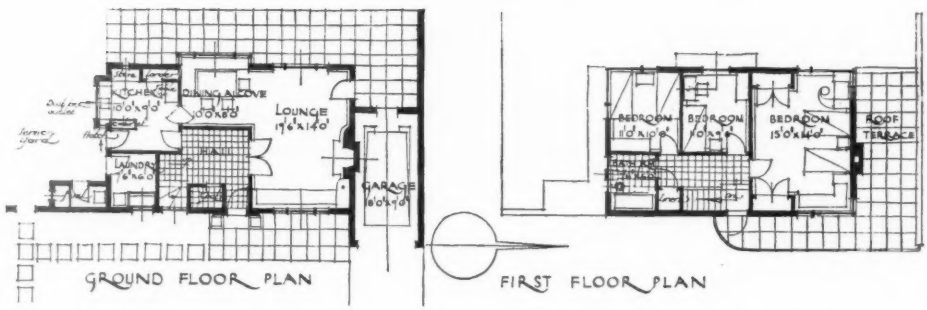
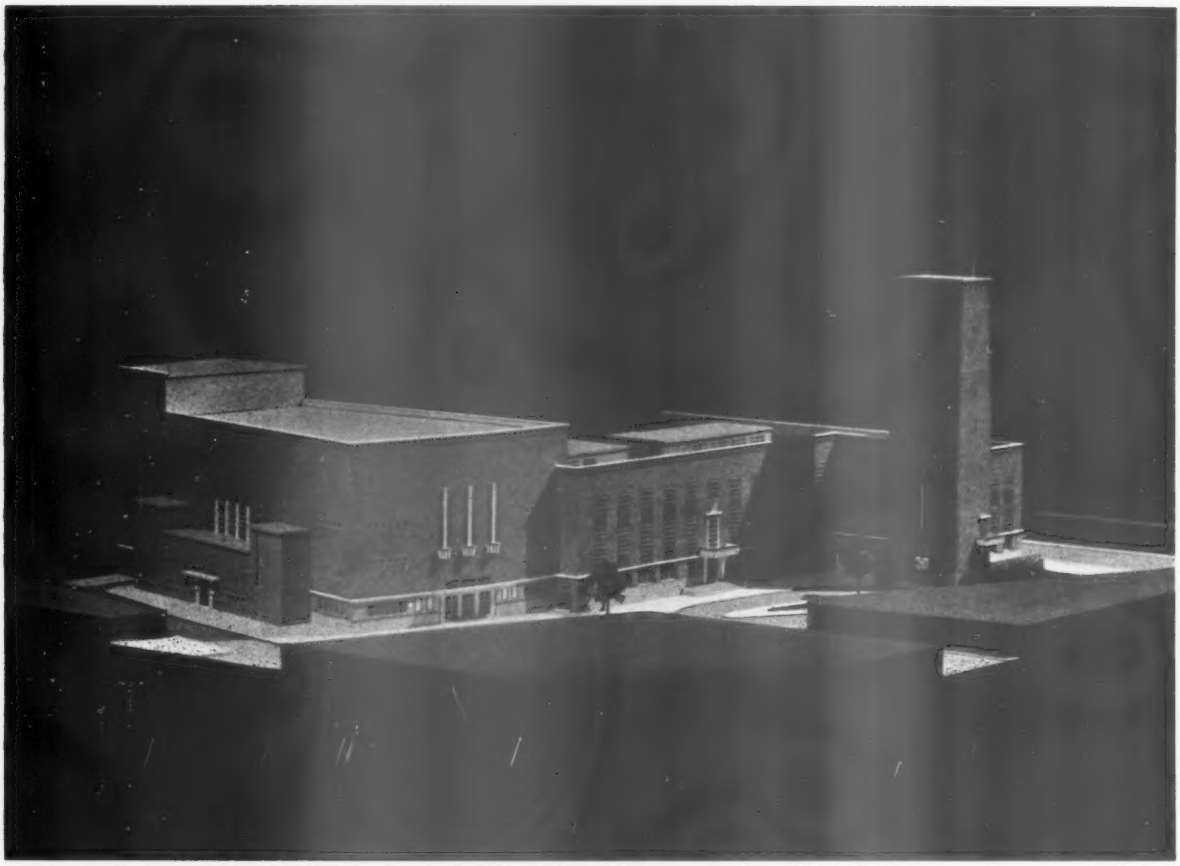
COMPETITION SCOOP

THREE SECTIONS: ONE WINNER



IN connection with the Centenary Homes Exhibition in Australia, a competition was organized by its promoters for three types of houses as follows: Section 1, "the perfect home" to cost £1,550 (first prize £50); Section 2, a concrete house to cost £1,200 (first prize, £100); Section 3, an asbestos-cement house to cost £650 (first prize £40). The competition was open to architects practising in Australia, and the winning design in each section was submitted by D. C. Ward of Victoria. Above are perspective and ground and first floor plans of the winning design in section two. The winning scheme in section three is illustrated on page 545.



GREENWICH TOWN HALL

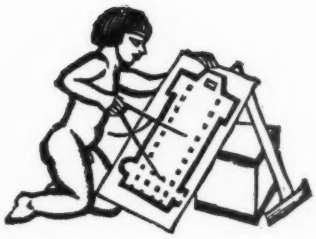
A photograph of a model of the proposed Greenwich Town Hall, the architects for which are Messrs. Culpin and Son.

The site is bounded on three sides by London Street, Royal Hill and Peyton Place, and the fourth side is mainly occupied by the existing Library. At present the site is occupied by the old baths, the Borough Hall, the cleared site of an old theatre and two public houses.

The main feature of the lay-out is the setting back of the front to Royal Hill, preserving existing trees, and opening out the corner at the junction of Royal Hill with London Street so that the whole group is exposed.

The building will house all the principal departments of the Council. The council chamber occupies the normal position on the axis of the civic entrance in Royal Hill and is situated on a mezzanine level in the courtyard, isolated from the normal flow of business traffic. The committee rooms are on the first floor on the Royal Hill front. A separate entrance is provided direct from London Street to the Rates Hall. In addition, there is a large assembly hall equipped for stage and cinematograph performances, providing seating accommodation for 1,200 persons. This hall is on the first floor. Below it are the cloakrooms, and a supper room seating about 250.

The building will have a reinforced concrete frame, with terrazzo base up to ground floor cill level. The piers between the ground floor windows will be faced with blue faience, and the walls above and the tower with 2-in. yellow bricks. The model is the work of Kenneth McCutchon.



EASTER OUTLOOK

THE approach of another Easter, which as usual has seemed to arrive with surprising suddenness, brings to an end the first working period of 1936.

For architects the year has so far fulfilled its promise of being a good one. In the Home Counties an afternoon's motor tour leaves an impression that each and every family has ordered a new home. In London the differences between the L.C.C. and those who seek to redevelop sites has softened into a working compromise, if not into complete agreement. And the volume of architectural work in the provinces, never so spectacular in growth or diminution as in London, has continued a gradual increase.

Quite a modest architectural optimism can go further in prophecy of good things to come—at least for the next year. In housing and education expenditure can at least be relied upon to bring up to date programmes partly or wholly delayed since 1931. Government confidence has caused a reflected expansion in the ideas of local authorities and private firms. Competitions open or about to be open cover such a diversity of buildings as municipal offices, a hospital, two schools, a housing scheme, a technical college and a railway receiving offices.

Architectural competitions in such a modest plenty may be hoped to be a sign of increasing enlightenment amongst the building public. But, should this be optimism too premature, competitions are always a welcome indication of confidence in good buildings as an investment; and this limited progress is something.

But not, unfortunately, everything. All in all at Easter 1936, architects, whether principals or assistants, may consider that prospects are good for a year ahead. That it is not for longer, that architects as a whole seem never able to enjoy for long an income both reasonably steady and reasonably good is due to a grave defect in British public opinion. The practice of architecture can only become a pursuit freed from epidemic financial anxiety when two conditions are fulfilled: the first, that all architects should be persons of high professional qualifications; the second, that the public should be both sensitive to the nature and arrangement of its surroundings and should realise its responsibility for those surroundings. That the employment of an architect on a building should be still quite widely regarded as a mild extravagance, however necessary or suitable, instead of being a matter of course, could possibly be dismissed as only regrettable were it not for its larger consequences. Lack of any real interest and appreciation of good appearance in single buildings has grown into public indifference concerning the appearance of streets, and finally of towns and all their surroundings. Wealthy cities today, even those that boast of their attractions as holiday centres, have apparently decided that a civic sense of decency is a quality which pays no dividend, loses no votes and can safely be allowed to disappear. Here and there societies raise a protest; C.P.R.E. or S.C.A.P.A. implore public opinion to notice what is happening, and a small section of that public opinion takes heart once more, but that is usually all.

The average citizen may perhaps quietly abandon a faint desire to be proud of his city and devote his attention strictly to business in the hope of being able to get out of it all in time.

The architect cannot. Even if blessed with an ability to disregard his surroundings, he must be aware that a fine architecture is impossible while such public apathy continues.

In recent years the R.I.B.A. has done its best to change this apathy into interest and appreciation, and the response, though much of it has come from the already converted, has shown that a public opinion on architecture is not impossible to bring about. But its full achievement needs the persistent effort of all architects, and the few days of the Easter holidays gives them an opportunity to measure the work to be done.

At Easter the public will relax from daily affairs, go to the seaside, to the country, to holiday resorts or merely look for fresh air and exercise in the neighbourhood of their homes. But wherever they happen to be, if familiarity has not mercifully blinded them, the lack of public criticism of surroundings, of any sense of fitness, will be horribly obvious. Good advertisements well arranged in a railway station are of value both to the community and to the advertiser. A litter of hoardings along the approaches to a much-advertised holiday resort are a continual affront to any reasoned sense of fitness.

Discussions in the House of Lords last week concerning the afforestation scheme for a part of the Lake District shows how big is the problem. The land affected was not considerable, nor in the better-known valleys, but the expression of opinion left no doubt of public alarm over anything which it thought likely to harm the Lakes. But no one mentioned the blight of regrettable buildings and worse advertising which is gradually extending through Keswick, Ambleside and Buttermere. Is it possible that even their Lordships no longer notice these things?

This Easter architects, and the small section of the public which feels as they do, can see that the Lake District is only one more example of public lack of sensitiveness to surroundings. And realising this lack it is worth while for architects to ponder what can be done about it. For if they do nothing it is certain that no one else will.

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

NOTES & TOPICS

CROMWELL ROAD EXTENSION

THE discussion after the Architecture Club dinner on the Cromwell Road extension was a rather one-sided affair as no one was there to support the official scheme against the attacks of Mr. R. A. Duncan and Mr. Davidge and representatives of various other opposing bodies.

*

Some of the most constructive criticism came from Sir Raymond Unwin, who pointed out that there would be no room ever to make another road and that if the official road was made it must be the most efficient possible road from a traffic point of view, and that the land on each side ought to be planned with the road to prevent crossings and numerous small roads running into it.

*

There was general agreement that "something must be done" and that any scheme that leaves Hammersmith Broadway as it is is bound to fail. But most of the speakers seemed to be a little shy of the elevated way over the railway put forward by Mr. Duncan, though this is the only scheme which makes any attempt to deal with the Broadway.

MAKING ARCHITECTS

Liverpool has made the most of its opportunity of being the first provincial School of Architecture to be invited to exhibit at the Building Centre.

*

From first to last, from the analysis of external influences on the School courses, through the departmental work in each year, to the frieze illustrating buildings completed by graduates of the School, the exhibition itself is an excellent example of crisp organization.

*

The students' work reminds one of the very high standard of draughtsmanship for which Liverpool is noted and the research work carried out by groups of students is both impressive and sound education for contemporary conditions.

NORTHERN POLY

And the speech night last Thursday at the Northern Polytechnic School was also impressive and enjoyable. Mr. T. E. Scott and his colleagues achieve annually the remarkable feat of finishing term late on Tuesday night, assessing the work of some 1,500 students, awarding upwards of 150 prizes and certificates, printing full details in an excellent programme, and distributing the prizes on Thursday in the same week.

*

To say nothing of the additional labour involved in preparing in this limited time a thorough exhibition not only of the work of the day and evening architects, but also the more bulky and no less interesting work completed in all the building crafts taught on the premises.

*

Mr. Percy Thomas, true to tradition and to his own high conception of both the duties and the pleasures of R.I.B.A. presidency, distributed the prizes (in record time it is whispered) and addressed the students with point and modest charm.

WATERLOO BRIDGE

Now that the demolition is almost complete I suppose that the new bridge will soon be started. I cannot recall exactly what it is expected to cost, but I hope the estimate will not be exceeded to anything like the same extent as was that of the old bridge. According to a newspaper extract of a hundred years ago the estimated cost was £500,000 and the actual cost £1,200,000.

QUICK CHANGES IN CHELSEA

Whether it is worth while, in these bustling times, to build anything save a mausoleum to last more than thirty years is not a new subject for architectural debate. But no one would have been likely to connect Sir Edwin Lutyens with such a cult of the ephemeral.

*

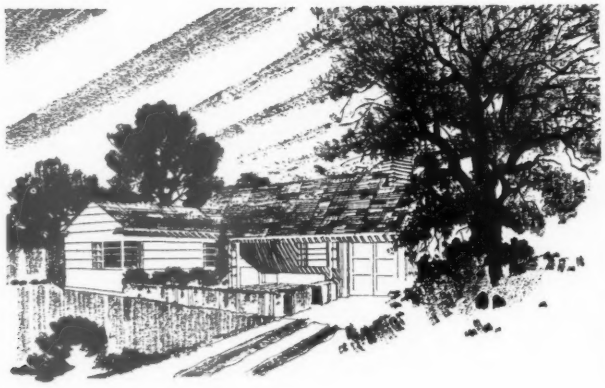
The renewed rumour of the coming demolition of 42 Cheyne Walk—a Lutyens house, which, at the age of four years can barely be said to be out of swaddling clothes—has therefore something quite horrifying about it. Is it possible that Sir Edwin has unwittingly secured an architectural record?

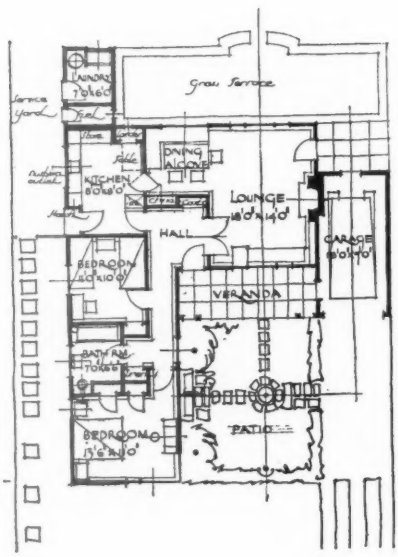
*

But Sir Edwin Lutyens' ill-wishers, if any exist, should not smile too soon; 42 Cheyne Walk has possibly gained for its designer not one, but two architectural records. There is a movement under weigh in Chelsea to save the house for the chief reason that it is a Lutyens' house.

*

If the houses of other architects have never come down so soon, they have also had to wait two centuries or so longer for similar tributes.





The winning design by D. C. Ward for an asbestos-cement house. The competition was held in connection with the Centenary Homes Exhibition, Australia. See page 541.

MINOR INTERFERENCE

Radio reception in multiple buildings has recently exercised architects to no small extent, though guaranteed reception is not unreasonably difficult when one really thinks about the problem.

*

The B.B.C. last week reminded us again of one of the minor sources of annoyance which, in relation to television more than to normal broadcast, can easily be overlooked—interference from the electrical equipment of cars when their engines are running as much as 30 ft. away from radio apparatus.

*

Garages under flats, therefore, would appear to demand special attention if interference is to be eliminated in one, two or even three floors above. Living-rooms opening on to main streets may have, in addition to direct and radiated noise, to put up with car distorted television—unless the point is attended to.

*

Or will the State take over control and insist on suppressors being fitted to every car ; with the inevitable time lag between the order and the execution?

DESIGN AT MANCHESTER

The D.I.A. shop exhibition scheme makes its provincial debut in Manchester, at Messrs. Kendal Milne & Co. You will remember that the chief point of the scheme is to exhibit only well designed articles taken from the normal stock held in the shop, with nothing whatever introduced specially for exhibition purposes.

*

The prices of the selected exhibits at Kendal Milnes are considerably less than experience of previous industrial design shows would lead one to expect. This is a great point and really shows that the D.I.A. is taking up a sound realist attitude in its exhibition policy.

*

And what of London shops and stores? Scarborough, Bromley and Woolwich have already booked dates for a D.I.A. exhibition—London, it seems, should spend more time watching the provinces.

VALUE OF AMENITY

At a conference last week of the South-West Durham Development Board suggestions were made for attracting new industries to Durham. The Conference was attended by many prominent people in industry and commerce and for that reason the following extract from the resolution which was carried unanimously is worth quoting :—

> The closing down of the pits left the countryside in a derelict condition, and it is essential as a first step to recovery that the general appearance should be improved, that better housing and sanitary conditions should be provided, that industrial estates should eventually be prepared in the area, and much-needed work in improvement of communications and in other directions should be immediately undertaken.

*

If these are the sentiments of the " business man " it looks as though we were progressing.

RECLAIM BRICKFIELDS ?

My remarks last week on the possible reclamation of the marshes of the Wash remind me of another and similar problem—the future of our brickfields.

*

The increase in the production and use of bricks in recent years has rapidly increased the acreage of discarded brickfields. But it has also, by the introduction of the modern shaver type of clay digger, left the fields in a more usable state. The old digger left great holes and irregular dumps. The modern shaver leaves an irregular surface but at one general level.

*

The brick companies themselves would probably be the first to welcome constructive ideas for the future use of these acres.

ASTRAGAL

NEWS

POINTS FROM THIS ISSUE

PARLIAMENT SQUARE

The Prime Minister and Mr. Neville Chamberlain last week received a deputation from members of the House of Commons on the subject of preserving the amenities of Parliament Square.

The deputation urged that the Government should join with the County Councils of London and Middlesex to make Westminster House site into an open space added to Parliament Square.

The Prime Minister said that if any scheme for a memorial to King George should be agreed upon which included improvements in the neighbourhood of Westminster Abbey and the Houses of Parliament, the Government would consider making a contribution from public funds.

TOWN AND COUNTRY PLANNING

The Minister of Health has approved eight planning schemes—for Bingley, Birmingham, Blackpool, Finchley, Hendon, Maldens and Coombe, Nottingham, Oldbury and Smethwick. With the exception of Blackpool, where the scheme was for the built-up areas of the borough, the schemes cover only the suburbs of the various towns. Schemes for the centres are to follow. This is the first group of schemes to be approved under the Town and Country Planning Act, 1932, which came into force in April, 1933.

HACKNEY MARSH

The recent decision of the Divisional Court given by the Lord Chief Justice, which prohibits the use of any part of Hackney Marsh for housing purposes, was the subject of a joint report by the Housing and Public Health Committee and the Parks Committee of the L.C.C., at a general meeting of the Council on Tuesday last. Extracts from the report are printed below :

"We have now to report that the Divisional Court, on the application of Sir Patrick Hastings, K.C., on behalf of the Hon. A. G. Child Villiers, has issued a Writ of Prohibition to prohibit the Minister of Health from issuing his certificate consenting to the Council's proposals, and from holding a public inquiry in connection therewith, on the grounds, *inter alia*, that the Council has no power to appropriate any part of Hackney Marsh for housing purposes.

"Whilst it is, of course, open to the Council to appeal, this would involve costly and, almost certainly, protracted proceedings, and, it being quite impossible to form any definite opinion as to the final result, it might well be that the Council would find itself ultimately in no better position than it now is. The Housing and Public Health Committee accordingly views the situation with grave concern, since there appears to be no possibility of proceeding with clearance and rehousing operations in the East End of London, except very slowly, unless the Council is able in some way to secure the use of part of Hackney Marsh with the least possible delay. The Council has a statutory obligation in regard to the clearance of unhealthy areas in London and the provision of accommodation for the displaced people, and it has declared its policy to deal with the problem within a limited number of years. If the site at Hackney Marsh were available, it is not unlikely that accommodation would be in course of erection thereon for a substantial number of persons within twelve months.

"Side by side with the slum-clearance problem is the problem of overcrowding, which the Housing Act, 1935, requires local authorities to solve with the utmost expedition. The recent survey shows that in Bethnal Green and Stepney alone approximately 68,000 persons are living in overcrowded conditions as defined in the Act of 1935. None with the interests of London at heart can contemplate the continuance for an indefinite period of these appalling conditions which deny anything like a reasonable amount of fresh air and sunlight to tens of thousands of people, including a large proportion of young children.

"The proposal for building on a relatively small portion of Hackney Marsh is the key to the problem, and has been designed to form the first link in a successive chain of operations of incalculable benefit to the inhabitants of this tragically congested part of working-class London. The progressive redevelopment of these congested areas on modern lines will afford far greater playing space for children than is now available.

"We have accordingly sought means by which the Council might in some way secure the use of part of Hackney Marsh with as little delay as possible, and it is proposed that the Council shall take the necessary steps with a view to the promotion of a special Bill in the present session of Parliament, in order to seek power to enable the scheme contemplated by the decision of July 30, 1935, to be carried out. The arguments which then obtained still prevail, but with even greater force. We propose that the Bill should provide that in the event of the Council being able to offer for public open space other land more suitably situated than that at Chigwell it should have power to do so with the consent of the Minister of Health.

"The Parliamentary Committee has been consulted under Standing Order 216 and have informed us that the matter can only be dealt with in the present session of Parliament if leave is given to introduce a late Bill. The solicitor has advised that the Council has power to promote the proposed legislation, and without recourse to the procedure prescribed by the Borough Funds Acts. The Town Planning and Building Regulation Committee has been informed of the proposal.

"It will be necessary to suspend the operation of Standing Order 215, clause (*a*) of which limits the consideration of parliamentary proposals by the Council to those in respect of the session of Parliament next ensuing.

"We recommend :

> "That application be made for the granting of powers in the session of Parliament, 1935-36 (i) to enable the Council to utilise for housing purposes a portion, about 30 acres in extent, of Hackney Marsh, ... (ii) to provide that the Council shall utilise as public open space the land, about 50 acres in extent, now forming part of the Chigwell housing site, . . .; (iii) to provide that the Council may, with the consent of the Minister of Health, substitute as public open space such other land in lieu of land at Chigwell as the Council may determine; and (iv) to provide for any incidental matters in connection therewith'"

OVERCROWDING IN LONDON

At the same meeting of the Council a detailed report was presented by the Housing and Public Health Committee dealing with the overcrowding problem in London, as disclosed by a survey made in compliance with the Housing Act, 1935, which required every local authority in the country to have its district inspected to ascertain what working-class dwelling-houses were overcrowded on the standard laid down in the Act. The results of the survey are contained in a volume entitled *County of London Overcrowding Survey*, which is published by the Council and can be obtained from the Council's publishers (P. S. King), price one shilling. The survey started on November 1, 1935, and was completed in all the boroughs by the first week in February, 1936—two months in advance of the date (April 1, 1936) fixed by the Minister of Health for the completion of the survey.

It is pointed out in the report that the survey has disclosed that, of more than 1,014,000 families of which particulars have been obtained, over 70,900 (about 7 per cent.) are living in overcrowded conditions, more than 57,000 (about 5.7 per cent.) occupy accommodation of the minimum size required by the Act, and some 886,000 (about 87.3 per cent.) have accommodation in excess of that standard. The number of persons living in overcrowded conditions is 9.1 per cent. of the total population of London.

THE ARCHITECTS' DIARY

Thursday, April 9

IDEAL HOME EXHIBITION. *At Olympia. Until April 18.*

Wednesday, April 15

INSTITUTION OF STRUCTURAL ENGINEERS. *Scottish Branch. At 129, Bath Street, Glasgow. "Tubular Construction." By W. Brown. 7.15 p.m.*

Thursday, April 16

INSTITUTION OF STRUCTURAL ENGINEERS. *Yorkshire Branch. At the Hotel Metropole, Leeds. "Modern Trusses and Frames." By J. B. May. 7 p.m.*

HOUSING CENTRE, *13 Suffolk Street, S.W.1. Exhibition of Working Class Housing to be opened by Lewis Silkin. 8.30 p.m.*

Friday, April 24

TOWN PLANNING INSTITUTE. *At Caxton Hall, Caxton Street, S.W.1. "Some Practical Planning Problems." By T. F. Thompson. 6 p.m.*

The metropolitan borough councils are now preparing their estimates of the numbers of new dwellings required to abate the overcrowding in their respective boroughs. When these estimates have been collated and examined the next task will be for the L.C.C., in conjunction with the metropolitan borough councils, to submit to the Minister of Health proposals for providing the accommodation required to abate the overcrowding disclosed.

DEVON AND CORNWALL ARCHITECTURAL SOCIETY

At the annual general meeting of the above Society, held recently at Plymouth, the following officers were elected for the ensuing year: President, Mr. E. Kemeys-Jenkin, F.R.I.B.A. (Exeter); vice-presidents, Messrs. Stanley Pool, A.R.I.B.A. (Truro), and J. C. C. Bruce, F.R.I.B.A. (Torquay); past president, Mr. E. G. Catchpole, A.R.I.B.A. (Plymouth); hon. treasurer, Mr. John Bennett, F.R.I.B.A. (Exeter); hon. auditor, Mr. L. F. Tonar, L.R.I.B.A. (Exeter); hon. secretary, Mr. J. Challice, A.R.I.B.A. (Exeter); assist. hon. sec., Mr. O. Parker, L.R.I.B.A. (Exeter).

ROYAL SOCIETY OF BRITISH SCULPTORS

At the annual general meeting of the above Society, Sir William Reid Dick, R.A., was re-elected President, Mr. Gilbert Bayes, vice-president, and Mr. C. L. Hartwell, hon. treasurer.

HEALTH CENTRE, SOUTHWARK

The Southwark Borough Council has decided to build a health centre on a site adjoining the town hall in Walworth Road, at an estimated cost of £36,000.

ARCHITECTS' REGISTRATION COUNCIL

In the list of members of the Admission Committee of the Architects' Registration Council of the United Kingdom, published on page 534 of last week's issue, we stated that Mr. L. A. F. Ireland was a representative of the R.I.B.A. Mr. Ireland writes: "I do not represent the R.I.B.A. or the A.A.S. & T.A. I am a registered architect and as such shall continue to do my best in the interest of all salaried men."

THE LATE A. F. SCOTT

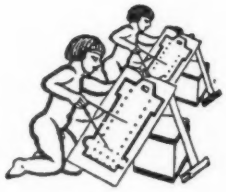
We regret to record the death, at the age of 81, of Mr. A. F. Scott, head of the firm of Messrs. A. F. Scott and Sons, Architects, of Norwich.

Mr. Scott was educated at the Old Commercial School, Norwich, and Elmfield College, York. Afterwards he spent five years studying the practical side of building under the late Mr. Robert Skipper, of East Dereham, and was then with the late Mr. John Henry Brown, the Cathedral and School Board architect, for ten years, and with the Liverpool Corporation for two years. He commenced private practice as an architect and surveyor in 1886 and, since that year, has been responsible for the erection of numerous buildings throughout the country. In 1912 Mr. Scott's two sons entered into partnership, and the firm became known as Messrs. A. F. Scott and Sons.

AN ARCHITECT'S WILL

Mr. E. M. Gibbs, F.R.I.B.A., of Sheffield, left £52,939 (net personalty £27,539).

COMPETITION NEWS



THE BARKING COMPETITION

PROPOSED TOWN HALL

Promoters: The Corporation of Barking.
Assessor: H. V. Lanchester, F.R.I.B.A.
Premiums: £500, £250 and £200.
Questions by: May 1, 1936.
Sending-in day: September 14, 1936.

THE CONDITIONS

IF for no other reason than the unusually generous time allowed for preparing designs, it is probable that this competition, which is open to all architects practising in the United Kingdom, will prove an extremely popular one.

Whatever three-dimensional limitations the conditions may impose, the competitor—with nearly six months in which to work out his scheme—at least cannot complain of undue restriction in the fourth dimension.

It is unfortunate that a better site was not available, but consolation may perhaps be found in the paradoxical, though undeniable, fact that awkward site conditions frequently inspire the most successful planning.

The conditions may in general be described as clear and straightforward, conforming in most respects with the accepted R.I.B.A. standard. They are obtainable, on payment of a deposit of two guineas, from Mr. S. A. Jewers, Town Clerk, Town Hall, Barking, Essex.

THE SITE

As previously suggested, the site is by no means ideal, consisting as it does of back land surrounded by a miscellaneous collection of buildings and at present used as the Corporation yard.

By demolishing the shops and dwellings now existing between the market and the George Hotel, and by widening the Broadway in addition, the south-west end of the site will be opened up to form a forecourt—an improvement of no little importance in the present crowded and unprepossessing conditions.

Reference to the site plan will show that the area actually available for building is somewhat disproportionately long and narrow, the south-west frontage being 116 ft. wide, the north-east 150 ft. and the length 450 ft.

No levels are given within this area, but for all practical purposes an even fall of 2 ft. over the whole length, from N.E. to S.W. may be reckoned.

A good foundation should be assumed to exist at a depth of 6 ft. below the surface.

Questions of rights of light may be disregarded.

Although the conditions are silent on the point, competitors ought most certainly to inspect the site and its surroundings before embarking on a detailed scheme.

DRAWINGS, ETC., REQUIRED

Plans of all floors, the four elevations and two sections are to be shown to one-sixteenth scale, and also, alas, "a portion of the (presumably S.W.) elevation drawn to a scale of half-an-inch to the foot." *Autres temps, mêmes mœurs!*

Drawings must be made on white paper in black ink, pencil or black line print, and mounted without borders. The different departments are to be emphasised on plans by means of specified tints; elevations and sections being left uncoloured except for a grey monotone where desired "to give greater clarity."

Competitors have to submit the customary report and estimate of cost based on the cubic contents. The anticipated cost of the building, including all services, fixed fittings, etc., is £160,000, but this figure is exclusive of movable furniture and pavings around the site.

ACCOMMODATION

The required accommodation may be broadly divided into two groups:

(1) The Municipal Offices.
(2) Public Assembly Rooms.

The Municipal Offices include:

	ft. sup.
Council Suite	10,000
Town Clerk's Department ..	3,500
Borough Engineer's Department	4,920
Public Health Department ..	6,060
Borough Treasurer's Department	6,180
Education Department ..	4,230
Juvenile Employment Bureau	1,200
Caretaker's flat	1,000

The Council Chamber (1,500 ft. sup.) is to seat 40 members and 10 officers, and provision has also to be made for 80 persons in the public gallery.

Five Committee rooms are asked for, three of which are to be divided by folding screens only so as to form one room when desired, with service room adjoining.

In addition two conference rooms must be provided.

The conditions suggest that the Borough Engineer's department should be on an upper floor, and that the general telephone exchange should adjoin this department.

The Public Health Department will presumably occur on the ground floor, since an external entrance for prams is required to this section. Separate external access to the Juvenile Employment Bureau is also stipulated, and in connection with the latter two Children's Courts, each 300 ft. super., are to be provided.

Storage space for the various departments is to be incorporated in a semi-basement, as well as staff cloakrooms and lavatories for 140 men and 60 women. " A dining-room for necessitous children " is also required on this floor.

Staff recreation and dining-rooms, service rooms and kitchen are to be provided; the planning of the latter in relation to Committee Rooms and the children's canteen in the basement will require careful consideration.

It is clear from the conditions that the Municipal Offices are intended to occupy the north-east end of the site, the public assembly rooms being assigned to the south-west portion and entered from the forecourt.

The assembly rooms consist of two halls, one—to seat 1,500—for meetings, concerts, dances and the like, and the other to be similarly used, but to seat 300 persons only.

It should be possible to use the latter either in conjunction with, or independently of, the larger hall.

Suitable foyers, cloakrooms and artists' rooms are required, and competitors are asked to provide a balcony on the south-west elevation, overlooking the forecourt.

This block is to be a self-contained unit, but it is desired that there should be direct and dignified approach from the Council suite when the halls are used for municipal functions. Compliance with the latter requirement should—in the circumstances—result in some interesting planning.

It is also desired that a clock tower should be incorporated in the scheme.

GENERAL

The dignity and importance of the building is to be expressed by such means as competitors consider appropriate.

The general character of the surroundings is not such as to warrant an elaborate or pretentious design—a simple treatment, dignified and of good proportion, is undoubtedly what is called for in the circumstances.

It is suggested that the general facings should be in brick, and, inasmuch as the majority of public buildings in the locality are so faced, this advice may be regarded as sound. The construction is to be fireproof throughout, and it is desired that as many partitions as practicable should be non-structural in view of possible rearrangement.

The conditions, one notes, do not ask that garage accommodation or parking space for cars should be included, nor is any provision required for possible future extension.

It is in any case fairly evident that such extension could only take place vertically.

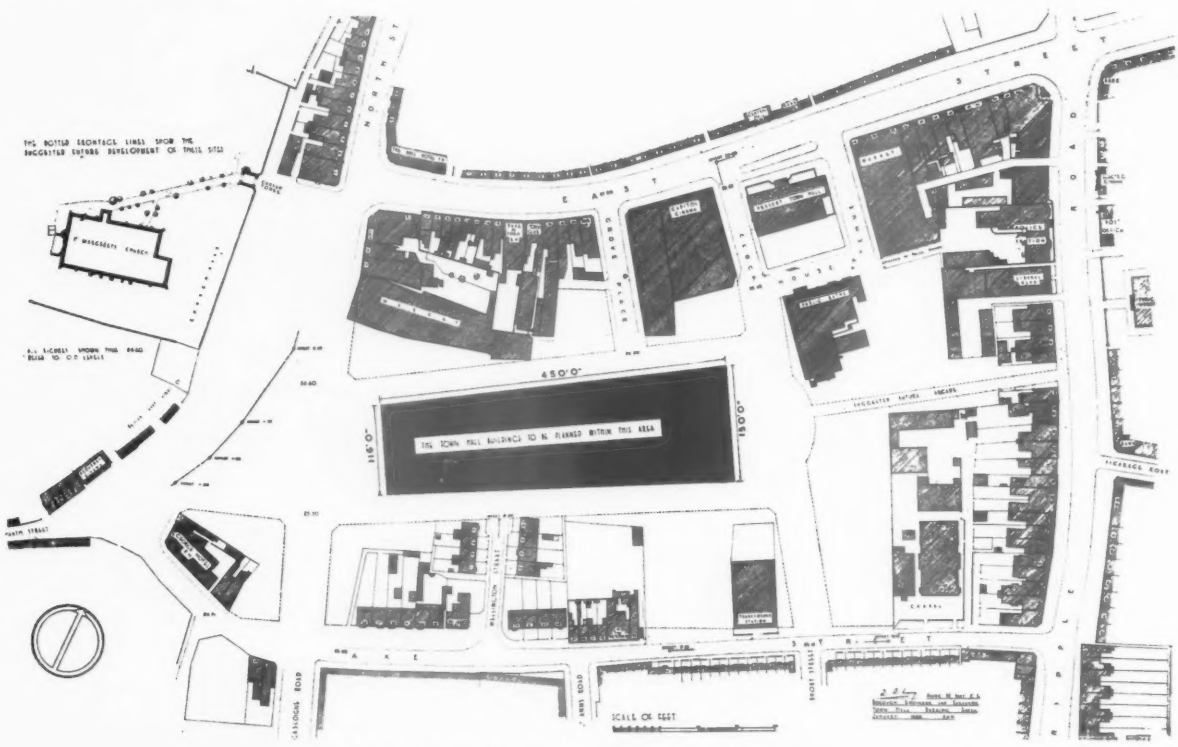
H. A. S.

●

HOUSING EXHIBITION, GLASGOW

The Glasgow Corporation invites architects practising in Scotland to submit designs for a five-apartment semi-detached cottage. Messrs. J. M'Kissack, W. B. M'Nab and J. H. Fernie have been appointed assessors; and the following premiums are offered: £75, £50, and £25. The designs must be sent to the Manager, Kelvin Hall, Glasgow, not later than May 22, 1936.

The whole, or at any rate selected designs, with the names of the authors attached, together with the assessors' award, will be exhibited in the Kelvin Hall during the period of the Housing and Health Exhibition in October next.

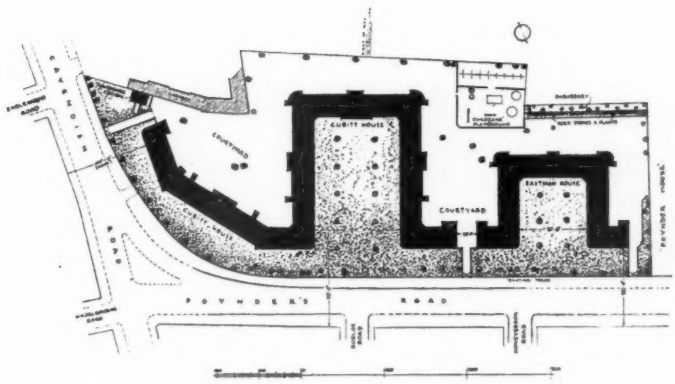


The Barking Competition: Site Plan

FLATS AT CLAPHAM PARK, S.W.

GENERAL PROBLEM.—*To provide flats for the relief of overcrowding in the neighbouring districts. The flats have been erected at an estimated cost of £88,450, and are among the first to qualify for the Government subsidy payable under the Housing Act, 1935, in respect of dwellings provided for the relief of overcrowding.*

SITE.—*Oaklands Estate, an area of about three acres. It takes its name from the large house and grounds which formerly occupied the site. As many as possible of the trees existing on the site have been preserved, and provision has been made for planting a number of small ornamental trees in the quadrangles. In the courtyard in the rear of the flats a children's playground has been laid out and fitted with swings, seesaws, etc., at an estimated cost of £250. The photograph is taken looking down the larger of the grass quadrangles on the south front.*

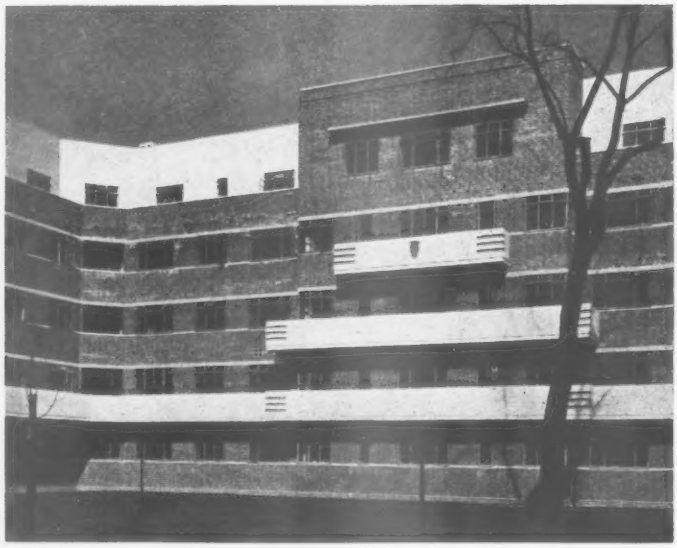


DESIGNED BY

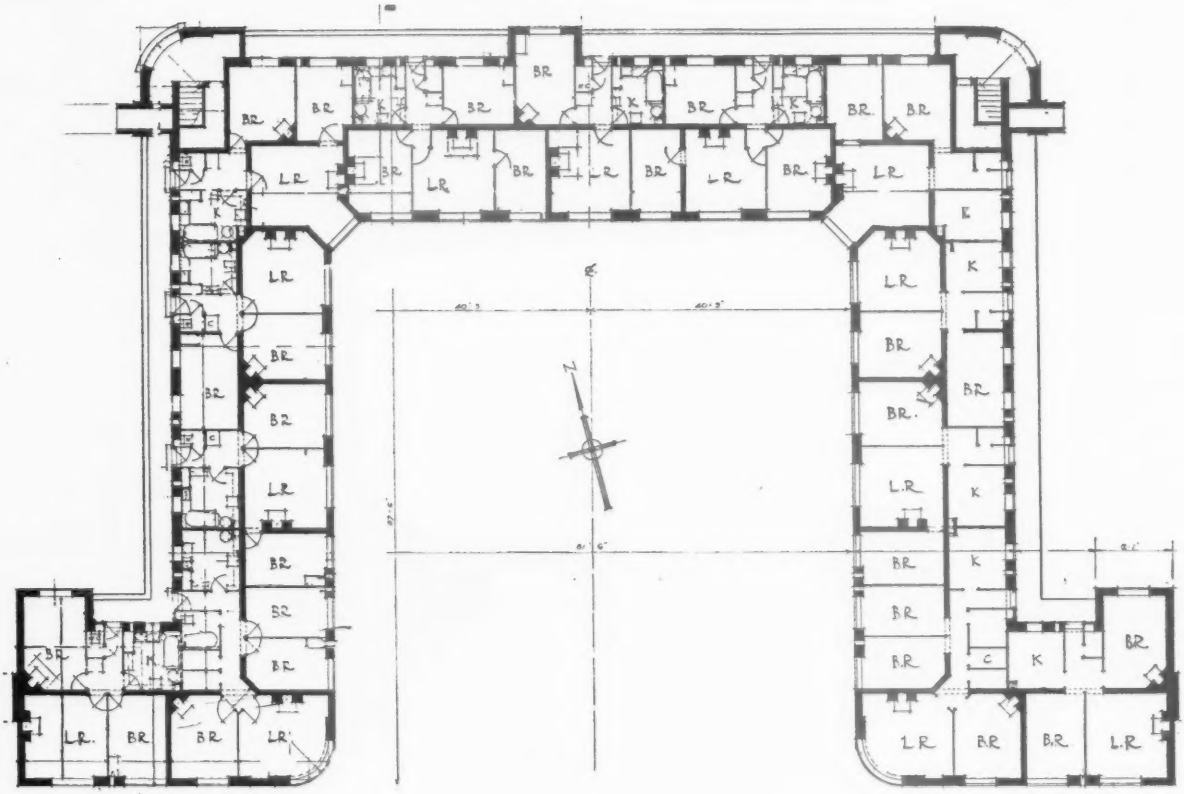
E. P. WHEELER

Architect to the L.C.C.

FLATS AT CLAPHAM PARK, S.W.



The photographs show: left, part of the rear elevation; above, the centre feature of the south front facing the larger quadrangle. On the facing page is a close-up of the balcony treatment at the west end of the main front.



TYPICAL FLOOR PLAN

BY E. P. WHEELER, ARCHITECT TO THE L.C.C.

FLATS AT CLAPHAM PARK, S.W.

DESIGNED BY E. P. WHEELER
Architect to the L.C.C.

ELEVATIONAL TREATMENT.—*The main elevations are faced with multi-grey bricks, with red dressings to the windows, the whole designed in the form of alternating bands of coloured brickwork. The reinforced concrete balconies and the top storey of the buildings are rendered and coloured cream. The steel windows are painted light green. At the rear of the buildings the base and balconies are in multi-grey bricks, with red brick walls behind the balconies. The capping to the balconies is red brick on edge. Doors and windows are painted light green. The roofs are flat and are asphalted.*

PLAN.—*The lay-out is in the form of two open quadrangles so that the living-rooms generally have a southerly aspect and overlook the street. The dwellings are five storeys high, with the top storey and the one below designed as two-storey maisonettes. The total accommodation comprises* 185 *flats, of which 25 have two rooms, 113 three rooms, 42 four rooms and 5 five rooms, housing approximately 900 persons. In the top floor there are, in addition, to the bedrooms of the maisonettes, ventilated rooms, accessible to all the tenants, for drying domestic washing. Each flat has a kitchenette equipped with a larder, a dresser, shelving, and a copper from which hot water is supplied to the bath.*

The photographs show : above, part of the south-west front ; right, a refuse bin. Each bin serves six flats, and is fitted at ceiling level with a slide, which closes the downpipe from the chutes while the bin is being emptied.

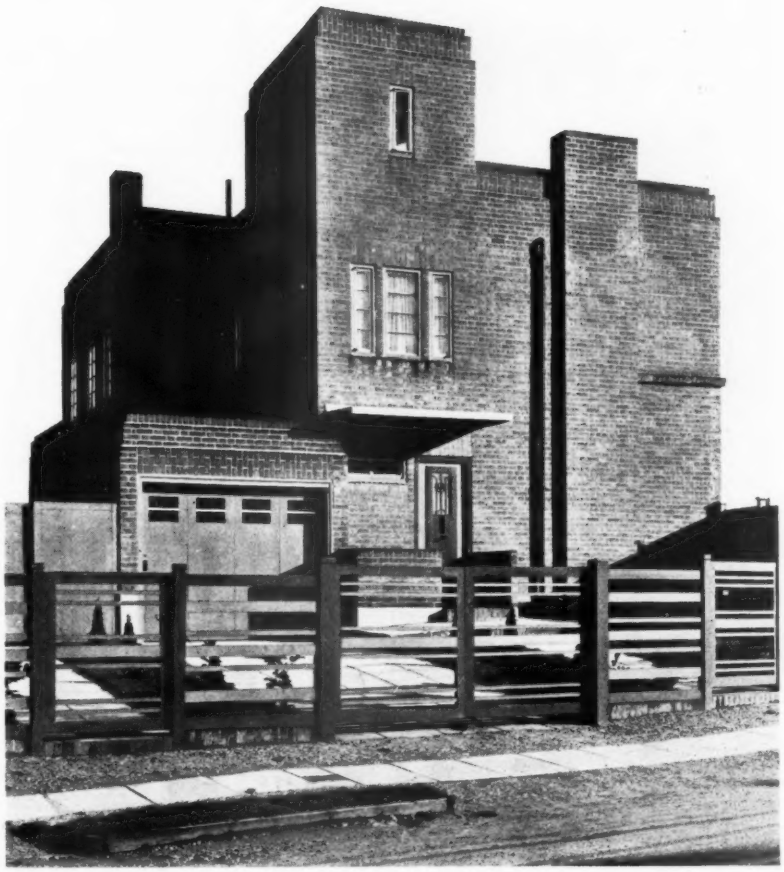
For list of general and sub-contractors see page 569.

RENTS.—*The estimated rents, including rates and water charges, are as follows, the net rents fixed by the Council being indicated in brackets :—*

Two rooms—9s. 6d. to 11s. 3d. (7s. 3d. to 8s. 6d.);
Three rooms—12s. 6d. to 14s. 9d. (9s. 3d. to 11s.);
Four rooms—14s. 6d. to 17s. 6d. (10s. 9d. to 13s.);
Five rooms—17s. 6d. to 20s. 6d. (13s. to 15s.).

HOUSE AT HENDON, MIDDLESEX

DESIGNED BY HAROLD ALEXANDER



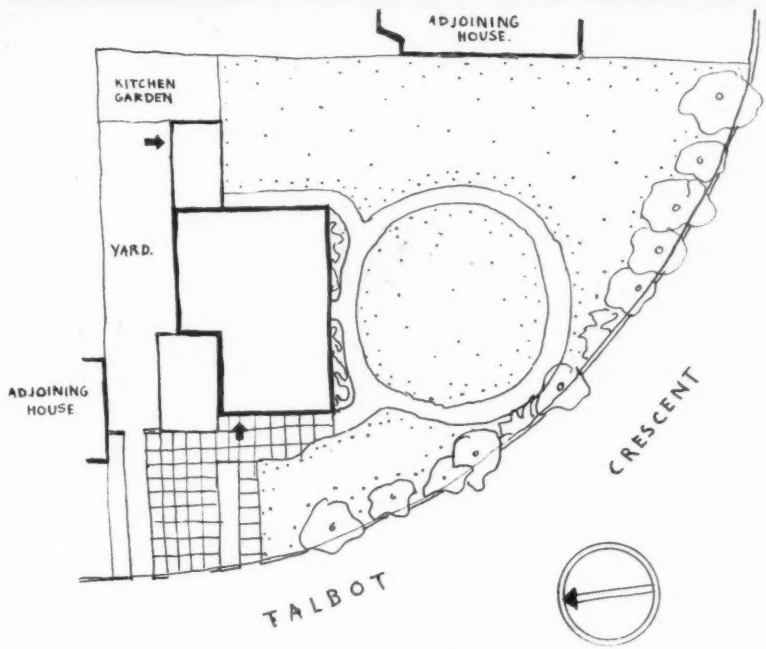
SITE.—*Of unusual shape and situated on a sharp bend in Talbot Crescent. The house was set over as far as possible towards the northern boundary to obtain the maximum amount of sunlight from over the houses on the opposite side of the road, and to secure the largest amount of garden space.*

PLAN.—*To minimise waste of space, at the same time providing ease of access to each part of the house. This regulates to a large extent the arrangement of the reception rooms. The lounge is entered direct from the entrance hall and in turn gives direct access to the dining- and sitting-rooms. This arrangement allows of easy management when entertaining, as the kitchen is approximately within equal distance of each room. A service-room between the kitchen and the lounge prevents cooking odours from entering the reception rooms. This service-room has a door to the garden from which a paved path leads to the lawn, where tea can be served with a trolley. The staircase gives access from the first floor to the flat roof. All the principal rooms face due south and their windows are glazed with special glass.*

CONSTRUCTION.—*External walls are brick, 9 ins. thick; internal walls partition blocks. The external walls are heavily rendered with cement and sand gauged with a strong proportion of waterproofing compound. The surface concrete and foundation concrete also have a mixture of waterproofing compound.*

ELEVATIONAL TREATMENT.—*Sand-faced multi-coloured bricks with red brick arch, parapet and string courses, and standard metal windows in wood frames.*

The photograph is of the entrance front.

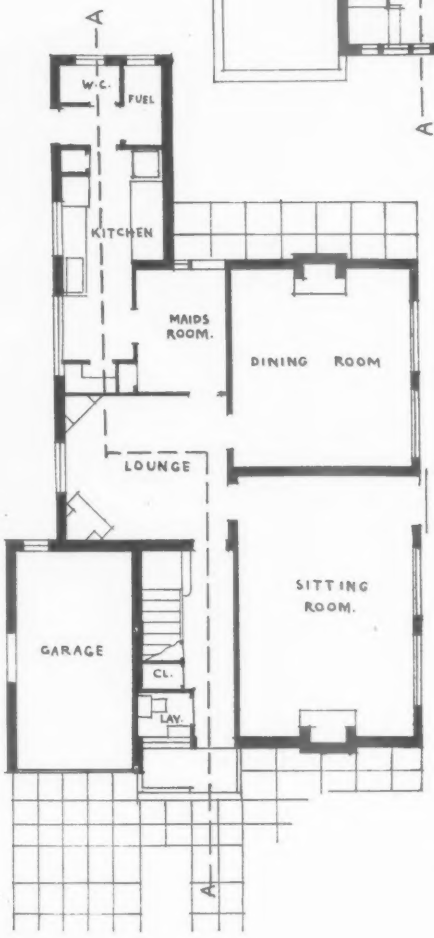


SITE PLAN

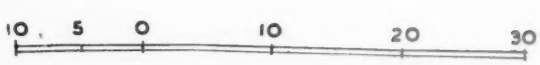
HOUSE AT HENDON, MIDDLESEX:

The photographs show: above, the sitting room; below, the kitchen.

FIRST FLOOR PLAN



GROUND FLOOR PLAN



DESIGNED BY HAROLD ALEXANDER

INTERNAL FINISHES.—*All the walls and ceilings are lined with plasterboard, finished with two coats of hard plaster. All the rooms, except the kitchen quarters and the maid's bedroom, are finished with several coats of oil paint with a stippled surface to distinctive colour schemes in each room.*

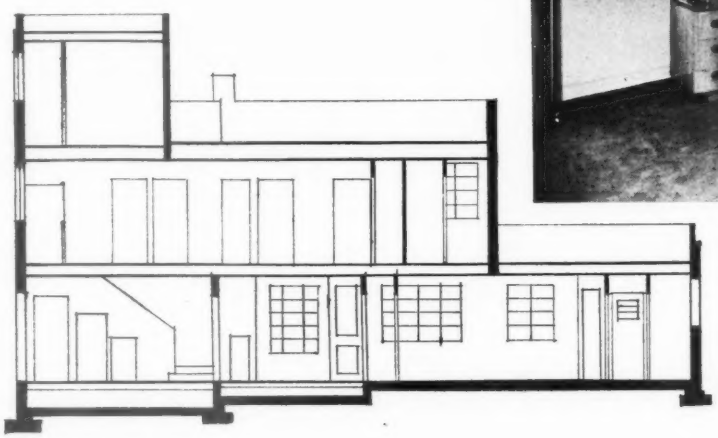
The sitting-room, dining-room and lounge have different decorative schemes, but are designed to harmonise as a suite. In each of these rooms the fireplace has a terrazzo surround and hearth and is arranged for use with electric, gas or coal fires. In the lounge a flush built-in angle cocktail cabinet balances the angle fireplace. The cocktail cabinet is lined with black and green mirrored glass with black shelves and chromium rails. In the dining-room the fireplace has a surround of mirror and reeded white glass.

The whole of the flooring to the ground floor, except the kitchen quarters, is finished in English oak strip flooring, lightly waxed. The kitchen has a dresser, cabinet fitment, and working table, all of which are built-in. The sink is provided with a specially large draining-board.

In the bathroom a mirrored figured glass in amethyst, rose and blue lines the bath recess, and there are built-in cabinets on the opposite wall. The lighting is flush in soffits over the bath, the basin and the cabinets. The floor finish is rubber. All the doors are flush surfaced and painted, and have chromium-plated door furniture.

In every room the furniture, curtains, carpets and electric-light fittings have been specially designed and made in order to harmonise with the decorative schemes. The photographs show : above, the lounge ; below, the principal bedroom.

For list of general and sub-contractors, see *page 569.*



SECTION A—A.

Three typical underfeed type stokers.

SOLID FUEL FIRING

[*BY AKRON*]

ECONOMY of the use of solid fuel, depends to a large extent on the methods by which it is employed, and the labour question involved in hand-firing central-heating boilers is a considerable factor. Where the type of building demands the attention of a regular staff, hand-firing is not a very considerable item, but it is obvious that, with labour costs at their present high level, a hand-fired installation must be assessed not only on the cost of fuel but also on the cost of the labour necessary to operate the plant. The mechanical stoker, however, reduces these labour costs to a minimum.

There is, however, another reason why automatic firing with solid fuel has been developed and that is that a mechanical appliance can naturally feed the fuel with greater precision and thus more exactly fulfil the needs of combustion than is possible with hand-firing methods, and this greater precision in controlling the fuel feed and air supply results in a higher efficiency of operation and in the extraction of a greater quantity of heat from the money unit of fuel. Thus mechanical methods save money by saving labour and increasing efficiency. It need hardly be added that, owing to the increased control of combustion provided by the automatic equipment, waste of fuel in terms of smoke is entirely obviated.

These mechanical coal-burning appliances can be controlled by thermostats to give the entire installation complete flexibility and, being self-feeding, they can be left for many hours at a time without the slightest attention being needed. Moreover, the safety of solid fuel for storage makes it eminently suitable as a source of energy in plant design to run by itself without human supervision. The more perfect combustion provided by these machines means an increasingly smaller residue being left for clearing; ash disposal is a very simple matter and is considerably assisted by the fact that, in the majority of these appliances, it is fused by the heat of the fire into a ring or form which is easily removable.

There are, roughly speaking, four main types of stoker suitable for the small or medium-sized building. The first may be described as the underfeed type, and works on the principle of feeding high volatile coals to the firebed by thrusting them up from beneath. The thrust is usually supplied by a spiral conveyor. With this machine, the tarry constituents of this type of coal are distilled off by the fresh fuel becoming heated as it approaches the firebed, and this volatile matter, which would otherwise tend to produce smoke, is burnt in its passage through the firebed.

The second type consists of a mechanical device for sprinkling the fuel evenly across the firebed. For buildings in confined areas, where smoke must of necessity be reduced to a minimum, this type of equipment should be used with a low volatile coal, though even with high volatiles, owing to the small amount of fuel that is served at each charge and the intense surface heat of the firebed, very little smoke is given off.

Gravity fed type, with blower.

The second type can be attached very satisfactorily to shell type boilers (perhaps better appreciated by architects when described as Lancashire boilers) and thus are also used for large installations as well as small. The underfeed principle is, however, particularly suitable even for very small sectional boilers provided that the fire bars are left out of the base of the boiler to allow for the admission of the pot or retort through which the coal is fed.

The third and fourth types operate on the principle of burning very low volatile fuel or smokeless fuels, such as anthracite or coke, by feeding them through a hopper or funnel, either on to an inclined plane or wedge formation, through which a forced draught is supplied. With these types of equipment combustion takes place below the neck of the funnel, and fuel is automatically fed by gravity. The firebed maintains the weight of the fuel above it in the funnel until it is burnt to ash, when the heavier fuel falls down and by displacing the ligher ash, automatically replenishes the fire. Whereas in types one and two the speed of combustion is controlled mechanically on both fuel feed and air supply, in the third and fourth types it is controlled by the amount of draught supplied to the fire only. The third type are usually described as gravity-fed burners and these are virtually water-jacketed fireboxes suitable for fitting in front of the actual boiler. With this type, only partial combustion of the fuel takes place in the burner proper, and complete combustion of the gases is effected on their entry into the boiler furnace where, through the admixture of a further supply of air under pressure, they burn as a bright smokeless flame.

The fourth type, usually referred to as the gravity-fed boiler, naturally gives entire combustion in the gas passage of the appliance. While burners can be fitted to existing boilers, the fitting of a gravity-fed boiler to an existing circuit means scrapping any existing boiler plant.

Such has been the success of mechanical stokers that there is a growing demand for this equipment even in the smallest households. One firm has recently produced an ingenious arrangement of feed hopper that can be connected to the ordinary kitchen boiler, suitable for the five- or six-roomed house. This hopper, together with a small electric fan controlled by a thermostat, is claimed to give trouble-free automatic stoking over long periods without attention. The magazine boiler and gravity-fed burner are also produced in sizes small enough to make them worth the very serious consideration of architects responsible for the smaller house. For one such installation, serving central heating and domestic hot water supply, the total amount of attention required was only 22 hours in the 365 days' firing considered under actual working conditions, that is to say, for less than an average of one quarter of an hour every four days. This installation ran itself automatically throughout the year, and represents an enormous advance in labour saving over any hand-fired appliance, and, moreover, by providing smokeless combustion and the unequalled economy resulting from the scientific use of the cheapest fuel obtainable, it bears favourable comparison with alternative methods of heating.

TOWN HALLS

Departments *(continued)*

PUBLIC ASSISTANCE AND EDUCATION

THE public assistance department, like that of the Medical Officer of Health, should in the majority of cases be kept self-contained in the municipal group.

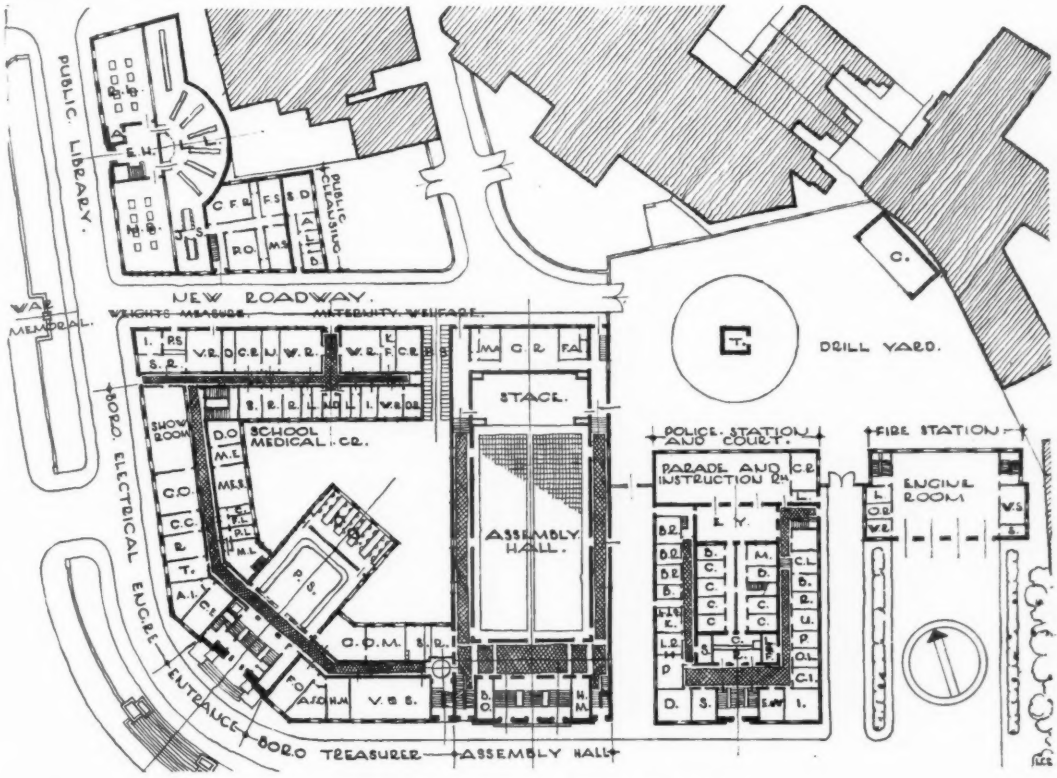
The work of the department is to see that relief, in the shape of money, milk, food or clothes, is properly given to persons in the borough who are in need.

Any member of the public who feels the necessity for relief can apply to the relieving officer of his ward; this application is usually brought before the committee, or, in cases of emergency, is granted directly by the relieving officer. If relief is granted the applicant visits the committee's office on certain appointed days.

It is the custom in most towns for the treasurer to pay all relief direct, and, if the department is disconnected from the municipal offices, care should be taken that it is not too far away from the treasurer's department.

It is not advisable to plan this department as part of the municipal building because of the large number of people that attend on certain days.

The question whether more than one relieving office should be used again presents itself (as in the case of the medical officer's clinics). It is undesirable and not at all economical for poor people to walk, or spend money on bus fares, to go four or five miles to see the relieving officer, and some large towns have split this department among various wards; other smaller towns allow the relieving officer to visit the houses of applicants and pay relief direct, though this is not a favoured system except where an applicant is unable to visit the relieving officer through illness.



TUNBRIDGE WELLS: KEY TO PLAN

WEIGHTS AND MEASURES
I. Inspector.
S.R. Standard Room.
P.S. Public.
V.R. Verification.

SCHOOL MEDICAL AND MATERNITY
D. Dark Room.
C.R. Consultation.
N. Nurses' Room.
W.R. Waiting Room.
K. Kitchen.
S. Surgery.
R.R. Rinsing and Recovery.
N.D. Nurses' Duty.
L. Lavatory.
I. Isolation.
D.R. Dressing.

BOROUGH ELECTRICITY
G.O. General Office.
C.C. Chief Clerk.

BOROUGH ELECTRICITY *(cont.)*
R. Records.
T. Typists.
A.I. Assistant Engineer.
C.E. Chief Engineer.
D.O. Drawing Office.
M.E. Mains Engineer.
M.E.S. Mains Staff.
M.L. Male Lavatory.

BOROUGH TREASURER
G.O.M. General Office and Calculating.
S.R. Service Room.
V. & S. Borough Treasurer (General).
F.O. Finance Officer.
A.F.O. Assistant Finance Officer.
H.M. Housing Manager.

ASSEMBLY HALL
B.O. Box Office.
H.M. House Manager.

POLICE STATION AND COURT
B.R. Bedrooms.
K. Kitchen.
L.R. Living Room.
P. Parlour.
D. Detective.
S. Sergeant.
E. & W. Waiting and Enquiry.
I. Inspector.
C.I. Chief Inspector.
O.L. Office Lavatory.
P. Photo.
U. Uniforms.
R. Records.
B. Baths.
C.L. Constables' Lavatory.
C.R. Constables' Room.
B. Bath.
C. Cells.
M. Matron.
E.Y. Exercise Yard.

FIRE STATION
L. Lavatories.
O.R. Officers' Room.
W.R. Watch Rooms.
W.S. Work Shop.
S. Store.

PUBLIC CLEANSING
B. Bath.
L. Undressing.
A. Attendance.
M.S. Male Staff.
S.D. Disinfectant Stores.

PUBLIC LIBRARY
R.L. Reference Library.
N.R. News Room.
L.L. Lending Library.
C.F.R. Catalogues and Files.
F.S. Female Staff: Lavatories.
P.O. Librarian: Private Office.
M.S. Male Staff: Lavatory.

The department does not suffer by disconnection from the municipal offices, and the town clerk and the borough treasurer do not meet the head of the department more than once a month.

The accommodation of the department is fairly simple. It is usual to have a large waiting-room, with interviewing rooms for the relieving officers placed round it. Near the door there should be a small office for taking particulars of applicants and a room is generally required in which a committee may investigate any doubtful cases.

In a medium-sized town about one hundred and twenty people will visit the department when relief is being paid out. The waiting-room should be very simply treated.

The administrative offices do not require any special planning. Accommodation should be provided for the head of the department, his chief assistant, secretary, waiting-room, general office, relieving officers' common room, and the usual filing and storage room. If the administrative offices are planned outside the municipal offices the committee rooms should be planned with the department.

The Education Department

The Director of Education controls roughly three types of educational work. These are (or, more strictly, were): the elementary, secondary, night and technical schools; the juvenile employment exchange and labour bureau; and school attendance. Modern nomenclature of primary, post-primary, etc., covers the same divisions of educational progress.

The various schools which the town helps to support are controlled from offices planned on the usual departmental lines. The work includes supervising the provision of equipment, such as books, apparatus, and sports' gear, and organising the building and repairing of the schools, as well as generally supervising all the educational matters of the town. The layout of the department varies with the size of the town, but in a big town there should be accommodation for the director of education and his typist, rooms for officials controlling higher education, scholarships and buildings, chief assistant's room, accountant, general office, inquiry and waiting rooms, filing and store room.

About sixty people a day visit the administrative offices of a medium-sized town to make inquiries.

The real problem in planning this department is the placing of the juvenile employment and school attendance sections.

The juvenile employed are in the charge of the local authorities until they reach the age of eighteen, and it is part of the director of education's duties to find work for them and generally watch over them. The juvenile employment section may be planned on the lines of a labour exchange.

The boys' and girls' sections should be kept separated, each side having a large covered waiting room capable of holding about sixty people. From this waiting room the juveniles go into the interview room. The boys and girls should not have to go back through the waiting room after they have been interviewed. It is desirable to have exits directly from the interview rooms to outside the building.

Every effort should be made to avoid any confusion, and the working of the department should be obvious to any applicant.

The boys' and girls' sides should be separated as widely as good supervision will allow.

The waiting rooms should be easily supervised from the interview room. A glazed screen is useful for this purpose.

Different officials have various methods of arranging the interview room. In some cases, the officials sit at tables and deal with the boys and girls; while in other towns there is a long counter across the room, and the interviews are held across the counter.

Where the officials sit at tables for their interviews, a separate counter or hatch is usually provided for the use of the treasurer's assistant when paying out money.

School Attendance

The attendance of children is checked by inspectors who investigate any case of absence they consider to be wrong.

The local authorities have power to summon parents whose children are absent from school without reason. It is customary for local authorities to allow the parents to plead before they are summoned, and provision must be made for a waiting and an interviewing room for this purpose.

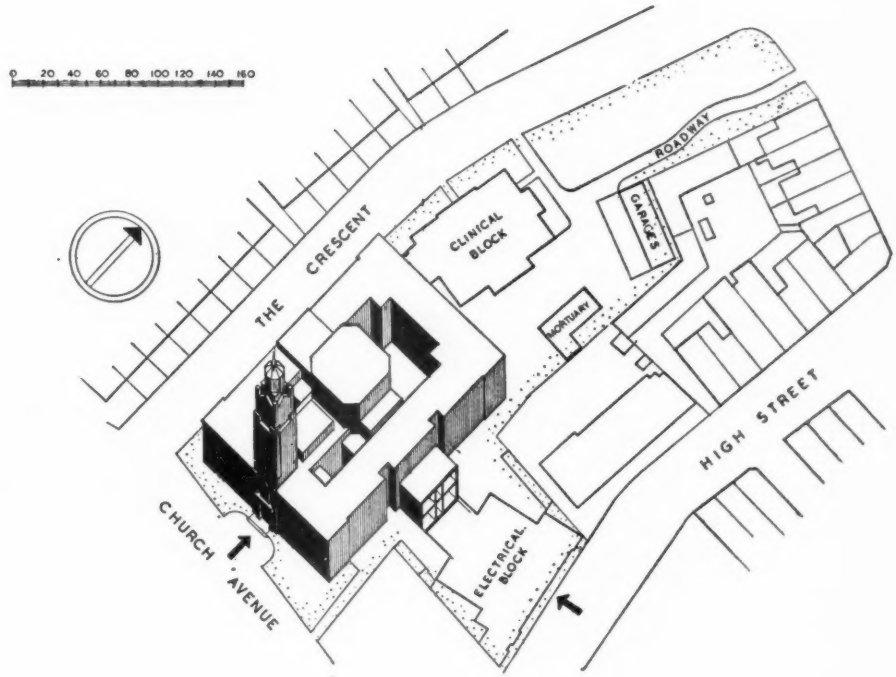
These rooms can be approached by the same entrance as the juvenile employment exchange. The waiting room should be big enough to contain about twenty people. A sub-committee of about five, and one or two officials usually interview the parents.

It is undesirable for perhaps one hundred and fifty juveniles and twenty parents to enter by a main office entrance, and the entrances to the juvenile employment and the school attendance sections should be placed in an inconspicuous position on the site. It is, however, necessary for the juvenile employment section and the school attendance section to be attached or close to the education office, because sub-committees from the main education committee work in the juvenile employment and the school attendance sections, and it is undesirable for sub-committees to have to meet in isolated parts of the town. The school attendance officers should be in touch with the administrative office and their interview rooms. The school attendance officials are usually out visiting their districts, and their office may be regarded as a convenient place for them to foregather and discuss business. The office should be provided with a desk and a small filing cabinet for each official.

The education department need not necessarily be attached to the town hall. The education officer seldom has to do business with the town clerk or treasurer. These officials may meet perhaps once a month.

TOWN HALLS

BECKENHAM • *By Lanchester and Lodge*



BECKENHAM

Urban District in Kent, immediately outside the Administrative County of London.

POPULATION

1921 Census	*33,345*
1931 Census	*43,832*
1934 (estimated resident population)	*60,503*

RATEABLE VALUE AND RATES

Rateable value (April 1934) ... £652,231
Local rates (1934-35) ... 8s. 2d. in the £

SIZE OF HOUSES

Average size of occupied dwelling (1931) ... ... 6·40 rooms

PRINCIPAL OCCUPATIONS

N.B.—Persons "Out of work" are included in the occupied. "Unoccupied and Retired" are shown separately.

Figures are from 1931 Census returns and relate to males and females aged fourteen years and over.

Only those occupation-orders in which more than a thousand males or more than a thousand females were placed are shown separately below, and the order "Other and Undefined Workers" has been ignored.

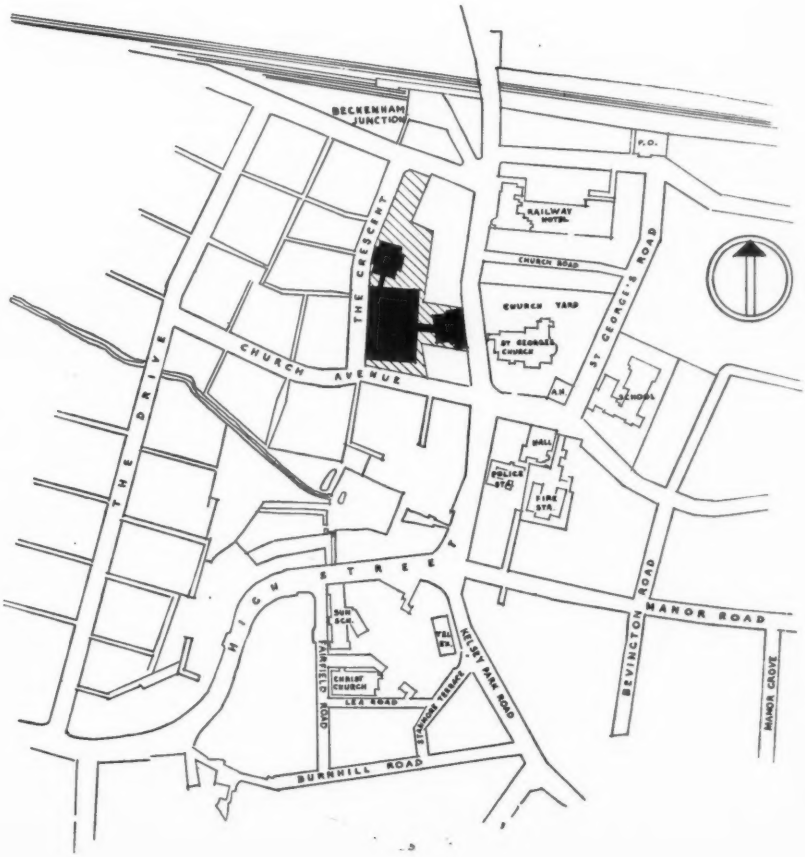
The total of occupied persons of each sex is, however, indicated above the figure for "Unoccupied and Retired."

MALES

Commercial, etc. (excl. clerks)	*2,838*
Clerks, draughtsmen, typists ...	*2,818*
Occupied	*13,599*
Unoccupied and retired ...	*1,757*

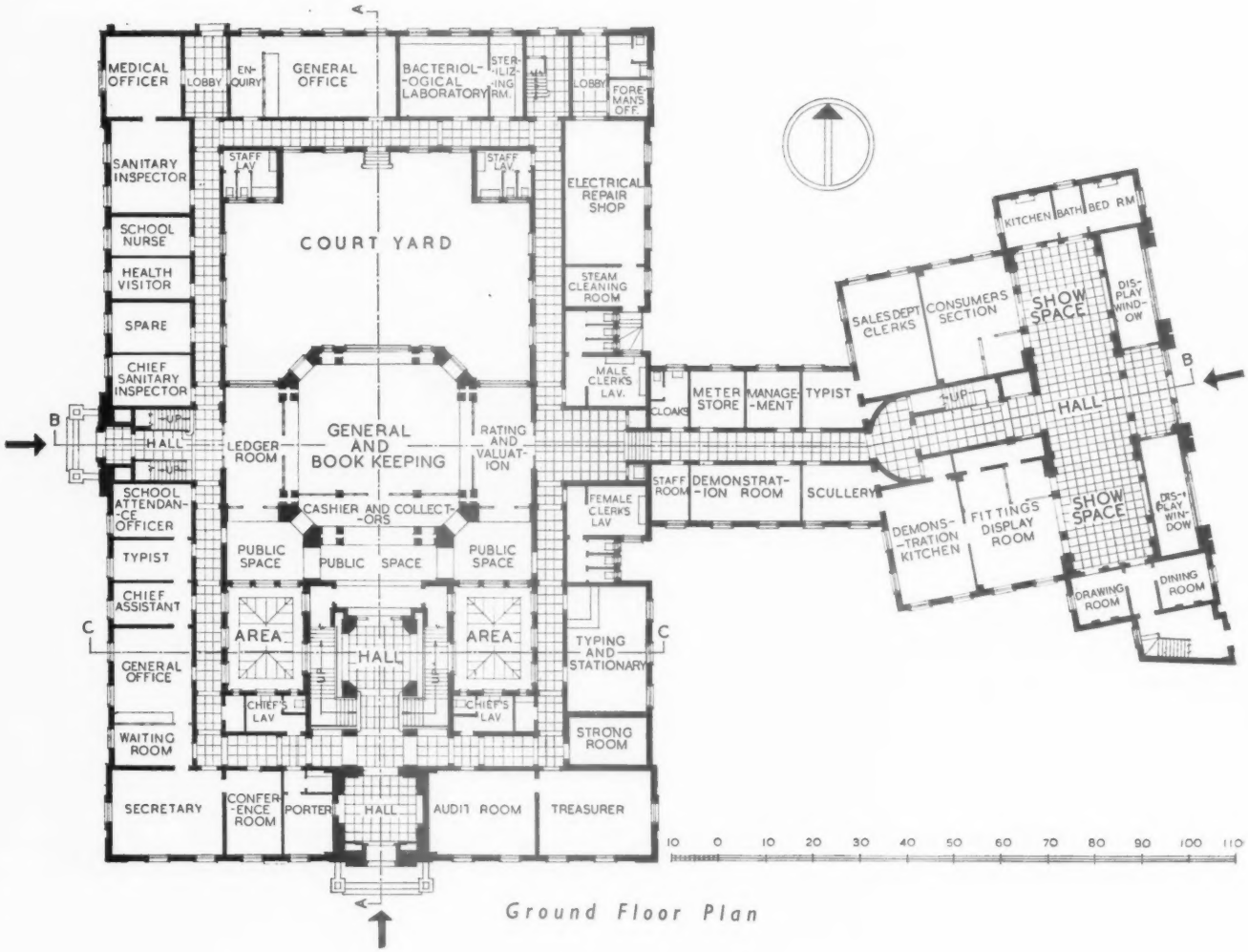
FEMALES

Personal service	*3,574*
Clerks, draughtsmen, typists ...	*1,745*
Occupied	*7,380*
Unoccupied and retired ...	*13,379*

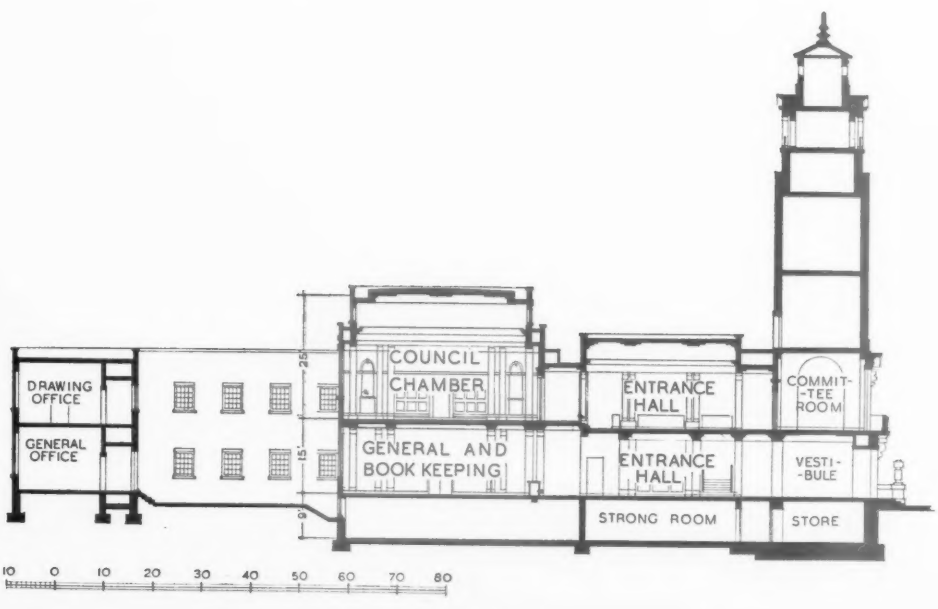


TOWN HALLS

BECKENHAM • By Lanchester and Lodge



Ground Floor Plan



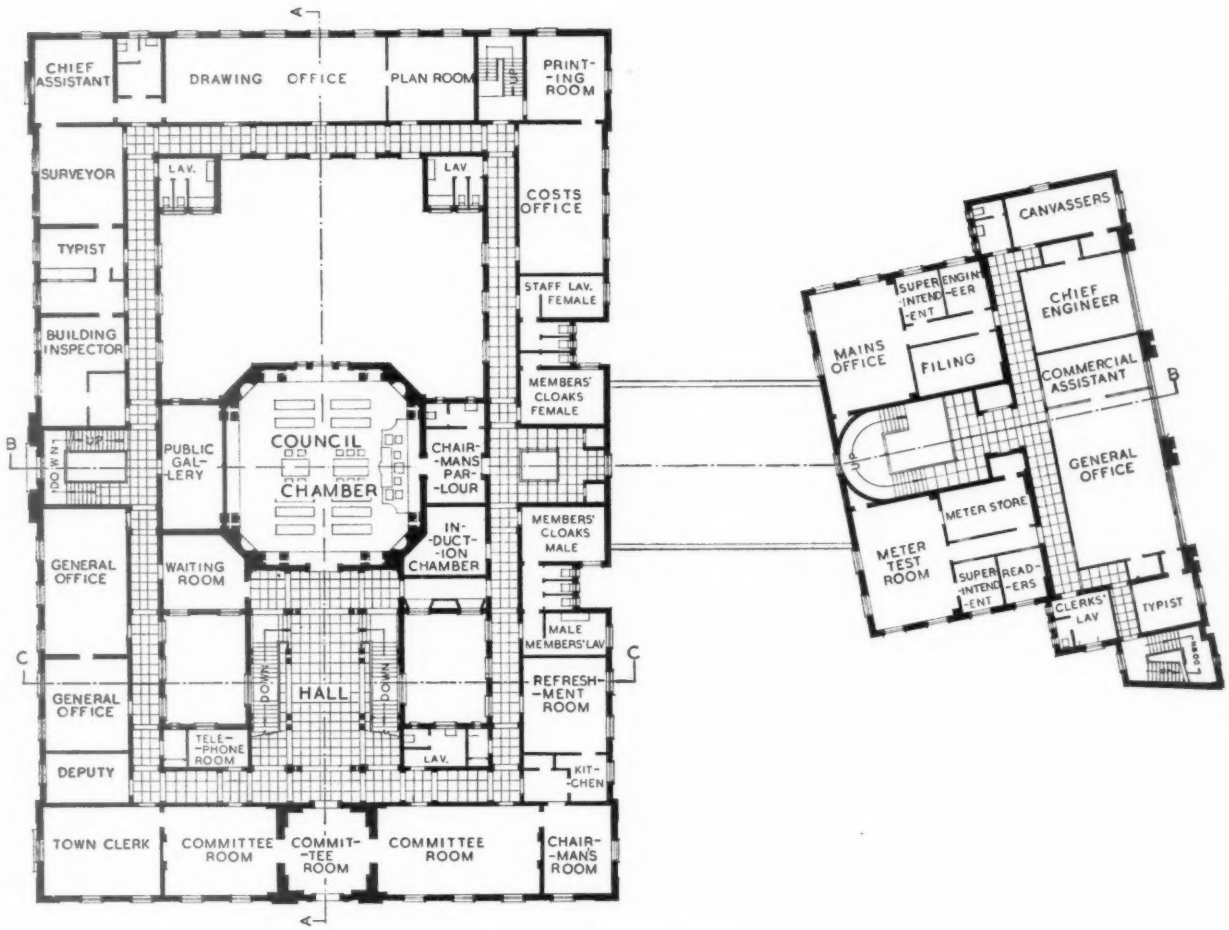
Section A—A

39

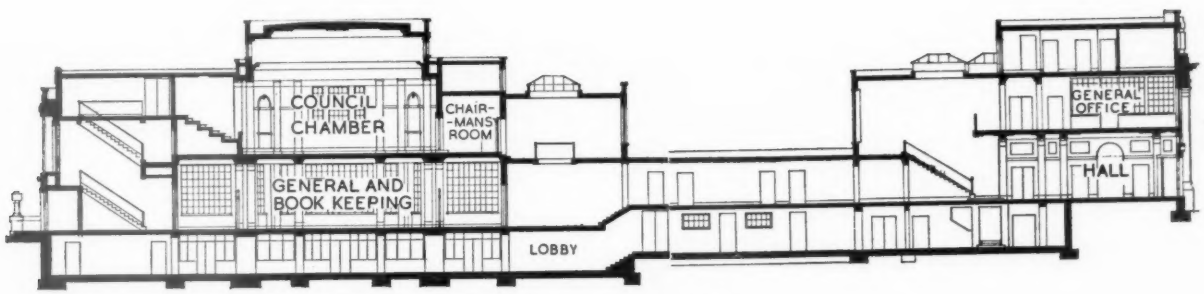
TOWN HALLS

The Architects' Journal Library of Planning

BECKENHAM • *By Lanchester and Lodge*



First Floor Plan

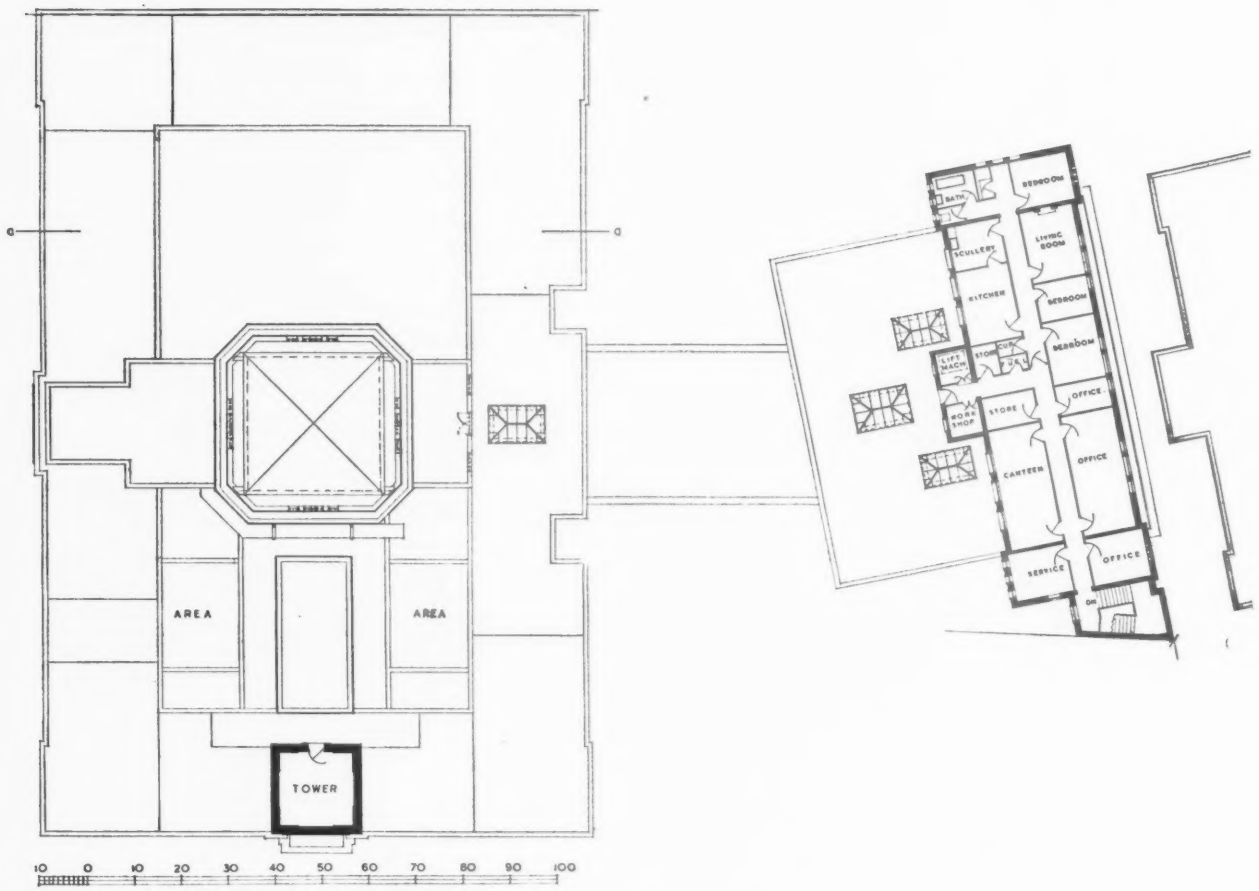


Section B—B

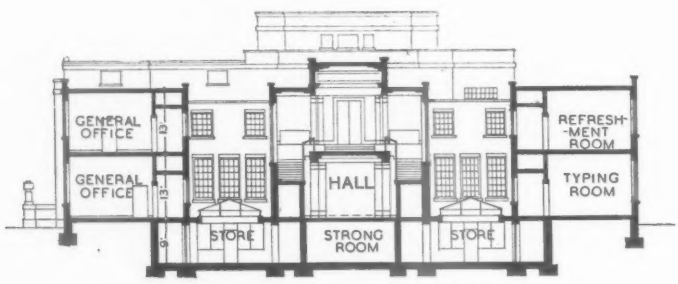
TOWN HALLS

The Architects' Journal Library of Planning

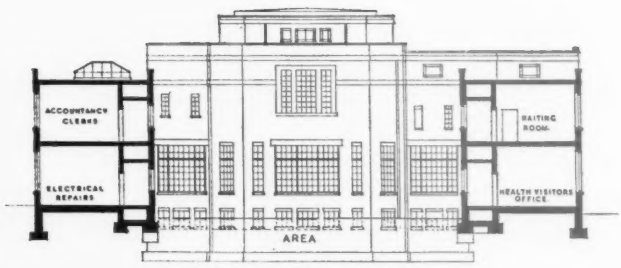
BECKENHAM • *By Lanchester and Lodge*



Second Floor Plan



Section C—C



Section D—D

A nursery designed by Pierre Vago, Paris, in collaboration with R. Drouin. Cost: approximately £40. The walls are painted sky blue and the floor is covered with blue rubber, curving up beneath the built-in fitments, with a high-piled white carpet. Lighting is from a central suspended globe. The built-in cupboards are of natural poplar, the sliding doors having panels of blue rubber in poplar frames. The armchairs and table are also in poplar, the former with cushions of sky blue and blue, the latter with an inlaid top of blue rubber. From "Decorative Art."

L I T E R A T U R E

AN ANNUAL PUBLICATION

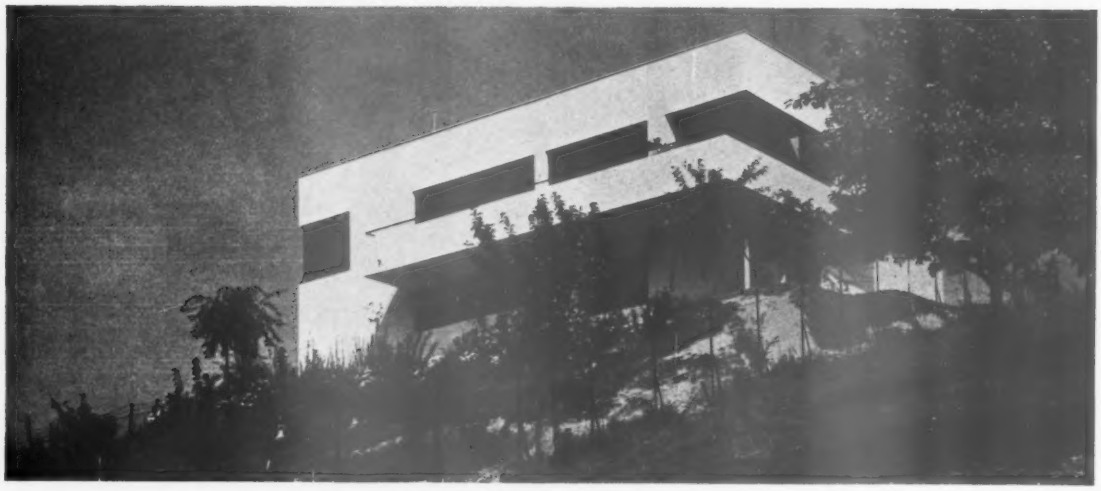
BY HERBERT BORTHWICK

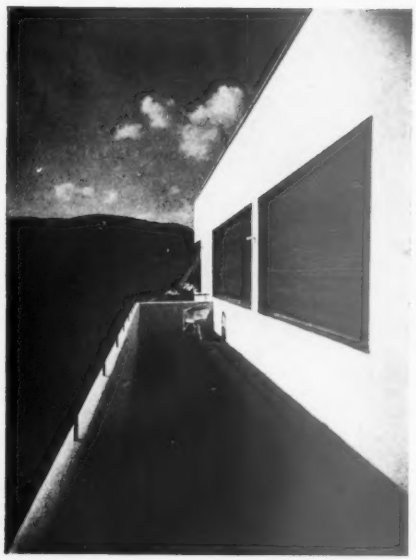
Decorative Art. The Studio Year Book, 1936. London, The Studio, Ltd. Price 10s. 6d.

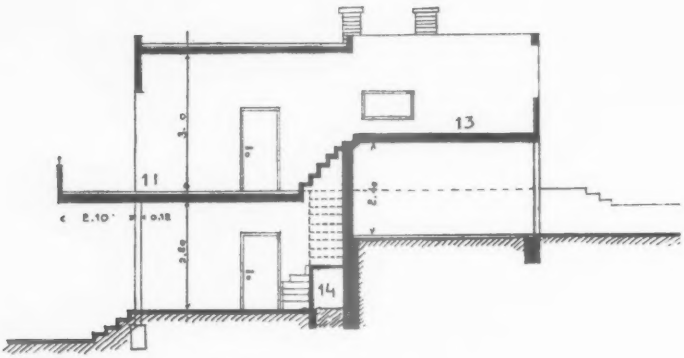
ON the first day of spring I took an afternoon walk all over Hampstead Heath and meditated on architecture, man and nature. Though I live close to Lawn Road, I had never seen the famous Wells Coates flats, so I made my outward journey that way. I knew roughly what to expect, but in truth the Lawn Road flats did not attract me as homes: that day they looked grim and forbidding. So on, by Savernake Road, dingy, Victorian, cheap, abominable. "Better Lawn Road than that, anyhow." Then over the back of Parliament Hill, taking pleasure, as always, in the big blocks of concrete flats overlooking Highgate Ponds. "Why so much better?" I queried; and answered: "Because relieved by water and gracious trees." So on again, by Ken Wood and the Spaniards to Heath Street, where are to be found lovely, gentlemanly, reticent Georgian houses in dark red brick. "Perhaps best of all," was the mental comment.

This trivial personal record is relevant to a consideration of *Decorative Art.* Reinforced concrete is a grand new toy for the architect, and he is playing with it for all he is worth. As these varied and well-chosen illustrations show, he can produce from it admirable asymmetrical patterns, built up of clean planes, large windows and wide loggias. But is it suited to English climate and English landscape? One sometimes

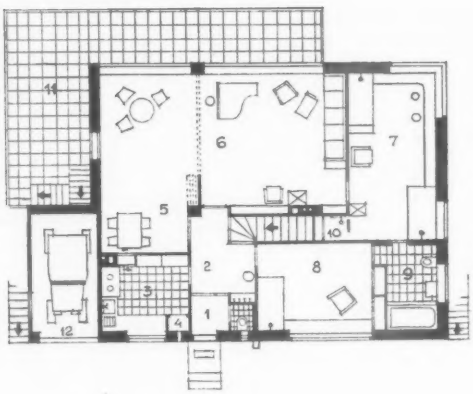
HOUSE IN BUDAPEST







SECTION



KEY TO PLAN

1 : Entrance
2 : Hall
3 : Kitchen
4 : Safe
5 : Dining Room
6 : Drawing Room
7 & 8 : Bedrooms
9 : Bathroom
10 : Cloaks
11 : Terrace
12 : Garage

DESIGNED BY ZOLTÁN KÓSA

SITE.—*Situated on the Szecher Road, Budapest, Hungary.*

FOUNDATION AND CONSTRUCTION.—*Reinforced concrete; a strongly sloping site has enabled an additional floor to be built at the garden side, below that which faces the road; five terraces round the house afford shelter and sunlight at all seasons. A balcony, 2 metres wide and 10 metres on its longest arm, takes in the back and side of the house, and is supported only by a single steel column at the corner. The roof is constructed in terraces, and carries a rainwater tank. The windows are eight-metre horizontal strips, with sliding windows of the accordion type. The house includes, on the main floor, five rooms, garage and offices and, on the lower floor, the gardener's flat. The illustrations show top, the garden front and terrace; a detail of the balcony.*

The illustrations on this and the facing page are from "Decorative Art."

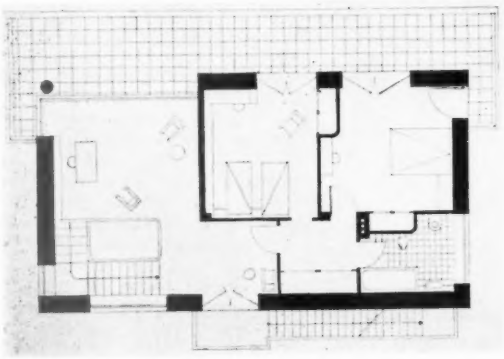
HOUSE IN ATHENS

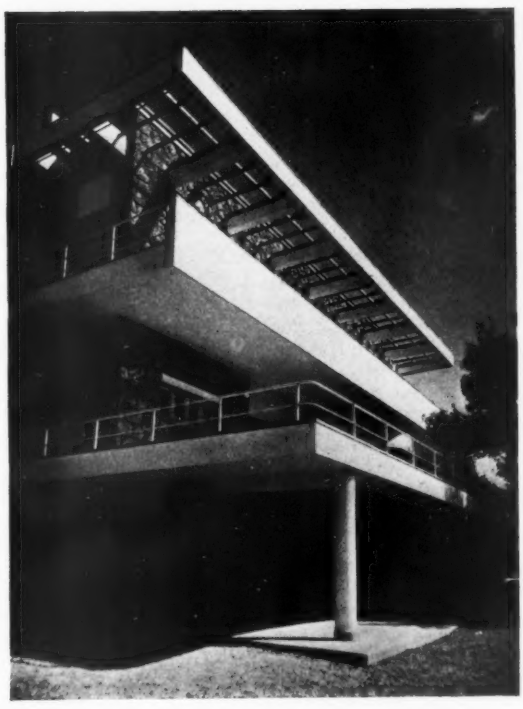
SITE.—*Situated in a suburb of Athens.*

CONSTRUCTION.—*Reinforced concrete combined with outer walls of stone and inner walls of brick. The stone masonry is random rubble, and the concrete finished with a mixture of marble and white cement. The flat roof is covered with concrete and asphalt on an insulating layer of cork. The doors and windows have wooden frames, and are equipped with wooden roller shutters as a protection against the sun.*

ACCOMMODATION.—*The house consists of a ground floor and first floor, of which the former contains the entrance hall and living-room, a study, the kitchen and the maid's bedroom, the latter two bedrooms, the bathroom and a studio. Advantage has been taken of the fall in the site to house a garage below the ground floor, together with the central heating boiler, a laundry and a store-room. The plan is of the first floor.*

COST.—*Approximately £1,100.*





DESIGNED BY P. MICHAELIDES AND T. VALENTIS

wonders. The editorial introduction to this book finds that "the modern architectural plan is at its best in urban schemes." If the Editor here alludes to reinforced concrete construction, my own conclusion is the exact opposite. I have seen the new architecture rising up in the birthplace of its father, Le Corbusier—in Neuchâtel, and where it was set among big chestnuts it was seemly, because it does definitely need relief to its severe lines and uncompromising texture. There is a strong case for brick in England. *Decorative Art* states the concrete case, but leaves out brick entirely this year. A glance at Holland might have been salutary.

Passing on to interiors, furniture, glass, pottery, fabrics, and so on, one finds, as is usual in this annual, much that is stimulating and suggestive. Broadly, the "functionalist" danger is that in eliminating fuss and bad ornament the new movement in design often inclines to trip over the cardinal point in its own philosophy. If, by using curved metal instead of four wooden legs, you produce a chair that makes everyone cold, and falls over into the bargain if not carefully sat in, then you aren't "fulfilling your function" at all. I myself have a plain modern bedside bookcase that, in the words of the popular song, is "lovely to look at, and lovely to see," but its two top shelves will hold only the smallest duodecimos, and are hence well-nigh useless. There is one illustrated (on p. 88) which would certainly necessitate getting out of bed to select a book. And the same bed, being fixed against a wall, would be very hard to make. Chairs in which one could not lean back (p. 125), sofas difficult to lie on (p. 94), tables with cross-bars that bark your shins (p. 85) —these are things to eschew, however tempting they may be as formal designs.

Decorative Art, none the less, abounds in material that is both useful and beautiful. The world has been ransacked for work that shows ideas. No part of the house is neglected; even the formerly humble kitchen has its section (and a very good one, too); nor are the needs of the children forgotten. A practical step has been to include prices of certain schemes. These tend to remain on the high side, as witness a very simple bedroom that costs £80. It would be a work of utility and beneficence if *The Studio* would include a section for the £500-a-year man; and it could be done, too.

The standard of lay-out and reproduction is the high one we expect from this house. But there are some typographical peculiarities that should not pass; for example, the Contents page is badly aligned, and, more serious, page folio numbers are placed just anywhere, and often omitted entirely.

A small house in Budapest. Architect, Joseph Fischer. Situation: a levelled plateau on a steep incline, with a view to the north over mountains and pine forest, and to the east over the Danube and the city. Cost: approximately £500. Foundations: concrete. Construction: reinforced concrete walls and floors, with a 5 cm. insulating layer of compressed reeds between the bedrooms and the terrace. The roof is of double planking, covered with tarred felt and an 18 cm. layer of clinkers; and the doors are solid unpanelled wood. The windows are double, with steel exterior and wooden interior frames. From "Decorative Art."

LAXTON'S

1936 Laxton's and Lockwood's Builders' Price Book. Edited by P. T. Walters, F.S.I., London: Kelly's Directories, Ltd. Price 10s. 6d.

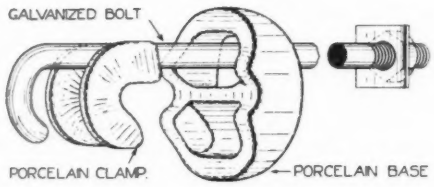
LAXTON'S Builders' Guide and Price Book has made its one hundred and nineteenth annual appearance. This compact work, which might be called the "Builders' Bradshaw," is full of information concerning prices of building work and fittings, divided into trade sections. The current edition includes the standard rates of wages for the building trades of England and Wales, including the re-gradings, which came into force on January 1, 1936, as well as the revised regulations and charges of the Metropolitan Water Board. There are tables and memoranda and scales of architects', surveyors', auctioneers' and estate agents' professional charges. A section of forty pages is devoted to legal notes, revised in accordance with recent decisions of the Courts.

One of the most useful lists is that giving trade names for proprietary materials and fittings, with names of manufacturers. It appears unusually comprehensive and contains nearly 11,000 titles. Y.

Private Enterprise

Sir Kingsley Wood, the Minister of Health, received a deputation recently from the National Federation of House Builders. The deputation was introduced by Mr. Frank Williams, the President of the Federation, and some 60 committee members representative of builders throughout the country were present. The object of the deputation was to explain to the Minister the effects upon building by private enterprise and the investment of money in house property of the large-scale housing operations now being undertaken by local authorities. Mr. N. McKellen suggested that local authorities have an enormous advantage over private builders owing to their ability to borrow at lower rates of interest and for longer periods, with the result that they could erect houses to rent at lower rates than was possible for private enterprise. The Federation felt that the local authorities should not commence to build until it had been shown that private enterprise was incapable of meeting the demand. They therefore suggested that no new houses should be erected by local authorities until a survey had been made of vacant houses in the various districts. The Federation recognized that local authorities had to provide housing accommodation at rents which the poorest could afford to pay, but they felt that assistance could be given for this purpose in some other way than by subsidizing the houses themselves.

The Minister said, in his reply, that since the withdrawal in 1932 of the general subsidy provided by the Housing Act of 1924, the output of houses by private enterprise without any form of State assistance had surpassed expectations and beaten all records; 207,000 such houses were built in the year ended March, 1934, and this figure was increased to 286,000 in the year ended March, 1935. The Government's decision to withdraw the subsidy had, therefore, been amply justified. It was true that the great proportion of these houses had been built for owner-occupiers, and this was an excellent thing from the point of view of the stability and security of the country. Houses must, however, also be built to let to meet the general needs of the population, and in this field he saw no reason why the Federation should be deterred because there was an increasing output of municipal houses. Local authorities had had the statutory duty placed upon them to build houses to let in order to remove the evils of the slums and to abate overcrowding, and in this connection they had to provide for families to whom a low rent was vital and for whom the payment of an economic rent would be a great hardship, if not an impossibility. The payment of Exchequer subsidies was made to secure accommodation on terms within the ability of the displaced tenants to pay. Local authorities were only building outside this special programme to a very limited extent in a few districts where they were satisfied that the needs of the general population were not being met by private enterprise. He could assure the Federation that it was the policy of the Government to look to private enterprise to continue to meet the needs of the general population.



TRADE NOTES

[EDITED BY PHILIP SCHOLBERG]

A Centralised Vacuum Cleaning System

THE ordinary centralised vacuum-cleaning plant, as used in hotels, shops and large blocks of offices, is familiar enough, but nobody, so far as I know, has ever installed the same thing in a private house, largely I should imagine, because the cost would be fairly high.

•

I was interested therefore to find at the Ideal Home Exhibition a firm called Centro-Vac, who are producing centralised plants which are not outrageously expensive. The system is perfectly straightforward and consists of a quite neat suction unit which can be housed more or less anywhere, and is incidentally very reasonably quiet. There remain the pipe runs and plug in points, the tubes being butt jointed with a sleeve and grub screw.

•

Cost varies from £22 for two points, to £28 for six points, each additional point costing 30s. These prices are retail, and do not include installation; on a new job, however, the work involved should not be excessive, as there are no screwed joints, and it should be possible to arrange fairly simple pipe runs.

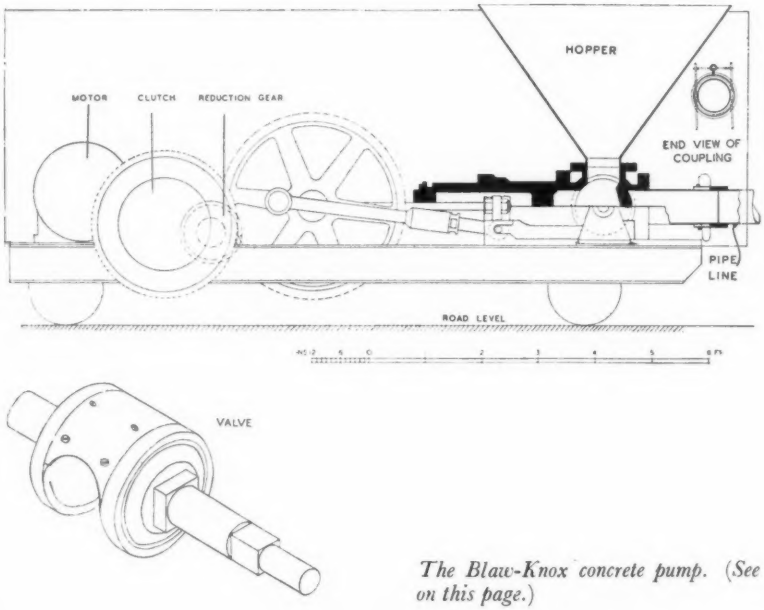
Whether or not there is a large potential demand for a system of this kind I do not know. It should provide a definite inducement to buyers of speculative builders' houses, in spite of the fact that most people seem to have an ordinary portable vacuum cleaner already. For houses of £1,000 and over, it should be well worth considering, particularly when it is remembered that a good portable cleaner costs from £15 to £20.

•

The advantages claimed for the system are ease of use and complete absence of noise, the last point being of some importance, for in many flat blocks it is only too easy to hear exactly when and where the ordinary cleaner is in use on the floor above.

Blaw-Knox Concrete Pump

For large concrete jobs a central mixing plant is the most economical and efficient means of making concrete. The problem is then to transport this concrete economically to its final position in the job. Chuting by gravity from a tower alongside the mixer was at one time considered the solution, but was never viewed with favour by engineers, because it usually meant that the concrete had to be mixed very wet to flow properly, particularly when feeding outlying parts of the job, and wet concrete is bad concrete.



The Blaw-Knox concrete pump. (See note on this page.)

A later solution of the problem is that of the concrete pump which, in its essentials, is an ordinary reciprocating pump which sucks concrete from a hopper into its cylinder and then on the pressure stroke forces it out through a pipe line.

•

The chief mechanical difficulty in the design of such a pump is that of arranging suitable valves and valve gear, remembering that concrete, while possessing many of the properties of a fluid until it is set, nevertheless contains solid matter which would put out of action any normal type of pump valve. In the Blaw-Knox pump the sleeve valve principle is used, and the edge of the valve opening is of specially hardened steel, so that any piece of stone which obstructs it when closing is crushed. The valve body (see diagram on this page) consists of a steel cylinder turned through 75 deg. by the operating gear, and partly cut away to provide a full way opening for the flow of concrete. The operating gear is arranged to provide quick opening and shutting of the valve at the beginning and end of the stroke with a stationary period between.

•

The pump may be driven by a petrol or diesel engine or by an electric motor. The pipe line is of steel, in standard lengths and bends, fitted with quick release couplings, secured by cotters needing only a hammer for operation. The pump will deliver over a horizontal distance of 600 ft. or a vertical height of 100 ft. Its capacity varies between 10 and 20 cubic feet per hour, depending, among other things, on the mix of concrete and the nature of the aggregates.

W.E.J.B.

Electrical Distribution

The pylons of the electrical grid have come in for a good deal of criticism, the overgrown telegraph poles of subsidiary lines for a good deal more. At a time when the Post Office is putting a good many of its lines underground, it seems a pity that more poles should be going up for other purposes. However, it *is* being done, and manufacturers are therefore producing the necessary equipment to meet the demand.

•

The problem of fixing a conductor to a wooden pole is not by any means as simple as it looks at first sight, and a most ingenious fitting has recently been produced by Callenders, and is illustrated in the headpiece to these notes. It is marketed under the name Callender-Brown.

•

The insulator consists of two porcelain parts, a base and a saddle, which, when clamped together and attached to a pole or other support—both operations being carried out by means of one simple galvanised hook bolt—insulate and grip the conductor. By this means the use of binding wire is entirely eliminated and consequently a considerable saving of time is effected in the erection. Furthermore the conductor can be easily adjusted for sagging by sliding it through the insulator before the final tightening of the hook bolt, thus rendering the use of snatch blocks unnecessary.

LAW REPORTS

PROPOSED ALTERATIONS—QUESTION OF CONSENT

F. W. Woolworth & Co., Ltd. v. *Lambert. Chancery Division.—Before Mr. Justice Clauson.*

THIS was an action by F. W. Woolworth & Co., Ltd., against Mr. G. E. Lambert and Mr. W. R. J. Lambert, for a declaration that in the true construction of a lease of shop premises at 18 and 19 Commercial Road, Bournemouth, which they held from the defendants, and in the events which had happened, the defendants were not entitled to withhold their licence or consent to the undertaking of certain proposed improvements and alterations to the premises. Plaintiffs also asked for a declaration that they were entitled to make the proposed improvements without any further licence or consent of the defendants.

By their defence defendants denied that the proposed alterations were improvements to which the Landlord and Tenant Act, 1927, applied.

Mr. F. D. Morton, K.C., and Mr. S. P. J. Merlin appeared for the plaintiffs, and Mr. Cyril Radcliffe, K.C., and Mr. Turnbull for the defendants.

It appeared that the premises at Bournemouth were held on lease by the plaintiffs for a term of 45 years from February 28, 1931, at a yearly rental of £3,500, until June, 1945, and thereafter at a rent of £3,750. The lease contained a covenant by the plaintiffs with the defendants "not without the previous consent in writing of the lessors to erect or to suffer to be erected upon the demised premises, nor to make or suffer to be made any structural alterations in or additions to the premises," and provided that in the event of the lessees making with the consent and approval of the lessors any further additions, alterations, or improvements to, or extensions" of the premises at any time during the said term, no fine or premium or increase of rent would be demanded for such approval.

Section 19 (2) of the Landlord and Tenant Act, 1927, contained a proviso which gave the defendants a right to grant the licence on the payment of a reasonable sum in respect of any damage to or diminution in the value of defendants' premises, and on an undertaking by the plaintiffs to reinstate at the end of the lease.

What plaintiffs desired was to connect up the present premises with adjoining premises at the rear, not belonging to the defendants, but at present occupied by the plaintiffs under a lease, and they undertook to reinstate the premises at the end or sooner determination of the term granted by the defendants.

The defendants, however, refused their consent except on the footing that plaintiffs paid defendants £7,000.

The plaintiffs refused and commenced this action. Their case was that the defendants had unreasonably refused their consent to the alterations and extensions which would be improvements from their point of view.

The case for the defence was that the alterations would seriously diminish the value of the reversion.

His lordship, in giving judgment, said here the covenant not to make any alterations was not to be read as an absolute covenant, and so far section 19 (2) seemed to apply. If it was to apply the proposed alteration must be an improvement. No doubt it would be an improvement from the point of view of the plaintiffs' business. But was it an improvement of the premises leased to them by the defendants? As tenants of that property they did not derive any advantage from the alteration, for by it they became tenants of a shell, a portion of the space of a much larger shop. In his lordship's opinion the proposed alteration was not an alteration in the nature of an improvement. But assuming it was an improvement, had the lessors unreasonably refused their consent to it. They were entitled to be paid a reasonable sum in respect of any diminution of the value of the demised premises. The premises were to be used as a first class shop. If the licence or consent were given, the effect of the alterations would be to make it impossible to use the premises as a first-class shop. To use the premises merely as part of another first-class shop would be a breach of the covenant. The nature of the premises might even be changed. Plaintiffs had to establish that the lessors' consent to the proposed alterations had been unreasonably withheld. He could not hold that it had been unreasonably withheld when they demanded a sum which they had been advised to demand and accept for damage to or diminution in value of the premises. He could not find that he had any jurisdiction to determine what was a reasonable sum in the circumstances. It was impossible to grant plaintiffs the declaration sought and he dismissed the action with costs.

DAMAGE FOR PERCOLATION

Peter Alwyn, Ltd. v. *St. James and Pall Mall Electric Light Co.—King's Bench Division. Before Mr. Justice MacKinnon.*

THIS was an action by Peter Alwyn, Ltd., costumiers, of Broad Street, W., to recover damages from the St. James and Pall Mall Electric Light Co., of Carnaby Street, W., in respect of expenses incurred by plaintiffs owing to the alleged negligence of defendants or their servants in making excavations and carrying out certain works outside plaintiffs' premises in Broad Street. W.

The plaintiffs are the occupiers of premises which stand at the corner of Broad Street and Berwick Street, and in October, 1935, the defendants, in the course of carrying out the work of changing over their electricity supply from direct to alternating current, made excavations in and under the pavement in Berwick Street and Broad Street, abutting on plaintiffs' premises. The plaintiffs' case was that during the progress of the work the defendants had wrongfully caused an obstruction in Berwick Street and Broad Street, whereby access to their premises by members of the public became impossible at certain times, with the result that plaintiffs had lost customers and profits they would otherwise have made, and on this head of claim they estimated their loss at £152. The plaintiffs further complained that the defendants in carrying out the works had failed to take any adequate precautions to avoid the accumulation of rain water in the trench and excavations which they made, with the result that water accumulated in the excavations and penetrated into the basement of plaintiffs' premises and caused damage to the extent of £182.

Defendants denied liability and pleaded that if any obstruction was caused (which was denied) the acts complained of were done under their statutory powers.

Mr. Cartwright Sharp, K.C., and Mr. Granville Sharp appeared for the plaintiffs, and Mr. Armstrong Jones for the defendants.

His lordship held that the work did not interfere with plaintiffs' business. On the other hand, as to damage from water, he awarded plaintiffs £32 2s. 0d., and he entered judgment accordingly.

BREACH OF CONTRACT—ERECTION OF HOUSE

Geddes v. *Gresswells, Ltd.—Official Referees Court. Before Mr. S. R. C. Bosanquet, K.C.*

THIS was an action by Mr. Reginald Garder Geddes, of Nursery Close, Shirley, to recover from Messrs. Gresswells, Ltd., builders, of Chelsea and Coulsdon, damages for alleged breach of contract in connection with a house which defendants built for plaintiff.

The plaintiff's case was that the house was built for him in 1929 by the defendants for £950, and that he afterwards discovered it did not comply with bylaws. He alleged that the foundations were not of the required thickness or depth and were too weak to support the walls, with the result that the house settled, cracks appearing in the walls, ceilings injured, roof tiling displaced and drains broken. Plaintiff alleged that the defects would cost £229 to remedy.

Defendants denied the plaintiff's allegations and liability. They said if the house had settled it was not due to bad or faulty work, but to shrinkage or settlement of the subsoil.

Capt. Montague Evans, architect and surveyor, of 292, High Holborn, W.C., gave evidence for the plaintiff and expressed the opinion that the settlement of the house was due to inadequate foundations. The site concrete was not thick enough and was of poor quality. He estimated that it would cost £124 to remedy the defects and he thought the value of the house had depreciated by £125.

For the defence, Mr. A. Gresswell, a director of the defendant company, and Mr. C. Johnson, a building inspector of the borough council, gave evidence, and expressed the opinion that work on the building was properly done and that the settlement was due to shrinkage of the subsoil owing to the dry summer of 1934.

During the hearing the Official Referee had "a view" of the house.

The Official Referee found in favour of the plaintiff for £179 15s. 5d. and costs, holding on the evidence that the settlement of the house was entirely due to inadequate foundations.

THE WEEK'S BUILDING NEWS

LONDON & DISTRICTS (15 MILES RADIUS)

BARKING. *Stores, etc.* Plans passed by the Corporation : Stores, Creeksmouth, for British Oil Storage Co., Ltd.; shop, 84 Longbridge Road, for Mr. J. Clements; six houses, Eldred Road, for Mr. H. Joseph; alterations and additions, 29 Linton Road, for Mr. R. Carter; alterations and additions, 7 The Broadway, for Messrs. R. D. & S. Willett.

BARKING. *Factory.* The Corporation has sold eight acres of land in the industrial area to Messrs. Nathan Cohen and Sons, Ltd., for the erection of a factory.

BECONTREE. *Library and Clinic.* The Barking Corporation has purchased sites in Porters Avenue, Becontree, for the erection of a library and clinic and, in Markgate Road, for a feeding centre.

BECONTREE. *Swimming Baths.* The Barking Corporation has acquired the Becmain sports ground, Becontree, for the erection of swimming baths.

BEDFONT. *Factory.* The Feltham U.D.C. has approved plans for a new factory proposed to be erected in Staines Road by Minimax, Ltd.; for six shops near New Road, for Mr. A. C. Stephens.

DENHAM. *Extension.* The London Films Productions, Ltd., are to provide storage vaults, three sound stages, and other works at their studios at Denham. Plans have been approved.

DENHAM. *Flats.* Messrs. J. A. Hallwood, Ltd., are to erect a block of 22 flats on a site off Moorhall Road. Plans have been approved.

EAST HAM. *Rehousing.* The Corporation is to prepare plans for the erection of dwellings in Park Avenue to rehouse tenants being displaced by clearances.

EAST HAM. *Flats.* Plans passed by the Corporation : 15 flats, Boundary Road, for Mr. J. F. W. Kelly; alterations, 168 High Street, for Messrs. C. Barrett, Ltd.; two houses, Ranelagh Road, for Mr. A. Sellar; eight flats, Aldersbrook Road, for Mr. H. C. Seymour; four flats, Katherine Road, for Mr. J. S. Broadbent; 18 houses, Langdon Road, for Mr. R. J. L. Slater; alterations, 51-3 High Street, for Messrs. J. S. Quilter and Son; extensions, 106 Halley Road, for Messrs. H. M. James and Sons.

EAST HAM. *Extensions.* The Corporation has approved plans by the borough engineer for extensions at Harts Sanatorium, at a cost of £20,507.

ENFIELD. *Pavilion, etc.* Plans passed by the U.D.C. : Pavilion, Slades Hill, for Mr. F. E. Cleary; estate development, off the Ride, Hertford Road, for Mr. Chas. V. Cable; 12 flats, Hertford Road, for Mr. E. W. Palmer; two houses, Lonsdale Drive, for Messrs. John Laing and Son, Ltd.; 18 houses, Riley Road, for Clarendon Estates, Ltd.; six bungalows, Linkside Close, for Mr. C. W. D. Walden; four houses, Caeterhatch Lane, for Mr. F. J. Gates; factory extension, Southbury Road, for Mr. H. Tankard; extensions, Ediswan Lamp Works, Duck Lees Lane, for Messrs. A. J. Maxfield and Son; four houses, Garnault Road, for Messrs. E. Dover & Co., Ltd.; two houses, Lancaster Avenue, for Mr. Noel Rees; extensions, Creek Works, Brimsdown, for Mr. H. St. G. Robinson; development, 154-174 Broadlands Avenue, for Messrs. Hilbery Chaplin, Ltd.; two houses, Peartree Road, for Messrs. Vigers & Co.

ENFIELD. *Church.* The London Diocesan Fund has acquired a site in Vera Avenue, Enfield, for the erection of a church.

IVER. *Flats, etc.* Plans have been approved for the proposed erection of a block of 20 flats off Bathurst Walk, for Messrs. Dukes and Simpson; as well as lay-out plans for the proposed development of an estate in Thorney Lane, by Messrs. Burney Moulton, Ltd.

IVER. *Film Studio.* The Eton R.D.C. has given permission to Mr. J. Murray-Wickham to develop land in Huntsmoor Park for a film studio, subject to the approval of detailed plans.

KINGSTON. *Baths.* The B.C. is to seek the sanction of the Ministry of Health to the acceptance of the tender of Limpus and Sons, Ltd., of Kingston, for the proposed erection of new baths in Denmark Road. The contract price is £51,986.

MOGDEN. *Hospital Extensions.* The South Middlesex and Richmond Joint Hospital Board is to seek sanction irom the Ministry of Health to borrow £113,700 for the proposed hospital extensions.

NORTHWOOD HILLS. *Cinema.* Work has just commenced upon the erection of the new Odeon theatre in Pinner Road. The architect is Mr. A. D. Clare, F.R.I.B.A.

POPLAR. *Rehousing.* The L.C.C. is to complete the re-development of the Bow Road island area of Poplar and is to provide rehousing at a cost of £81,000.

ST. MARGARETS. *Cinema.* Mr. Alister Macdonald is the architect for the new cinema proposed to be erected on the site of the recently burnt-out film studio, for Mr. Julius Hagen.

STOKE NEWINGTON. *Extensions.* The British Ever Ready Co., Ltd., are to extend their works in Carysfort Road, Stoke Newington.

WESTMINSTER. *Shops, Flats, etc.* Plans submitted to the City Council : Shops, 30 Curzon Street, for Messrs. Collins and Collins; flats, 45-6 Grosvenor Square, for Mr. F. Billerey; extensions, 7-9 St. Georges Square, for Civil Service Housing Association, Ltd.; offices and shops, Gillingham Street and Wilton Road, for Messrs. Forbes and Tate; flats and shops, Curzon Street and Clarges Street, for Messrs. T. P. Bennett and Son; garage, Knightsbridge Green, for Messrs. Thomas Tilling, Ltd.; flats, 67-71 Ennismore Gardens, for Mr. M. Rosenauer; buildings, Endell Street, Wilson Street and Castle Street, for Messrs. Yates, Cook and Darbyshire.

SOUTHERN COUNTIES

DEPTFORD. *Cinema.* The B.C. has passed plans, by Mr. G. Coles, for a new Odeon cinema in Broadway and Church Street.

HASTINGS. *Additions, etc.* Plans passed by the Corporation : Additions, 31 White Rock, for Mr. A. Radcliffe; four bungalows, Parker Road, for Messrs. Jeffrey and Wyatt; six houses, Hoads Wood Road, for Messrs. Morley and Webb; 12 houses, off Filsham Road, for Mr. A. J. Horsfield; stage alterations, New Palace pier, for Southern Piers, Ltd.

NEW DENHAM. *Church.* Plans are now being considered for the new church proposed to be erected on a site near the Nine Stiles footpath.

PORTSMOUTH. *Dwellings.* The Corporation has agreed to submit two schemes to the Ministry of Health for the proposed erection of a two-storied building, as accommodation for the aged and infirm, on the site of the Old Children's Home. Plans by the City Architect. Estimated cost of £69,300.

EASTERN COUNTIES

CHELMSFORD. *Bungalows.* The Corporation is to prepare plans for the erection of bungalows for the aged on the Boarded Barns estate.

CHELMSFORD. *Houses, etc.* Plans passed by the Corporation : Six houses, Weterhouse Street, for Mr. A. J. Leathers; extensions, 52 Duke Street, for Mr. C. H. Joliffe; store extensions, Barrack Square, for Co-operative Society, Ltd.; store, 8 Springfield Road, for Messrs. W. S. Low, Ltd.; factory extensions, Cottage Place, for Messrs. J. Macpherson & Co., Ltd.; 4 houses, Oaklands Crescent, for Messrs. W. & A. Pudsey; two houses, Third Avenue, for Messrs. David Salmon, Ltd.; three houses, Seventh Avenue, for Messrs. R. H. Currie and Sons; four houses, off Springfield Road, for Mr. F. C. Riches; four houses, Prykes Drive, for Mr. J. C. Pryke; works extensions, Springfield Park Road, for Messrs. F. Ward and Sons; extensions, 76 High Street, for Messrs. F. Luckin-Smith, Ltd.; block of offices, Rainsford Road, for Messrs. E. S. Polkinghorne and Son; four houses, off Springfield Road, for Messrs. Brown and Bennett.

MIDLAND COUNTIES

BURSLEM. *Extensions, etc.* Plans passed : Works extensions, Albert Street, for Messrs. Smith and Owen; church, Waterloo Road, for Rev. Faulconer Morgan; four houses, off Turnhurst Road, for Messrs. Marsh and Bromley; two houses, Dawn Avenue, for Mr. W. Woolam; six houses, Bank Hill Road, for Mr. C. Kearton; four houses, Marston Grove, and 140 houses, Dairyfields estate, Sneyd Green, for Messrs. Leake & Co.; 22 houses, off Buxton Street, for Mr. J. Kelly.

HANLEY. *Alterations, etc.* Plans passed : Alterations, Roe Buck Inn, Hope Street, for Parkers (Burslem) Brewery, Ltd.; shop, Tontine Square, for Messrs. J. H. Ball and Son; seven houses, Mulberry Street, for Mr. F. Davies; offices, Broom Street, for Messrs. Smith and Warrilow; alterations, 33-7 New Hall Street, for Mr. C. Nicklin; church and institute, Wellesley Road, Shelton, for N. Staffs Deaf and Dumb Society.

STOKE-ON-TRENT. *Warehouse, etc.* Plans passed by the Corporation : Warehouse, Newport Lane, for Messrs. T. A. Simpson; two houses, Burnhays Road, for Messrs. C. & R. Whymark; works additions, Federation Road, for Burslem Mills Co., Ltd.; eight houses, Davenport Street, for Messrs. Bailey and Tilstone; four houses, Hunters Croft, for Mr. W. C. Beech; two houses, Hillfield Avenue, for Messrs. P. Bailey & Co., Ltd.; four houses, Hunters Croft, for Mr. A. H. Hood; two houses, Boma Road, for Mr. J. E. Robinson; warehouse, Oldfield Street, for Messrs. C. E. Ramsden & Co., Ltd.; 16 houses, Radford Road, for Mr. G. H. Broad; 34 houses, Regent Road, Fenton, for Mr. Albert Bates; alterations and additions, Albion Works, Longton, for Messrs. Taylor Tunnicliffe (Refractory), Ltd.; four houses, Princes Street, for Mr. T. Hales; 388 houses, off Uttoxeter Road, Meir, for Mr. F. Gibson; six houses, Stone Road, for Mr. W. Braithwaite; vicarage, School Lane, Blurton, for vicar; shop and house, Sandon Road, for Mr. N. Poole.

STOKE-ON-TRENT. *Maternity Home.* Corporation is seeking sanction to borrow £69,196 for the erection of a maternity home in London Road.

THE BUILDINGS ILLUSTRATED

OAKLANDS ESTATE, CLAPHAM (pages 549–552). General contractors, R. J. Rowley, Ltd. Sub-contractors : Read and Partners, Ltd., electrical installation; Clark, Hunt and Co., Ltd., constructional wrot ironwork; Crittall Manufacturing Co., Ltd., steel casements; A. Goldstein and Co., glazing; Arthur Scull and Son, Ltd., plumbing; Ernest Hawkins, Ltd., plastering; Kay-Zed, Ltd., painting and decorating; Excel Asphalte Co., Ltd., asphalt; Messrs. Nicholls and Clark, Ltd., ironmongery, etc.

HOUSE AT HENDON, N.W.4 (pages 554–556). General contractors, F. Howkins. Sub-contractors : Engert & Rolfe, asphalt; James Clark and Son, Ltd., decorative glasswork in bathroom and cocktail cabinet; Pugh Bros., Ltd., glasswork to fireplaces; Turpin's Parquet Flooring Co., Ltd., narrow oak strip flooring; Courtney Russell and Co., Ltd., electric light fixtures; John Bolding and Sons, Ltd., sanitary fittings; Taylor Pearse and Co., Ltd., door furniture; E. Harding, textiles (curtains); L. Parker, garden lay-out and shrubs and trees; Smith's Electric Clocks, Ltd., electric clock in bathroom.

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		II	
			s.	d.	s.	d.
A_1	ABERDARE ...	S. Wales & M.	1	5½	1	1¼
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	0¾
A	Accrington ...	N.W. Counties	1	6½	1	2
A_2	Addlestone ...	S. Counties	1	5	1	0¾
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	5	11¼	
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	0¾
A	Barnsley ...	Yorkshire	1	6½	1	2
B	Barnstaple ...	S.W. Counties	1	4⅝	1	0⅝
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	1¼
A	Batley ...	Yorkshire	1	6½	1	2
A_2	Bedford ...	E. Counties	1	5½	1	1¼
A_2	Berwick-on-Tweed	N.E. Coast	1	5½	1	1¼
A_2	Bewdley ...	Mid. Counties	1	5½	1	1¼
B_2	Bicester ...	S. Counties	1	5	11¼	
	Birkenhead ...	N.W. Counties	°1	7½	1	2⅜
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	0¾
A_2	Bournemouth...	S. Counties	1	5½	1	1¼
B_2	Bovey Tracey	S.W. Counties	1	5½	11¾	
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	11¾	
A	Bromsgrove ...	Mid. Counties	1	5½	1	1¼
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	6½	1	2
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	0¾
A	Chelmsford ...	E. Counties	1	5	1	0¾
A	Cheltenham ...	S.W. Counties	1	5	1	0¾
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	1¼
A	Colne	N.W. Counties	1	6	1	1½
A_2	Colwyn Bay ...	N.W. Counties	1	5½	1	1¼
A_1	Consett ...	N.E. Coast	1	6	1	1½
A_2	Conway ...	N.W. Counties	1	5½	1	1¼
A	Coventry ...	Mid. Counties	1	6½	1	2
A_2	Crewe	N.W. Counties	1	5½	1	1¼
A	Cumberland ...	N.W. Counties	1	5	1	0¾
A	DARLINGTON ...	N.E. Coast	1	6½	1	2
A	Darwen ...	N.W. Counties	1	6½	1	2
B_1	Deal	S. Counties	1	4	1	0
A_2	Denbigh ...	N.W. Counties	1	5	1	0¾
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	0¾
A_2	Droitwich ...	Mid. Counties	1	5½	1	1¼
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

			I		II	
			s.	d.	s.	d.
A_2	EASTBOURNE ...	S. Counties	1	5½	1	1¼
A_1	Ebbw Vale ...	S. Wales & M.	1	6	1	1½
A	Edinburgh ...	Scotland	1	6½	1	2
A_1	Glamorgan-shire, Rhondda Valley District ...	S. Wales & M.	1	6	1	1½
A_2	Exeter ...	S.W. Counties	°1	5½	1	1¼
B	Exmouth ...	S.W. Counties	1	4½	1	0½
A_2	FELIXSTOWE ...	E. Counties	1	5	1	0¾
A	Filey	Yorkshire	1	5	1	0¾
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	11¾	
A	GATESHEAD ...	N.E. Coast	1	6½	1	2
B	Gillingham ...	S. Counties	1	4½	1	0½
A	Glasgow ...	Scotland	1	7	1	2⅜
A_2	Gloucester ...	S.W. Counties	1	5½	1	1¼
A_2	Goole	Yorkshire	1	5½	1	1¼
A_2	Gosport ...	S. Counties	1	5½	1	1¼
A_2	Grantham ...	Mid. Counties	1	5	1	0¾
A_1	Gravesend ...	S. Counties	1	6	1	1½
A	Greenock ...	Scotland	°1	6½	1	2
A	Grimsby ...	Yorkshire	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	1¼
B	Hereford ...	S.W. Counties	1	4½	1	0½
A_2	Hertford ...	E. Counties	1	5½	1	1¼
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	1¼
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	0¾
A_2	Keswick ...	N.W. Counties	1	5	1	0¾
A_1	Kettering ...	Mid. Counties	1	6	1	1½
A_2	Kidderminster ...	Mid. Counties	1	5½	1	1¼
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	11¾	
A_2	Lichfield ...	Mid. Counties	1	5½	1	1¼
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	1¼
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	2⅝
A	Long Eaton ...	Mid. Counties	1	6½	1	2
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_3	Maidstone ...	S. Counties	1	5	1	0¾
A_3	Malvern ...	Mid. Counties	1	5	1	0¾
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	0¾
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	1¼
B_2	Minehead ...	S.W. Counties	1	3½	11¾	
B_2	Monmouth ... & S. and E. Glamorganshire	S. Wales & M.	1	3½	11¾	
A	Morecambe ...	N.W. Counties	1	6½	1	2
A_2	NANTWICH ...	N.W. Counties	1	5½	1	1¼
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

			I		II	
			s	d.	s.	d.
A	Northampton	Mid. Counties	1	6½	1	2
A	North Shields...	N.E. Coast	1	6½	1	2
A	North Staffs ...	Mid. Counties	1	6½	1	2
A_1	Norwich ...	E. Counties	1	6	1	1½
A	Nottingham ...	Mid. Counties	1	6½	1	2
A	Nuneaton ...	Mid. Counties	1	6½	1	2
A	OAKHAM ...	Mid. Counties	1	5	1	0¾
A	Oldham ...	N.W. Counties	1	6½	1	2
A_2	Oswestry ...	N.W. Counties	1	5	1	0¾
A_1	Oxford ...	S. Counties	1	6	1	1½
A	PAISLEY ...	Scotland	°1	6½	1	2
B_2	Pembroke ...	S. Wales & M.	1	3	11¼	
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	1¼
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	1¼
B	Reigate ...	S. Counties	1	4½	1	0½
A	Retford ...	Mid. Counties	1	5	1	0¾
A_1	Rhondda Valley	S. Wales & M.	1	6	1	1½
A	Ripon	Yorkshire	1	5	1	0¾
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	1¼
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	11¾	
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	1¼
A_1	Skipton ...	Yorkshire	1	5½	1	1¼
A_2	Slough ...	S. Counties	1	5½	1	1¼
A_1	Solihull ...	Mid. Counties	1	6	1	1½
A_2	Southampton ...	S. Counties	1	5½	1	1¼
A_1	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	Stirling ...	Scotland	1	7	1	2⅜
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	0¾
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	1¼
A	Todmorden ...	Yorkshire	1	6½	1	2
A_1	Torquay ...	S.W. Counties	1	6	1	1½
B_2	Truro	S.W. Counties	1	3½	11¾	
A_3	Tunbridge Wells	S. Counties	1	5	1	0¾
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	West Bromwich	Mid. Counties	1	6½	1	2
A_2	Weston-s.-Mare	W. Counties	1	5½	1	1¼
A_2	Whitby ...	Yorkshire	1	5½	1	1¼
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	0¾
A	Wolverhampton	Mid. Counties	1	6½	1	2
A_2	Worcester ...	Mid. Counties	1	5½	1	1¼
A_3	Worksop ...	Yorkshire	1	5	1	0¾
A_1	Wrexham ...	N.W. Counties	1	6	1	1½
A	Wycombe ...	S. Counties	1	5	1	0¾
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

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
¾" Crushed Ballast	"		7	0
Building Sand	"		7	6
Washed Sand	"		8	6
2" Broken Brick	"		8	0
¾" " "	"		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
¾" 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:					
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	10	6
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	" "		8
" " 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, ¾"	Sq.	18	6
" ¾"	"	1	1	6
" 1"	"	1	2	0
" 1¼"	"	1	5	0
" 1½"	"	1	10	0
Deal matchings, ¾"	"		14	0
" ¾"	"		15	6
" 1"	"	1	4	0
Rough boarding, ¾"	"		16	0
" 1"	"		18	0
" 1½"	"	1	6	0

Plywood, per ft. sup.

Thickness	¼"			½"			¾"			1"		
Qualities	A d.	B d.	BB d.	A d.	B d.	BB d.	A d.	B d.	BB d.	A d.	B d.	BB 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	2¾	–	4	3½	–	5	4½	–
Gaboon Mahogany	4	3½	–	5	4½	–	7	6½	–	8	7	–
Figured Oak	6½	5	–	7½	5¾	–	10	8	0	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"	½"	1"	1¼"	2"
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	61¼	" 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, ¾"	"	10	6
" " ⅝"	"	10	3
" " ½"	"	10	0

SMITH AND FOUNDER—*continued*

		s.	d.
Mild steel reinforcing rods, ⅜"	cwt.	9	6
" " ¼"	"	9	6
" " 1"	"	9	6
" " 1¼"	"	9	6
" " 1½"	"	9	6

		¾" s.	¾" 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		6		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

L.C.C. soil and waste pipes:	3"	4"	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
¼" Georgian wired cast	"				11
¼" 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 ⅛" and ¼"	"		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 0
,, backing to masonry	,,	1 10 0
,, raising on old walls	,,	2 0 0
,, underpinning	,,	5 10 0½
Fair Face and pointing internally	F.S.	1¼
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	,,	7
Weather pointing in cement	,,	3
Slate dampcourse	,,	10
Vertical dampcourse	,,	1 1

ASPHALTER

		s. d.
½″ Horizontal dampcourse	Y.S.	4 9
½″ Vertical dampcourse	,,	7 9
¾″ 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 labours 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
3″ × 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
1½″ do.	,,	1 9

CARPENTER AND JOINER—*continued*

		s. d.
1¼″ deal moulded sashes of average size	F.S.	1 9½
2″ ,, ,, ,, ,,	,,	1 11½
1¼″ deal cased frames double hung, of 6″ × 3″ oak sills, 1¼″ pulley stiles, 1¼″ heads, 1″ inside and outside linings, ⅜″ parting beads, and with brass faced axle pulleys, etc., fixed complete	,,	3 7
2″ ,, ,, ,, ,, ,,	,,	3 10
Extra only for moulded horns	Each	6
1¼″ deal four-panel square, both sides, door	F.S.	2 0
2″ ,, ,, ,, ,,	,,	2 8
1¼″ ,, but moulded both sides	,,	2 4
2″ ,, ,, ,, ,,	,,	3 0
4″ × 3″ deal, rebated and moulded frames	F.R.	1 0
4½″ × 3½″ ,, ,, ,, ,,	,,	1 4
1¼″ deal tongued and moulded window board, on and including deal bearers	F.S.	1 9
1¼″ 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
1⅜″ ,, outer strings	,,	2 4
Ends of treads and risers housed to string	Each	1 9
3″ × 2″ deal moulded handrail	F.R.	1 3
1″ × 1″ deal balusters and housing each end	Each	2 0
1½″ × 1½″ ,, ,, ,, ,,	,,	2 9
3″ × 3″ deal wrought framed newels	F.R.	1 3
Extra only for newel caps	Each	6 0
Do., pendants	,,	6 0

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, ½″ 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 0	—
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	,,	1¾
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

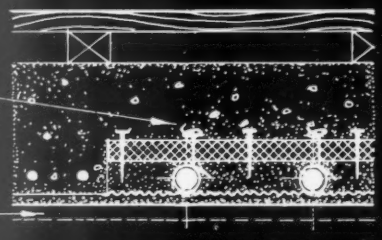
THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

(A) THERMAL INSULATION OF HEATING COILS IN VARIOUS CEILINGS :

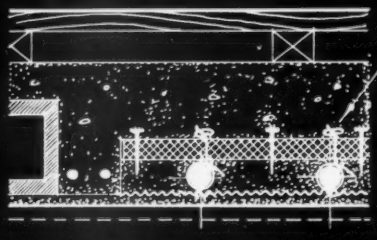
1. PANEL IN REINFORCED CONCRETE FLOOR:

Twisted wire hangers pushed through cork before concrete is poured thereon.

Pipes hung & pugged up, expanded metal (wired to pipes at 6" centres) & 3-coat plaster applied, upon removal of shuttering.



2. PANEL IN HOLLOW TILE FLOOR:



Hangers, pugging, expanded metal & 3-coat plaster as before for concrete floor.

NOTE.-If main tiles are sufficiently deep shallower reinforced tiles may be laid in ½" cement mortar directly on the cork before concrete is poured.

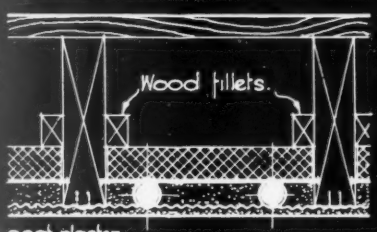
3. HEATING PANEL IN WOOD FLOOR :

Wire pipe coils to flat iron bars checked into joists.

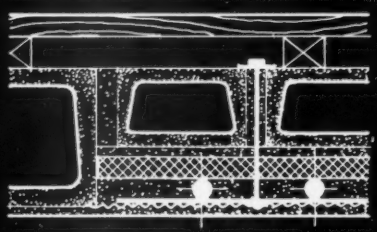
Loop tie wires for expanded metal over pipes at 6" centres & temporarily twist.

Lay cork slabs and toe nail to joists.

Pug up panel, wire up expanded metal & apply 3-coat plaster.



4. HEATING PANEL IN PRECAST BEAM FLOOR :

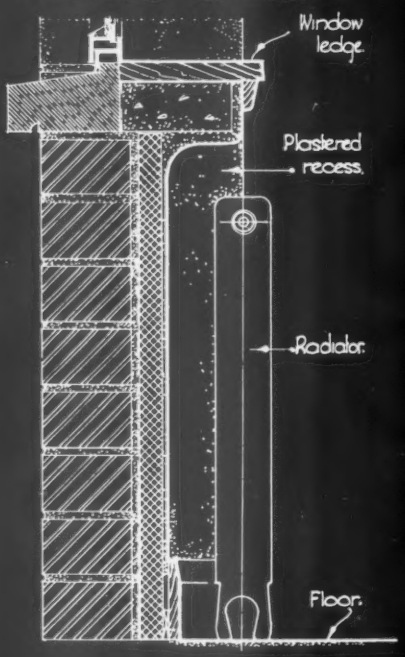


In precast floors, panels are formed with shallower beams & the cork offered to the underside with ½" cement buttering, being propped till set.

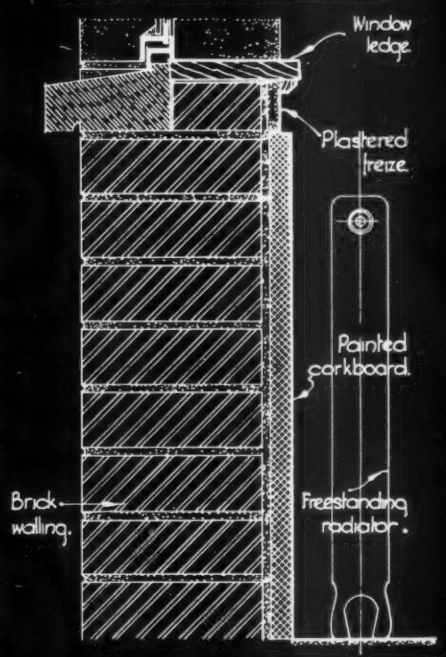
Pipe coils are then supported on metal flats and suspension rods. Pugging, expanded metal wired on, & 3-coat plaster as before.

(B) THERMAL INSULATION OF RADIATORS AND PANEL SYSTEMS OF CENTRAL HEATING :

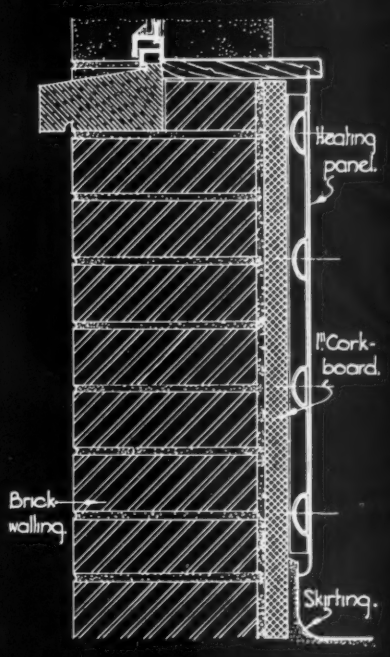
PART PLAN & SECTION OF 1" CORKBOARD INSULATION TO RECESSED RADIATOR.

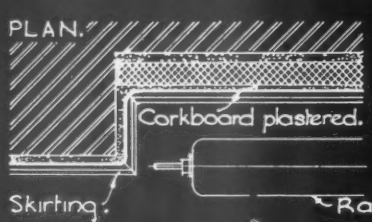


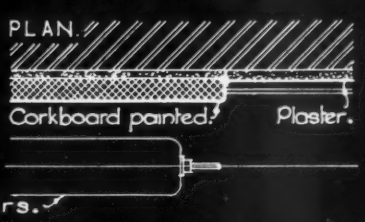
PART PLAN & SECTION OF 1" CORKBOARD INSULATING PANEL BEHIND A FREESTANDING RADIATOR.

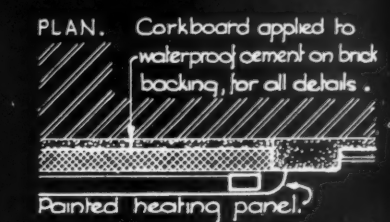


PART PLAN & SECTION OF 1" CORKBOARD INSULATION TO A WINDOW HEATING PANEL.









Information from The Corkboard Information & Research Bureau.

INFORMATION SHEET • CORKBOARD • 3 • INSULATION OF CENTRAL HEATING ELEMENTS.

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

INFORMATION SHEET • 337 • INSULATION OF CENTRAL HEATING

THE ARCHITECTS' JOURNAL
LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET
• 337 •
INSULATION OF CENTRAL HEATING ELEMENTS

Product : Corkboard

Quality of Cork :

Corkboard is especially manufactured for building work, by a number of manufacturers, to a rigid specification laid down by the Corkboard Information and Research Bureau.

Corkboard, as recommended for use in the insulation of buildings, consists of granules of pure cork compressed into slabs and baked. During the heat treatment, the natural resin in the cork is liquefied, and this resin then serves to bind the granules of cork together, forming a non-absorbent cellular slab. The insulating properties of the corkboard are derived from the imprisoned air particles in this cellular structure.

Thermal Conductivity :

The thermal conductivity of corkboard has been established by National Physical Laboratory tests at 0.280 B.T.U.'s per inch thickness per sq. ft. per 1° F. temp. difference per hour.

For general purposes, however, the Thermal conductivity will, in these Sheets, be taken as 0.30 B.T.U.'s, thus ensuring conservative calculations.

Sizes :

Corkboard is made in two standards, namely, 36 in. by 12 in. and 36 in. by 24 in. and each standard is made in the following thicknesses : 1 in., 1½ in., 2 in., 3 in. and 4 in.

Average Weight :

Corkboard weighs on the average about 9 lb. per cu. ft., that is, ¾ lb. per b.m. (1 s.f.b.m. being a sq. ft. of board, 1 in. thick).

Fire Resistance :

Corkboard is not easily ignited. If a blow lamp is played upon its surface, the cork will char, but it does not burn or smoulder when the flame is removed.

Resistent Qualities :

Corkboard derives its non-absorbent qualities, as mentioned above, from the natural resin in its composition. This condition also renders corkboard proof against vermin, rot and all other forms of deterioration.

A. Thermal Insulation of Heating Coils in various Ceilings :

1. Reinforced Concrete Floor :

Over the whole of the area to be occupied by the heating coil, wooden spacers of a depth a little greater than the diameter of the heating coil pipes, are nailed to the temporary shuttering. Stout wire hangers are pushed through the Corkboard to project above and below in the correct position to accommodate the heating coils. The Corkboard is then lightly nailed to the top of these spacers so that the nails project only a short way into the wooden spacer and the heads project above the Corkboard. The concrete floor slab is then poured directly on to the Corkboard and around it and when set, the wooden spacer is pulled off the nails when the shuttering is struck. This then leaves a space under the Corkboard into which the coil pipes may be placed and supported on the wire hangers, provision also being made to wire the expanded metal to the pipes. The pipes are then pugged up and expanded metal fixed. A plaster finish is then applied to the soffit of the whole job.

2. A Hollow Tile Floor :

The application here is exactly similar to a reinforced concrete floor. However, it will only be possible to provide tiles over the heating panel if the main floor is fairly deep.

3. Wooden Floors :

Iron bars to support the pipes are checked into the joists at the correct level and the pipes wired to these. Corkboard is then placed over the pipes and held down by wood fillets nailed to the joists. The pipes are then pugged up and expanded metal nailed to the joists and wired to the pipes across the soffit of the floor to form a base for the plaster.

4. Precast Beam Floor :

Fixing bolts are arranged between the joints of special shallow units and the Corkboard applied to the underside of these units in Portland Cement Mortar. Metal flats supporting the heating coils are then hung up on the bolts, the pipe coils are pugged up and expanded metal fixed across the underside to support the plaster.

B. Thermal Insulation of Radiators and Heating Panels :

In the example shown, Corkboard is applied to brick walls in a waterproof cement backing. The Corkboard may be finished in plaster or painted.

Previous Sheets :

Previous sheets of this series are Nos. 263 and 290.

Issued by : The Corkboard Information and Research Bureau
Address : Melbourne House, Aldwych, W.C.2
Telephone : Temple Bar 3039

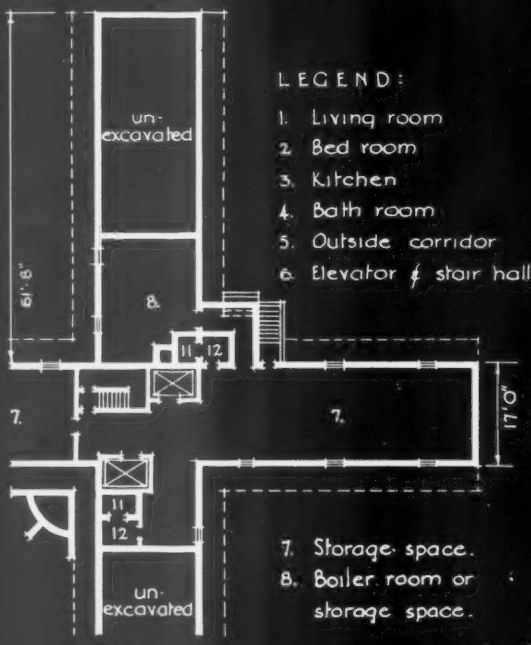
Su

B T

I
s

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

TYPE : EIGHT STOREY BLOCKS

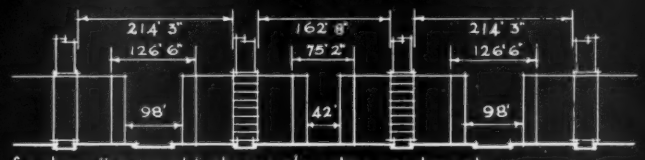


LEGEND:

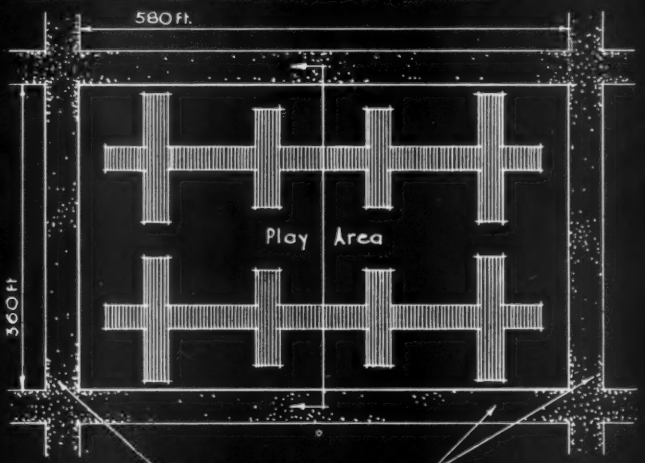
1. Living room
2. Bed room
3. Kitchen
4. Bath room
5. Outside corridor
6. Elevator & stair hall
7. Storage space.
8. Boiler room or storage space.

Basement floor plan. For site plan see sheet (2.)

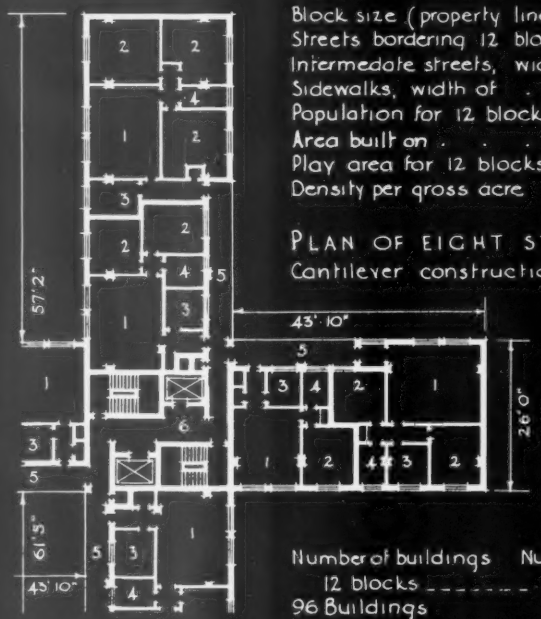
BLOCK PLAN showing one block of 8 buildings



Section thro' eight storey elevator apartments



80 ft. Intermediate streets.



Typical floor plan

Block size (property line to property line)	360 x 580 ft.	
Streets bordering 12 block area, width of	80	"
Intermediate streets, width of	80	"
Sidewalks, width of	10	"
Population for 12 blocks	24,576	People
Area built on	23·1	%
Play area for 12 blocks	102,500	Sq. ft.
Density per gross acre	307	People

PLAN OF EIGHT STOREY ELEVATOR APARTMENTS : ONE UNIT

Cantilever construction, partial basement.

FOR SECTION SEE SHEET (6.)

Legend continued

11. Incinerator
12. Incinerator room

Scale for plans ft. 0 10 20 30 40 50

Number of buildings 12 blocks	Number of units in 12 blocks	Number of rooms per unit	Total no. of rooms 12 blocks
96 Buildings 1 unit each	96	256	24,576
Grand total	96		24,576

Factual data of one complete unit	Eight storey buildings
Number of rooms per floor (including kitchen)	32
" " 3 room apartments per floor	2
" " 4 " " " "	4
" " 5 " " " "	2
Total number of " " "	8
" " " " " unit	64
Total " " rooms " unit	256

Information from The Housing Study Guild, New York (7)

INFORMATION SHEET: ANALYSIS OF VARIOUS TYPES OF HOUSING SCHEME

SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON W. C. 1.

Supplement to THE ARCHITECTS' JOURNAL for April 9, 1936

THE ARCHITECTS' JOURNAL
LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET

• 338 •

AMERICAN HOUSING

(vii)

This sheet gives the site lay-out, plans, sections and general data for the eight-storey flat block with basement. See also Sheets 292, 297, 301, 305, 329, and 335.

COSTS	Cost per 256-room unit	Cost per room including kitchen
Foundations and Basement :—	$	$
Excavation and disposal by steam shovel	577·05	
By hand	482·60	
Backfill	114·90	
Rough grading	65·00	
Concrete footings and basement walls, including forms and reinforcement	4,187·70	
Steel columns	595·00	
Floor screed	478·80	
Concrete waterproofing	141·25	
Total	6,642·30	25·95
Basement Finish :—	$	$
Stairs, forms and reinforcement	187·55	
6 in. hollow tile walls	242·90	
Column fireproofing and partitions	148·35	
Handrails to stairs	51·45	
Steel sashes and glazing	39·80	
5 fireproof doors and hardware	93·50	
Whitewashing and painting	85·80	
22 electrical outlets and fittings	103·40	
Slop sink	44·00	
Total	996·75	3·90
Structure and Enclosure :—	$	$
Steel columns	6,709·50	
Setting-out anchor bolts	39·50	
Grouting column bases	19·75	
Floor slabs, forms and reinforcement	18,294·65	
Roof slab, forms and reinforcement	2,286·85	
Hollow-tile walls	2,962·75	
Curtain walls with external stucco and internal plaster	10,395·40	
Steel sashes and glazing	6,658·55	
Insulation	894·10	
Total	48,261·05	188·50
Stairs, Halls, Corridors, Lift Shafts, etc. :—	$	$
Structural steel	805·00	
Floor slabs	2,502·00	
Roof slab	487·00	
Hollow-tile walls	5,389·90	
Steel stairs, balcony railings, etc.	7,400·35	
Main entrance steps	63·45	
Floor finish (cement)	377·00	
Roofing of corridors, penthouse, etc.	399·20	
Fireproof doors and furniture	1,499·60	
Painting	448·80	
105 electrical outlets	601·65	
Bellwork and mailboxes	703·20	
4 slop sinks	470·00	
Total	21,147·15	82·50
Roof :—	$	$
Copper flashings, etc.	362·40	
3-ply roofing	367·00	
Insulation and screeded fill	920·00	
Parapet, hollow tile, glazed inside, rendered outside	1,085·60	
Parapet, glazed tile coping	259·70	
Total	2,994·70	11·70
Finishes and Equipment :—	$	$
Column fireproofing (2 in. hollow tile and plaster)	1,223·00	
2 in. plaster partitions	5,285·00	
Plastering of internal walls	1,408·00	
64 fireproof entrance doors and furniture	1,501·80	
400 internal doors and furniture	4,178·40	
⅞ in. hardwood floors	5,019·00	
Skirtings and picture mouldings	1,002·40	
Tile floor for bathrooms	1,476·00	
Painting : walls, ceilings, doors, etc.	5,195·20	
176 metal wardrobes and equipment	2,440·00	
64 kitchen cabinets	2,880·00	
64 medicine cabinets	416·00	
392 window blinds	392·00	
64 gas cookers	1,600·00	
64 refrigerators	5,120·00	
Total	39,134·80	152·90
Lifts :—	$	$
Cost of two lifts	11,024·00	
18 metal lift doors and furniture	1,591·20	
Wiring	318·20	
Total	12,933·40	50·50
Incinerators :—	$	$
Total cost	3,657·50	14·30
Plumbing :—	$	$
Cost per unit, not including gas lines	26,163·20	102·20
Heating :—See Sheet 297	$	$
Total cost	10,263·04	40·09
Gas and Electrical :—	$	$
Initial cost of gas carcasing	1,792·00	
Electric meter connections	238·98	
768 outlets and fittings	4,454·40	
Total	6,485·38	25·33
Total cost per room, including kitchen		$697·87

Su

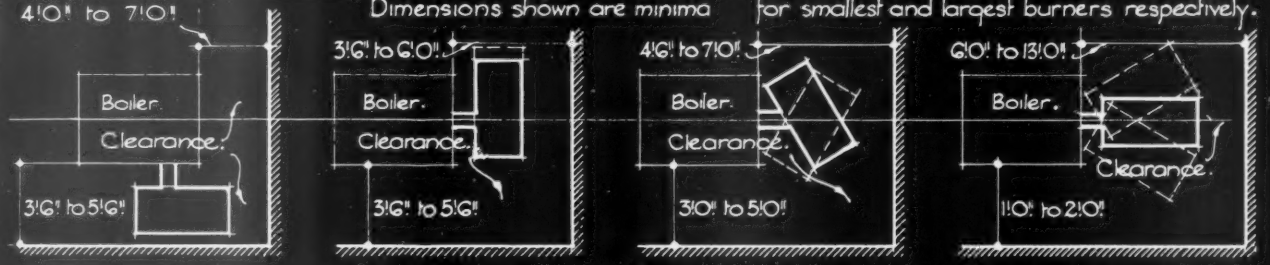
T

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

EXTERIOR TYPE CERAC AUTOMATIC SOLID FUEL BURNERS. (For fitting to any type of boiler.)

Diagrammatic plans showing optional settings according to space available.

Dimensions shown are minima for smallest and largest burners respectively.



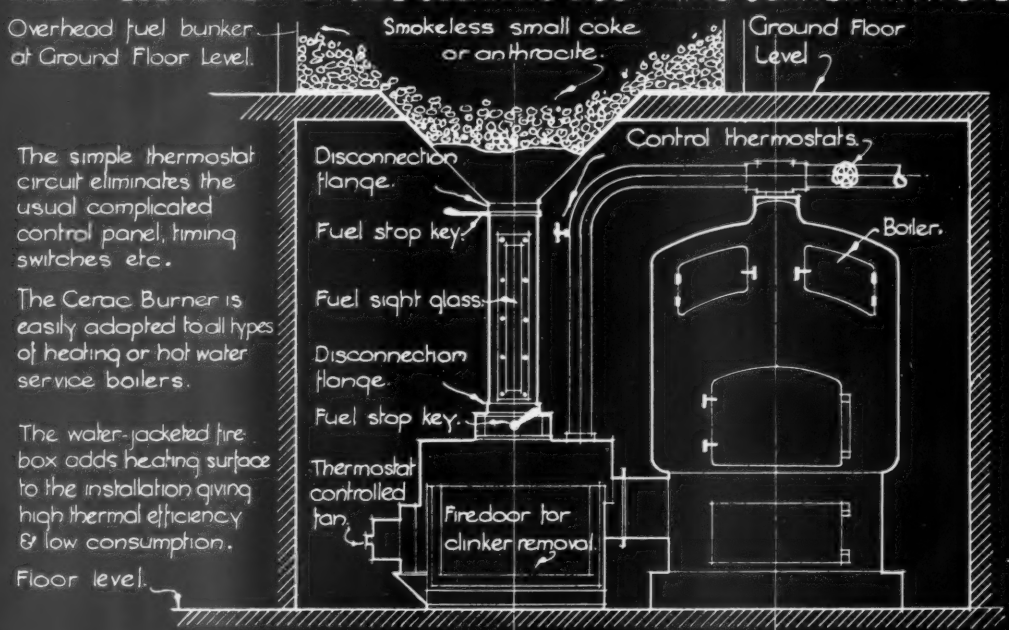
Standard side clearing burners, Right or left hand side firing leaving boiler front clear.

Standard side clearing burners right or left hand. Front firing & set square to boiler.

Standard side clearing burners, right or left hand, front firing & set at angle to boiler.

Special front clearing burners, front firing. Square or at angle to boiler.

FRONT ELEVATION OF SIDE CLEARING SIDE FIRING BURNER WITH OVERHEAD FEED :



The simple thermostat circuit eliminates the usual complicated control panel, timing switches etc.

The Cerac Burner is easily adapted to all types of heating or hot water service boilers.

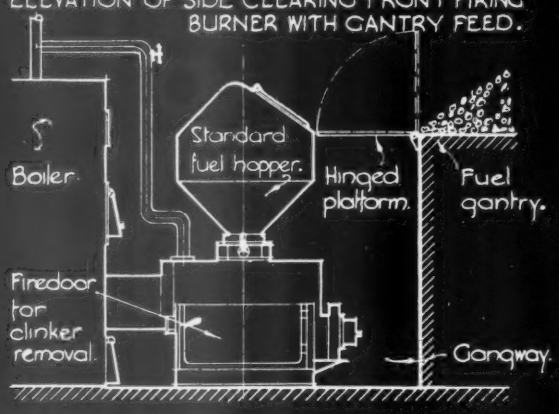
The water-jacketed fire box adds heating surface to the installation giving high thermal efficiency & low consumption.

IDEAL LAYOUT:

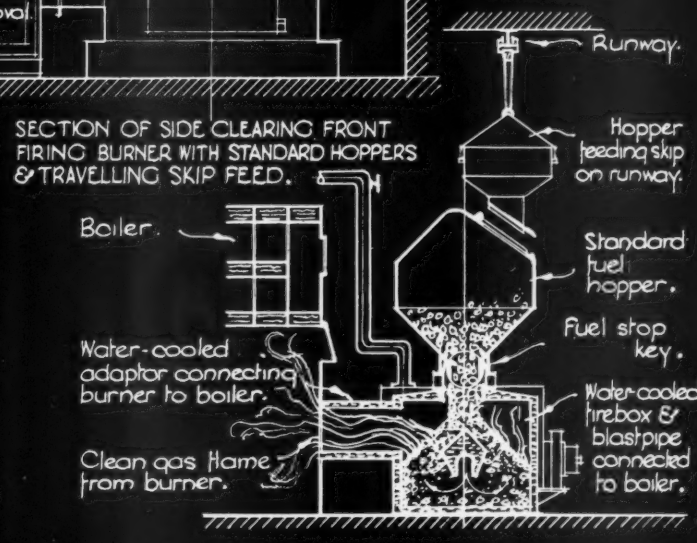
The layout indicated on the left incorporates a large storage from which the burner is gravity fed without handling of the fuel.

The boiler front is left clear for cleaning or inspection and the only labour entailed is that of removing clinker approximately once daily.

ELEVATION OF SIDE CLEARING FRONT FIRING BURNER WITH GANTRY FEED.



SECTION OF SIDE CLEARING FRONT FIRING BURNER WITH STANDARD HOPPERS & TRAVELLING SKIP FEED.



PRINCIPAL & OPERATION: The Burner uses smokeless small coke or anthracite, which feeds by gravity into the water-cooled fire box. It is there burnt in an incandescent fuel bed, under thermostatic control, only clean gas flame passing into boiler. The boiler is used as economiser. There are no firebars or loose ashes. All ash fuses to clinker in one piece & easily removed. There is only one moving part, the fan.

Specifications, dimensions & ratings overleaf. Details of Cerac Automatic Magazine Boilers on later information sheet.

Information from Cerac Ltd.

INFORMATION SHEET : AUTOMATIC SOLID FUEL BURNERS :
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1. Oscar P. Bayne

THE ARCHITECTS' JOURNAL
LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET

• 339 •

AUTOMATIC FIRING OF BOILERS

Product : The Cerac Automatic Solid Fuel Burner.

General :

On the front of this Sheet are shown typical settings and the general arrangement of Cerac Automatic solid Fuel Burners. The Cerac is a self-contained unit and may be fitted to any existing boiler, whether water-cooled or having removable firebars.

Operation :

The Cerac burns small coke or anthracite grains, the fuel being fed by gravity from overhead fuel bunker or superimposed hopper directly into the firebox, whence only clean gas flames enter the boiler itself. The only moving part of the machine is the electric fan supplying forced draught to the blast pipe.

Clinker and Ash :

As the fuel bed is completely enclosed within the firebox of the burner, there is no clinker or ash deposit within the boiler itself, clinker formation being confined to either side of the water-cooled blast pipe. Removal of the clinker through the firedoor occupies a few minutes only, and is done once approximately every 24 hours.

Water Jacket :

The firebox is enclosed with a water-jacket adding prime heating surface to the boiler and maintaining a separate circulation 15° to 20° F. hotter than that of the boiler itself. This circulation may feed a series of hot-water fixtures, or it may be connected to the main boiler circulation. The adapter connecting the burner to the boiler is also waterjacketed.

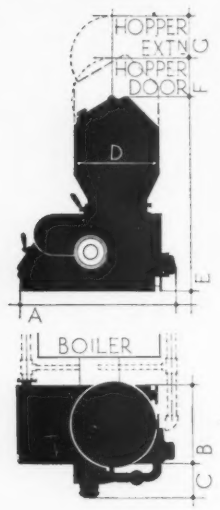
Control :

Complete control over the rate of firing is obtained by simple adjustment of the main air-regulating valve. The output of the burner can be reduced to one-quarter of its listed rating. Thermostatic controls are provided on the main flow pipe, controlling the fan and consequently the forced draught supply.

Costs :

Prices of Cerac burners vary from £70 to £215, according to capacity.

Capacities and Sizes :



Specification									Overall Dimensions						
Type ES	Max. Rating in BTU/HR.	Flow and Return Connections: Burner	Flow and Return Connections: Adapter	Hopper Capacity in Lbs.: A'cite	Hopper Capacity in Lbs.: Coke	Heating Surface in sq. ft. incl. Adapter	Fan h.p.	Watts S.ph.	A	B	C	D	E	F	G
15	150,000	1½"	¾"	180 to 260	110 to 160	10	0·1	100	2′ 8"	1′ 8"	9"	1′ 11"	4′ 3"	1′ 1"	6"
25	250,000	2"	1"	270 to 400	190 to 280	16	0·1	125	3′ 2"	1′ 11⅛"	1′ 0⅛"	2′ 2"	4′ 9"	1′ 1"	9"
35	350,000	2½"	1¼"	360 to 490	250 to 340	19	0·1	150	3′ 8"	2′ 1⅛"	1′ 0⅜"	2′ 4"	5′ 2"	1′ 3"	11"
45	450,000	2½"	1¼"				0·2	200							
60	600,000	3"	1¼"	450 to 720	320 to 500	24	0·2	250	4′ 1"	2′ 3½"	1′ 1¼"	2′ 6"	5′ 7"	1′ 3"	1′ 0"
80	800,000	3"	1¼"				0·3	325							
100	1,000,000	4"	1½"	560 to 860	390 to 600	28	0·3	375	4′ 5"	2′ 5⅛"	1′ 3⅛"	2′ 8"	6′ 0"	1′ 3"	1′ 2"
130	1,300,000	4"	1½"				0·4	450							
160	1,600,000	4"	1½"	670 to 1,040	470 to 730	36	0·4	500	5′ 2"	2′ 7⅛"	1′ 5⅛"	2′ 10"	6′ 7"	1′ 3"	1′ 3"
200	2,000,000	4"	1½"				0·5	600							

Standard side clearing burners left or right-hand clearing from stock.
Special front-clearing burners to order. Larger hoppers to order.

Manufacturers : Cerac, Limited
Address : 41 Lower Kennington Lane, London, S.E.11
Telephone : Reliance 1441