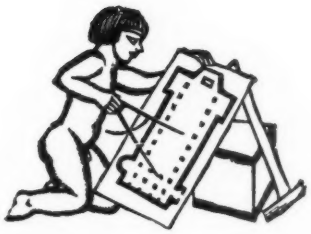
TRANSPLANTED BAROQUE

A MEXICAN LANDSCAPE

A PHOTOGRAPH taken by the late Mr. Chester Jones of the town of Taxco in South Mexico. The illustration is typical of the development, and huge size, of the churches in even the smaller towns of colonial Mexico.

MEXICAN JOURNEY

On this and the previous page are two photographs taken by the late Mr. Chester Jones in the course of a journey in Mexico that lasted several months. The complete collection forms probably one of the best records of provincial Mexican architecture which has yet been made. The illustration is of the town of Cholula with the Church of San Gabriel on the left, and the Capilla Real, said to have forty-nine domes, on the right.



THE FUTURE OF TOWN PLANNING

TOWN planning during the last few years has been going through rather a difficult time, and may even be said without injustice to have descended in public estimation. That this has happened is certainly not the fault of town planners; rather it is through the natural causes of our contemporary society.

Town planning after the war had a good Press. Town planning in the grand manner of axes and vistas, of cities beautiful fringed with trees, appealed to that part of everyone that hopes for finer surroundings of living. But then, in the usual order of things, it came into collision with vested interests and, still more, with vested authorities. The first town-planning officers found themselves cramped and chivvied, and disliked as much by local authorities who did not appreciate experts teaching them their business as they were attacked by developers who wished to wring the last ten pounds from the last quarter-acre of a building strip.

So now the Press reports of town planning are different. The word amenity, so horribly jaded, appears too often, and grim battles for road frontages and architects objecting to having architecture defined for them, seem to make town planning, at times, almost the pursuit of odd, unreasoning faddists.

And then, suddenly, something happens which raises hope again and reinstates town planners, better named territorial planners, in the high position that they should always hold. One such event has been Mr. Max Nicholson's paper at the Town and Country Planning Summer School at Salisbury.

Mr. Nicholson, as one would expect, dealt with bigger things than the size of a Cotswold window. He dealt with the problems that really matter in territorial planning.

Taking as his text the high salaries paid to officials in London compared with the provinces in the curious British balance between local and central government, and mentioning the sudden subsidies and assistance given to this or that industry, he stressed the importance of planning for a region, of considering the various and aggregate needs of a region, rather than examining each trade and livelihood as a unit in the rarefied remoteness of Whitehall.

In this paper there seem to lie the seeds of a territorial planning which is more than a gesture.

Today the position in planning for the needs of the population, in its government that is to say, is intriguingly curious. At bottom there is the individual man and firm, struggling as best they can to get a better share in what they think worth having in life. Next, there is the framework of vested interest and authority, mostly local, which regulates the worst abuses of individual scrambling by police courts, factory Acts, or building Acts, as the case may be. Finally, there is the Government, which, moved by the loudest cries for quick decisions as to what is the best course for the moment, makes empirical decisions in favour of an industry or area devoted mainly or concerned with one industry—so that one county, and not by a long way the poorest county, gets one and two-thirds millions a year from the nation under the sugar beet subsidy.

The most stimulating fact that emerges from the examination of this precarious pyramid of regulation is that the Government, past as well as present, uses the means which territorial planners advocate, but without realizing, and without knowledge, of what the effect will be. And in extremely baffling cases of social malorganization, they use the exact methods of territorial planners by sending industrial experts to study the whole needs of a region, *as* a region, under the name of Special Commissioners.

These happenings seem to foreshadow territorial planning and town planning as they will one day be recognized as social necessities. Files of all trades and industries assembled in Whitehall, however accurate and stupendous, do not represent the needs of the country. An industry in one county may be doing badly because it should never have been put there; in another the same industry may be doing badly because, although ideally situated, it is not on a large enough scale to compete with an import from abroad. At present a subsidy would be given to both, or to neither. Under a planning scheme in which each more or less well-balanced productive area, irrespective of present local government boundaries, was in the charge of two or three highly-paid territorial planning advisers, industrial, agricultural and geographical, the needs of a region as a whole could be put before the Government in a way which is at present impossible. That territorial planning in this sense is bound to come few intelligent people can now doubt.

The task of town planners for the next few years must be chiefly to provide the means of its coming. And it will be a large enough task.

The recent report on assize towns has shown how much local authorities can dislike losing even a minor privilege. There is no reason to suppose they will appreciate delegation of territorial planning powers any better. Town planning officers who regulate road widths and "amenities" according to a council's wishes are acceptable. Regional planners who attempt to plan for all the needs of several million people have been known to be frowned on even by the enlightened rulers of a metropolis.

But preparing for town planning in this real sense must remain the day-to-day concern of all real town planners.

The Architects' Journal
Westminster, S.W.1
Telephones: Whitehall
9212-7
Telegrams
Buildable
Parl
London

NOTES & TOPICS

KING GEORGE MEMORIAL

THERE has been much comment recently about town-planning in Westminster, a subject which has naturally arisen since the suggestion was first made of making a site for a memorial to King George V in Abingdon Street.

*

No one is likely to deny that a memorial in such a position could be both well placed and dignified, but there is a feeling, perhaps a general feeling, that an undertaking greater in its symbolism, if not greater also in scale, would be well received by the public.

*

Various suggestions have been made of replanning Westminster "on a scale worthy of its unique position as the focal point of the Empire," and I was therefore specially interested to see an advance proof of Mr. A. G. Ling's article in this issue of the JOURNAL.

*

Mr. Ling, I am told, did not undertake the preparation of this suggestion with the idea of a memorial to the late King in his mind. It was prepared as a piece of town planning worth doing. But its possibilities as a memorial scheme are obvious.

*

I have heard it said that the new government offices, which are to be built by Mr. Vincent Harris adjoining Whitehall, are one day to be extended as far as Bridge Street.

*

The public may well think, however, that it would be a very great opportunity lost if they were allowed to do so—particularly if a Charing Cross Bridge and the redevelopment of the south bank are ever to become realities.

OUR FORERUNNERS

The latest architectural life to appear* (and what thrilling possibilities in biography architecture offers to an enterprising publisher) mentions two occurrences of rather special interest: one which I did not know and another which I just hoped was true.

*

Of James Wyatt most architects will say: "Oh yes, Fonthill for William Beckford," and then perhaps will grow rather vague about other details. And so it was with me.

*

I did not know that in the Wyatt family, in the three generations between Benjamin Wyatt, James's father, and Sir Mathew Digby Wyatt, James's second cousin, there were no fewer than eleven Wyatts who were architects.

*

It is significant that these eleven are said "to be known to have been architects"; there may of course have been others who were just architects on the quiet.

*

And then there is the story of the Clerk of Works confessing, on his deathbed, that the inverted arches spreading the load of the tower at Fonthill had never been put in.

*

I had always suspected this story somehow. But it seems to be true. Mr. Dale is just the least bit censorious over Wyatt's superintendence of the work he specified.

*

But Beckford had asked that the building should be "partially a ruin" and Wyatt was hardly to blame if he was somewhat carried away by the spirit of the job. And, anyway, if architects always attended the deathbeds of their Clerks of Works. . . .

PRINTING EXHIBITION

About a hundred pieces of contemporary commercial printing are on show until further notice in Room 74 of the Victoria and Albert Museum. Most of the exhibits are from this country: there are a few from Switzerland, France, the U.S.A., Germany, Czecho-Slovakia and Poland. Two kinds of commercial printing are likeable: simple jobbing done by printers, and elaborate publicity, always provided it is designed by an artist, for without a touch of genius this sumptuous advertising can so easily be tedious: most typographers and theorists are prone to joyless over-designing.

*

Practically no straightforward jobbing is included in this collection, and there is some dull Continental work inspired by one —ism or another. Where an artist has had a good time with the resources of modern commerce behind him—as for example Edward Bawden has had in his wine-list for the Royal Hotel, Scarborough—the result is something new and magnificent.

*

I was glad that the organizers had put in some of the excellent leaflets and forms issued by the Post Office—but the new stamps? Strange that these should be included in such an exhibition. Nothing by the Underground Railways is physically present, but any respectable show of English publicity is pervaded by their pioneer spirit.

CIVIC GUARDIANS

When we want to symbolize dignity, majesty and whatnot (as P. G. Wodehouse might say), we run to lions in England. America has eagle trouble whenever her sculptors get away from George Washington; but lions are our big sculptural

* *James Wyatt, Architect.* Antony Dale. Oxford: Basil Blackwell. Price 12s. 6d.

A litter bin in Cologne with a well-chosen inscription: "In your hands is the tidiness of the community."

problem. I remember the lions outside the British Pavilion at the Brussels exhibition last year. It would be difficult to forget them.

*

I remember Herrick's design for the Wembley lion in 1924. A stark, clean-limbed beast that was; but it was a long way ahead of the nursery zoo book lion that got itself onto the British Empire Exhibition postage stamps.

*

But for lions that express the true genius of the modernistical spirit, you must visit the pair that guard the portals of the city hall at Nottingham. I saw them last week for the first time, staring across at each other, with paws crossed, and streamlined wigs instead of manes, and an air of painfully superior disapproval.

*

Landseer's honest realism in Trafalgar Square is refreshing after that sort of thing. You can't play tricks with the king of beasts except in heraldry, unless you are a designer of the calibre of Herrick.

THE BEACH HUT

Where are the bathing machines of my youth—the great, gay, wheeled affairs that were ranged in ranks upon the seashore at Brighton and other resorts? There are some left; a few survivals, but they are following the hansom cab and the sedan chair into the limbo of forgotten conveniences.

*

Instead we have the beach hut, a growth that is multiplying with raw haste. Visit any part of the coast; even those secluded parts of East Anglia that are still blessed with unaccommodating railways, and are off the main motor traffic roads. Visit, for example, such a remote preserve of Victorian serenities as Southwold.

*

At that spot on the Suffolk coast you will find a pier; a small promenade; a lighthouse; bridge-players; golfers; military gentlemen who have retired to study rheumatism, and holiday-makers who sun-bathe in the east wind with savage determination. But there are beach huts by the mile—and what beach huts.

*

Dilapidated weather-boarding; shabby synthetic materials; peeled paint, and pervading them all an air that is both feudal and faintly Swiss.

*

And there are a few good old honest bathing machines. Plain affairs; functional in their day, but now no longer patronized. The glittering young things who rush their rubber-cased permanent waves and waterproof lipstick into the sea have quicker, cruder ways of undressing than their grandmothers.

*

The beach hut is O.K. by them. So are hundreds of other things that perplex the C.P.R.E., and distress people accustomed to use their eyes. Young England stamps on the gas, and rushes by. Soon we shall all be like the American visitors who accept sham half-timbering as genuine "Toodor." Can't somebody sell off our shameless dilapidated beach huts to the States as souvenirs?

*

I hear that the market for antiques is beginning to move slightly. As O. Henry said: "Satan always finds someone for idle hands to do!" Almost any step would be justified that would rid us of our coastal beach hut belt.

ARCHITECTURAL BENEVOLENCE

This year there is once again to be a Ball at Olympia in aid of the Architects' Benevolent Society. Tickets, as usual, from Mrs. Lanchester at the R.I.B.A., at one guinea each with a reduction for quantity. The date is Friday, September 25.

*

And a very worthy object too, for although the crisis amongst unemployed draughtsmen may be over, the Society is none the less in need of funds. And I think all architects should be grateful to Mr. Greville Montgomery too, for he is once more defraying the whole cost of the hall, so that all the money for tickets goes straight into the funds of the Society with no deduction for expenses.

TRAFFIC DELAYS

On Monday I found myself on Blackfriars Bridge in the middle of the worst traffic jam I have ever known. Stationary for hours and hours with only the whistle of passing pedestrians and bicycles to disturb the quiet.

*

And all because one half of New Bridge Street was being re-laid. According to *The Times* the whole of New Bridge Street and Ludgate Circus is to be dealt with, and the City Corporation has been given until October 12 to finish the job. Yes, October the *twelfth*—from Monday this week. What do these delays cost in terms of money? How much would be saved by continuous shifts to get the job done in a reasonable time? Is it impossible to post adequate traffic notices, far enough away for people to be able to make for another bridge?

*

There are times when my democratic tolerance fails me and I long for a traffic dictator who will really *do* something. Stipulating, of course, that the only possible dictator would be

ASTRAGAL

NEWS

POINTS FROM THIS ISSUE

"*Town planning after the war had a good Press. . . . then it came into collision with vested interests and, still more, with vested authorities. The word amenity, so horribly jaded, appears too often and grim battles for road frontages . . . seem to make town planning the pursuit of odd, unreasoning faddists*" .. 325

"*When we want to symbolize dignity, majesty and whatnot . . . we run to lions in England. America has eagle trouble whenever her sculptors get away from George Washington; but lions are our big sculptural problem. I remember the lions outside the British Pavilion at the Brussels exhibition last year. It would be difficult to forget them*" .. 327

The case for the formation of a new square to form a Civic Centre for Westminster and to provide a better setting for the national government buildings 331

SURVEYOR OF THE KING'S WORKS OF ART

Lord Gerald Wellesley, F.R.I.B.A., whose appointment as Surveyor of the King's Works of Art was recently announced, has been in practice as an architect since the War, before which he was in the diplomatic service.

The responsibilities of his new appointment include all the pictures, sculpture and other works of art at the royal palaces—a collection of tremendous value.

Lord Gerald Wellesley was elected a Fellow of the R.I.B.A. in 1929 and is in partnership with Mr. Trenwith Wills.

PREPARING FOR THE CORONATION

The Building Industries National Council has recently sent a memorandum to Government departments, local authorities, and larger building owners asking that they should renovate the buildings under their control before the forthcoming Coronation.

It is pointed out that all building owners will probably wish that their premises should present their best appearance at such a time—particularly in view of floodlighting or other illuminations. The period October to April is usually a slack time for the painting and decorating trades, and B.I.N.C. suggests that building owners could take advantage of this slackness to secure a great improvement in the appearance of their buildings at a reasonable price.

In addition, such activity would not only represent money well invested, but would also make the Coronation year specially memorable to the 30,000 or so painters normally unemployed in the winter months.

THE ARCHITECTS' DIARY

Friday, September 11
LONDON SALON OF PHOTOGRAPHY. *Private view. Twenty-Seventh International Exhibition of Pictorial Camera Work. At the Galleries of the Royal Society of Painters in Water Colours, 5a Pall Mall East, S.W.1.*

Saturday, September 12
ARCHITECTURAL ASSOCIATION. *Annual excursion to Czechoslovakia. Until September 26.*

Tuesday, September 15
NATIONAL FEDERATION OF MASTER PAINTERS AND DECORATORS. *At Hull. Annual Conference. Until September 18.*

Wednesday, September 16
BUILDING EXHIBITION. *At Olympia. Until September 30.*

Friday, September 25
INSTITUTE OF HOUSING ADMINISTRATION. *At Bristol. Annual General Meeting and Conference. Also September 26.*

Tuesday, September 29
INSTITUTE OF EXPORT. *Mr. Browning Dick on "A Marine Insurance Expert's Advice to Exporters." At 21 Tothill Street, S.W.1. 6 p.m.*

Friday-Sunday, October 2
TOWN PLANNING INSTITUTE. *Eighteenth Annual Country Meeting. At Norwich. Until October 4.*

Wednesday-Saturday, October 14
NATIONAL SMOKE ABATEMENT SOCIETY. *Eighth Annual Conference and Smoke Abatement Exhibition. In London. Until October 17.*

Friday, October 16
LONDON SOCIETY. *Miss E. Jeffries Davis on "The Story of Bloomsbury." 5 p.m.*

Tuesday-Friday, October 20
ARCHITECTURAL ASSOCIATION. *Annual Exhibition of Water-colours, Etchings and other Drawings by Members. Until November 6.*

Tuesday, October 27
ARCHITECTURAL ASSOCIATION. *Presidential Address by Mr. L. H. Bucknell, F.R.I.B.A. 8 p.m.*

COASTLINE PLANNING

The South Devon Regional Planning Committee, the honorary secretary of which is Mr. H. A. Hield, the town clerk of Torquay, is making progress with the plans for the preservation of the coastline from Sidmouth to Plymouth. After several starts and a considerable amount of difficulty, the committee is at last receiving support, and preliminary plans have already been prepared for most localities.

The National Trust now owns the headland on both sides of the Salcombe estuary, including the whole of Bolt Head, and the greater part of Gara Rock coastline on the east side. Various land in Salcombe itself, including the valley at North Sands, has been scheduled for preservation as private open space. Zoning has been generally adopted, and the number of houses to the acre strictly limited.

ARCHITECTURAL JUDGES

It is interesting to note that the seven judges of the *News Chronicle's* snapshots competition, for which a large entry has just competed, are described, in that newspaper as follows: Professor C. H. Reilly, O.B.E., a past president of the Royal Institute of British Architects; Mrs. Edith Tudor-Hart, specialist in modern photography; Miss Dorothy Wilding, the well-known photographer; Mr. Cecil Beaton, photographer, artist and stage designer; Mr. Joseph Emberton, the architect who designed the new Olympia and other well-known buildings; Mr. John Grierson, film producer for Post Office Film Unit and producer of B.B.C. film, "Song of Ceylon," etc., etc.; and the Editor of the *News Chronicle*. It would a few years ago have been a surprise to find one architect in such a capacity. Two appear to speak well for the status of the architect in the public's estimation; even though Professor Reilly is not a Past-President of the R.I.B.A.

L.C.C. SCHEME OPPOSED

A defence committee of Stoke Newington residents has been formed to oppose the L.C.C. scheme to build on a 64-acre site in the borough the largest estate of working-class flats in the country. It will accommodate nearly 15,000 persons in 3,000 dwellings.

The borough council also is opposing the scheme, and an inquiry is to be held.

STUDENTS' ART EXHIBITION

A proposal that Schools of Architecture should co-operate with the Architectural Association Students' Art Club, and hold a Representative Exhibition of Students' Drawings and Paintings, has met with such a favourable reception that an Exhibition has been arranged at the Architectural Association, to take place from November 9 to 20.

If any School has not received particulars of this Exhibition, which calls for a collection of works not exceeding nine in number from each School, particulars may be obtained from the Hon. Sec., A. A. Students' Art Club, 36 Bedford Square, W.C.1.

LENNOX CASTLE MENTAL HOSPITAL

The Lennox Castle Institution for Mental Defectives, near Glasgow, will be opened on September 24. The scheme has accommodation for 1,200 patients and has cost £1,250,000 to complete. The estate has its own railway line, reservoir and sewage plant, as well as a hospital, concert hall seating 1,000 persons, cinema and workshops. The architect is Mr. E. G. Wylie, of Glasgow.

THE DARTFORD-PURFLEET TUNNEL

Work on the new Dartford-Purfleet tunnel under the Thames is to be started during the next fortnight, when the approach road on the Kent side will be begun. As soon as the road is finished the shafts can be sunk and excavation will proceed in the usual way with a compressed air shield. The tunnel, circular in section, will provide a 20-ft. carriageway with a patrol path on either side. The estimated cost of the scheme is £3,200,000.

NEW COMPETITION

British Architects domiciled in the United Kingdom are invited to submit designs in Competition for a new Central Technical College, Commercial College and Art College proposed to be erected on a site bounded by Aston Street, Corporation Street and two new streets (which the Corporation propose to form) at Birmingham. The expenditure on the buildings, including the cost of heating, ventilation, lighting,

drainage, water, gas and electric services, but excluding furnishings and professional charges, must not exceed £560,000.

Assessor—James R. Adamson, F.R.I.B.A., whose award shall be final and binding on all competitors and the Corporation. Premiums—£750, £500 and £250.

The conditions of the competition, instructions to competing architects and the plan of site may be obtained on and after Friday, 11th September, 1936, on application to P. D. Innes, Chief Education Officer, Education Office, Council House, Margaret Street, Birmingham 3, on payment of deposit of £2 2s., which will be returned on receipt of a bona-fide design, or on the return of the competition documents not less than four weeks before the day for submitting designs.

Sending-in day, Friday, 12th March, 1937.

WESTMORLAND ARCHITECTS AND COMPETITIONS

Westmorland County Council has decided to give careful consideration to a letter from 15 of the 17 architects practising in the county, which asked that public building work of an architectural nature should be thrown open to competition.

PENDING COMPETITION

The Urban District Council of Thurrock, Essex, has decided to obtain designs from architects for a new Council offices at Grays, and to offer a premium of a hundred guineas.

THE BUILDING EXHIBITION

The Incorporated Association of Architects and Surveyors will have a club-room at the Building Exhibition which will be open at Olympia, London, from September 16 to 30. All members, their friends and others interested are invited to use it.

The club-room will be at the end of the first floor gallery, facing the main entrance of the Exhibition.

FORTHCOMING LECTURES

The following lectures will be open to the public at the Geffrye Museum, Shoreditch, E.2 :—

October 29.—Furniture and Equipment of the Medieval House. Mr. H. Clifford-Smith, F.S.A. (Keeper of Woodwork at the Victoria and Albert Museum).

November 5.—Medieval Wall-paintings. Mr. A. K. Sabin (Deputy Keeper of the Bethnal Green Museum).

November 12.—Good Craftsmanship in Lettering. Mr. H. Warren Wilson, A.R.C.A.

November 19.—Design in Everyday Things. Mr. Percy A. Wells, F.R.S.A.

November 26.—London in Roman Times. Mr. D. Martin Roberts, M.A.

December 3.—Shoddy Furniture. Should its Making be a Criminal Offence ? Mr. E. Hawking.

NEW POPLAR TOWN HALL

Following are some extracts from a leading article in the *City and East London Observer* on the subject of the design for the new Poplar Town Hall of which we reproduce a perspective:—

"Severe logic has been applied to the problem in Poplar as elsewhere. Art and architecture have no place in the new scheme of things municipal. The guiding principle in the design of this building is utility not ornament. The exterior lacks any feature, unless a squat tower at the eastern end can be regarded as a feature. The general aspect of this building is that of a storehouse or factory, and there may be public regret that the opportunity to raise the standard of the buildings in a dull, drab area has been missed. Utilitarianism can be carried too far, and only by a stretch of the imagination can it be said the new Poplar Town Hall will be anything of which to be proud. Man does not live by bread alone.

"The 'modern building,' of which this is an illustration of the latest type, has its apologists and defenders, but that continental examples should always be followed looks much like a mental obsession. The best that can be said of the new Poplar building is that it is un-English. If that is an argument in its favour then the public must grin and bear it, for the plans have been approved and a contract for the construction accepted."

The new Poplar Town Hall on which work was recently begun. The plinth is to be of precast terrazzo, ground-floor piers of green marble, the top banding and tower of thin wide-jointed brickwork, and the remaining wall surfacing of Portland stone veneer. The architects are Messrs. Culpin and Son, and the drawing reproduced is by Mr. J. D. M. Harvey.

TIMBER SHOW

The Timber Development Association's travelling exhibition of timber utilisation will finish its long journey at Euston next week, where it will be on view from Wednesday to Friday.

ACKNOWLEDGMENT

The photographs on pages 313, 314, and 316 of our last issue, illustrating the new hydro-electric power-station at Marèges, are the copyright of the photographer, M. Jean Roubier.

R. I. B. A.

SCHOLARSHIPS IN ARCHITECTURE

The following Maintenance Scholarships have been awarded for the year 1936-1937:—

An R.I.B.A. Maintenance Scholarship of £100 per annum to Mr. F. A. R. Hill of Birmingham.

An R.I.B.A. Maintenance Scholarship of £100 per annum to Mr. B. B. Batt of Lincoln.

An R.I.B.A. (Houston) Maintenance Scholarship of £100 per annum to Mr. P. L. Cleveland of London.

An R.I.B.A. (Houston) Maintenance Scholarship of £100 per annum to Mr. P. F. Shepheard of Liverpool.

The *Builder* Maintenance Scholarship of £50 per annum to Mr. J. C. de C. Henderson of London.

The Ralph Knott Memorial Maintenance Scholarship of £45 per annum at the Architectural Association School of Architecture, awarded to Mr. T. Verity in 1935, has been renewed for a further period of one year.

The R.I.B.A. Maintenance Scholarships of £50 each, awarded to Mr. A. M. Foyle (Bartlett School of Architecture, University of London) and Mr. G. M. Thomas (Leeds

School of Architecture), have been renewed and have been increased to £70 each for the Session 1936-1937.

THE HENRY L. FLORENCE BURSARY

The R.I.B.A. desires to call attention to the fact that the last date for the receipt of applications for the Bursary is December 1, 1936.

Candidates must be members of the Royal Institute of British Architects. The Bursary is offered in alternate years and is of the value of £350. The general object is the study of the Greek and Hellenistic architecture of the Mediterranean basin with a view to making available for architects, from an architectural standpoint, the results of the more recent archæological researches.

The holder of the Bursary is required to spend a period of not less than six months in travel and research.

Applications must be made in writing accompanied by testimonials, and a brief outline of the candidate's intention regarding his proposed studies must be included. Candidates should state their qualifications, age, architectural training, works executed and publications, if any. Applications should be sent so as to reach the Secretary, R.I.B.A., before December 1, 1936.

•

TERRITORIAL PLANNING

A paper entitled "A Factual Basis for Territorial Planning" was read to the Town and Country Planning School at Salisbury on August 30 by Mr. Max Nicholson.

Some extracts appear below :—

One of the reproaches often levelled against town and country planning from outside is that it seeks to impose a rigid framework on a vast number of complex and delicate activities without appreciating the human, or even all the economic and technical implications of its actions so far as other people are concerned. Another reproach, common to planners and to critics of planning, is that carefully prepared plans often prove more or less futile because they lie in their pigeon-holes while political and economic forces decide the issue in the old haphazard way as if no plan existed.

Most of us here are trying, in our different fields, to plan, and it seems most profitable to deal with the subject by considering first what things the State and other agencies are now doing which affect territorial planning. Second, what types of change are necessary in order to make the actions of the State and other agencies harmonise with, instead of ignoring or counteracting, such territorial planning, and third, what types of change in the outlook and methods of territorial planning are necessary in order to make it work in more effectively with the State and with other agencies.

Town and country planning is of course territorial, rather than functional, in its basis—it deals with a definite and limited geographical area and all its needs, instead of tackling, say, a definite industry and its needs without much regard to geographical factors.

While professing a *laissez-faire* attitude of allowing each part of the country to gain or lose population according to the play of economic forces, the State has in fact so tampered with these economic forces as to give very large and unrecognized advantages to some parts of the country, with corresponding handicaps to others.

I believe I am correct in saying that until two years ago there was not a single central government official permanently outside London and Edinburgh (apart from the higher legal and medical personnel who are in a peculiarly strong bargaining position) being paid more than £1,500 a year, and very few provincial posts rose much above £1,000. On the other hand quite a number of London posts, Civil Service as well as Ministerial, carried salaries of £3,000 or over.

Industry drifts Londonwards because London is the largest market and because London has a growing approach to monopoly of the best brains of the country. Economists may interpret this as a natural and healthy process: I submit to you that it is a highly artificial and unhealthy process.

For example, in the days when the Post Office was a byword for backwardness and lack of imagination it was wholly centralized in London: now that it is becoming a progressive and live concern it is finding the need for giving wide responsibilities and good pay to regional directors in Scotland, in Yorkshire, and so forth.

The more the State centralizes its administration in London, the more it becomes necessary to spend further national money on London police, London communications and so forth; while, as Mr. Osborn has pointed out, the new policy of subsidizing the payment for site values for rehousing in central areas involves the use of national funds for maintaining and further increasing site values which national expenditure may have created.

Some surprising anomalies have also come down from the past. For instance, it is widely agreed that large national parks in such areas as North or Central Wales, the Highlands and the Lake District and elsewhere, would be a sound and desirable national investment if the taxpayer could afford it. How many people realize that the British taxpayer is at the moment finding a net amount of nearly a quarter of a million pounds for parks and pleasure gardens, and that of this large sum raised from all parts of the country, including the distressed areas, all except an insignificant fraction goes to Greater London? If there is any single element which accounts for the residential and social attractions of the West End of London more than another, it is the Royal Parks. Westminster, the richest city in England, has 723 acres of open space, of which six acres are maintained at its own expense and the great bulk of the rest is enjoyed free, thanks to a subsidy from the taxpayer of nearly £100,000 a year. South Shields, a town with heavy unemployment and with about a twentieth of Westminster's rateable value, has to pay a rate of about 1s. 5d. in the £ in order to enjoy a smaller acreage of public open spaces, and South Shields people also contribute through taxation, to give wealthy Westminster its free parks.

The agricultural subsidies which have grown up in recent years are a conspicuous example of the State taking money from one area in order to benefit another, without realizing, at any rate at the outset, what the effect will be. For instance, Dr. Venn has estimated annual payments to agriculture by the State and the consumer at £33 million gross (not counting tariffs and quotas) of which Norfolk alone, with 320,000 people in the administrative county, gets a total of nearly £3 million—nearly £10 per head gross.

In public expenditure also there are reasons to believe that lack of attention to the territorial aspect has led to inequality and has falsified attempts at regional planning. I should be surprised if a single person here would question the wisdom—in fact the urgent necessity—of mitigating the isolation of South Wales by a road bridge over the Severn, which would save a sixty-mile detour in the road journey between the centre of population around Cardiff-Newport and the centre of population round Bristol and Bath. The estimated cost is less than £2 millions, yet, after endless delay, and after the Ministry of Transport had actually earmarked the necessary money, the scheme has been turned down by a Parliamentary committee without the case for it ever being heard. Meanwhile the Dartford-Purfleet tunnel, which costs twice as much, is to be given to Thames-side industries by the use of national funds, while more urgently needed improvements are withheld elsewhere.

I do not suggest that because a certain population is now employed at a certain place it has a right to expect to be provided with continued employment there if economic or other factors change, nor do I suggest that the State should abstain from necessary decisions because these may hurt one area and help another. I do, however, submit that from now on we should have a properly equipped agency to watch, measure and report upon the effects of actions of the State and of other agencies, such as the steel and shipbuilding industry, the agricultural marketing boards and finance, upon each of the many regions of the United Kingdom, so that all concerned are kept informed of the relevant facts.

Such a process, I believe, will bring out the fact that our institutional structure in Great Britain is no longer appropriate to a congested urban civilization. Until almost within living memory there was hardly any paid local government service in Great Britain. It has grown up in mushroom fashion and taken on dozens of functions, many of which, such as electricity and water supply, roads, transport, town and country planning, education, have grown even faster and are more and more requiring area of operation much larger than most of our local authorities can give.

We have just had the Minister of Transport's announcement that the trunk roads are to be nationalized, and there is a certain drift towards nationalizing everything, but the State may be at least as unsuitable an authority for many of these intricate and intensely localized services as the local authority, although in a different way.

It appears to me that the best solution will be found in giving more responsibility and scope to regional bodies (using the word regional to cover groups of several normal counties, rather than sections of a country as you use it in town and country planning), and I hope that this possibility will receive the more serious study which it deserves.

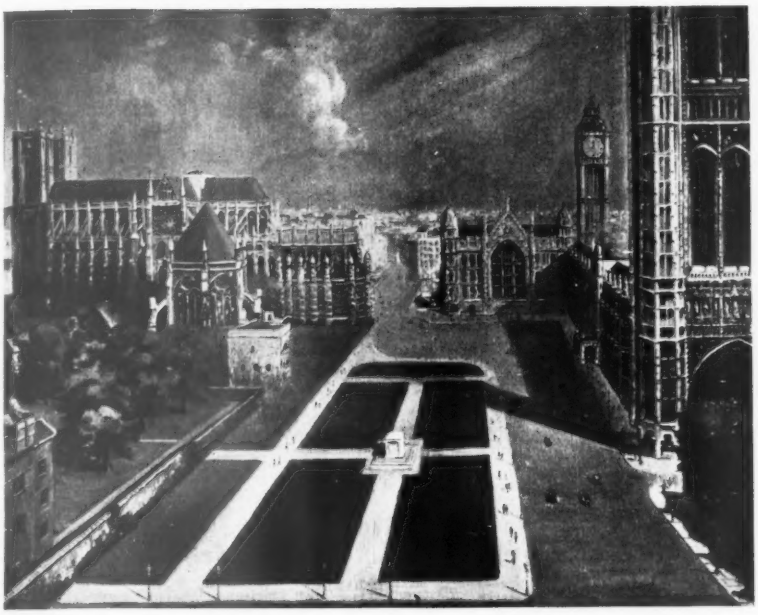


Fig. 1 : *A sketch painting of the new square adjoining Abingdon Street, Westminster, which it is intended to form as a Memorial to King George. The position of this square is shown in the extreme left foreground of fig. 2.*

A CIVIC CENTRE FOR WESTMINSTER

By

A. G. LING

THE proposal to create a new square in Westminster on the Abingdon Street site as a setting for a monument to King George V has so far met with little opposition. Yet, viewed from a town-planning point of view it would be disastrous to create yet another open space to compete with Parliament Square. To be effective it must either dominate or be subservient. And surely there is property of less architectural and historic merit that should be demolished first. Such a scheme as is outlined below would provide a setting far more worthy of the statue of King George V. It would stand almost literally at the centre of the Empire. At the same time Westminster would be accorded that recognition which is due to her as " the shrine and national centre of the Empire," obsolescent buildings would be cleared away, and those in which the laws of the land are made and administered would be provided with a dignified civic setting " entirely worthy of the highest aspirations of the Commonwealth."

According to the principle of betterment, those benefiting under such a scheme as this should contribute towards its cost. This then is clearly a case in which the national exchequer should play its part. Since, however, this proposed new square would provide a magnificent site for a memorial tatue to King George V, part of the memorial fund might conceivably be used on a basis of voluntary subscription. The full realization of this project must necessarily take considerable time, but it is essential, if this area is ever to have architectural and town-planning expression equal to the importance of the purpose to which the buildings are put, that the Government should adopt a definite plan for its development.

The creation of a Civic Centre for London has been slow but persistent. Government offices have been built near the Houses of Parliament, along Parliament Street and Whitehall, until gradually there has appeared a certain area which we have to accept as London's Civic Centre. The building of the Home, Foreign and Colonial Offices to the design of Sir Gilbert Scott (1868-1873), those of the Ministry of Health and the Board of Education by J. M. Bryden (1900-1915), and the widening of Parliament Street, were important steps in this process of development. With the building of the new Government offices by Vincent Harris yet another step is to be taken. Now so far, although effort has been made to obtain the best designs for the individual buildings, there has been lacking a coherent plan for the grouping of them, one with another. The process has now reached a stage at which the Government should look for the direction in which future development is to take place.

At the moment, Parliament Square and Whitehall are not on sufficiently grand a scale to dominate the rest of London. Other centres of equal size such as Trafalgar Square and the Mansion House compete with them. Something on a rather larger scale is required if this area is to represent adequately the life not only of the city, but of the nation and the Empire. The new Government offices to be erected call attention to the only remaining

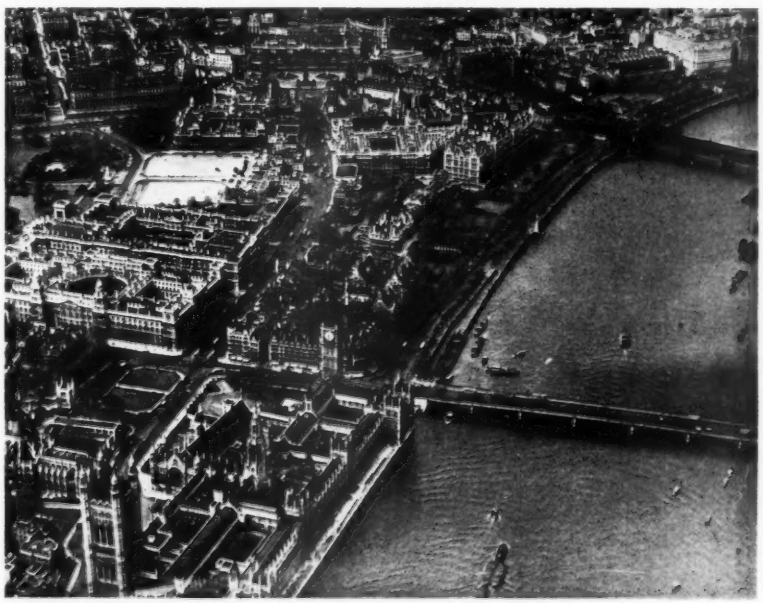


Fig. 2 : *Aerial photograph of Westminster as it now is, showing the shops and the business property occupying the area between the Houses of Parliament and the site of the new Government offices. This type of property completely destroys the quiet and dignified character which is essential to a Civic Centre. Note also the uncertainty in the layout of Parliament Square on the West side.*

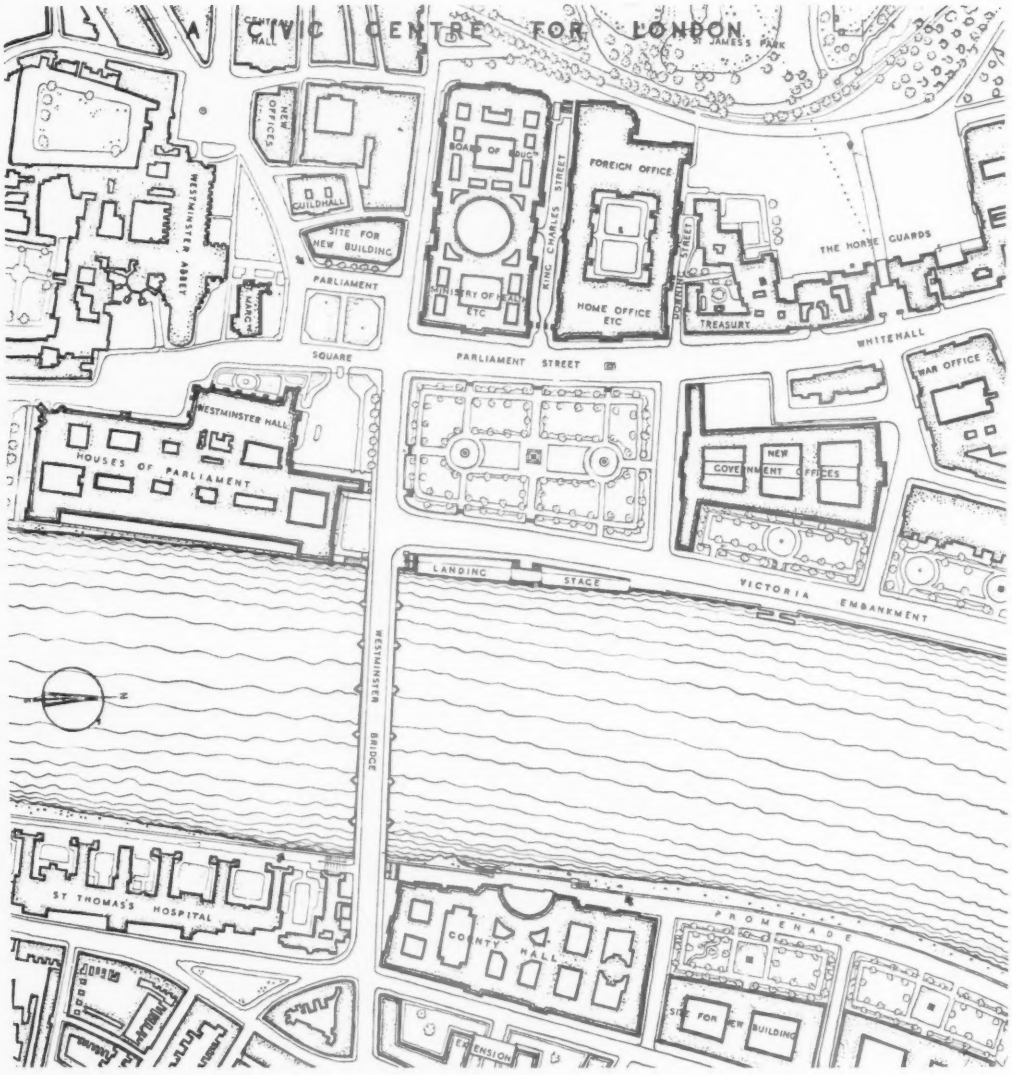


Fig. 3 : *Plan of the area around the Houses of Parliament, showing the proposed new square, the new Government offices with two side wings added, and new buildings on the west side of Parliament Square and on the east side of the river next to the County Hall. The black arrows indicate the viewpoints of figs. 4, 5, 7 and 8.*

area near to the Houses of Parliament which is still undeveloped for National purposes. This area is bounded on the north and south by Richmond Terrace and Bridge Street, and on the east and west by the Victoria Embankment and Parliament Street. (Fig. 2.) The property there consists mainly of shops and business premises which completely destroy the quiet dignity essential to a Civic Centre.

Now the new Government offices are of such magnitude and importance that their position, half hidden behind the Banqueting Hall and Gwydyr House, is rather unfortunate. The Embankment façade is the only one receiving due respect, and this is rather away from the general centre. As a setting, not only for these new offices but also for the Houses of Parliament and for those offices already existing on the west side of Parliament Street, a new square should be created on the site of the present shops and business premises. The whole of the area between the new offices and the Houses of Parliament should be cleared and laid out with gardens. The southern end of the new Government offices should have two side wings added to the present design, so that the building would extend from Whitehall to the Victoria Embankment. This would involve very little alteration to the present plans. The principal façade of the building, with a main entrance in the centre, would then face on to the new square. (Fig. 3.)

This would be a magnificent square, surrounded by the most important office buildings of the Government; on the south, the Houses of Parliament and Big Ben; on the north, the new Government offices; on the west, the Home, Foreign and Colonial offices connected to those of the Ministry of Health and the Board of Education by an overhead bridge central on the new square; Downing Street would lead on to the new square at the N.W. corner; on the remaining side, the east, would be the Embankment and the river. The present landing stage should be so reconstructed as to extend the whole length of the new square. (Fig. 3.) Across the river lies the County Hall, which would correspond exactly in length to that of the proposed new square, so that it would form a fourth side to it, and include the river in the scheme, Westminster Bridge serving as a link. The river would then be invited to take part in the real life of the city and boats would be able to land their passengers alongside the most important square in London. The effect would be comparable to that of the Piazza of St. Mark at Venice, only on a much larger scale. (Fig. 6.)

Fine views would be opened up; of the Houses of Parliament, Big Ben and the offices by Sir Gilbert Scott, J. M. Bryden and Vincent Harris. Particularly fine would be the view from the terrace in front of the County Hall. (Fig. 5.) Big Ben would mark the entrance to the new square from Westminster Bridge and there would be a fine contrast between the verticality of the Houses of Parliament and Big Ben in the Gothic style, and the horizontality of the old and new

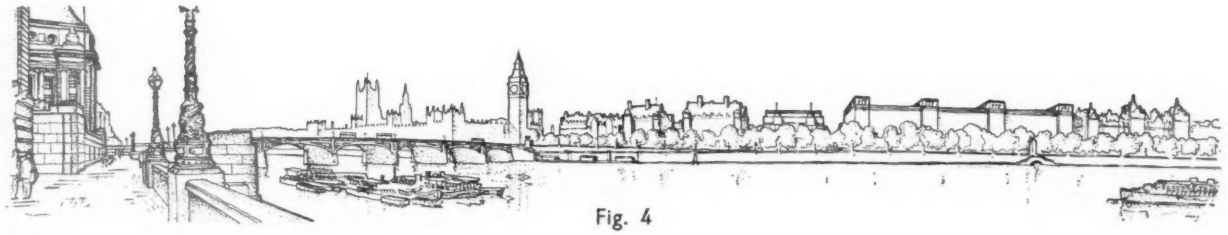


Fig. 4

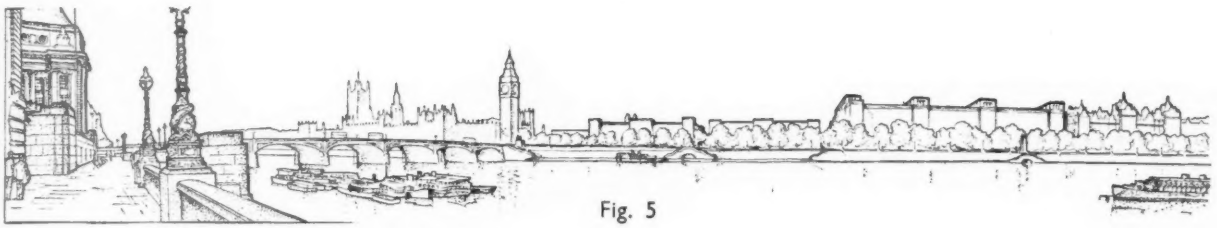


Fig. 5

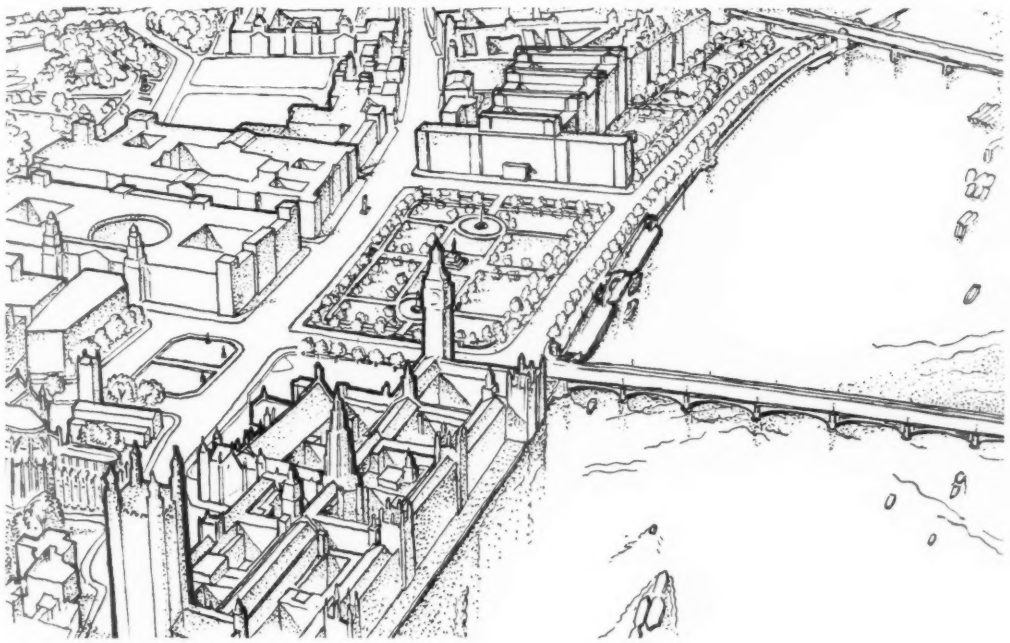


Fig. 6

Fig. 4 : *Panoramic view of Westminster, seen from the terrace in front of the County Hall as it will appear when the new Government offices are completed. The proposed extension to Scotland Yard is also shown. The emphasis which the new Government offices throw on the property between them and the Houses of Parliament, is here clearly seen. This area with its haphazard development and broken sky-line now becomes the centre.*

Fig. 5 : *View, taken from the same standpoint, showing the effect of the proposed new square. The new and old Government offices are given a dignified setting and now form a unified composition with the Houses of Parliament. Compare the sky-line of the buildings here with those shown in Fig. 4.*

Fig. 6 : *Aerial view of the proposed new square, showing the new Government offices on the north, the existing offices on the west, the Houses of Parliament on the south, and the reconstructed embankment and landing stage on the east. On the west side of Parliament Square is shown the suggested form of a new building to be erected there, which would be symmetrical onto the square.*

Government offices in the classical style. Through Parliament Square there would be a view of St. Margaret's Church and Westminster Abbey with Westminster Cathedral in the far distance. A grand approach to the new square would be obtained from Victoria Station. There would be a gradual opening out, first into Broad Sanctuary, then into Parliament Square, then into the new square, and finally to the river and the whole of London with a view of St. Paul's in the distance. (Fig. 8.) In this way the City, the business centre, would be brought into relation with Westminster, the Civic Centre. The overhead bridge across King Charles Street, connecting the buildings housing the Ministry of Health and Board of Education with those of the Home and Foreign offices, would form a central feature on the west side. Straight through this archway lies St. James's Park and Buckingham Palace, Constitution Hill leading to Hyde Park Corner and Rotten Row lying in a straight line with it, so that the Parks and the Palace would also have direct relation with the new square.

Such a development as this would entail the removal of Scotland Yard and business premises to other sites. Several of the buildings are now used for Government purposes; with the erection of the new offices their sites would become available for development. The entrance to the Westminster Underground Railway Station

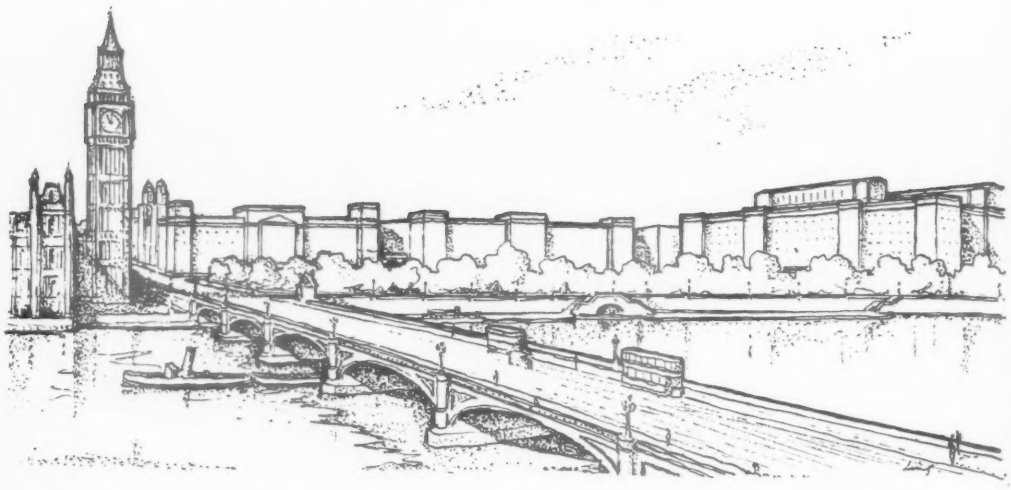


Fig. 7 : *The New Square from St. Thomas's Hospital. Big Ben and Queen Boadicea's Statue frame the entrance to it from Westminster Bridge. Straight ahead is the Ministry of Health building joined to the Home Office by an overhead bridge. On the right are the proposed new Government offices as they would appear with the suggested alterations.*

would remain as now directly in front of Big Ben, on the opposite side of Bridge Street. All buildings connected with the station would be underground. There would be a fine effect on coming out of this station into this great open space. Restaurant facilities should be provided in the Government offices, to compensate for the restaurants cleared away under the proposed scheme.

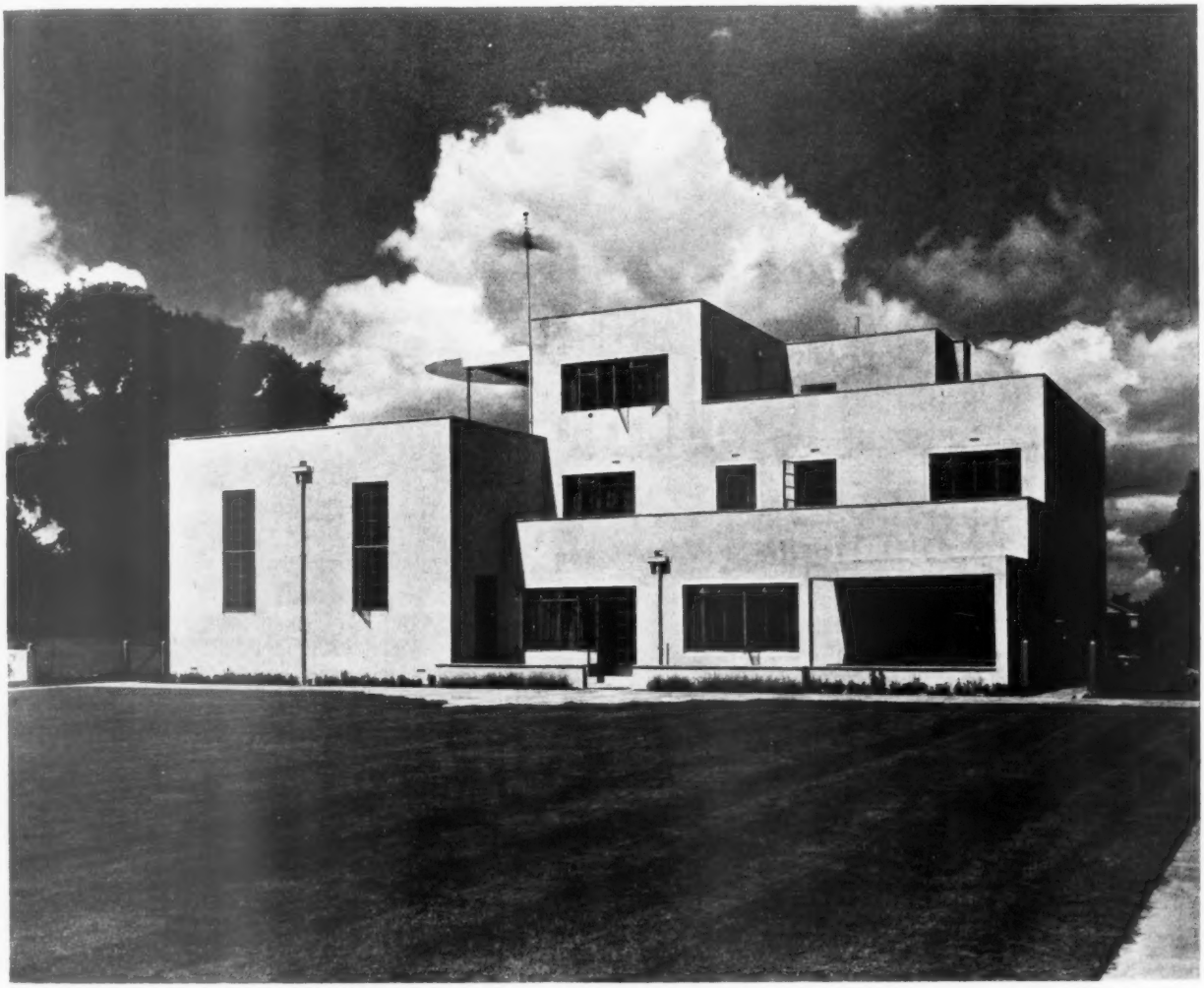
Scotland Yard has already outlived its purpose and an extension has now become necessary. Very few people will be found to seek its preservation on grounds of architectural merit; there is good reason therefore for taking this opportunity of erecting some fine new Police Headquarters. Two sites are possible, the one on the West side of Parliament Square, the other on the East side of the river, next to the County Hall (Fig. 3). The first has the advantage of being near to the Government offices, but has the disadvantage of affording only a small site. Now if the new square were made, so much new open space would be provided, that it would be reasonable to use the Green on the west side of Parliament Square, together with the site of the present offices there, as a site for these new Police Headquarters. On this site they could be designed so as to present a symmetrical façade to the West side of Parliament Square.

This development would result in a more enclosed square, round which there would be buildings representative of the various elements in our social structure. On the south, St. Margaret's Church and Westminster Abbey, representing the moral values which should be the inspiration of all laws; on the east the Houses of Parliament where the laws are made; on the north the Government offices where the laws are administered, and on the west the Headquarters of the police responsible for their enforcement. The road in front of this new building would lead, as now, directly to the transept entrance to Westminster Abbey.

The second possible site for the new Police Headquarters, on the south side of the river next to the County Hall, would be of greater area, but would not be so conveniently near the Government offices. Nevertheless, when the proposed new Charing Cross Bridge is built, access would be facilitated, and moreover, the erection of a new building here would carry on the good work started by the London County Council in developing the south side of the river in a proper manner. If the building were set back from the building line of the County Hall, and the area in front laid out with gardens, an effect similar to that on the opposite side of the river would be obtained (Fig. 3). A promenade, continuing that in front of the County Hall, would run along the riverside to join up with the new Charing Cross Bridge.

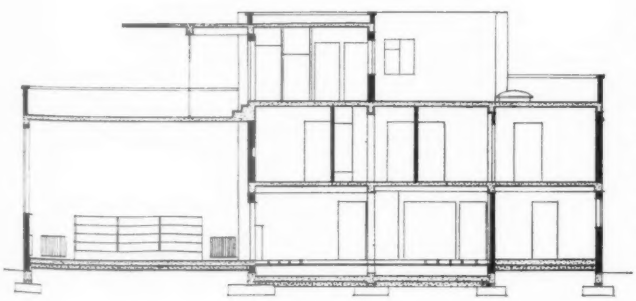
Fig. 8 : *The New Square seen from the south-west corner of Parliament Square showing the new Government offices to the north, County Hall and the new buildings next to it across the river, and the City and St. Paul's in the distance. With this development the business centre and St. Paul's are brought into relation with the Civic Centre and Westminster Abbey.*

MUSICIAN'S HOUSE AT HOLMBURY ST. MARY



DESIGNED BY

W. DALTON IRONSIDE



SECTION

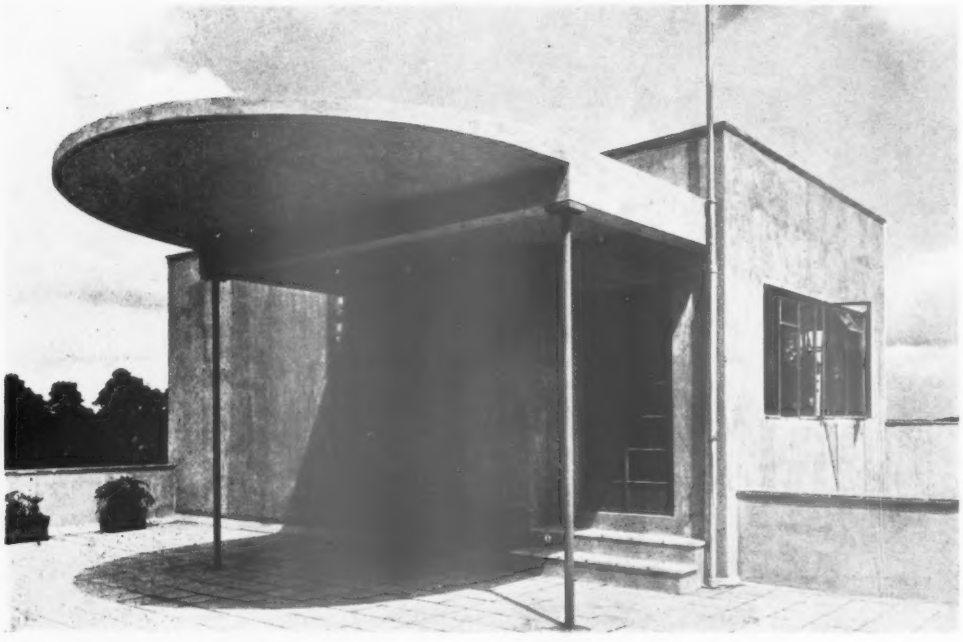
GENERAL PROBLEM—*A house in Surrey with a large music-room as a principal part of the plan. The following requirements of the client controlled the size of the music-room : a platform for two concert grand pianos and music fitments at one end, and a billiards table and bookshelves at the other with living space in the centre of the room. The plan also was controlled by the client's wish to have access from his own bedroom suite to the flat roof over the music-room. There is also a garage for three cars.*

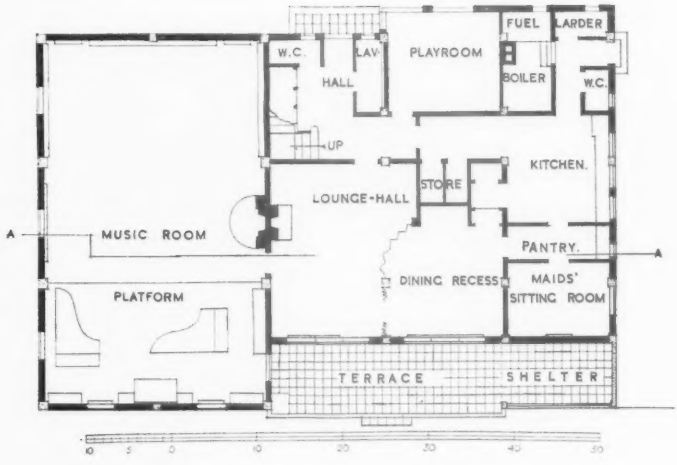
SITE—*An open one 500 ft. above sea level. The boundaries of the site are edged with old trees, and the views extend to Hurtwood Common to the south, and to Newland's Corner and Leith Hill. The house has been placed to take advantage of these views and to secure protection from the prevailing winds.*

The photograph is of the garden front.

C

MUSICIAN'S HOUSE AT HOLMBURY ST. MARY, D



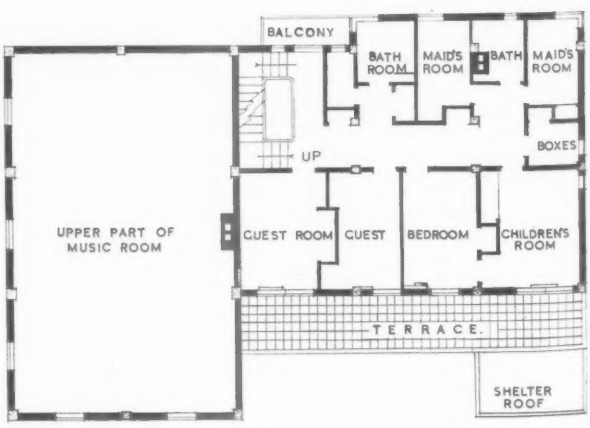


PLANS OF GROUND AND FIRST FLOORS

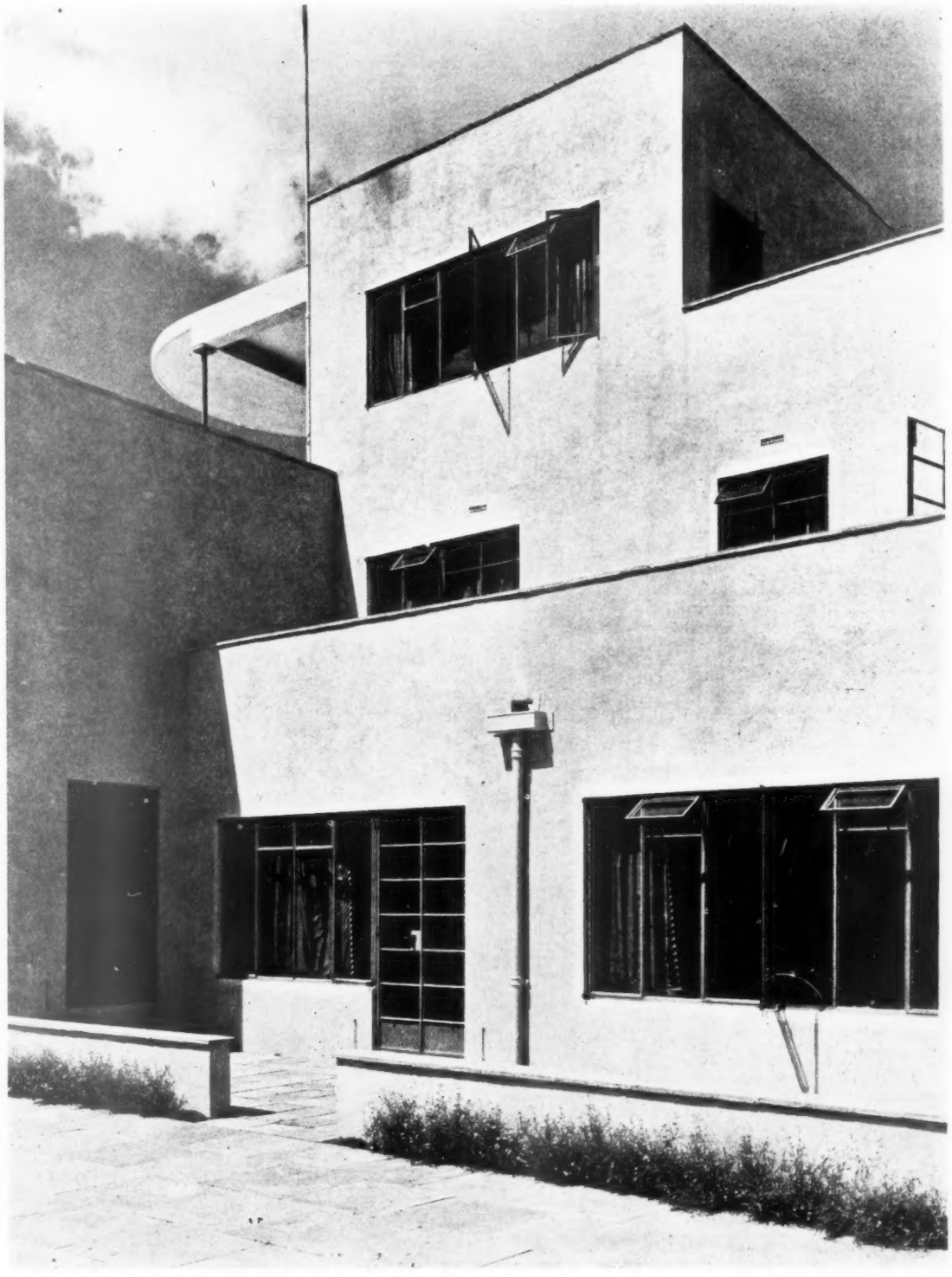
PLAN—*The spare bedrooms are planned above the lounge hall and next to the upper part of the music-room, and the children's rooms are over the kitchen quarters. On the second floor are the owner's bedroom and dressing-room only.*

CONSTRUCTION—*Reinforced concrete frame and floors. The walls are of two 3-in. skins of terra-cotta hollow blocks with a 2-in. cavity, and rendered externally with waterproof cement. The outside skin of blocks was made to pass the reinforced concrete piers and beams to avoid any possibility of the rendering cracking along the joints, and as an added protection against the weather. Piers and beams, therefore, show internally and are made a feature of the design. Partitions are of terra-cotta blocks. The wall between the music-room and the house is double cavity and is packed with slag wool.*

The photograph is of the canopy over the entrance to the owner's bedroom on the roof.



DESIGNED BY W. DALTON IRONSIDE



ELEVATIONAL TREATMENT—*The client desired a house in the contemporary style but with comparatively normal fenestration. Provision was required for sleeping outside, and this has been provided by the terrace adjoining the first-floor bedrooms. The external rendering was spray-painted pink at the desire of the client. Windows are metal casements in standard sizes and sections. Casements and external doors are painted jade green. The photograph shows a detail of the garden front.*

MUSICIAN'S HOUSE AT HOLMBURY ST. MARY

INTERNAL FINISHES — *In the music-room the roughcast plaster walls are left their natural colour, and the ceiling panels are finished with plaster thrown upwards and left to form its own pattern. All other plaster surfaces are left from felt floats or trowelled smooth and painted flat finish. The lower half of the music-room windows are glazed with obscured glass at the desire of the client. Australian hardwoods are used for special floors and flush doors, jarrah for the floors, and walnut, black bean and Tasmanian blackwood for the doors. All floors, other than hardwood, are deal on battens and stained or painted. Skirtings to principal rooms are ebonized oak, and all built-in fittings are painted deal. The staircase has a solid balustrade surmounted with a chromium-plated tubular handrail. The dressing-room bathroom has a black vitrolite dado and bath recess with joints picked out in green, and the house bathroom has a pearl grey glass dado with joints picked out in scarlet. In the bathrooms and bedrooms are coloured sanitary ware. The kitchen is partly tiled in white.*

SERVICES — *Central heating is by hot water radiators in all rooms and landings, and there are coal fires in the music-room and lounge hall, the former carried out in purple facing bricks and slate slabs, the latter in reconstructed Hopton Wood stone and black tiles. The general lighting round the music-room platform is by concealed striplights on top of the music cases. There are power points in all rooms. All plumbing and electric services are concealed. For list of general and sub-contractors see page 354.*

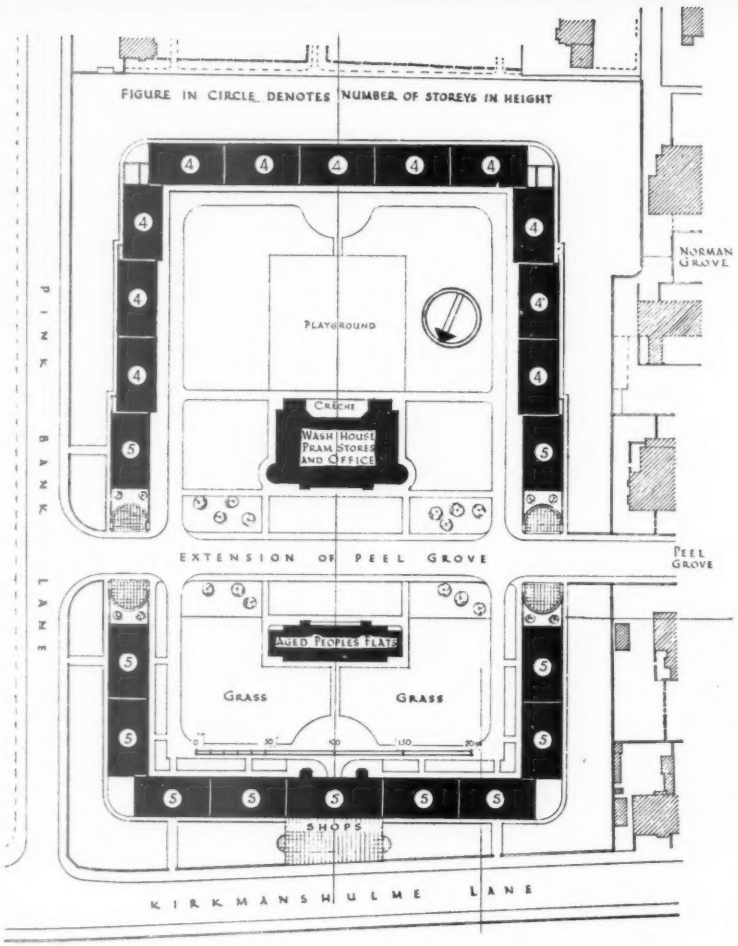
The photograph is of the client's dressing-room and bathroom on the second floor.

SECOND FLOOR PLAN

DESIGNED BY

W. DALTON IRONSIDE

WORKING CLASS FLATS AT MANCHESTER



DESIGNED BY LEONARD HEYWOOD, HOUSING DIRECTOR

PROBLEM—*A block of flats to rehouse tenants from slum clearance areas. The scheme includes a smaller two-storey block of flats for aged people and a central washhouse.*

SITE—*The layout was partly controlled by the extension of Peel Grove to Pink Bank Lane, and partly by the principle that no building should be less distant from another building than twice its own height.*

Above is a photograph taken from the north end of the internal court with the washhouse and two-storey flats in the foreground.

WORKING CLASS FLATS AT MANCHESTER,

GROUND FLOOR PLAN

TYPICAL PLAN OF FLATS

PLAN—*Each flat has its own balcony. This type of design has been adopted in preference to the continuous balcony to give privacy to each individual flat, and to ensure that in no case will a habitable room be overshadowed.*

CONSTRUCTION—*Brick walls 14 ins. thick with internal steel stanchions, and rolled steel joists carrying floors. Internal walls are 2½-in. breeze slabs. On the ground floors, the floors are of precast* R.C. *slabs finished with coloured asphalt; on the upper floors, of boarding on 2½ × 3-in. battens with breeze concrete filling, the structural floors being* R.C. *slab.*

ELEVATIONAL TREATMENT—*Sand-faced brick with rusticated piers. The windows generally are of wood, but in special positions of steel direct in brickwork.*

On the left is a general view of the northern front to the courtyard, and on the facing page is a detail of the north entrance with flanking staircase towers.

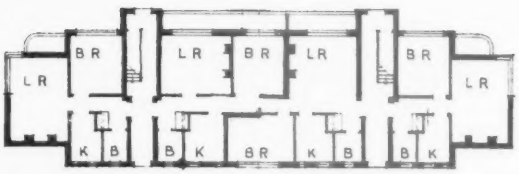
DESIGNED BY LEONARD HEYWOOD

WORKING CLASS FLATS AT MANCHESTER

INTERNAL FINISHES—*The brick and breeze walls and the concrete ceilings are finished in plaster and light-coloured washable distemper. Staircases are in plastic brick with steps of precast reinforced concrete finished in granolithic. A hospital finish has been adopted in all the flats wherever possible to eliminate dust pockets and crevices.*

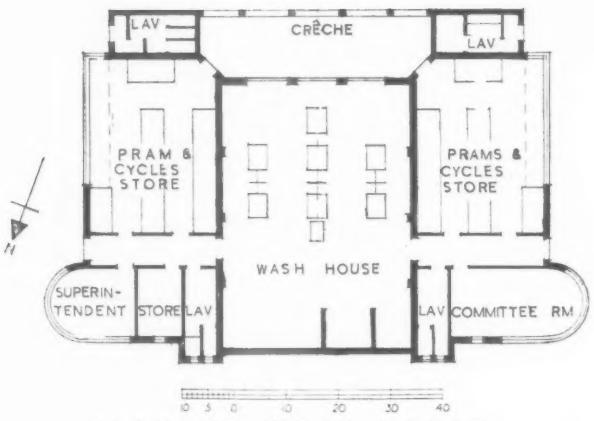
SERVICES—*There is a coal fire in the living-room only of each flat, and built-in electric fires in two of the bedrooms. The tenant of a two-bedroomed flat pays 7d. per week for electricity, and, in addition, ½d. per unit for light and power through a prepayment meter. An electric griller and electric kettle are provided free and the equipment is maintained free of charge. Hot water is obtained from a back boiler behind the living-room coal fire. The use of the central washhouse is free to tenants, and water, almost at boiling point, is delivered free to the washtubs. The use of the boilers, coppers and drying-horses are also provided free of charge. The water to the washhouse is supplied by a series of automatic heaters.*
Left, a detail of the two-floored flats for aged people.

COST—*Price per cube foot 10¾d. Finished cost will be approximately £91,000.*
For list of general and sub-contractors see page 354.



AGED PEOPLE'S FLATS
FIRST FLOOR PLAN

DESIGNED BY LEONARD HEYWOOD



PLAN OF WASH-HOUSE

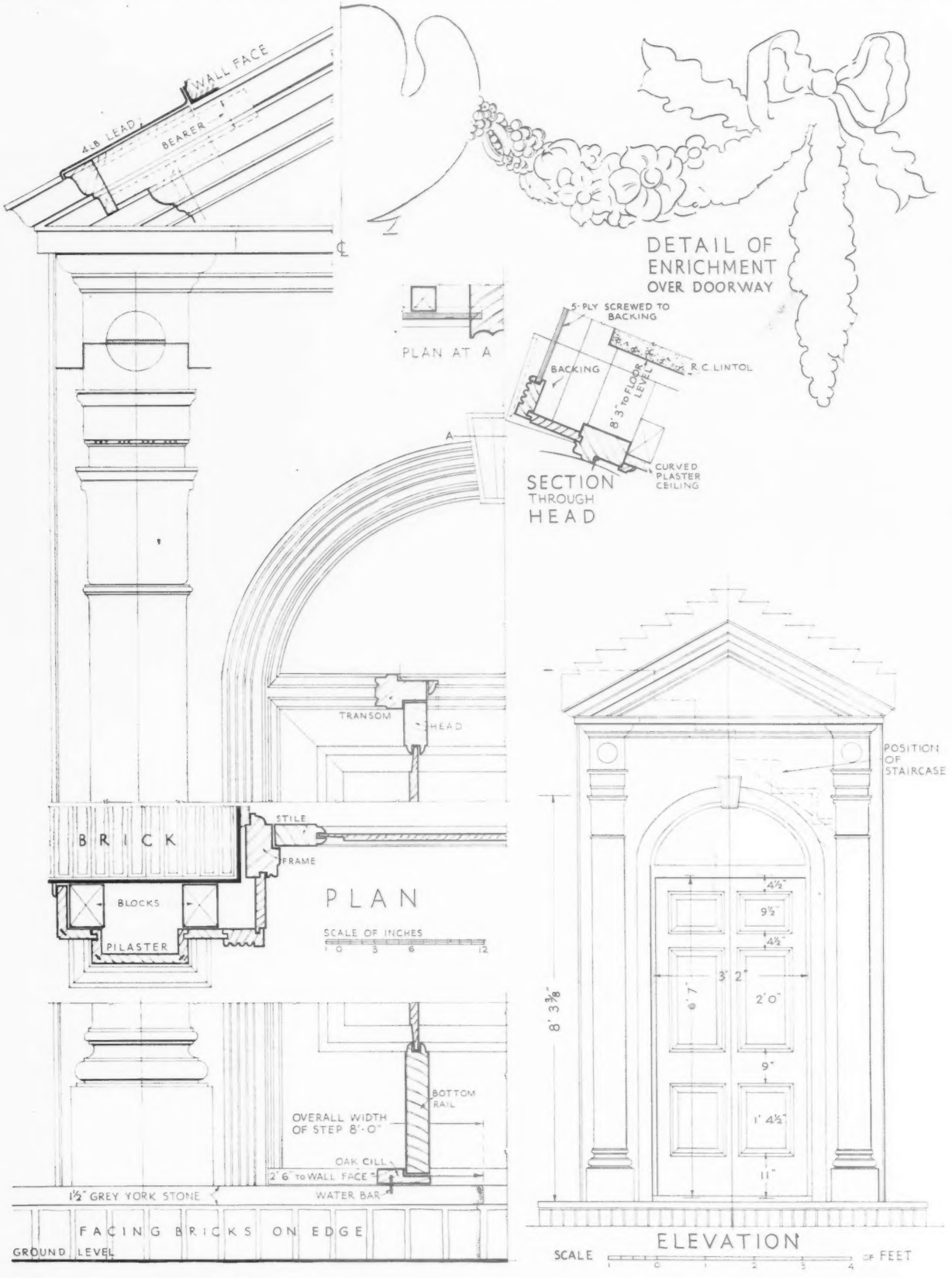
WORKING DETAILS : 487

DOORWAY OF HOUSE AT SEALE, SURREY • WELCH & LANDER

A photograph of the main entrance doorway of a house at Seale. Detail drawings of the design and construction appear overleaf.

WORKING DETAILS : 488

DOORWAY OF HOUSE AT SEALE, SURREY • WELCH & LANDER



Details of the doorway illustrated overleaf.

WORKING · DETAILS : 489

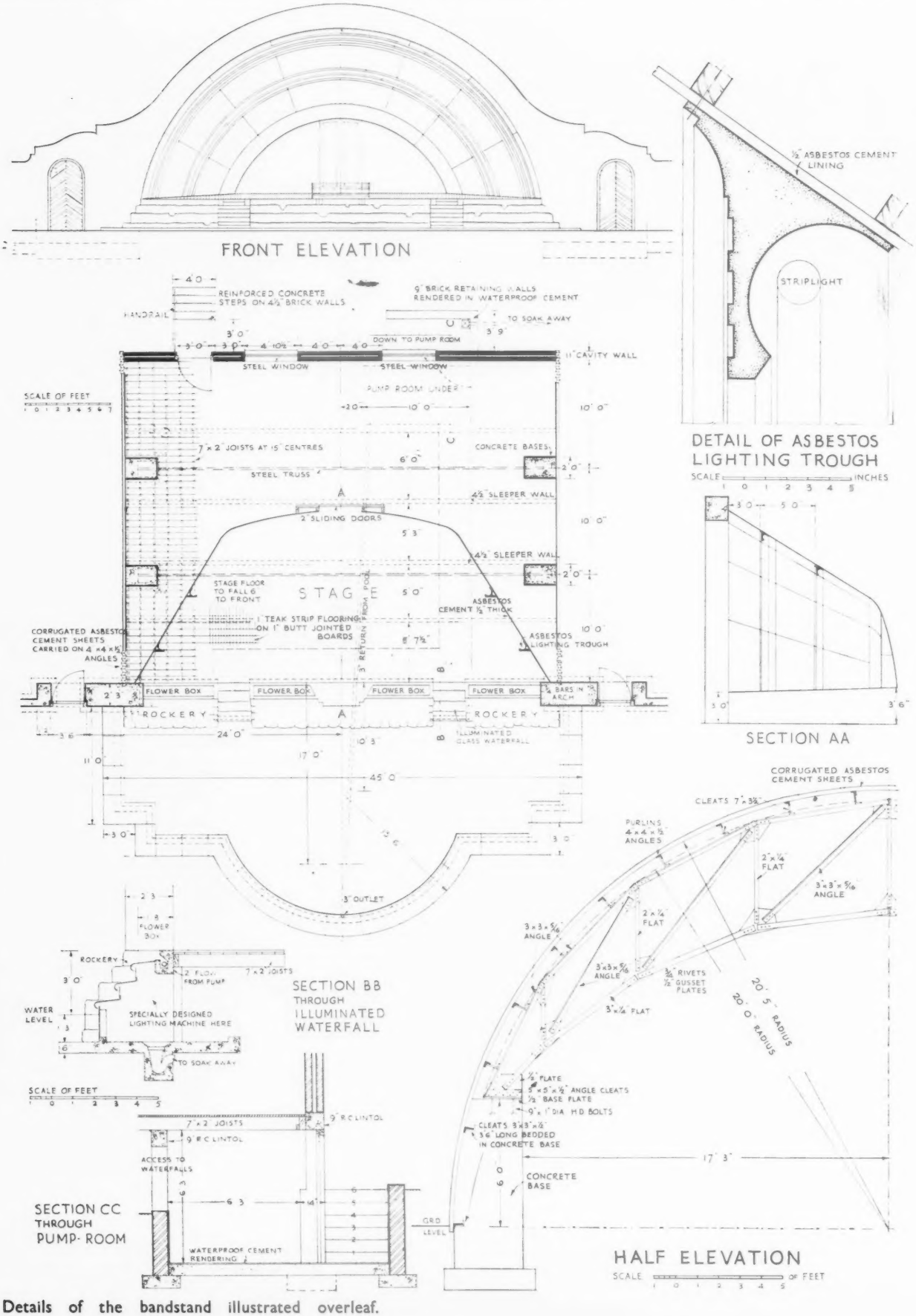
BANDSTAND AT THE TOWN GARDENS, SWINDON • J. B. L. THOMPSON

The bandstand illustrated above is covered with corrugated asbestos cement sheets. Inside, the stage lining is of asbestos cement with special asbestos troughs to carry strip lighting. Details of the design and construction appear overleaf.

FILING REFERENCE:

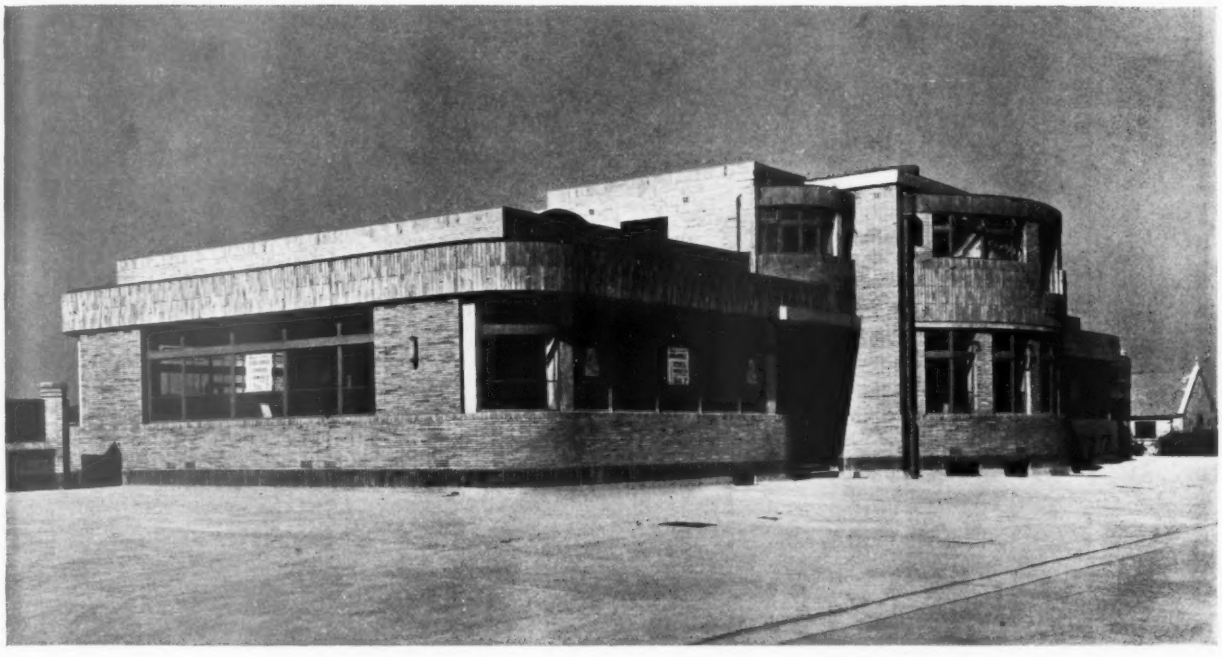
WORKING DETAILS : 490

BANDSTAND AT THE TOWN GARDENS, SWINDON • J. B. L. THOMPSON



Details of the bandstand illustrated overleaf.

THE BOUNDARY HOTEL, LIVERPOOL

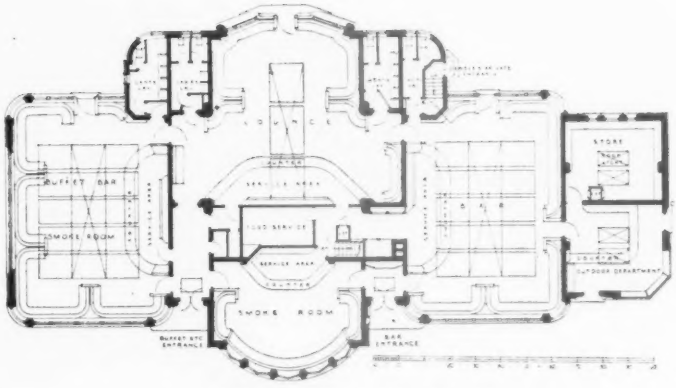


BY ERNEST SHENNAN

PROBLEM—*An up-to-date public-house in a growing residential district near Liverpool.*

PLAN—*The island service both for food and drink was adopted for its ease of supervision and its allowing all four sides of the building to be used as public space. The lounge has a terrace outside it which overlooks two bowling greens, and a store and a bottle and jug entrance are placed in the more secluded wing of the plan. Above is a general view of the building, and to the right a detail of one of the entrances.*

THE BOUNDARY HOTEL, LIVERPOOL



GROUND FLOOR PLAN

DESIGNED BY

ERNEST SHENNAN

CONSTRUCTION AND MATERIALS—*The building is faced with 12-in. × 1½-in. golden-brown bricks with wide cream joints. Main entrance paving is of cream travatine and dados are of polished travatine. Entrance walls above dado height are panelled with zebrano and macassar ebony. The lounge walls are finished with pink stippled glass with brilliant cut designs of Liverpool. Other room walls are plastic paint, and counters are of sycamore and macassar ebony. Seating upholstery is of hide.*

The photograph shows a general view of the smoke-room and bar counter.

LIBRARY AT VIIPURI, FINLAND

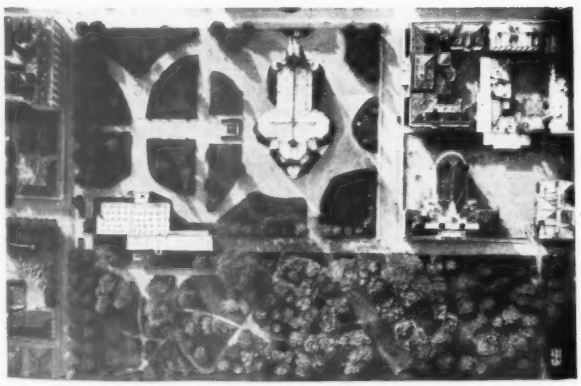
PROBLEM—*The building was to provide accommodation not only for lending and reference libraries, but for a large hall for debates and lectures.*

SITE—*The site is on the edge of a large and well-timbered public park. See aerial view below.*

THE LIBRARY—*The library forms a single room at three different levels and is entirely top-lit. Walls are in brick, with ventilating ducts of glazed earthenware and cast iron built in and arranged for easy future conversion to a full air-conditioning system. The roof is of reinforced concrete beams spanning 50 ft.; in this are the circular skylights, 6 ft. in diameter, with prismatic soffits to distribute the light.* *(See section on page 351.)* *These skylights are made deep enough to prevent the entrance of direct sunlight, which is harmful to books.*
The library consists of rows of readers' tables, flanked by open counters for periodicals, the space being divided by a row of central bookcases. At a higher level is the lending library, arranged as an open gallery, with a central staircase to a further book-lined well. Supervision of all sections of the library is possible from the central desk, below which are the librarian's offices.

THE LECTURE ROOM—*The lecture-room block is of steel-frame construction, the accommodation including a buffet and small kitchen. The lecture hall is divisible by folding concertina-type partitions, and the unusual ceiling section (see page 352) has been designed for acoustic reasons, the nature of the lectures and debates demanding that speakers may rise at any point in the main body of the hall, and be equally audible everywhere else. This ceiling is backed with lead sheet coated with bitumen on both sides for sound insulation.*

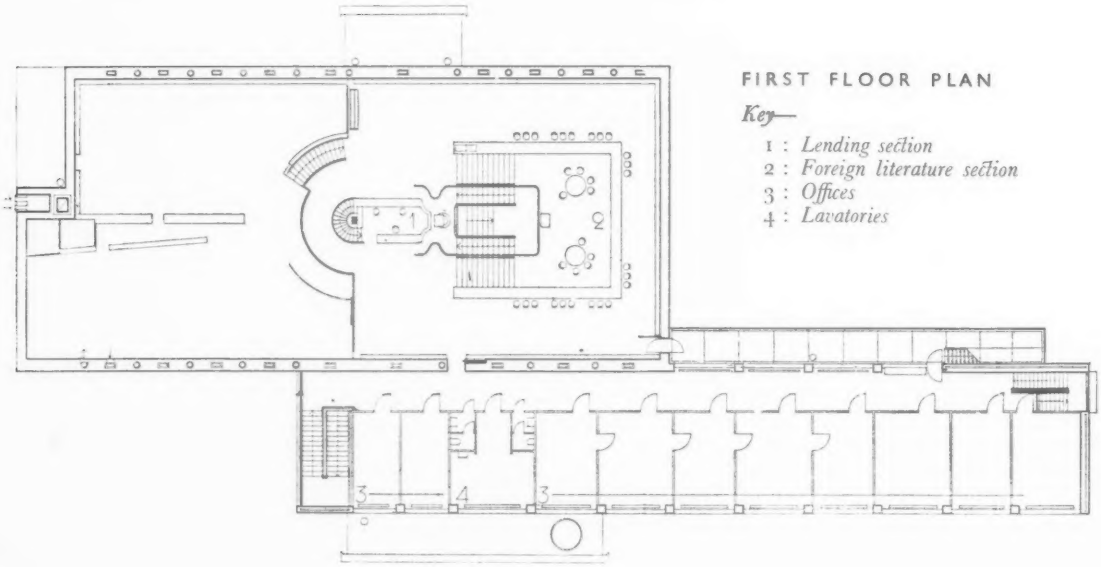
On this page are two general views of the library showing the well-timbered site, and an aerial view.



DESIGNED BY

ALVAR AALTO

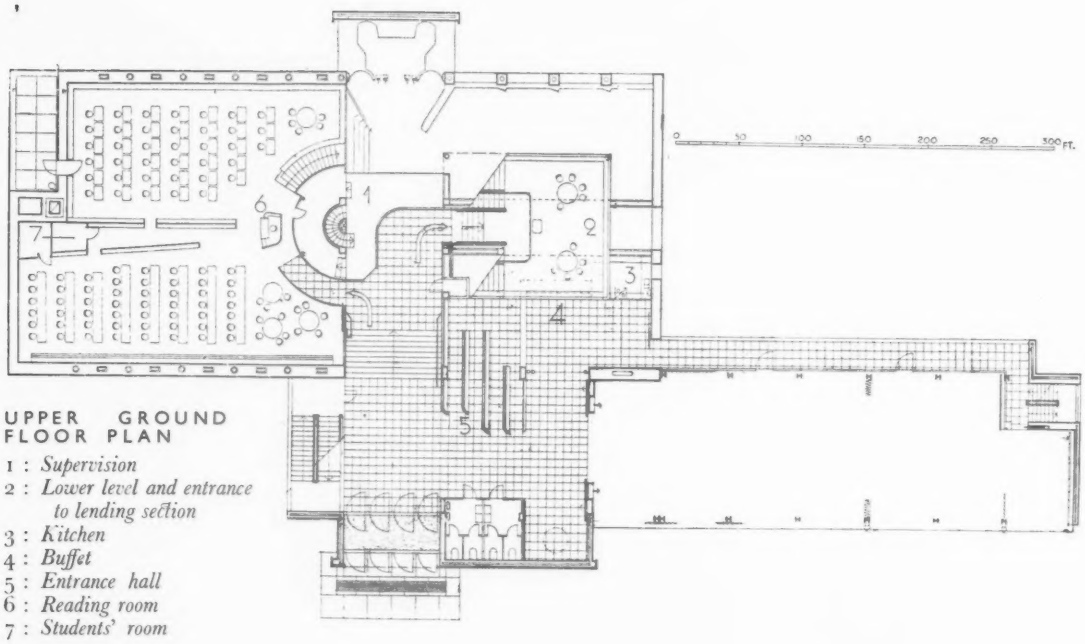
LIBRARY AT VIIPURI, FINLAND,



FIRST FLOOR PLAN

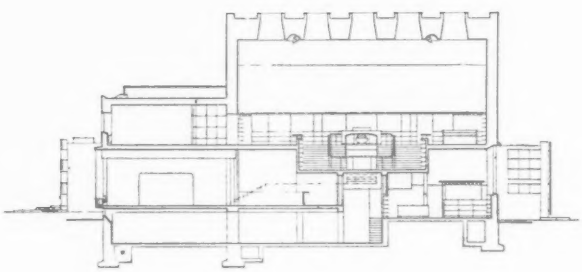
Key—

1 : *Lending section*
2 : *Foreign literature section*
3 : *Offices*
4 : *Lavatories*



UPPER GROUND FLOOR PLAN

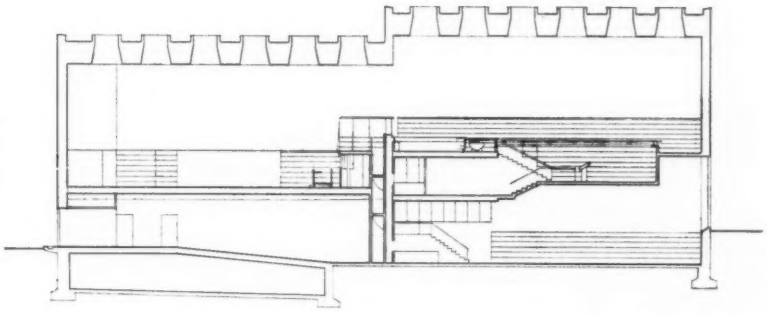
1 : *Supervision*
2 : *Lower level and entrance to lending section*
3 : *Kitchen*
4 : *Buffet*
5 : *Entrance hall*
6 : *Reading room*
7 : *Students' room*

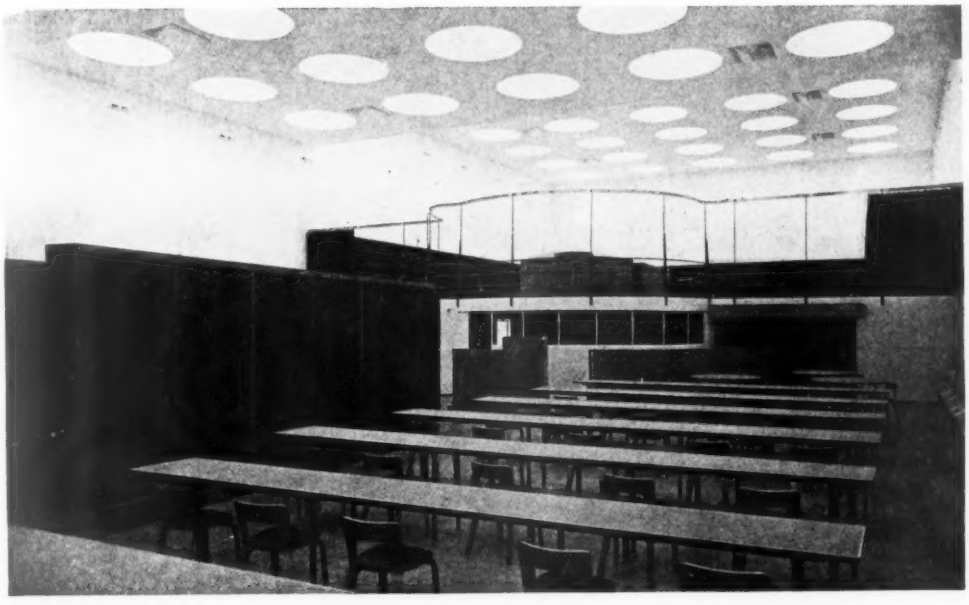


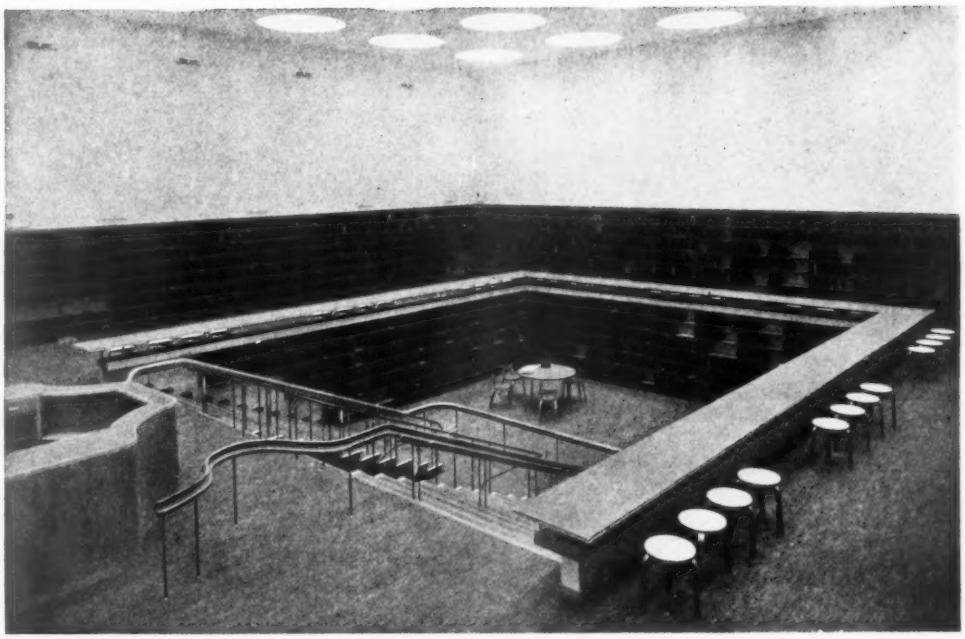
On the right is the short section across the library showing the position of the circular top lights.

DESIGNED BY ALVAR AALTO

Below are two general views of the lending library, showing the method of top lighting and the desk for general supervision. To the right is the long section showing the different levels.



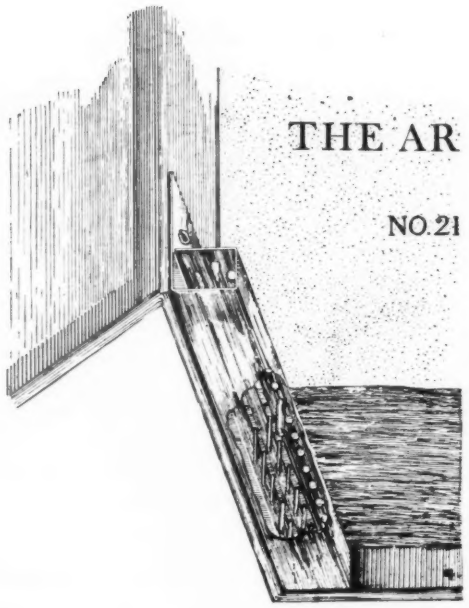




LIBRARY AT VIIPURI, FINLAND

Above is a view of the lecture hall, showing the ceiling arrangement ; on the left is the children's library, while below is the entrance hall, the door to the left leading through into the lecture hall.

DESIGNED BY ALVAR AALTO



TRADE NOTES

[EDITED BY PHILIP SCHOLBERG]

Simplified Storage

THE problem of keeping back numbers of periodicals in some semblance of order is perennially fresh, for nearly everyone knows the usual dusty pile in one corner of the office, the different issues never by any chance in the proper chronological order, and the essential copy nearly always missing.

•

Plenty of solutions have been offered, some of them very complicated and awkward to handle. A method that is new to me is called Easibind, and, incidentally, a special version is produced which is specially arranged to fit this JOURNAL, having the name stamped on the back with a space for the essential dates. Individual copies are held in position by thin flexible rods fixed in the slots; the system being explained in the illustration at the head of these notes. The first and the last copies in the folder are fixed by thicker rods, which fit into holes, the intermediate copies on the thinner rods sliding in the two slots.

•

All of which may sound rather complicated, but the method is easy enough after it has been used once or twice, and the copies are fixed firmly. Single binders, large enough to hold thirteen issues, cost 4s. 6d.; they are obtainable from the manufacturers or at the offices of this JOURNAL.

Flat-Pin Plugs

Flat-pin plugs and sockets are largely used in America, where, so far as one can judge from advertisements, they are more or less standard practice, and it is certain that nearly all the small portable American mains-driven wireless sets arrive in this country with flat pin plugs on their leads, so there may be some truth in this theory. True or not, however, there are certain advantages inherent in the flat-pin plug which give it some talking points over the more usual round type.

•

The chief advantage is interchangeability, and this has been fully developed in the Wylex system, details of which have just been sent to me. It should be realized that for *all* different sizes of plug the thickness of the pins is the same, but the width is variable. Take, therefore, the usual range, 15, 5 and 2 amp. plugs. Any of these plugs will fit the standard 15-amp. socket, but no plug can be fitted to a socket that is too small for it. The 15-2-amp. socket in this series is particularly ingenious, and is shown in the line drawing at the bottom of this page. Two sockets are provided, one 15-amp. and one 2-amp., with this arrangement no fewer than nine different combinations of plug are possible, and wiring costs are the same as for a single 15-amp. plug, the cost of a separate 2-amp. plug for reading lamp, wireless set or clock being saved.

Note :—With the present habit of a standing charge plus a flat rate for current used it is perfectly legitimate to feed a light fitting from a " power " plug.

•

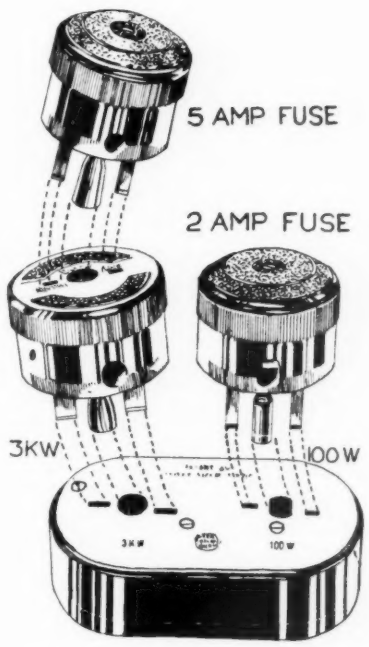
Whether or not this system has a great future I cannot pretend to foretell. Savings on a large block of flats should obviously be quite considerable, but the building industry is very conservative and the round-pin plug is already so firmly established. On a new job, however, I see no reason why these fittings should not be usefully employed, though, since clients are always liable to buy extra gadgets, it is probably worth while to lay in a stock of spare plugs to allow for this. I have never tried to buy a flat-pin plug at an ordinary electrical retailers, but I should imagine it is not too easy, and there is nothing more irritating than a new gadget which cannot be used until the right plug can be got " on order."

o

And, incidentally, the subject of electrical fittings gives me an admirable opportunity to work off an old prejudice. Why is it that one can hardly ever tell which switch does what? In a strange room one is faced with a wall plate covering perhaps six switches, which probably control a ceiling fitting, wall fittings on either side of the fireplace, and elsewhere, or plugs in the skirting: the result is nearly always chaos, for nearly all the lights in the room have to be flicked on and off again before the right result is obtained. How often, too, are the switches for hall and staircase lights fitted side by side on a *horizontal* base instead of vertically above each other with the upper switch controlling the upstairs light?

•

Admittedly a small point, but the present-day Q.M.B. switches open and close with quite a distinct smack, and sound travels farther than one suspects through the flimsy partitions now so usual. Does the Institution of Electrical Engineers say anything about intelligent placing in its wiring code? I doubt it, but it most assuredly should do so.



A multiple plug socket which allows the use of several different types of plug in varying combinations. (*See note on this page.*)

Check Hinges

The usual floor spring is a very excellent device, but there are numerous occasions when only a single way swing is needed, and for this purpose there seems to be a good case for the spring hinge and hydraulic check. The result is neat and inconspicuous, and fitting is no more difficult than with the ordinary hinge.

•

Tonks's Comet hinge is a good example of this type. Here the spring hinge and the hydraulic check are made up as two separate hinges, so that the design of each is less complicated and it is easier to make the result reliable. Both spring and check are adjustable, the adjustment being locked by a tommy pin, which prevents unauthorized interference.

•

The price of a set, check and spring is 63s. for doors up to about 100 lb. For larger sizes one check and two springs are used, the price of the set being then 84s. These prices apply to the bronze finish; chromium plating is extra.

Addresses

Easibind, Ltd., 9a Mallow Street, E.C.1.

George H. Scholes, Ltd., Wylex Works, Wythenshawe, Manchester.

Tonks (Birmingham) Ltd., Moseley Street, Birmingham.

LAW REPORTS

COMPENSATION—APPEAL FROM ARBITRATORS AWARD

Law of Property Act, 1925—re *Spencers Flats, Ltd.—Chancery Division. Before Mr. Justice Clauson*

THIS matter came before the Court by way of appeal from an arbitrator's award, and raised an interesting point of law arising out of the conversion of a large property at Spencer Park, Wandsworth Common, into a dozen flats. The arbitrator's award was made under section 84 of the Law of Property Act, 1925, which gave him certain powers to modify restrictions under old covenants. The arbitrator found in favour of Spencers Flats, Ltd., and awarded adjoining neighbours £200 each by way of compensation.

Mr. Voisey, K.C., on behalf of Spencers Flats, Ltd., said his clients took exception to this award on the ground of acquiescence on the part of the neighbours. They had stood by whilst his clients had spent £5,000 on the conversion of the property.

Mr. Andrew Clark, for the respondents, Mr. Bailey and Mr. Roberts, submitted that there had been no acquiescence on the part of the neighbours. They merely abstained from making complaint and then sought to enforce their rights in an equitable manner, the appellants having taken up the order of the arbitrator.

His lordship held that respondents had not lost their right to the benefit of the restrictive covenants, or their right to bring the matter before the Court. In his view, there was plainly evidence before him on which the arbitrator could find for respondents to the extent he had. The mere fact of delay did not make non-existent the loss which the arbitrator had assessed at £200 in each case. Under these circumstances he dismissed the appeal with costs.

QUESTION OF RESTRICTIVE COVENANT

Nelson and Good v. *Rayner.—Chancery Division. Before Mr. Justice Bennett*

THIS was an action by Mr. W. G. F. Nelson and Mr. A. P. Good, as owners of Foreland House, Bembridge, I. of W., against Mrs. F. H. Rayner, for an injunction restraining her from erecting any building on the sea side of Foreland House, without their consent.

Plaintiffs' case was that defendant's land was covered by a conveyance of July, 1930, which precluded her from building on the sea side of Foreland House, and under it the defendant's vendors were bound. In contravention of that covenant they alleged that defendant had erected additions to an old lifeboat house she had there, for the purpose of a restaurant, and had also placed a wooden hut on wheels on a concrete base near her house, which they contended was a "building."

Defendant pleaded that she had no knowledge of the covenant when she purchased the property in 1933, and that she had purchased the fee simple for valuable consideration without notice of the covenant.

His lordship, after hearing the evidence and legal argument, said in his view the hut and extensions to the defendant's property were buildings within the meaning of the covenant set up by the plaintiffs. He had no doubt that defendant's land was property to which the burden of restrictive covenant applied, and that when she purchased it she had constructive notice of it. She had broken its terms and there must be an injunction against her with costs.

PUBLIC HEALTH ACT, 1875. SECTION 13

Geo. Legge & Co., Ltd. v. *Wenlock Corporation. Chancery Division. Before Mr. Justice Crossman*

THIS was an action by plaintiffs, Geo. Legge and Son, Ltd., of Madeley, Shropshire, roof tile manufacturers, against the Corporation of Wenlock, for a declaration that a certain watercourse which flowed through a mound on their property had become a sewer and was maintainable by the Corporation.

The case raised a point for construction under section 13 of the Public Health Act, 1875, which provided that all existing and future sewers within the district of a local authority were vested in and under the control of that authority. In that section the definition of sewer included a sewer or drain of every description, except a single building drain and a highway drain. The stream ran from Madeley to the river Severn, and at Madeley plaintiffs were the owners of land through which it ran for the greater part of its length in a covered culvert. The stream was open originally, but plaintiffs' case was that since the culvert was constructed it had changed its status and become a sewer.

The Corporation raised a preliminary point of law that since the passing of the Rivers Pollution Act, 1876, the stream could not become a sewer by reason of the discharge of sewage into it, and that therefore it could not become a sewer within the meaning of the Public Health Act, 1875.

His lordship, in giving judgment on the preliminary point, said the authorities that had been cited did not help him, as they did not cover the point now raised. He could see no sufficient reason for excluding the stream as a stream which might become a sewer under the Rivers Pollution Act. It was a channel which could become a sewer by reason of the discharge into it of sewage. He, therefore, found in favour of the plaintiffs.

THE BUILDINGS ILLUSTRATED

HOUSE AT HOLMBURY ST. MARY, SURREY (pages 335 to 338). The general contractors were Chapman, Lowry and Puttick, Ltd., and the principal sub-contractors and suppliers included : F. Bradford & Co., Ltd., reinforced concrete; Empire Stone Co., Ltd., artificial stone; J. H. Sankey's Cranham hollow blocks, terra-cotta; D. Anderson & Co., Ltd., thermotile and triplex roofings, special roofings; Hollis Bros. & Co., Ltd., woodblock flooring; Bratt Colbran & Co., lounge fire, grates; C. G. Bayliss, casements; F. Knight & Co., Ltd., door furniture; Ascog, Ltd., Falk, Stadelmann & Co., and Rowley Galleries, electric light fixtures; Froy sanitary fittings; Carbo Plaster Ltd., plaster.

FLATS AT MANCHESTER (pages 339 to 342). The general contractors were G. and J. Seddon, Ltd. The principal sub-contractors and suppliers included : Banister, Walton & Co., Ltd., steelwork; Trussed Concrete Steel Co., Ltd., patent floors; Naybro Stone, Ltd., artificial stone; Limmer and Trinidad Lake Asphalt Co., Ltd., asphalt; Accrington Brick and Tile Co., Ltd., bricks; Blacker Forge and Hammer Co., Ltd., balustrading and dust hoppers; H. Mason and Sons, Ltd., grates; Bradford Metal Case Co., Ltd., patent hot-water system; J. Faulkner and Sons, Ltd., lightning conductor; Manchester Corporation Gas Dept., laundry equipment; E. M. Evans and Sons, Ltd., electric light; A. Sharrocks, Ltd., decorators' work; C. Wicksteed & Co., Ltd., playground equipment.

BOUNDARY HOTEL, LIVERPOOL (pages 347 and 348). The general contractors were John Lucas and Son. The principal sub-contractors and suppliers included : Thos. James & Co., steelwork; Grip Steel Bar Co., Ltd., reinforcement; Penmaenmawr and Trinidad Asphalt Co., asphalt; J. A. King & Co., Ltd., roof lights; Colley Marriott & Co., Ltd., electrical installation; Musgraves, Ltd., sanitary goods; Hughes and Ellision, metal windows, cast and wrought ironwork; J. Keith and Blackman Co., Ltd., ventilating; Scotts, Ltd., heating installation; Compton Bros., glazing; Sefton Lift and Shutter Co., Ltd., lifts; S. Pollard, upholstery, ruboleum and floor coverings; Gaskell and Chambers, pewtering; John Stubbs and Sons, marble and tiles; John Lucas and Son, laylights, seating; H. E. Wilson, Ltd., decorations; T. Murtha and Son, house and basement decoration; Quiggin Bros., Ltd., lettering; Mersey Insulation Co., Ltd., lagging; P. Ettinger, Ltd., glass in showcases; Pilkington Bros., glass decorations; Lewis's, Ltd., loose furniture; Helliwell & Co., rubber mats; Synchromatic Time Recording Co., Ltd., electric clocks.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICT (15 miles radius)

ENFIELD. *Houses.* The Ministry of Health has allowed the appeal by Dr. J. A. Gillison against the refusal of the Enfield U.D.C. to allow the erection of 124 houses in Ordnance Road.

WATFORD. *Cinema.* Mr. J. Owen Bond, architect, has submitted plans to the Watford Corporation for the erection of a cinema in High Street.

WATFORD. *Municipal Buildings.* At Watford Corporation, Mr. Cowles-Voysey submitted revised draft plans of the new municipal buildings, for submission to the Ministry of Health.

SOUTHERN COUNTIES

BOURNEMOUTH. *Swimming Bath.* Bournemouth Corporation has asked the Education Committee to consider the desirability of a scheme for the provision of a children's swimming bath at the Stoke Wood Road Baths.

HASLEMERE. *Swimming Bath.* The Medical Officer of Health for Haslemere urges the provision of a swimming bath on a site at Camelsdale.

WILTSHIRE. *Secondary School.* Wilts Education Committee has purchased 22 acres at Southbroom Park, Devizes, for the erection of a secondary school.

EASTERN COUNTIES

KING'S LYNN. *Extensions.* The King's Lynn Corporation has approved a scheme for the extension of the Isolation Hospital, at a cost of £3,833.

NORFOLK. *Central School.* Norfolk Education Committee is preparing plans for the erection of a central school at Upwell.

NORFOLK. *Hospital.* Norfolk C.C. is to obtain tenders for the erection of the central hospital at East Dereham and appointed Mr. E. G. Phillips of Nottingham as Consulting Engineer in connection with the engineering services.

NORFOLK. *County Accountant.* Norfolk C.C. is to invite selected contractors to submit tenders for the completion of the County Surveyor's block and for the erection of the County Accountant's new block at Norwich.

NORFOLK. *Elementary School.* Norfolk Education Committee has approved plans for the erection of an elementary school at Old Buckenham.

NORFOLK. *Central School.* Norfolk Education Committee is to erect a central school for 320 pupils at Stalham.

PETERBOROUGH. *Houses.* Messrs. S. Dodson and Son, Architects, Peterborough, on behalf of Messrs. H. P. Kirkby and Son, Builders, Peterborough, are to erect 30 houses at the Broadway, Yaxley, Huntingdonshire.

PETERBOROUGH. *Houses.* Cosy Homesteads (Peterborough), Ltd., are to erect 12 houses at Orton Longville, Hunts.

MIDLAND COUNTIES

HUNTINGDONSHIRE: *New Nurses' Home.* Huntingdonshire C.C. has obtained sanction to borrow £3,590 for the erection of a new nurses' home at the Three Counties Mental Hospital.

MARKET HARBOROUGH. *Houses.* Market Harborough U.D.C. has asked the Surveyor to prepare plans for the erection of two houses, for occupation by employees, in York Street.

SHROPSHIRE. *Senior School.* Shropshire Education Committee has purchased a site at the Beechfield Estate, Oswestry, for the erection of a senior school.

SHROPSHIRE. *Schools.* Shropshire Education Committee has asked the County Architect to prepare plans for the erection of two new schools at Wellington.

SHROPSHIRE. *Schools.* Shropshire Education Committee has purchased a site at Hodnet for the erection of junior and senior schools.

SHROPSHIRE. *Council School.* Shropshire Education Committee has approved plans for the erection of a junior council school at Oswestry.

SHROPSHIRE. *Children's Home.* Shropshire C.C. has asked the Shrewsbury Guardians Committee to submit proposals for the adaptation, equipment and furnishing of Sutton Lodge, Shrewsbury, for a children's home.

NORTHERN COUNTIES

BOLTON: *Housing Scheme.* Bolton Corporation is acquiring land on the Breightmet Hall estate for housing schemes.

BOLTON. *Church.* Dr. W. W. Kay, Secretary, Bolton Independent Methodist Circuit, is negotiating with the Bolton Corporation for a site in Winchester Way for the erection of a church.

BOLTON. *Alterations.* Bolton Watch Committee has approved plans submitted by Mr. Frank G. Donaldson for alterations at the Plaza Cinema, Deane Road.

BOLTON. *New Fire Station.* Bolton Corporation is considering particulars of a possible site for a new fire station.

BOLTON. *Extensions.* Bolton Corporation has approved plans for the proposed extension to the Theatre Block to provide accommodation for the Ante-Natal Clinic, etc., at the Townleys Hospital.

DURHAM. *School.* Durham County Education Committee is to acquire a site at Sherburn for the erection of a school.

MANCHESTER. *Elementary School.* Manchester Education Committee has accepted the tender of Messrs. G. and W. Smith, Ltd., for the erection of an elementary school at Bowker Vale.

MANCHESTER. *Rehousing.* Manchester Corporation is to clear an area at Dean Street, St. Clement's Ward, and provide re-housing at a cost of £94,424.

RIPON. *Plans.* Ripon Corporation has asked the City Engineer to prepare plans and lay-outs for developing Allhallowgate Hill, Bondgate-Claro Road and Grebby's Court sites.

SHEFFIELD. *Houses.* Sheffield Corporation has accepted the following tenders for the erection of houses at the Parson Cross Estate: Mr. D. J. Topley for eight, £2,526 18s.; Messrs. Melling Bros., Ltd., for 92, £30,706; Messrs. M. J. Gleeson, Ltd., for 94, £32,474 14s. 9d.; and Messrs. W. Memmory and Sons for eight, £2,452 16s.

SHEFFIELD. *Aerodrome.* Sheffield Corporation is to proceed with the acquisition of the Todwick site and its development into a first class aerodrome for Sheffield. The estimated cost of the land (excluding Todwick Grange) minerals and earthworks is £200,000.

SHEFFIELD. *Flats.* Sheffield Corporation has accepted the tender of Messrs. W. Malthouse, Ltd., £61,889, for the erection of 112 flats at Duke Street.

WAKEFIELD. *Houses.* Wakefield Corporation has asked the housing architect to invite and submit tenders for the erection of 98 houses on the Eastmoor Estate and 10 on the Gill Syke Estate.

WAKEFIELD. *Houses, etc.* Plans passed by Wakefield Corporation: House in South Drive for Mr. F. Rogers; two houses, St. John's Grove, Messrs. Turner & Co., Ltd.; House, Milnthorpe Lane, Mr. H. Dixon; alterations to shops, Westgate, Mr. C. D. Cooper; three houses, Long Causeway, Mr. G. Wigglesworth; house, Belgrave Mount, Mr. G. Wigglesworth; conversion of Grove Hall, in College Grove Road, into offices for the West Riding County Council.

WAKEFIELD. *Houses.* Wakefield Corporation is to erect 220 houses for displaced tenants on sites being acquired.

WAKEFIELD. *Houses.* Wakefield Corporation is to erect 54 houses at Darnley and instructed the housing architect to submit proposals and layout plans.

WAKEFIELD. *Baths.* Wakefield Corporation Baths Committee has had letters from three firms of Consulting Engineers with reference to the preparation of a report in connection with the heating of the proposed new baths and is to interview Mr. Ernest Griffiths relative to the report required by the Ministry of Health upon the heating of the proposed baths.

WAKEFIELD. *Houses.* Wakefield Corporation has accepted the tender of Messrs. Elvey and Steel of Wakefield, for the erection of 12 houses on the Tornes Road Estate.

WORKINGTON. *Houses.* Workington Corporation has approved plans for the erection of 84 houses on the Frostoms and Westfield Estates.

SCOTLAND

GLASGOW. *Swimming Baths.* Glasgow Corporation has acquired a site in Archerhill Road for the erection of a swimming pond and baths.

GLASGOW. *Schools.* Glasgow Education Committee is to acquire sites for schools at the new housing areas.

GLASGOW. *High School.* Glasgow Education Committee is to allow the officials of the department to assist in connection with the construction of a new High School for girls at the Notre Dame High School.

GLASGOW. *Canopy.* Glasgow Corporation has granted permission to Messrs. C. J. M'Nair and Elder, architects, to erect a canopy over the entrance to the Bellgrove Hotel, Gallowgate.

GLASGOW. *Clinic.* Glasgow Corporation has approved plans of the clinic proposed to be erected in Sandy Road, Partick, at a cost of £14,000.

GLASGOW. *Canopy.* Glasgow Corporation has granted an application by Messrs. C. J. M'Nair and Elder, architects, on behalf of the proprietors of the Palaceum Cinema, Shettleston, for permission to erect a canopy at the cinema in Edrom Street, Shettleston.

GLASGOW. *Churches.* Application is being made to the Glasgow Corporation by the Rev. John Hall, Joint Secretary to the Home Board of the Church of Scotland, for sites for church purposes at Blackhill, Carnwadrie, Blawarthill and Pollok.

GLASGOW. *Houses.* Glasgow Corporation has approved a lay-out plan of ground at Blawarthill upon which it is proposed to erect three-storey tenements of 138 houses, with provision for an open space and children's playground.

GLASGOW. *Houses.* At Glasgow Corporation Housing Committee the director submitted plans showing high tenements of houses and the committee agreed to continue consideration thereof.

GLASGOW. *Houses.* Glasgow Corporation Housing Committee has approved plans of the director for the layout of areas at Garscadden Road and Anniesland Road, showing proposals to erect 390 houses of cottage and flatted types, there being sites for shops, public buildings and open spaces; and at Kingsway, showing proposals for the erection of 90 houses of cottage and flatted types, and Knightswood for the erection of 36 houses of cottage and flatted types.

GLASGOW. *Extensions.* Glasgow Education Committee is acquiring property in Cathedral Street and North Frederick Street, in connection with extensions at the Stow College School of building and allied trades.

GLASGOW. *School.* Glasgow Education Committee has accepted the tender of Messrs. Cowiesons, Ltd., £5,641 6s. 5d., for the several works, in connection with the erection of East Keppoch Temporary R.C. School.

GLASGOW. *Shops.* Glasgow Corporation has approved plans by Mr. Alexander Macdougall for the erection of shops at Maryhill Road, on condition that the applicant agrees to set back the building to permit of the formation of a bay for standing vehicles.

WALES

CARDIFF. *Houses.* Messrs. H. L. Simpson & Co., Ltd., builders, are to erect houses at Heol Esgyn, Cardiff.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers. The rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I s. d.	II s. d.
A_1	ABERDARE ...	S. Wales & M.	1 5½	1 1½
A	Aberdeen ...	Scotland	1 6½	1 2
A_1	Abergavenny ...	S. Wales & M.	1 6	1 1½
A_2	Abingdon ...	S. Counties	1 5	1 0½
A	Accrington ...	N.W. Counties	1 6½	1 2
A_2	Addlestone ...	S. Counties	1 5	1 0½
A	Adlington ...	N.W. Counties	1 6½	1 2
A	Airdrie ...	Scotland	*1 6½	1 2
C	Aldeburgh ...	E. Counties	1 2½	11
A	Altrincham ...	N.W. Counties	1 6½	1 2
B_2	Appleby ...	N.W. Counties	1 3	11½
A	Ashton-under-Lyne	N.W. Counties	1 6½	1 2
B_1	Aylesbury ...	S. Counties	1 4	1 0
B_1	BANBURY ...	S. Counties	1 4	1 0
B_1	Bangor ...	N.W. Counties	1 4	1 0
A_2	Barnard Castle	N.E. Coast	1 5	1 0½
A	Barnsley ...	Yorkshire	1 6½	1 2
B	Barnstaple ...	S.W. Counties	1 4½	1 0½
A	Barrow ...	N.W. Counties	1 6½	1 2
A	Barry	S. Wales & M.	1 6½	1 2
B_1	Basingstoke ...	S.W. Counties	1 4	1 0
A_2	Bath	S.W. Counties	1 5½	1 1½
A	Batley ...	Yorkshire	1 6½	1 2
A_2	Bedford ...	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 5½	1 1½
A_2	Bewdley ...	Mid. Counties	1 5½	1 1½
B_2	Bicester ...	S. Counties	1 3	11½
	Birkenhead ...	N.W. Counties	*1 7½	1 2½
A	Birmingham ...	Mid. Counties	1 6½	1 2
A_1	Bishop Auckland	N.E. Coast	1 6	1 1½
A	Blackburn ...	N.W. Counties	1 6½	1 2
A	Blackpool* ...	N.W. Counties	1 6½	1 2
A	Blyth	N.E. Coast	1 6½	1 2
B_1	Bognor ...	S. Counties	1 4	1 0
A	Bolton ...	N.W. Counties	1 6½	1 2
A_2	Boston ...	Mid. Counties	1 5	1 0½
A_2	Bournemouth...	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 3½	11½
A	Bradford ...	Yorkshire	1 6½	1 2
A_1	Brentwood ...	E. Counties	1 6	1 1½
A	Bridgend ...	S. Wales & M.	1 6½	1 2
B	Bridgwater ...	S.W. Counties	1 4½	1 0½
A_1	Bridlington ...	Yorkshire	1 6	1 1½
A	Brighouse ...	Yorkshire	1 6½	1 2
A_2	Brighton ...	S. Counties	1 5½	1 1¼
A	Bristol ...	S.W. Counties	1 6½	1 2
B	Brixham ...	S.W. Counties	1 3½	11½
A	Bromsgrove ...	Mid. Counties	1 5½	1 1½
B	Bromyard ...	Mid. Counties	1 3	11½
A	Burnley ...	N.W. Counties	1 6½	1 2
A	Burslem ...	Mid. Counties	1 6½	1 2
A	Burton-on-Trent	Mid. Counties	1 6½	1 2
A	Bury	N.W. Counties	1 6	1 1½
A	Buxton ...	N.W. Counties	1 6	1 1½
A_1	CAMBRIDGE	E. Counties	1 6	1 1½
B_1	Canterbury ...	S. Counties	1 4	1 0
A	Cardiff ...	S. Wales & M.	1 6½	1 2
A	Carlisle ...	N.W. Counties	1 6½	1 2
B	Carmarthen ...	S. Wales & M.	1 4½	1 0½
B	Carnarvon ...	N.W. Counties	1 4½	1 0½
A	Carnforth ...	N.W. Counties	1 6½	1 2
A	Castleford ...	Yorkshire	1 6½	1 2
A_2	Chatham ...	S. Counties	1 5	1 0½
A	Chelmsford ...	E. Counties	1 5	1 0½
A	Cheltenham ...	S.W. Counties	1 5	1 0½
A	Chester ...	N.W. Counties	1 6½	1 2
A	Chesterfield ...	Mid. Counties	1 6½	1 2
B_1	Chichester ...	S. Counties	1 4	1 0
A	Chorley ...	N.W. Counties	1 6½	1 2
B_1	Cirencester ...	S. Counties	1 4	1 0
A	Clitheroe ...	N.W. Counties	1 6½	1 2
A	Clydebank ...	Scotland	1 6½	1 2
A	Coalville ...	Mid. Counties	1 6½	1 2
A_2	Colchester ...	E. Counties	1 5½	1 1½
A	Colne	N.W. Counties	1 6	1 1½
A_2	Colwyn Bay ...	N.W. Counties	1 5½	1 1½
A_1	Consett ...	N.E. Coast	1 6	1 1½
A_2	Conway ...	N.W. Counties	1 5½	1 1½
A	Coventry ...	Mid. Counties	1 6½	1 2
A_2	Crewe	N.W. Counties	1 5½	1 1½
A	Cumberland ...	N.W. Counties	1 5	1 0½
A	DARLINGTON	N.E. Coast	1 6½	1 2
A	Darwen ...	N.W. Counties	1 6½	1 2
B	Deal	S. Counties	1 4	1 0
A_2	Denbigh ...	N.W. Counties	1 5	1 0½
A	Derby	Mid. Counties	1 6½	1 2
A	Dewsbury ...	Yorkshire	1 6½	1 2
B	Didcot ...	S. Counties	1 4½	1 0½
A	Doncaster ...	Yorkshire	1 6½	1 2
B_1	Dorchester ...	S.W. Counties	1 4	1 0
A	Driffield ...	Yorkshire	1 5	1 0½
A_2	Droitwich ...	Mid. Counties	1 5½	1 1½
A	Dudley ...	Mid. Counties	1 6½	1 2
A_2	Dumfries ...	Scotland	1 6	1 1½
A	Dundee ...	Scotland	1 6½	1 2
A	Durham ...	N.E. Coast	1 6½	1 2
A_2	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale ...	S. Wales & M.	1 6	1 2
A	Edinburgh ...	Scotland	1 6½	1 2
A_2	Exeter ...	S.W. Counties	*1 5½	1 1½
B	Exmouth ...	S.W. Counties	1 4½	1 0½
A_2	FELIXSTOWE	E. Counties	1 5	1 0½
A	Filey	Yorkshire	1 5	1 0½
A	Fleetwood ...	N.W. Counties	1 6½	1 2
B_1	Folkestone ...	S. Counties	1 4	1 0
A	Frodsham ...	N.W. Counties	1 6½	1 2
B_2	Frome ...	S.W. Counties	1 3½	11½
A	GATESHEAD	N.E. Coast	1 6½	1 2
B	Gillingham ...	S. Counties	1 4½	1 0½
A_1	Glamorgan-shire, Rhondda Valley District	S. Wales & M.	1 6	1 1½
A	Glasgow ...	Scotland	1 7	1 2½
A_2	Gloucester ...	S.W. Counties	1 5½	1 1½
A_2	Goole ...	Yorkshire	1 5½	1 1½
A_2	Gosport ...	S. Counties	1 5½	1 1½
A_2	Grantham ...	Mid. Counties	1 5	1 0½
A_1	Gravesend ...	S. Counties	1 6	1 1½
A	Greenock ...	Scotland	*1 6½	1 2
A	Grimsby ...	Mid. Counties	1 6½	1 2
B	Guildford ...	S. Counties	1 4½	1 0½
A	HALIFAX ...	Yorkshire	1 6½	1 2
A	Hanley ...	Mid. Counties	1 6½	1 2
A	Harrogate ...	Yorkshire	1 6½	1 2
A	Hartlepools ...	N.E. Coast	1 6½	1 2
B	Harwich ...	E. Counties	1 4½	1 0½
B_1	Hastings ...	S. Counties	1 4	1 0
A_2	Hatfield ...	S. Counties	1 5½	1 1½
B	Hereford ...	S.W. Counties	1 4½	1 0½
A_2	Hertford ...	E. Counties	1 5½	1 1½
A	Heysham ...	N.W. Counties	1 6½	1 2
A	Howden ...	N.E. Coast	1 6½	1 2
A	Huddersfield ...	Yorkshire	1 6½	1 2
A	Hull	Yorkshire	1 6½	1 2
A	ILKLEY ...	Yorkshire	1 6½	1 2
A	Immingham ...	Mid. Counties	1 6½	1 2
A_2	Ipswich ...	E. Counties	1 5½	1 1½
B_2	Isle of Wight ...	S. Counties	1 4½	1 0½
A	JARROW ...	N.E. Coast	1 6½	1 2
A	KEIGHLEY ...	Yorkshire	1 6½	1 2
A_2	Kendal ...	N.W. Counties	1 5	1 0½
A_2	Keswick ...	N.W. Counties	1 5	1 0½
A_1	Kettering ...	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 5½	1 1½
B_1	King's Lynn ...	E. Counties	1 4	1 0
A	LANCASTER ...	N.W. Counties	1 6½	1 2
A_1	Leamington ...	Mid. Counties	1 6	1 1½
A	Leeds	Yorkshire	1 6½	1 2
A	Leek	Mid. Counties	1 6½	1 2
A	Leicester ...	Mid. Counties	1 6½	1 2
A	Leigh	N.W. Counties	1 6½	1 2
B	Lewes	S. Counties	1 3	11½
A_2	Lichfield ...	Mid. Counties	1 5½	1 1½
A	Lincoln ...	Mid. Counties	1 6½	1 2
	Liverpool ...	N.W. Counties	*1 8	1 3
A_2	Llandudno ...	N.W. Counties	1 5½	1 1½
A	Llanelly ...	S. Wales & M.	1 6½	1 2
	London (12-miles radius)		1 8	1 3
	Do. (12-15 miles radius)		1 7½	1 2½
A	Long Eaton ...	Mid. Counties	1 6½	1 0
A	Loughborough	Mid. Counties	1 6½	1 2
A_1	Luton	E. Counties	1 6	1 1½
A	Lytham ...	N.W. Counties	1 6½	1 2
A_1	MACCLESFIELD	N.W. Counties	1 6	1 1½
A_2	Maidstone ...	S. Counties	1 5	1 0½
A_2	Malvern ...	Mid. Counties	1 5	1 0½
A	Manchester ...	N.W. Counties	1 6½	1 2
A	Mansfield ...	Mid. Counties	1 6½	1 2
B_1	Margate ...	S. Counties	1 4	1 0
A	Matlock ...	Mid. Counties	1 5	1 0½
A_1	Merthyr ...	S. Wales & M.	1 6	1 1½
A	Middlesbrough	N.E. Coast	1 6½	1 2
A_2	Middlewich ...	N.W. Counties	1 5½	1 1½
B_2	Minehead ...	S.W. Counties	1 3½	11½
B_2	Monmouth & S. and E. Glamorganshire	S. Wales & M.	1 3½	11½
A	Morecambe ...	N.W. Counties	1 6½	1 2
A_2	NANTWICH ...	N.W. Counties	1 5½	1 1½
A	Neath	S. Wales & M.	1 6½	1 2
A	Nelson ...	N.W. Counties	1 6½	1 2
A	Newcastle ...	N.E. Coast	1 6½	1 2
A	Newport ...	S. Wales & M.	1 6½	1 2
A	Normanton ...	Yorkshire	1 6½	1 2
A	Northampton...	Mid. Counties	1 6½	1 2
A	North Shields...	N.E. Coast	1 6½	1 2
A	North Staffs ...	Mid. Counties	1 6	1 1½
A_1	Norwich ...	E. Counties	1 6½	1 2
A	Nottingham ...	Mid. Counties	1 6½	1 2
A	Nuneaton ...	Mid. Counties		
A	OAKHAM ...	Mid. Counties	1 5	1 0½
A	Oldham ...	N.W. Counties	1 6½	1 2
A_2	Oswestry ...	N.W. Counties	1 5	1 0½
A_1	Oxford ...	S. Counties	1 6	1 1½
A	PAISLEY ...	Scotland	*1 6½	1 2
B_2	Pembroke ...	S. Wales & M.	1 3	11½
A	Perth	Scotland	*1 6½	1 2
A_1	Peterborough	E. Counties	1 6	1 1½
A	Plymouth ...	S.W. Counties	*1 6½	1 2
A	Pontefract ...	Yorkshire	1 6½	1 2
A_1	Pontypridd ...	S. Wales & M.	1 6	1 1½
A_2	Portsmouth ...	S. Counties	1 5½	1 1½
A	Preston ...	N.W. Counties	1 6½	1 2
A	QUEENSFERRY	N.W. Counties	1 6½	1 2
A_2	READING ...	S. Counties	1 5½	1 1½
B	Reigate ...	S. Counties	1 4½	1 0½
A	Retford ...	Mid. Counties	1 5	1 0½
A_1	Rhondda Valley	S. Wales & M.	1 6	1 1½
A	Ripon	Yorkshire	1 5	1 0½
A	Rochdale ...	N.W. Counties	1 6½	1 2
B	Rochester ...	S. Counties	1 4½	1 0½
A_1	Ruabon ...	N.W. Counties	1 6	1 1½
A	Rugby ...	Mid. Counties	1 6½	1 2
A_2	Rugeley ...	Mid. Counties	1 5½	1 1½
A	Runcorn ...	N.W. Counties	1 6½	1 2
A_1	ST. ALBANS ...	E. Counties	1 6	1 1½
A	St. Helens ...	N.W. Counties	1 6½	1 2
B_2	Salisbury ...	S.W. Counties	1 3½	11½
A_1	Scarborough ...	Yorkshire	1 6	1 1½
A	Scunthorpe ...	Mid. Counties	1 6½	1 2
A	Sheffield ...	Yorkshire	1 6½	1 2
A	Shipley ...	Yorkshire	1 6½	1 2
A_2	Shrewsbury ...	Mid. Counties	1 5½	1 1½
A_2	Skipton ...	Yorkshire	1 5½	1 1½
A_2	Slough ...	S. Counties	1 5½	1 1½
A_2	Solihull ...	Mid. Counties	1 6	1 1½
A_1	Southampton	S. Counties	1 5½	1 1½
A_2	Southend-on-Sea	E. Counties	1 6	1 1½
A	Southport ...	N.W. Counties	1 6½	1 2
A	S. Shields ...	N.E. Coast	1 6½	1 2
A	Stafford ...	Mid. Counties	1 6	1 1½
A_1	Stirling ...	Scotland	1 7	1 2½
A	Stockport ...	N.W. Counties	1 6½	1 2
A	Stockton-on-Tees	N.E. Coast	1 6½	1 2
A	Stoke-on-Trent	Mid. Counties	1 6½	1 2
B	Stroud ...	S.W. Counties	1 4½	1 0½
A	Sunderland ...	N.E. Coast	1 6½	1 2
A	Swansea ...	S. Wales & M.	1 6½	1 2
A	Swindon ...	S.W. Counties	1 5	1 0½
A_1	TAMWORTH ...	N.W. Counties	1 6	1 1½
B	Taunton ...	S.W. Counties	1 4½	1 0½
A	Teesside Dist....	N.E. Counties	1 6½	1 2
A_2	Teignmouth ...	S.W. Coast	1 5½	1 1½
A	Todmorden ...	Yorkshire	1 6½	1 2
A	Torquay ...	S.W. Counties	1 6	1 1½
A_1	Truro	S.W. Counties	1 3½	11½
B_2	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ...	Mid. Counties	1 6½	1 2
A	Tyne District	N.E. Coast	1 6½	1 2
A	WAKEFIELD	Yorkshire	1 6½	1 2
A	Walsall ...	Mid. Counties	1 6½	1 2
A	Warrington ...	N.W. Counties	1 6½	1 2
A_1	Warwick ...	Mid. Counties	1 6	1 1½
A_1	Wellingborough	Mid. Counties	1 6	1 1½
A_1	West Bromwich	Mid. Counties	1 6	1 2
A_2	Weston-s.-Mare	W. Counties	1 5½	1 1½
A_2	Whitby ...	Yorkshire	1 5½	1 1½
A	Widnes ...	N.W. Counties	1 6½	1 2
A	Wigan ...	N.W. Counties	1 6½	1 2
B	Winchester ...	S. Counties	1 4½	1 0½
A_2	Windsor ...	S. Counties	1 5½	1 1½
A	Wolverhampton	Mid. Counties	1 6½	1 2
A_2	Worcester ...	Mid. Counties	1 5½	1 1½
A_2	Worksop ...	Yorkshire	1 5	1 0½
A_1	Wrexham ...	N.W. Counties	1 6	1 1½
A	Wycombe ...	S. Counties	1 5	1 0½
B	YARMOUTH ...	E. Counties	1 4½	1 0½
B	Yeovil ...	S.W. Counties	1 4½	1 0½
A	York	Yorkshire	1 6½	1 2

In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request.

CURRENT PRICES

The wages are the standard Union rates of wages payable in London at the time of publication. The prices given below are for materials of good quality and include delivery to site in Central London area, unless otherwise stated. For delivery outside this area, adjustment should be made for the cost of transport. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry. The whole of the information given is copyright.

WAGES

		s.	d.
Bricklayer	per hour	1	8
Carpenter	"	1	8
Joiner	"	1	8
Machinist	"	1	8
Mason (Banker)	"	1	8
" (Fixer)	"	1	9
Plumber	"	1	8
Painter	"	1	7
Paperhanger	"	1	7
Glazier	"	1	7
Slater	"	1	8
Scaffolder	"	1	4
Timberman	"	1	4
Navvy	"	1	3
General Labourer	"	1	3
Lorryman	"	1	5½
Crane Driver	"	1	7
Watchman	per week	2	10	0

MATERIALS

EXCAVATOR AND CONCRETOR

		£	s.	d.
Grey Stone Lime	per ton	2	2	0
Blue Lias Lime	"	1	16	6
Hydrated Lime	"	3	0	9
Portland Cement, in 4-ton lots (d/d site, including Paper Bags)	"	1	19	0
Rapid Hardening Cement, in 4-ton lots (d/d site, including Paper Bags)	"	2	5	0
White Portland Cement, in 1-ton lots	"	8	15	0
Thames Ballast	per Y.C.		6	6
1" Crushed Ballast	"		7	0
Building Sand	"		7	6
Washed Sand	"		8	6
2" Broken Brick	"		8	0
½" " "	"		10	3
Pan Breeze	"		6	6
Coke Breeze	"		8	9

DRAINLAYER

BEST STONEWARE DRAIN PIPES AND FITTINGS

		4" s.	4" d.	6" s.	6" d.
Straight Pipes	per F.R.	0	9	1	1
Bends	each	1	9	2	6
Taper Bends	"	3	6	5	3
Rest Bends	"	4	3	6	3
Single Junctions	"	3	6	5	3
Double	"	4	9	6	6
Straight channels	per F.R.	1	6	2	6
½" Channel bends	each	2	9	4	0
Channel junctions	"	4	6	6	6
Channel tapers	"	2	9	4	0
Yard gullies	"	6	9	8	9
Interceptors	"	16	0	19	6

IRON DRAINS:

		s.	d.
Iron drain pipe	per F.R.	1	6	2	6
Bends	each	5	0	10	6
Inspection bends	"	9	0	15	0
Single junctions	"	8	9	18	0
Double junctions	"	13	6	30	0
Lead Wool	lb.		6		—
Gaskin	"		5		—

BRICKLAYER

		£	s.	d.
Fletton	per M.	2	15	0
Grooved do.	"	2	17	0
Phorpres bricks	"	2	15	0
" Cellular bricks	"	2	15	0
Stocks, 1st quality	"	4	11	0
" 2nd "	"	4	2	6
Blue Bricks, Pressed	"	8	17	6
" Wirecuts	"	7	17	6
" Brindles	"	7	0	0
" Bullnose	"	9	0	0
Red Sand-faced Facings	"	6	18	6
Red Rubbers for Arches	"	12	0	0
Multicoloured Facings	"	7	10	0
Luton Facings	"	7	10	0
Phorpres White Facings	"	3	17	3
" Rustic Facings	"	3	12	3
Midhurst White Facings	"	5	0	0
Glazed Bricks, Ivory, White or Salt glazed, 1st quality:				
Stretchers	"	21	0	0
Headers	"	20	10	0
Bullnose	"	27	10	0
Double Stretchers	"	29	10	0
Double Headers	"	26	10	0
Glazed Second Quality, *Less*	"	1	0	0
" Buffs and Creams, *Add*	"	2	0	0
" Other Colours	"	5	10	0
2" Breeze Partition Blocks	per Y.S.		1	7
2½" " " "	"		1	10
3" " " "	"		2	1
4" " " "	"		2	6

MASON

The following d/d F.O.R. at Nine Elms:		s.	d.
Portland stone, Whitbed	F.C.	4	4½
" " Basebed	"	4	7½
Bath stone	"	2	10
York stone	"	6	6
" " Sawn templates	"	7	6
Paving, 2"	F.S.	1	8
" 3"	"	2	6

SLATER AND TILER

First quality Bangor or Portmadoc slates d/d F.O.R. London station:

		£	s.	d.
24" × 12" Duchesses	per M.	28	17	6
22" × 12" Marchionesses	"	24	10	0
20" × 10" Countesses	"	19	5	0
18" × 10" Viscountesses	"	15	10	0
18" × 9" Ladies	"	13	17	6
Westmorland green (random sizes)	per ton	8	10	0
Old Delabole slates d/d in full truck loads to Nine Elms Station:				
20" × 10" medium grey per 1,000 (actual)		21	11	6
" " green " "		24	7	4
Best machine roofing tiles " "		4	5	0
Best hand-made do. " "		4	17	6
Hips and valleys	each			9
" hand-made	"			9½
Nails, compo	lb.		1	4
" copper	"		1	6

CARPENTER AND JOINER

		£	s.	d.
Good carcassing timber	F.C.		2	2
Birch	as 1" F.S.			9
Deal, Joiner's	" "			5
" 2nds	" "			4
Mahogany, Honduras	" "	1		3
" African	" "	1		1
" Cuban	" "	2		6
Oak, plain American	" "	1		0
" Figured "	" "	1		3
" plain Japanese	" "	1		2
" Figured "	" "	1		5
" Austrian wainscot	" "	1		6
" English	" "	1	11	
Pine, Yellow	" "	1		0
" Oregon	" "			4
" British Columbian	" "			4
Teak, Moulmein	" "	1		3
" Burma	" "	1		2
Walnut, American	" "	2		3
" French	" "	2		3
Whitewood, American	" "	1		1
Deal floorings, ⅞"	Sq.	18		6
" 1"	"	1	1	6
" 1¼"	"	1	2	0
" 1½"	"	1	5	0
" 1¾"	"	1	10	0
Deal matchings, ⅞"	"		14	0
" 1"	"		15	6
" 1¼"	"	1	4	0
Rough boarding, ⅞"	"		16	0
" 1"	"		18	0
" 1¼"	"	1	6	0

Plywood, per ft. sup.

Thickness	¼"			⅜"			½"			⅝"		
Qualities	A	B	BB	A	B	BB	A	B	BB	A	B	BB
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch 60 × 48	4	2½	2	5	3	2½	7	5	4	8	6	5
Cheap Alder	–	2	1½	–	3½	2	–	–	–	–	–	–
Oregon Pine	–	2½	–	3	2½	–	4	3½	–	5	4½	–
Gaboon Mahogany	4	3½	–	5	4½	–	7	6½	–	8	7	–
Figured Oak	6½	5	–	7½	5½	–	10	8	–	1/–	9	–

		d.
Scotch glue	lb.	8

SMITH AND FOUNDER

Tubes and Fittings

(The following are the standard list prices, from which should be deducted the various percentages as set forth below.)

		¼"	⅜"	½"	¾"	1"
Tubes, 2'–14' long	per ft. run	4	5½	9½	1/1	1/10
Pieces, 12"–23" long	each	10	1/1	1/11	2/8	4/9
" 3"–11½" long	"	7	9	1/3	1/8	3/–
Long screws, 12"–23½" long	"	11	1/3	2/2	2/10	5/3
" " 3" M–½" long	"	8	10	1/5	1/11	3/6
Bends	"	8	11	1/7½	2/7½	5/2
Springs not socketed	"	5	7	1/1½	1/11½	3/11
Socket unions	"	2/–	3/–	5/6	6/9	10/–
Elbows, square	"	10	1/1	1/6	2/2	4/3
Tees	"	1/–	1/3	1/10	2/6	5/1
Crosses	"	2/2	2/9	4/1	5/6	10/6
Plain sockets and nipples	"	3	4	6	8	1/3
Diminished sockets	"	4	6	9	1/–	2/–
Flanges	"	9	1/–	1/4	1/9	2/9
Caps	"	3½	5	8	1/–	2/–
Backnuts	"	2	3	5	6	1/1
Iron main cocks	"	1/6	2/3	4/2	5/4	11/6
" with brass plugs	"	—	4/–	7/6	10/–	21/–

Discounts	TUBES. Per cent.		Per cent.
Gas	65	Galvanized gas	52½
Water	61½	" water	47½
Steam	57½	" steam	42½

	FITTINGS.		
Gas	57½	Galvanized gas	47½
Water	52½	" water	42½
Steam	47½	" steam	37½

		s.	d.
Rolled steel joists cut to length	cwt.	12	9
Mild steel reinforcing rods, ½"	"	10	6
" " ⅝"	"	10	3
" " ¾"	"	10	0

SMITH AND FOUNDER—*continued*

		s.	d.
Mild steel reinforcing rods, ⅞"	cwt.	9	6
" " 1"	"	9	6
" " 1¼"	"	9	6
" " 1½"	"	9	6
" " 1¾"	"	9	6

		½" s.	½" d.	4" s.	4" d.
Cast-iron rain-water pipes of ordinary thickness metal	F.R.		8		10
Shoes	each	2	0	3	0
Anti-splash shoes	"	4	6	8	0
Boots	"	3	0	4	0
Bends	"	2	7	3	9
" with access door	"		—	6	3
Heads	"	4	0	5	0
Swan-necks up to 9" offsets	"	3	9	6	0
Plinth bends, 4½" to 6"	"	3	9	5	3
Half-round rain-water gutters of ordinary thickness metal	F.R.		5		6
Stop ends	each		8		6
Angles	"	1	7	1	11
Obtuse angles	"	2	0	2	6
Outlets	"	1	9	2	3

PLUMBER

		s.	d.
Lead, milled sheets	cwt.	24	6
" drawn pipes	"	24	6
" soil pipe	"	30	0
" scrap	"	16	0
Solder, plumbers'	lb.		9½
" fine do.	"	1	0
Copper, sheet	"		8½
" tubes	"		11

I.C.C. soil and waste pipes:		½"		1"		6"	
Plain cast	F.R.	1	0	1	2	2	6
Coated	"	1	1	1	3	2	8
Galvanized	"	2	0	2	6	4	6
Holderbats	each	3	10	4	0	4	9
Bends	"	3	9	5	3	10	3
Shoes	"	2	10	4	4	9	6
Heads	"	4	8	8	5	12	9

PLASTERER

		£	s.	d.
Lime, chalk	per ton	2	5	0
Plaster, Coarse	"	2	10	0
" fine	"	4	15	0
Hydrated lime	"	3	0	9
Sirapite	"	3	6	0
Keene's cement	"	5	0	0
Gothite Plaster	"	3	6	0
Pioneer Plaster	"	3	6	0
Thistle plaster	"	3	6	0
Sand, washed	Y.C.		11	6
Hair	lb.			6
Laths, sawn	bundle		2	4
" rent	"		3	9
Lath nails	lb.			3

GLAZIER

		s.	d.		s.	d.
Sheet glass, 21 oz., squares n/e 2 ft.	s. F.S.					2½
" " 26 oz.	" "					3
Flemish, Arctic, Figures (white)*	"					7
Blazoned glasses	"				2	6
Reeded: Cross Reeded	"					11
Cathedral glass, white, double-rolled, plain, hammered, rimpled, waterwite	"					6
Crown sheet glass (n/e 12" × 10")	"				2	0
Flashed opals (white and coloured)	"	1	0	and	2	0
⅛" rough cast; rolled plate	"					5½
⅛" wired cast; wired rolled	"					9½
⅛" Georgian wired cast	"					11
⅛" Polished plate, n/e 1 ft.	"			†10 to ‡1	1	
" " 2	"			†1 2 " ‡1	4	
" " 4	"			†2 3 " ‡2	6	
" " 8	"			†2 9 " ‡3	2	
" " 20	"			†3 1 " ‡3	9	
" " 45	"			†3 3 " ‡4	0	
" " 100	"			†4 0 " ‡4	10	
Vita glass, sheet, n/e 1 ft.	"				1	0
" " " 2 ft.	"				1	3
" " " over 2 ft.	"				1	9
" " plate, n/e 1 ft.	"				1	6
" " " 2 ft.	"				3	0
" " " 5 ft.	"				4	0
" " " 7 ft.	"				5	0
" " " 15 ft.	"				6	0
" " " over 15 ft.	"				7	6
"Calorex" sheet 21 oz., and 32 oz.	"	2	6	and	3	6
" rough cast ¼" and ⅛"	"			8½ "	1	0
Putty, linseed oil	lb.					3

* *Colours, 1d. F.S. extra.*

† *Ordinary glazing quality.* ‡ *Selected glazing quality.*

PAINTER

		£	s.	d.
White lead in 1 cwt. casks	cwt.	2	8	6
Linseed oil	gall.		2	3
Boiled oil	"		2	9
Turpentine	"		4	1½
Patent knotting	"		14	0
Distemper washable	cwt.	2	6	0
" ordinary	"	2	0	0
Whitening	"		4	0
Size, double	firkin		3	0
Copal varnish	gall.		13	0
Flat varnish	"		14	0
Outside varnish	"		16	0
White enamel	"	1	15	0
Ready mixed paint	"		13	6
Brunswick black	"		7	6

CURRENT PRICES FOR MEASURED WORK

The following prices are for work to new buildings of average size, executed under normal conditions in the London area. They include establishment charges and profit. While every care has been taken in its compilation, no responsibility can be accepted for the accuracy of the list. The whole of the information given is copyright.

EXCAVATOR AND CONCRETOR

		£	s.	d.
Digging over surface n/e 12″ deep and cart away	Y.S.		2	9
,, to reduce levels n/e 5′ 0″ deep and cart away	Y.C.		8	6
,, to form basement n/e 5′ 0″ and cart away	,,		9	0
,, ,, 10′ 0″ deep and cart away	,,		9	6
,, ,, 15′ 0″ deep and cart away	,,		10	0
If in stiff clay	add ,,			6
If in underpinning	,,		4	0
Planking and strutting to sides of excavation	F.S.		1	0
,, ,, to pier holes	,,			5
,, ,, to trenches	,,			5
,, ,, extra, only if left in	,,			3
Hardcore, filled in and rammed	Y.C.		10	0
Portland cement concrete in foundations (6–1)	,,	1	6	0
,, ,, (4-2-1)	,,	1	12	6
,, ,, underpinning	,,	1	16	0
Finishing surface of concrete, space face	Y.S.			7

DRAINLAYER

		4″ s.	d.	6″ s.	d.
Stoneware drains, laid complete (digging and concrete to be priced separately)	F.R.	1	6	2	3
Extra, only for bends	Each	2	8	3	9
,, ,, junctions	,,	3	9	4	6
Gullies and gratings	,,	16	6	18	0
Cast iron drains, and laying and jointing	F.R.	4	9	6	9
Extra, only for bends	Each	10	6	15	6

BRICKLAYER

		£	s.	d.
Brickwork, Flettons in lime mortar	Per Rod	26	10	0
,, ,, in cement	,,	27	12	6
,, Stocks in cement	,,	34	0	0
,, Blues in cement	,,	50	0	0
Extra only for circular on plan	,,		2	0
,, backing to masonry	,,		1	10
,, raising on old walls	,,		2	0
,, underpinning	,,		5	10
Fair Face and pointing internally	F.S.			1½
Extra over fletton brickwork for picked stock facings and pointing	,,			8
,, ,, ,, red brick facings and pointing	,,			11
,, ,, ,, blue brick facings and pointing	,,		1	4
,, ,, ,, glazed brick facings and pointing	,,		3	6
Tuck pointing	,,			7½
Weather pointing in cement	,,			3
Slate dampcourse	,,			10
Vertical dampcourse	,,			1

ASPHALTER

		s.	d.
½″ Horizontal dampcourse	Y.S.	4	9
½″ Vertical dampcourse	,,	7	9
½″ paving or flat	,,	6	3
1″ paving or flat	,,	7	6
1″ × 6″ skirting	F.R.	1	0
Angle fillet	,,		2½
Rounded angle	,,		2½
Cesspools	Each	5	6

MASON

		£	s.	d.
Portland stone, including all labour, hoisting, fixing and cleaning down, complete	F.C.		17	9
Bath stone and do., all as last	,,		13	6
Artificial stone and do.	,,		13	0
York stone templates, fixed complete	,,		10	6
,, thresholds	,,		13	6
,, sills	,,	1	0	6

SLATER AND TILER

		£	s.	d.
Slating, Bangor or equal to a 3″ lap, and fixing with compo nails, 20″ × 10″	Sqr.	3	10	0
Do., 18″ × 9″	,,	3	7	0
Do., 24″ × 12″	,,	3	17	0
Westmorland slating, laid with diminished courses	,,	6	0	0
Tiling, best hand-made sand-faced, laid to a 4″ gauge, nailed every fourth course	,,	3	0	0
Do., all as last, but of machine-made tiles	,,	2	16	0
20″ × 10″ medium Old Delabole slating, laid to a 3″ lap (grey)	,,	2	16	0
,, ,, ,, ,, ,, ,, (green)	,,	4	15	0

CARPENTER AND JOINER

		£	s.	d.
Flat boarded centering to concrete floors, including all strutting	Sqr.	2	2	6
Shuttering to sides and soffits of beams	F.S.			7
,, to stanchions	,,			7
,, to staircases	,,		1	6
Fir and fixing in wall plates, lintols, etc.	F.C.		3	9
Fir framed in floors	,,		4	6
,, ,, roofs	,,		6	6
,, ,, trusses	,,		7	6
,, ,, partitions	,,		8	6
¾″ deal sawn boarding and fixing to joists	Sqr.	1	14	6
1″ ,, ,, ,, ,, ,,	,,	1	17	6
1½″ ,, ,, ,, ,, ,,	,,	2	3	0
1½″ × 2″ fir battening for Countess slating	,,		9	6
Do., for 4″ gauge tiling	,,		12	0
Stout feather-edged tilting fillet	F.R.			4½
Patent inodorous felt, 1 ply	Y.S.		2	3
,, ,, ,, 2 ,,	,,		2	9
,, ,, ,, 3 ,,	,,		3	3
Stout herringbone strutting to 9″ joists	F.R.			10½
1″ deal gutter boards and bearers	F.S.		1	2
1½″ ,, ,, ,,	,,		1	6
2″ deal wrought rounded roll	F.R.			8
1″ deal grooved and tongued flooring, laid complete, including cleaning off	Sqr.	2	1	0
1¼″ do.	,,	2	10	0
1½″ do.	,,	2	17	0
1″ deal moulded skirting fixed on, and including grounds plugged to wall	F.S.		1	6
1¼″ do.	,,		1	9

CARPENTER AND JOINER—*continued*

		s.	d.
1½″ deal moulded sashes of average size	F.S.	1	9½
2″ ,, ,, ,, ,,	,,	1	11½
1½″ deal cased frames double hung, of 6″ × 3″ oak sills, 1¼″ pulley stiles, 1¼″ heads, 1″ inside and outside linings, ⅝″ parting beads, and with brass faced axle pulleys, etc., fixed complete	,,	3	7
2″ ,, ,, ,, ,, ,,	,,	3	10
Extra only for moulded horns	Each		6
1½″ deal four-panel square, both sides, door	F.S.	2	0
2″ ,, ,, ,, ,, ,,	,,	2	8
1½″ ,, but moulded both sides	,,	2	4
2″ ,, ,, ,, ,, ,,	,,	3	0
4″ × 3″ deal, rebated and moulded frames	F.R.	1	0
4½″ × 3½″ ,, ,, ,, ,,	,,	1	4
1½″ deal tongued and moulded window board, on and including deal bearers	F.S.	1	9
1½″ deal treads, 1″ risers in staircases, and tongued and grooved together on and including strong fir carriages	,,	2	6
1½″ deal moulded wall strings	,,	2	1
1½″ ,, outer strings	,,	2	4
Ends of treads and risers housed to string	Each	1	9
3″ × 2″ deal moulded bandrail	F.R.	1	3
1″ × 1″ deal balusters and housing each end	Each		2
1½″ × 1½″ ,, ,, ,,	,,		2
3″ × 3″ deal wrought framed newels	F.R.	1	3
Extra only for newel caps	Each		6
Do., pendants	,,		6

SMITH AND FOUNDER

		£	s.	d.
Rolled steel joists, cut to length, and hoisting and fixing in position	Per cwt.		16	6
Riveted plate or compound girders, and hoisting and fixing in position	,,	1	0	6
Do., stanchions with riveted caps and bases and do.	,,		19	0
Mild steel bar reinforcement, ¼″ and up, bent and fixed complete	,,		17	6
Corrugated iron sheeting fixed to wood framing, including all bolts and nuts 20 g.	F.S.			11
Wrot-iron caulked and cambered chimney bars	Per cwt.	1	10	0

PLUMBER

		£	s.	d.
Milled lead and labour in flats	cwt.	1	18	6
Do. in flashings	,,	2	2	0
Do. in covering to turrets	,,	2	7	6
Do. in soakers	,,	1	13	3
Labour to welted edge	F.R.			3½
Open copper nailing	,,			3
Close ,, ,,	,,			4

		½″ s.	d.	¾″ s.	d.	1″ s.	d.	1¼″ s.	d.	2″ s.	d.	4″ s.	d.
Lead service pipe and fixing with pipe hooks	F.R.	10		1	0	1	3	2	0	2	10	—	
Do. soil pipe and fixing with cast lead tacks	,,	—		—		—		—		—		5	6
Extra, only to bends	Each	—		—		—		—		2	0	6	9
Do. to stop ends	,,	6½		8		9		11		1	6	—	
Boiler screws and unions	,,	3	3	3	9	5	0	8	0	—		—	
Lead traps	,,	—		—		—		6	3	8	9	—	
Screw down bib valves	,,	6	9	9	6	11	0	—		—		—	
Do. stop cocks	,,	7	0	9	6	12	6	—		—		—	

		s.	d.
4″ cast-iron ½-rd. gutter and fixing	F.R.	1	0
Extra, only stop ends	Each	1	0
Do. angles	,,	1	6
Do. outlets	,,	2	9
4″ dia. cast-iron rain-water pipe and fixing with ears cast on	F.R.	1	2
Extra, only for shoes	Each	1	3
Do. for plain heads	,,		5 6

PLASTERER AND TILING

		£	s.	d.
Expanded metal lathing, small mesh	Y.S.		2	0
Do. in n/w to beams, stanchions, etc.	,,		2	9
Lathing with sawn laths to ceilings	,,		1	3
½″ screeding in Portland cement and sand or tiling, wood block floor, etc.	,,		1	5
Do. vertical	,,		1	7
Rough render on walls	,,		1	2½
Render, float and set in lime and hair	,,		1	9
Render and set in Sirapite	,,		1	11
Render, backing in cement and sand, and set in Keene's cement	,,		2	9
Extra, only if on lathing	,,			4
Keene's cement, angle and arris	F.R.			6
Arris	,,			1½
Rounded angle, small	,,			3
Plain cornices in plaster, including dubbing out, per 1″ girth	,,			1½
1″ granolithic pavings	Y.S.		3	6
1½″ ,, ,,	,,		4	6
6″ × 6″ white glazed wall tiling and fixing on prepared screed	,,		17	6
9″ × 3″ ,, ,, ,, ,,	,,	1	2	6
Extra, only for small quadrant angle	F.R.			8

GLAZIER

		s.	d.
21 oz. sheet glass and glazing with putty	F.S.		6½
26 oz. do. and do.	,,		7½
Flemish, Arctic Figured (white) and glazing with putty	,,	1	1
Cathedral glass and do.	,,	1	2
Glazing only, British polished plate	,,		7
Extra, only if in beds	,,		2
Washleather	F.R.		4

PAINTER

		s.	d.
Clearcolle and whiten ceilings	Y.S.		6
Do. and distemper walls	,,		9
Do. with washable distemper	,,	1	1
Knot, stop, prime and paint four coats of oil colour on plain surfaces	,,	3	3
Do. on woodwork	,,	3	6
Do. on steelwork	,,	3	0
Do. and brush grain and twice varnish	,,	5	6
Stain and twice varnish woodwork	,,	1	11
Stain and wax-polish woodwork	,,	4	6
French polishing	F.S.	1	2
Stripping off old paper	Piece	2	0
Hanging ordinary paper	from ,,	2	9

Suppl

TH

IN
SIR

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

TURNALL · ASBESTOS REINFORCED ALUMINIUM FOIL :

DESCRIPTION :

The material consists of two thin sheets of aluminium inseparably attached by means of a bitumen adhesive to a centre reinforcement sheet of asbestos paper or felt.

HEAT RESISTANCE :

Provided both faces of the foil are exposed to the air, the heat resistance is 1·4 hours for 1 B.T.U. to pass 1 sq. ft. per 1° F. difference in temperature between faces. With two ½" air spaces enclosed by thin sheeting the heat resistance becomes 3·2 hours.

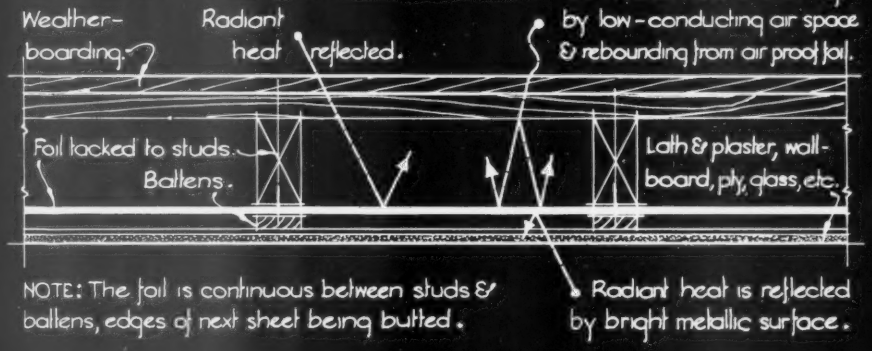
PHYSICAL PROPERTIES :

Aluminium foil is completely air & windproof, & in addition to consequent protection against damp & vermin, the material considerably reduces the possibility of condensation on inner wall surfaces.

CUTTING & FIXING : Foil may be cut and trimmed with scissors or a knife and for batten and joist fixing should be tacked at 4" centres along both edges with ½" flat head tin tacks.

THE METALLIC SURFACES permanently retain their stability and heat reflectivity, while long exposure causes a thin protective coating of oxide which further resists any appreciable increase of emissivity.

ANALYSIS OF HEAT CONSERVATION BY STANDARD FIXING OF ASBESTOS REINFORCED ALUMINIUM FOIL INSULATION :



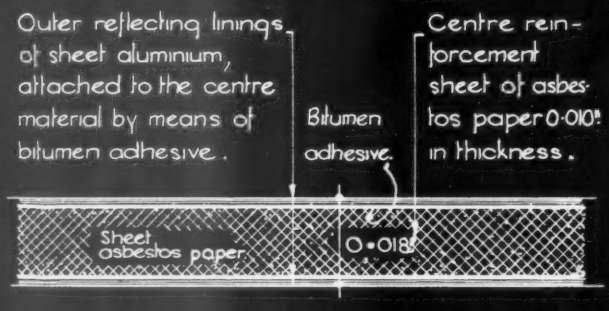
NOTE: The foil is continuous between studs & battens, edges of next sheet being butted.

SIZES, WEIGHT, ETC. :

The foil is made up in rolls 24" wide by 100 linear yards; the paper-centre foil weighing 62 lbs, and the felt-centre foil weighing 115 lbs, per roll. For weights per sq. ft. see diagrams below.

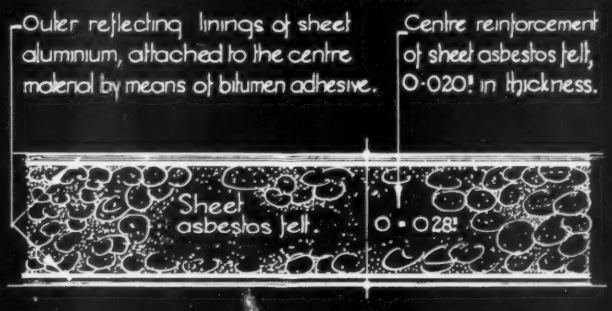
ENLARGED SECTIONS SHOWING COMPOSITION OF FOIL :

SECTION THROUGH TYPE APF.I. ALUMINIUM FOIL :
(Foil having asbestos paper centre is usually more suitable for internal situations.)
TOTAL THICKNESS OF FOIL, 0·018" Nominal.



WEIGHT OF FOIL, approximately 1½ ozs. per square foot.

SECTION THROUGH TYPE APF.II ALUMINIUM FOIL :
(Foil having asbestos felt centre is suitable for situations where damp is likely to be encountered.)
TOTAL THICKNESS OF FOIL, 0·028" Nominal.



WEIGHT OF FOIL, approximately 3 ozs. per square foot.

USES OF FOIL :

Thermal insulation of domestic, factory, workshop and public buildings,

Hutments, loggias, outbuildings in exposed situations etc.

APPLICABLE SURFACES :

Wood, masonry or patent wallings, flat or pitched roofs of timber or steel construction, & any construction having an air space in which foil may be placed.

WALL AND CEILING FINISHES :

Lath and plaster, patent wall-boards, sheets, ply, etc.

ROOFINGS :

Any covering capable of being fixed to timber or steel members.

TYPICAL APPLICATION, to various forms of wall and roof construction, see Information Sheet No 2. of this series.

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

(1)

INFORMATION SHEET : ASBESTOS REINFORCED ALUMINIUM INSULATING FOIL:
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1. Olive A. Bayne.

THE ARCHITECTS' JOURNAL
LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET

• 403 •

ASBESTOS-ALUMINIUM FOIL

Product : "Turnall" Asbestos Reinforced Aluminium Foil

This is the first of two Sheets dealing with asbestos-reinforced aluminium foil, its properties, uses and application to various surfaces.

The Material :

In this asbestos reinforced aluminium foil, a sheet of asbestos paper or asbestos felt is faced on each side with a thin sheet of aluminium applied with a strong bituminous adhesive.

Weight :

Foil with the asbestos paper centre weighs 62 lbs. per roll 24 inches wide by 100 yards in length, which equals 0.93 lbs. per square yard.

Foil with an asbestos felt centre weighs 115 lbs. per roll which equals 1.72 lbs. per square yard.

Reflection of Radiant Heat :

Tests have shown that aluminium foil possesses a high reflection factor for radiant heat, and that this quality is not impaired by the formation of the fine film of oxide characteristic of the metal.

This film, while not affecting the reflecting capacity of the foil, serves to protect the metal from atmospheric conditions.

Resistance to Thermal Transmission :

Test results show that where both faces of the foil are exposed, the heat resistance of the foil is 1.4 hours for 1 B.T.U. to pass through one square foot of surface per 1° F. difference in temperature between faces.

If the foil is enclosed by thin sheet material with an air space of $\frac{1}{2}$" left on each side of the foil, then this resistance is increased to 3.2 hours.

Wind and Damp :

Tests under both laboratory and field conditions show that both types of foil are permanently damp-proof and wind-proof.

Uses :

Reinforced aluminium foil may be used for thermal insulation purposes of all kinds and in conjunction with all other materials.

Cutting and Fixing :

Foil is cut and trimmed with scissors or a knife, without difficulty. Foil, when fixed to wood battens, should be tacked at 4" centres along each batten, and at all edges with $\frac{1}{2}$" flat headed tinned tacks.

Tests and Fixing Details :

Future Sheets will show the fixing of reinforced aluminium foil to various types of construction, and will set out the results of authoritative tests on the material.

Manufacturers :
Turners Asbestos Cement Company, Branch of Turner and Newall Ltd.
Head Office :
Trafford Park, Manchester, 17
Telephone : Trafford Park 2181
London Office :
Asbestos House, Southwark, S.E.1
Telephone : Waterloo 4041

Supp

T H

T
SE

2

S

5

2

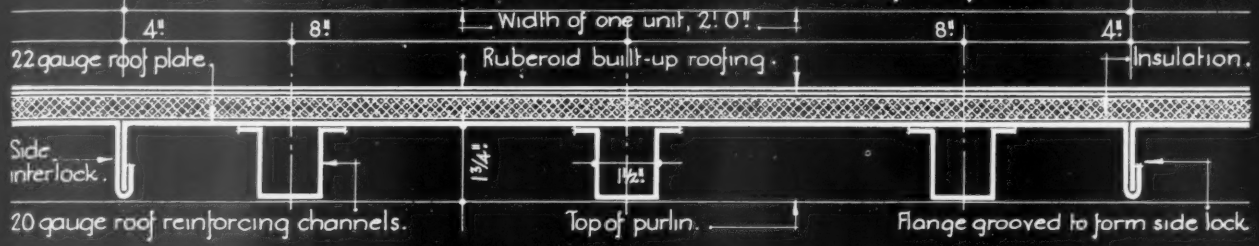
S

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

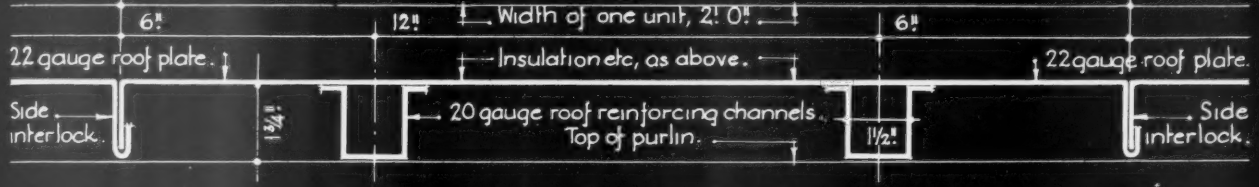
THE RUBEROID INSULATED STEEL ROOF FOR FLAT, CURVED OR PITCHED WORK.

SECTIONS THROUGH STANDARD ROOF UNITS. ① THREE CHANNEL TYPE.

For superimposed loads for varying spans see table on the reverse side of this information sheet.



SCALE FOR SECTIONS : ¼ Full size. ② TWO CHANNEL TYPE. (For loads see note above.)



LENGTH OF UNITS : Standard lengths of units range from 4' 0" – 10' 0" in rises of 4" to suit purlin spacing.

TYPES OF UNIT : Type A : for curved roofs, Type B : for flat or pitched roofs. (Either 2 or 3 channels.)

FIXING : Type A. channels & Type B. channels interlock over supports and are secured to each other and to the roof members by cleats, hook bolts, or screws in one operation. No puncturing or drilling is required.

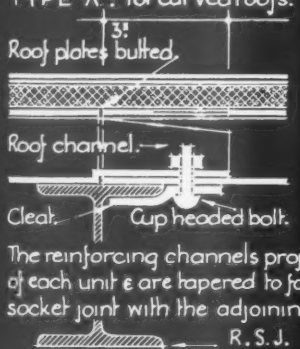
INSULATION : Insulation is cemented to the roof with hot Ruberoid compound. Where the pitch is steep, it can be cleated to the roof at the unit joints, by two cleats per unit. The insulation is to break joint with the roof units.

WEIGHT : The total weight including insulation & Ruberoid weatherproofing is 4 lbs. per square foot.

WEATHER PROOFING : Ruberoid built-up roofing is cemented by compound over the insulation.

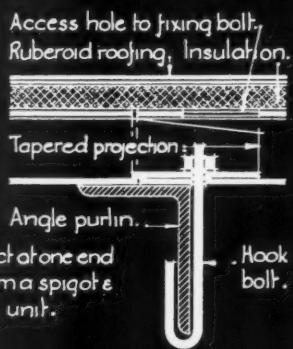
DETAILS OF JOINTING AND FIXING OF THE STEEL ROOF UNITS : Scale · ¼ Full size.

TYPE A : For curved roofs.



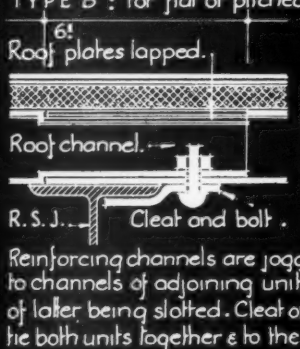
The reinforcing channels project at one end of each unit & are tapered to form a spigot & socket joint with the adjoining unit.

FIXING TO R.S.J. PURLIN WITH CLEAT:



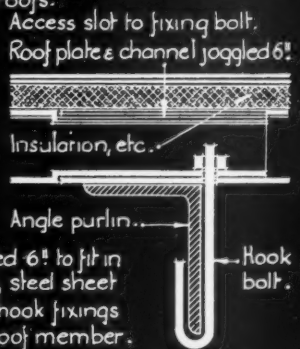
HOOK BOLT FIXING TO STEEL ANGLE PURLIN:

TYPE B : For flat or pitched roofs.



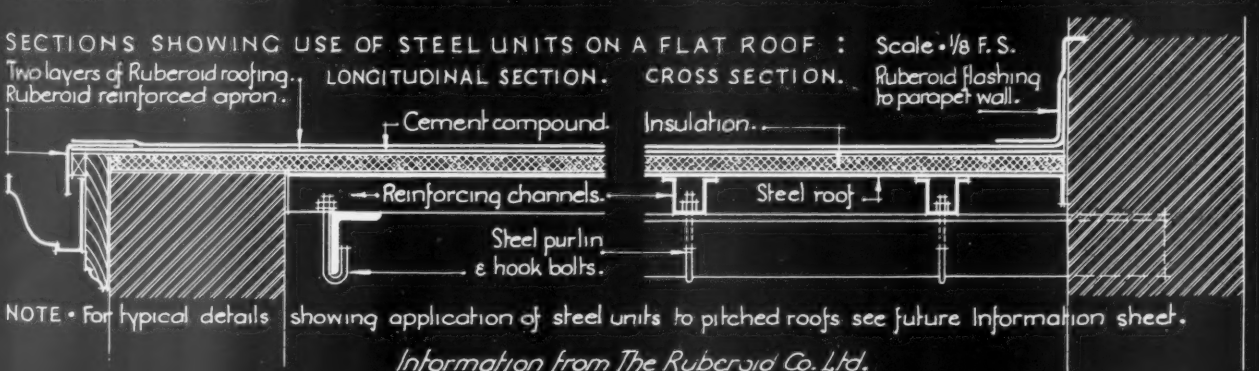
Reinforcing channels are joggled 6" to fit in to channels of adjoining units, steel sheet of latter being slotted. Cleat or hook fixings tie both units together & to the roof member.

FIXING TO R.S.J. PURLIN WITH CLEAT:



HOOK BOLT FIXING TO STEEL ANGLE PURLIN:

SECTIONS SHOWING USE OF STEEL UNITS ON A FLAT ROOF : Scale · ⅛ F. S.



NOTE · For typical details showing application of steel units to pitched roofs see future Information sheet.

Information from The Ruberoid Co. Ltd.

INFORMATION SHEET : LIGHT GAUGE PRESSED STEEL ROOFING, No 1 ·

SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1 · Oscar A. Bayne.

THE ARCHITECTS' JOURNAL
LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET

• 404 •

ROOFING

Product : The Ruberoid Insulated Steel Roof

The Ruberoid Insulated Steel Roof consists of self-interlocking steel units 2 ft. wide and of certain standard lengths.

The units are made in two types, A and B, as shown, and each type is made with either two or three channels per unit.

The sides of the units are designed to interlock with one another. The channels of the type A units project at one end of the unit and are tapered to form a spigot and socket joint with the channels of the adjoining unit.

The channels of the type B unit do not project, but are joggled so that they will rest in the channels of the adjoining units, the top plate being slotted for the purpose.

Special Steel :

The units are fabricated from specially rolled copper-alloy steel, each unit being cleaned after fabrication and drawn through dipping baths which deposit on all surfaces an unbroken protective film of lead.

Fire Resistance :

This type of roof is favourably rated by the insurance companies, the sub-structure of the roof being incombustible. The airtight seal formed by the insulation and weatherproofing tends, in the case of fire, to smother the outbreak by permitting no outward draughts to develop.

Erection :

The erection of this roof being merely the assembly of standardized pre-fabricated units, it can be carried out with great rapidity.

Supply and Erection :

The Company undertakes the supply and erection of the roof complete in any part of the country and accepts full responsibility for materials and workmanship.

Super-imposed Loads :

The following table sets out the safe recommended loads for varying spans.

Application of Insulation :

The insulating material is cemented to the roof deck with Ruberoid Compound applied hot. The joints between pieces of insulating material should break joint with the steel deck.

In the case of abnormally steep roofs a cleat to anchor the insulation is employed in addition to the Ruberoid Compound. The cleat is a simple steel prong, angled and punched at the base to sit on top of the hook bolt before the nut is fastened. The cleat pierces the insulation and its point is then hammered flat. Two cleats to each deck unit are enough.

Roof Surface :

Roofings to Ruberoid Standard Specifications are employed to give a surface finish to the roof. These include :—

(1) Built-up Ruberoid with either smooth, grit or gravel finish.
(2) Rubercrete (Bitumac finish).
(3) Ruco-Ruberoid (Mastic Asphalt finish).
(4) Ruberdal (Tile finish).

Engineering Data :

All technical and constructional data is given in catalogue No. 305 issued by the manufacturers and available on request.

Further Sheet :

A further sheet will be published giving additional details with particular reference to the question of insulation.

Previous Sheets :

Information Sheets Nos. 267, 304 and 402 have already been published dealing with damp-coursing, from particulars supplied by The Ruberoid Co., Ltd.

Manufacturers : The Ruberoid Co., Ltd.
Address : Lincoln House, 296-302 High Holborn, W.C.1
Telephone : Holborn 9501

Branches

Birmingham : 66½ Corporation Street
Telephone : Central 2079
Manchester : 33 Blackfriars Street
Telephone : Blackfriars 3001
Newcastle-on-Tyne : 3 St. Nicholas Buildings
Telephone : Newcastle 25958
Edinburgh : Caroline Park, West Shore Road, Granton
Telephone : Granton 84041
Dublin : 1 Aston Place
Telephone : Dublin 23107
Belfast : 31 Corporation Street
Telephone : Belfast 26808

Two Channel Deck		Three Channel Deck		Total dead load including insulation and Ruberoid Weatherproofing	Deflection
Span	Safe superimposed load in lbs. per sq. ft.	Span	Safe superimposed load in lbs. per sq. ft.		
4′ 0″	148	4′ 0″	172	Approximately 4 lbs. per square foot	1/250th span
5′ 0″	95	5′ 0″	110		
6′ 0″	66	6′ 0″	80		
7′ 0″	48	7′ 0″	56		
8′ 0″	37	8′ 0″	43		
		9′ 0″	34		

Supp

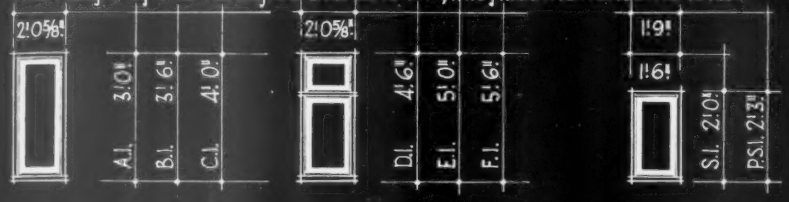
TH

IN
SIR

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

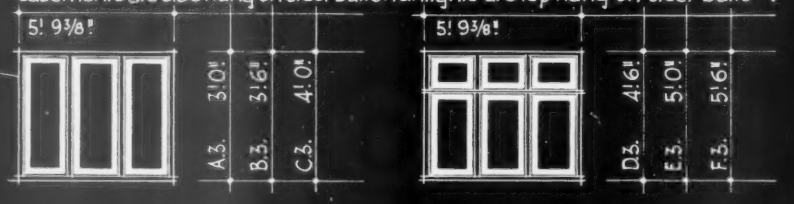
STANDARD SIZES OF TI-FOON CASEMENT WINDOWS :

The height of the fanlights overall is 1'5", this fixes the transome level.

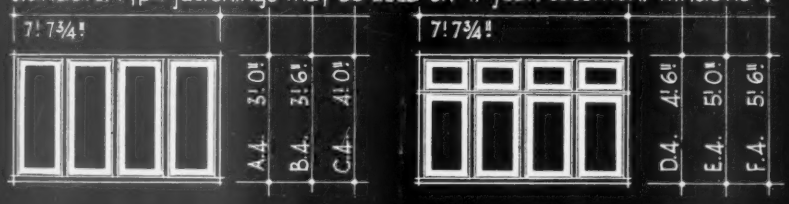


Standard Casements have no glazing bars, they can be made with bars if required.

Casements are side hung on steel butts. Fanlights are top hung on steel butts.



Standard type fastenings may be used on Ti-foon casement windows.

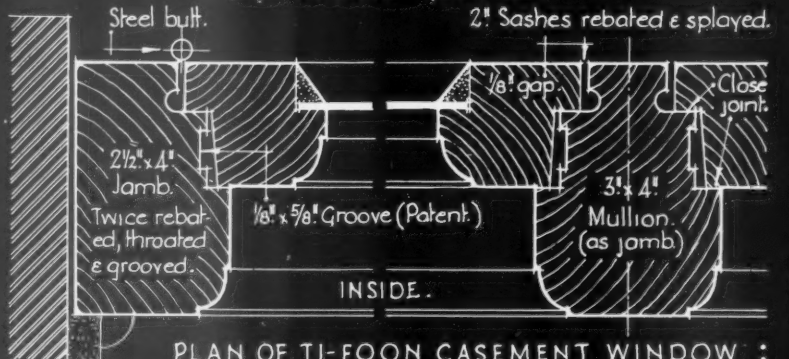


NOTES : The window is constructed so that air & water shall not penetrate & the sash will not bind due to swelling when wet.

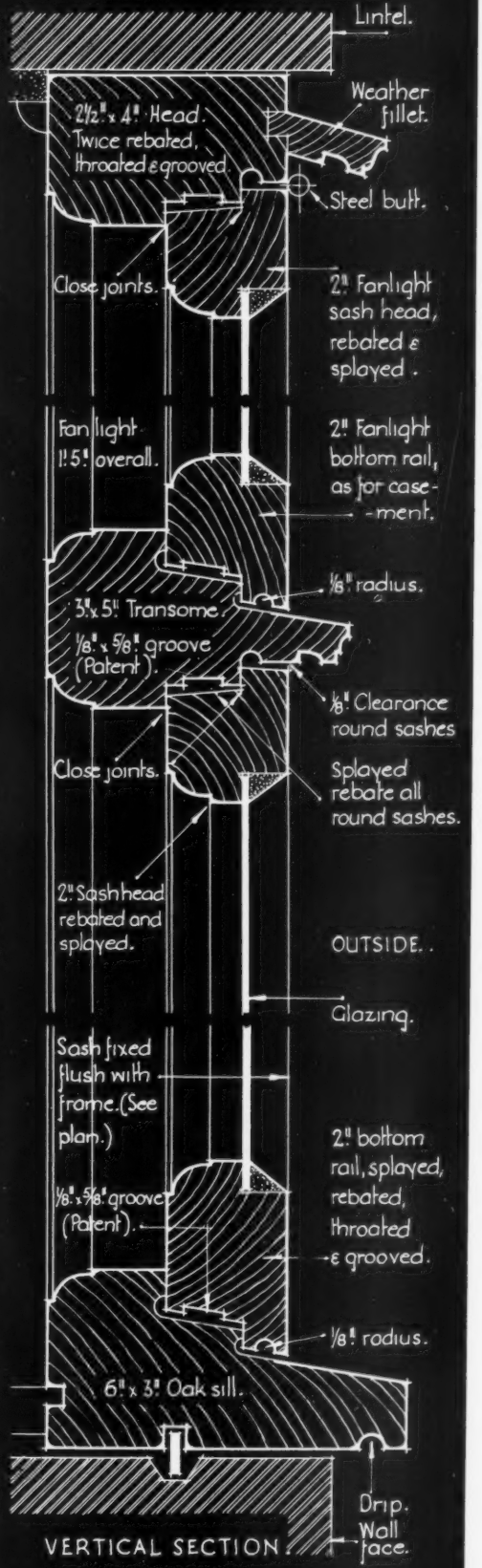
This is obtained by a twice rebated frame, & rebated & splayed sash, the sash or frame being grooved & throated to check driven rain.

The sash is fixed flush with the frame enabling steel butts of ordinary pattern to be used.

SCALE FOR DETAILS - ⅜ Full size.



PLAN OF TI-FOON CASEMENT WINDOW :



VERTICAL SECTION

Information from John Sadd & Sons Ltd.

INFORMATION SHEET : DETAILS OF TI-FOON PATENT WEATHERPROOF WINDOWS : No 1.
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1 · Oscar A. Bayne.

THE ARCHITECTS' JOURNAL
LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET

• 405 •

JOINERY

Product : Ti-Foon Casement Windows

The drawings given on this Sheet show the details and standard sizes of the Ti-Foon Patent casement window. These windows are also manufactured to any size required. It will be seen from the details that the patent design incorporates a series of special rebates, grooves and channels between sash and frame arranged to provide a completely weather-proof window, draught-proof yet without any possibility of binding occurring between the sash and the frame.

Hinges :

It should be noticed that the sash being flush with the outside of the frame, ordinary butts may be used. Steel butts are supplied as standard, but any of the usual types available in bronze, or other materials can be supplied if required. Unless required otherwise 50 per cent. sashes are hung.

Timber :

Standard Ti-Foon windows are manufactured from Best Yellow Deal and they may be obtained to order in Western Red Cedar, Columbia Pine, Teak, Oak, etc.

Details Shown :

The details given in this sheet show the window in position in a wall. It should be noted that the standard window does not include cover moulds to plaster, window board, or weather bar. These items are supplied to order. Ovolo mouldings are shown, but any other type may be adopted.

Glazing Bars :

Standard windows are manufactured without glazing bars ; bars are fitted as required to order.

Priming :

Windows can be supplied primed with one coat of red lead priming.

Prices :

Schedule of current prices can be obtained upon application.

Manufacturers :	John Sadd and Sons, Ltd.
Address :	" Don " Joinery Works, Maldon, Essex.
Telephone :	Maldon 131 (3 lines)
Address :	108 Sentinel House, Southampton Row, London, W.C.1
Telephone :	Holborn 9200
Address :	Grainger Road, Southend-on-Sea
Telephone :	Southend, Marine 6607 (2 lines)
Address :	Station Works, Clacton-on-Sea
Telephone :	Clacton 1096 (2 lines)
Address :	Jersey Gardens, Wickford
Telephone :	Wickford 130
Address :	Sutton's Lane, Hornchurch
Telephone :	Hornchurch 789 (2 lines)
Address :	Baddow Road, Chelmsford
Telephone :	Chelmsford 3411 (2 lines)