 6
Stanchions, ordinary sections with riveted caps and bases	per ton	23 10 6
Stanchions, compound	per ton	25 11 6
Plate girders	per ton	27 19 6
Framed roof trusses, 25' 0" span	per ton	30 4 6
Ditto ditto 60' 0" span	per ton	28 5 0

Wrot Iron Work

Simple balusters and handrail fixed (excluding mortices, etc.)	per cwt.	56/-	
Bolts and nuts fitted	per cwt.	45/-	38/6

Galvanized Corrugated Sheetting

		20 B.G.		22 B.G.	
Sheetting in 3" corrugations and fixing on wood framing with screws and galvanized embossed curved washers including laps	per square	52/3	46/1	
			42/3	36/8	
Ditto fixed to steel framing	per square	60/1	54/7	
			47/7	42/1	

PLASTERER

Lime and Sirapite Plastering

		Per yard super	In narrow widths per foot super
Expanded metal lathing	1/8	-3
1" x 3/8" sawn laths	1/1½	-1½
		-9½	-5
Render and set in lime and hair	1/8	-3½
		-6½	-3½
Render, float and set in lime and hair	2/-	-3½
		-8½	
Plaster, float and set ditto on lathing (measured separately)	2/1½	-4
		-9½	
Render and set with Sirapite	1/9½	-3½
		-8	
Plaster, float and set ditto on lathing (measured separately)	2/3	-4
		-10½	
Skimming coat Sirapite	1/5½	-4½
		-4½	
3/8" thick plaster board fixed including covering joints with scrim cloth	2/-	1/2½

PLASTERER—(continued)

		Per yard super	In narrow widths per foot super
<i>Keenes</i>			
Cement plain face on and including a backing of Portland cement and sand	2/6	-5
		-8½	
<i>Mouldings and Labours</i>			
Plain cornices and mouldings 6" girth	per foot run	-9½	-11
		-1½	-2
Labour arris, quirk or throat	per foot run	-1½
Ditto rounded angle	per foot run	-2
Ditto staff bead	per foot run	-7½

Mitres price as 12" of moulding, stopped ends as 6", and rounded angles as 18".

Portland Cement and Sand (1 : 3)

		1/2" Keenes	3/4" Keenes
Screeds to floors for wood or tiles	per yard super	1/2½	1/4
		-4½	-6½
Screeds for tiling, etc., on walls	per yard super	1/4	1/6
		-4½	-6½
Renderings to walls—one coat float finish	per yard super	1/6	1/8
		-4½	-6½
Plainface	per yard super	2/-
			-6½

Coloured Cement Plainface

Cullamix No. 2 or 3 cream, on and including water repellent cement and sand backing	per yard super	3/10
			1/9
Snowcrete mixture on and including ditto	per yard super	3/10	1/8½
Snowcrete and white silica sand on and including ditto	per yard super	3/4½	1/3½

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

Wall Tiles, Commercial Quality

6" x 6" x 3/8" ivory or white	per yard super	16/-
			11/3
Extra for rounded edge tiles	per yard run	1/1½
			1/0½
6" x 6" x 3/8" coloured enamel bright glazed	per yard super	21/3	16/6
Extra for rounded edge tiles	per yard run	-4
			-3
6" x 6" x 3/8" eggshell gloss enamelled	per yard super	22/1	17/4
Extra for rounded edge tiles	per yard run	-4
			-3

EXTERNAL PLUMBER

		Lead	Gutters, Flashings	Stepped etc. Flashings	Soakers cut to size
* Milled sheet lead and labour	per cwt.	38/10	39/11	41/1	33/8
		25/4	25/4	25/4	25/4
Bedding edges in white lead	per foot run			-2
Lead wedgings to flashings	per foot run			-1½
Ditto to stepped flashings	per foot run			-2
Dressing 6-lb. lead over glass and glazing bars	per foot run				-3½
Copper nailing	per foot run			-1½
Close ditto	per foot run			-2
Bossed ends to rolls	each			-7½
Extra labour dressing through shoots and into rainwater heads	each			3/-
Ditto to cesspools, including extra solder	each			5/3

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CURRENT PRICES

EXTERNAL AND INTERNAL PLUMBER

BY DAVIS AND BELFIELD

EXTERNAL PLUMBER—(continued)

Cast Iron Rainwater Goods

Rainwater Pipes fixed to brickwork.

	5"	4"
Round pipes per foot run	1 6 1/2	3 4
Extra for bends each	2 4	2 11
Ditto 6" offset each	2 4	2 11
Ditto single branches each	2 10	3 8
Ditto shoes each	2 4	3 -
	1 7	2 -
	3 1/2" x 3 1/2"	4" x 3"
Square and rectangular pipes .. per foot run	3 1	2 10
Extra for elbows (fitted) each	6 6	5 11
Ditto single branches each	6 7	6 3
Ditto shoes each	7 2	6 6
	6 1	5 5

Gutters fixed to fascia.

	4"	5"	6"
Half-round gutters .. per foot run	1 1	1 2 1/2	1 7 1/2
Extra for angles each	1 9	2 -	2 6
Ditto nozzles each	1 7	1 10 1/2	2 3
Ditto stop ends each	1 0 1/2	1 3	1 4 1/2
Ogee gutters per foot run	1 2	1 4	1 8 1/2
Extra for angles each	1 9	2 1 1/2	2 3
Ditto nozzles each	1 8 1/2	2 2 1/2	2 5
Ditto stop ends each	1 1 1/2	1 4 1/2	1 7 1/2

INTERNAL PLUMBER

Lead Pipes

Service.

	1/2"	3/4"	1"	1 1/4"
*Pipes laid in trenches .. per foot run	-10 1/2	1 2 1/2	1 9	2 4
Add if fixed on walls .. per foot run	-1 3/4	-2	-2 1/2	-3 1/4
Ditto if in short lengths .. per foot run	-1	-1	-1 1/2	-2
*Pipes laid in trenches .. per foot run	2 11 3/4	4 -	—	—
Add if fixed on walls .. per foot run	-5	-6	—	—
Ditto if in short lengths .. per foot run	-3	-4	—	—

Distributing.

	1/2"	3/4"	1"	1 1/4"
*Cold water pipes fixed to walls .. per foot run	-11	-11 1/2	1 6 3/4	2 1 1/2
Add if in short lengths .. per foot run	-1	-1	-1 1/2	-2
*Cold water pipes fixed to walls .. per foot run	2 5 1/2	3 5 1/2	—	—
Add if in short lengths .. per foot run	-3	-4	—	—

Waste and Warning.

	1/2"	3/4"	1"	1 1/4"
*Waste and overflow pipes fixed to walls .. per foot run	-8	-10 1/2	1 2	1 8
*Waste and overflow pipes fixed in short lengths per foot run	2 2 1/2	2 9 1/2	—	—

Soil and Ventilating

	3 1/2"	4"	4 1/2"
*Pipes fixed, including lead tacks per foot run	4 3	5 4	6 5
Bends each	1 6	2 -	2 9
Soldered joints to fittings each	1 9	2 -	2 3 1/2
Soldered branch joints (price as largest branch) each	1 11	2 2	2 5 1/2
Soldered branch joints (price as largest branch) each	3 7	4 -	4 7
Wrap small pipes with hair felt per foot run	-6	-7 1/2	-8 1/2

INTERNAL PLUMBER—(continued)

Drawn Lead Traps

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

Brasswork (Best Quality)

	1 1/2"	2"	1"
Brass screwdown stop cocks including two soldered joints each	7 5 1/2	9 10	13 7
Ditto, including two red lead joints for iron each	5 6	6 6 1/2	9 6
Ditto, including one soldered and red lead joint each	6 4	7 5 1/2	11 10
High pressure Portsmouth pattern ball valve with flynut and union and one soldered joint each	8 3	11 -	18 10
Ditto, including red lead joint for iron each	6 9	9 -	15 9
Brass thimble and soldered and cement joints each	5 1	9 -	9 -
Ditto, with solder and caulked lead joints each	5 8	10 1	10 6

Fixing Only (Connections to Pipes measured separately)

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

Screwed and Socketed Galvanized Steam Quality Steel Tubes and Fittings

Pipes up to and including 1 1/2" include short running lengths, sockets, connectors, elbows, bends, fire bends; Tees and Diminishing Pieces enumerated.

Distributing.

	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Pipes fixed to walls per foot run	-10 1/2	-11 1/2	1 3 1/2	1 10 1/2	2 4 1/2	3 -
Ditto in short lengths, fittings, etc., measured separately per foot run	-10 1/2	-11 1/2	1 4	1 10 1/2	2 5 1/2	3 1 1/2
Extra for	-4 1/2	-5	-6 1/2	-9 1/2	1 0 1/2	1 3 1/2

Firebends each	-4	-6	-9	1 3	1 6	2 -
Bends each	1 2	1 5	1 9	2 6	3 1	4 9
Round elbows each	1 4 1/2	1 7	1 9 1/2	2 3 1/2	2 9 1/2	4 5
Square ditto each	1 3 1/2	1 5 1/2	1 8	2 2	2 7 1/2	4 1 1/2
Tees each	1 6	1 9 1/2	2 -	2 6	3 0 1/2	4 9
Crosses each	2 9	3 2	3 10	5 -	6 -	9 1
Diminishing pieces each	-10	-11	1 2	1 6	1 11	2 8
Caps each	-7	-8 1/2	-10	1 1 1/2	1 5	2 1
Plugs each	-6	-7	-8 1/2	-10	1 1	1 6 1/2

Cast Iron Waste, Soil and Vent Pipes

	2"	3"	4"	5"	6"
L.C.C. pipes in 6' 0" lengths fixed to brickwork per foot run	1 9	2 0 1/2	2 6 1/2	4 5	5 4
Extra for bends each	3 11	4 10	6 7	9 4	12 8
Ditto single branches each	5 9	6 7	7 9	8 7	10 7
Ditto swannecks 6" projection each	4 5	6 5	8 5	12 5	16 11
Extra for access door or any fitting each	6 9	6 9	7 3	8 6	8 6

* Items marked thus have fallen since June 22.

CURRENT PRICES

BY DAVIS AND BELFIELD

INTERNAL PLUMBER, GLAZIER AND PAINTER

INTERNAL PLUMBER—(continued)

		Zincworker			
		13 G.	14 G.	15 G.	16 G.
Rolled sheet zinc on flats	per foot super	-7½	-8½	-9½	-10
Ditto in gutters, cover flashings, etc.	per foot super	-8½	-9	-10	-10½
Ditto in stepped flashings	per foot super	-10½	-11	1/-	1/0½
Labour and risk dressing over glass	per foot run	-4½	-4½	-4½	-4½
Capped ends to rolls	each	-2½	-2½	-2½	-2½
Extra labour to cesspools	each	2/7½	2/7½	3/2	3/2

		Copperworker					
		½"	¾"	1"	1½"	2"	
Solid drawn copper tube fixed to walls	per foot run	-9	-11	1/4½	1/9½	2/4	3/1½
Add if in short lengths	per foot run	-0½	-0½	-1	-1½	-2	-2½

		Fittings for copper tubes					
		Compression type					
Straight couplings	each	1/9½	2/4	2/11½	3/8	5/-	7/-
Obtuse elbows	each	2/8	3/1	4/4	5/4	8/7	11/4
Tees	each	3/-	3/5½	5/1	7/2	10/10	15/1
Crosses	each	4/-	4/6½	6/4½	7/10	12/9	17/5½
Reducing couplings	each	—	2/2	2/11½	3/8	4/11½	7/-
Bends	each	2/4½	2/10	3/11½	4/11	8/-	11/7
Brass stopcocks	each	5/2½	7/4½	10/4	18/-	24/6	40/4

		Capillary type					
Straight couplings	each	1/7	2/-	2/9½	3/5	4/4	5/9½
45° Elbows	each	2/6½	3/2½	4/2	5/3½	7/4½	10/5½
Tees	each	2/9½	3/2	4/7½	6/4	8/6	12/-
Crosses	each	3/4	3/9	5/6½	7/7	10/6½	14/9
Reducing couplings	each	—	1/7½	2/0½	2/7½	3/5½	5/0½
Bends	each	2/10½	3/5	4/7½	6/-	8/10	11/11
Pillar tap connections	each	2/0½	2/9½	—	—	—	—

		24 G.		23 G.	
Rolled sheet copper on flats	per foot super	1/5	1/7	1/6	1/8
Ditto in gutters, cover flashings, etc.	per foot super	2/1½	2/4½	—	—
Labour and risk dressing over glass	per foot run	-4½	-4½	—	—
Capped ends to rolls	each	-3½	-3½	—	—
Extra labour to cesspools	each	3/8	3/8	—	—

GLAZIER

Sheet Glass (Ordinary Glazing Quality)

18 oz. clear sheet and glazing to wood, sprigged and with back and front putties, to all normal sizes not exceeding 60" in length or 40" wide	per foot super	-6½
24 oz. ditto	per foot super	-7½
32 oz. ditto	per foot super	-11½
Obscured ground sheet glass, net extra to above prices	per foot super	-1½
½" figured rolled white glass and glazing to wood with beads (measured separately)	per foot super	-10½
Ditto, normal tints, ditto	per foot super	1/2½
Hammered double rolled cathedral white ditto	per foot super	-10
Ditto, normal tints, ditto	per foot super	1/1½
Add for glazing into metal frames (ordinary rebates)	per foot super	-1½
Ditto, metal sashes with ferroput	per foot super	-2½
Ditto, solid metal casements and screw beads per foot super	per foot super	-2½
Wash leather strip or similar material and bedding edge of glass	per foot run	-3½

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

PAINTER

		Whitening, Distemping and Painting (on new Plastered Walls)	
Twice distemping white	per yard super	-4½	-1
Ditto, in common colours	per yard super	-7	-3½
Add for stippling	per yard super	-2	—
Preparing and painting two coats of undercoating and one coat of enamel	per yard super	1/9	-8

		Preparing and Painting Two Coats of Oil Colour on Ironwork after fixing	
General surfaces	per yard super	1/-	-4
Perforated landings and staircases both sides (one side measured)	per yard super	2/6	-8
Pipes, bars, balusters, etc., not exceeding 3" girth	per yard run	-1½	—
Metal window frames	per yard run	-2½	—
Eaves gutters	per yard run	-7½	—
2" Rainwater pipes	per yard run	-3	—
4" ditto	per yard run	-6	—
Squares one side	per dozen	1/9	—
Large ditto	per dozen	2/3	—
Extra large ditto	per dozen	3/-	—
Edges of casements	each	-3	—

Painting on New Woodwork

		Knot, prime, stop and paint three coats oil colour		Add or deduct for each coat more or less	
General surfaces	per yard super	2/-	-8	-6	-2
Fascias and soffits	per yard super	2/6	-8	-7½	-2
Fillets, skirtings, etc., not exceeding 3" girth	per yard run	-3	—	-0½	—
Ditto, not exceeding 6"	per yard run	-5½	—	-1½	—
Ditto, not exceeding 9"	per yard run	-7	—	-1½	—
Ditto, not exceeding 12"	per yard run	-9	—	-2	—
Squares one side	per dozen	3/6	—	-9	—
Large ditto	per dozen	4/6	—	1/-	—
Extra large ditto	per dozen	6/-	—	1/4	—
Edges of casements	each	-6	—	-1½	—

Sundries

Twice creosoting woodwork	per yard super	-6	-2
Twice limewhiting brickwork	per yard super	-4½	-0½
General surfaces	per yard super	-2	-4½
Wax polishing	per foot super	-4½	—
Body in and French polish on hardwood surfaces	per foot super	1/-	—

Writing

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

Gilding

		Single Gold		Double Gold	
Preparing and gilding in best oil gold	per foot super	5/3	8/4	—	—
Ditto in matt or burnished gold	per foot super	7/4	11/6	—	—

Paperhanging

		On walls		On ceilings	
Preparing new plastered walls for papering	per piece (60 feet super)	1/4	-5½	1/5½	-5½
Plain lining paper	per piece (60 feet super)	1/4	-1½	1/8	-1½
Common printed papers	per piece (60 feet super)	2/-	-1½	2/6	-1½

APPROXIMATE ESTIMATES

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

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

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

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

FOUNDATIONS

Thickness of walls
9' 11" Hollow 13½'

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

EXTERNAL WALLS

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

APPROXIMATE ESTIMATES—(continued)

INTERNAL WALLS AND PARTITIONS

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

GROUND FLOORS

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

UPPER FLOORS

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

APPROXIMATE ESTIMATES—(continued)

FLAT ROOFS

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

PITCHED ROOFS

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

DOORS

	Partitions or Walls				
● 2" flush door p.c. 29/- 2' 6" × 6' 6", including deal frames or linings, ironmongery p.c. 15/- and simple architraves both sides, all painted each	100/-	101/5	96/3	100/10 1/2	106/10 1/2

WINDOWS

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

● Standard metal casements with fixed lights per foot super	2/5
● Ditto, with average proportion of opening lights per foot super	3/10
● Standard metal casements in wood frames with fixed lights per foot super	4/-
● Ditto, with average proportion of opening lights per foot super	4/11
● Standard industrial type sashes with fixed lights per foot super	2/2
● Ditto, with average proportion of opening lights per foot super	3/6
● Solid deal frames and 2' casements per foot super	5/0 1/2
● Deal cased frames and double hung sashes per foot super	4/10 1/2

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

APPROXIMATE ESTIMATES—(continued)

STAIRCASES

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

DRAINS

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

PATHS AND DRIVES

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

FENCES

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

The four sections on PRICES published in the issues of June 29, July 6, 20 and this week together complete the PRICES SUPPLEMENT. Next week the FIRST SECTION—PRICES OF MATERIALS, PART 1—will be repeated with items revised according to market quotations