

FOUNTAIN IN STOCKHOLM

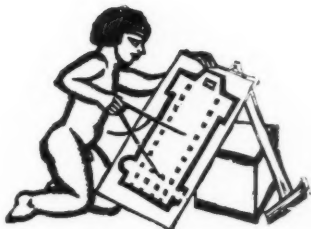


*A detail of the Orpheus fountain  
by Carl Milles which stands  
at the entrance to Ivar Tengböm's  
Concert Hall at Stockholm.*



## STORE AT AMSTERDAM

*A store on one of the canals in the centre of Amsterdam. The front is of light-brown glazed brick with raked joints; the plinth and entrance surround are of polished granite, and the lettering, fascia bars, show-window framing and doors are of bronze, and the metal windows are painted buff.*



## PLANNING AND ELECTRICITY

**W**HEN an independent body having the name "Political and Economic Planning" produces a Report\* on a great public utility industry, one is prepared for the advocacy of anything from absolute nationalization of the industry to its reconstruction in terms of a select group of Super-Size Units, so popular in industry today.

One may therefore express surprise—or should it be relief?—that neither of these two proposals has been advocated by the group of experts who have written the P.E.P. "Report on the Supply of Electricity in Great Britain."

Broadly speaking, the authors have attempted to do three things: (1) to provide an economic study of the industry with full information on history, growth, problems, etc.; (2) to set out lines upon which the distribution of electricity might be reorganized; (3) to indicate lines of needed research and development.

They have attempted to address themselves to both layman and engineer, a provision for which architects may be grateful, and considering the lack of informative books on the electricity supply industry, the publication of this work fills a big gap.

Unavoidably, we must compare this study with the McGowan Report (prepared by the Government Committee) which appeared in May, 1936, and while there are a number of recommendations in common in these two Reports, P.E.P. pays more attention to the public service principle, to the need for research and development and to the need for thorough supervision of those "octopus" financial groups which own two-thirds of the supply companies in the country.

A point made in this Report is that many of the present difficulties of the electricity supply industry are outside the control of the supply engineer, and are derived from past legislation and the way in which the industry has grown up. On the other hand, it is recognized that there are many undertakings which need stirring up, and there are too many different ways of charging the residential consumer, while the spectacle of local authority and private company men in one and the same industry, snorting indignantly at each other over a fence of prejudices, is undignified in the year 1937 and does not create public confidence in those who are responsible for the supply of electricity.

The "man in the house" will ask: "What does this new Report do towards making electricity lower in price, more widely available—particularly in rural zones—and more uniform in terms and conditions of charge? Might not the national organization of the Distribution of Electricity be, in the long run, a satisfactory, if drastic solution to the industry's difficulties?"

On this matter the Report gives the impression that Nationalization of Distribution may be considered as a solution for the future, but that at the present stage of development in a comparatively young industry, it is not essential to secure maximum progress. P.E.P. offers us the alternative of an Authority with radical

powers which, instead of taking over the operation of supply undertakings, acts as a powerful development body, in collaboration with the Electricity Commission, which is to have increased powers.

Strict legislation to control the finance of holding companies in the industry is incorporated in the proposals set out, and in the light of the potentialities of abuse of these finance concerns, one must welcome legislation to throw full light upon internal transactions, and the actual profits, transfers and reserves of all subsidiary companies. It is acknowledged in industrial circles that the Companies Act of 1929 is useless for these purposes.

On the important question of uniformity of prices, P.E.P. would secure uniform methods of charging through new powers granted to the Electricity Commission, but states that uniformity of price levels is not practicable, as long as areas differ in character, potentialities and size. A significant comment on this problem is the following: "What makes a uniform tariff for telephone service practicable is the fact that the whole of the telephone system is controlled by a single organization."

This suggests that one important consequence of nationalizing distribution of electricity would be the possibility of uniform prices for domestic use. The P.E.P. group, however, apparently feel that the upheaval of the industry, and the cost of buying out companies and municipalities which would ensue, would prove too heavy a price to pay for the privilege of a uniform tariff, and prefer to proceed by gradual stages. The all-important matter of standardization of frequency has been rapidly carried out by the Central Electricity Board and the Commission, so that the move towards uniformity is continuous.

One is grateful for the careful attention to the "public service principle" which marks the P.E.P. Report as being more in line with the most progressive minds in the electricity supply industry than was the McGowan Report. This may be due to the fact that the former is an economic study, whereas the latter is a synthesis of mixed evidence placed before a committee.

The P.E.P. Report is one of the most up-to-date and informative studies that has been produced, and if some feel that it might have been more bold and have demanded a complete reorganization of the distribution side of the electricity supply industry nationally, the Report goes a long way in this company, and is a valuable contribution to the understanding of the industry.

Architects and town planners will find the information on domestic electrification useful. We endorse the references to the need for co-ordination between the activities of regional planning and electricity supply, and deplore the lack of a central body with powers to use them as instruments for careful decentralization of industry and for planned reconstruction.

\* *Report on the Supply of Electricity in Great Britain.* Published by P.E.P., 16 Queen Anne's Gate, London, S.W. Paper boards 6s. Cloth 8s. 6d. Postage 6d. extra.



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# NOTES & TOPICS

## ST. GEORGE'S

THE thin peninsula of outworn buildings that is St. George's Hospital must have made a multitude of passing architects wonder about its future—especially during the past year.

Behind its hedging of hoardings, appeals for revenue and for its building fund, that arm of land thrusting out into the traffic whirlpool of Hyde Park Corner seems in most ways one of the most unsuitable of all sites for a hospital.

But the site of St. George's has one great, and in the view of the governors an apparently overwhelming, advantage. St. George's is a voluntary hospital; voluntary hospitals depend on subscriptions; subscriptions depend to a great extent on keeping in the public eye—and no site in London could be more in the public eye than St. George's peninsula. So St. George's is to be rebuilt, in its own words—"Here and Now."

The problem which that rebuilding will present to architects can, with no hyperbole at all, be called one of the most intricate which has yet been placed before this generation of architects.

To ensure that its future wards shall have the quiet appropriate to healing on a site too narrow for large internal courts, will compel the use of every latest discovery in sound-proof glazing and mechanical ventilation; and providing something like a thousand beds on the site available will need a rare brilliance in planning.

These things are bound to have caused a great reassurance to all architects when it was announced that the final design for the rebuilding scheme will be one which has passed the test of an open competition—however great the regret at the occurrences which brought about that competition.

Mr. C. E. Elcock, whose services as architect for the scheme (with all fees paid) were offered to the hospital by

an anonymous donor, resigned his appointment on learning that one of his sketch schemes had been criticized unofficially by another architect.

Mr. Elcock's action will bring him the sympathy and admiration of all of us—and I, for one, hope that having done what is unquestionably the right thing in a regrettable affair, he will not feel that there is the slightest and most remote reason why he should not enter for the coming competition.

It would be an excellent end to a sad beginning if Mr. Elcock, having helped to invite us all to enter for the St. George's competition, proceeded quietly to knock us all out again.

## FIRST EXHIBITION OF 1937

One of the first exhibitions of the New Year that has especial interest for architects and designers is the opening exhibition of the Reimann School and Studios at Regency Street, Westminster, on January 12.

The opening of the Reimann School in England, which I mentioned a few weeks ago, should give a new and stimulating injection of genius to commercial art in this country. Not that we are lagging behind the Continent or America in the gifts that endow commercial art with vitality; but we do lack adequate and inspired schools for training people.

Incidentally, I have seen better conceptions of commercial design coming out of architectural schools than from the normal type of art school. The architectural student, approaching poster and advertisement design as a designer, gives his graphic essays a three-dimensional quality that the pattern-mongering of the old-fashioned type of art student rarely achieves. The art director of a progressive advertising agency told me recently that the old-fashioned type of art student is still the commonest type.

## CHRISTMAS IN RETROSPECT

This year a few of the "cheap Christmas lines" were less repulsive than usual. Not that manufacturers displayed greater taste; they didn't, but they had, for reason or reasons unknown, exercised a little more restraint. The garish complexity of goods on counters was less irritating than last year.

Still, most of us recall the winged verses written years ago by A. D. Godley, when we find Christmas upon us. Particularly the classic lines from his *Pensées de Noël* :—

When you roam from shop to shop,  
Seeking, till you nearly drop,  
Christmas cards and small donations  
For the maw of your relations,  
Questing vainly 'mid the heap  
For a thing that's nice, and cheap :  
Think, and check the rising tear,  
Christmas comes but once a year.

I put down the apparent simplicity of Christmas "fancy goods" to the fact that all our most fanciful talent has been mustered for Coronation wares.

## FERTILISING DUCTS?

A seasonable visit of goodwill to take a cup of tea with the caretaker revealed a generous collection of coloured cards framed in the mirror over his fireplace.





*Under construction : the Cotton Pressing Buildings in Alexandria.  
Architect, Noel Dawson.*

All were first, second or third awards in local shows for the produce of his allotment—vegetables constitute his hobby.

Knowing that he had only a very limited time to spend in digging, I asked him for the secret of this success, and "Dust" was the unexpected reply.

"No, Sir, not from the office, of course, but a pal of mine looks after the local picture palace, and every time he cleans out the ventilation tubes he gives me a packet of the dust, and rare stuff it is. Them red cards now, them's for onions, biggest I've ever seen. . . ."

This is the age of by-products, and I commend the idea to our cinema magnates—a fertilizing industry out of the ducts, and not forgetting the vacuum cleaners and the ashtrays.

We might almost have a revival of red plush.

#### CORONATION PLANTING

Commemorative planting is an old human virtue. Some of the maturer corners of European towns owe their present state to some extent to the planting which immediately followed the war.

We have now a Coronation Planting Committee to encourage proper planting next year—planting as distinct from afforestation.

The Committee has started its job well by taking a long view of its responsibility, and has appointed the A.A. Planning School (the School of Planning and Research for National Development, to give it its full title) to do some preliminary research work.

The ultimate idea is to co-ordinate all schemes for new pathways and roads, parks and playing-fields, and any planting scheme now under consideration.

#### INNOCENT VANDALISM

Protests against the proposed new reredos for Brecon Cathedral increase daily. The old church of St. John, now the cathedral of the diocese of Swansea and Brecon, has, you will remember, a five-lancet east window of rare

proportion, far too good to be spoilt by any unnecessary additions. The whole east end of the cathedral is, indeed, a very fine and complete piece of work, as unified in composition as anything we have. A tall reredos, however skilful its design, would be a vulgarity in form and may quite well be one too in tone and colour value.

Many authorities have deplored the proposal and now the Society for the Protection of Ancient Buildings, with the courage of its convictions (and technical knowledge) suggests that a trial model be erected so that everyone shall see and judge.

An excellent suggestion. The design, *per se*, is not in question, only its inappropriateness. Even a well-matured stilton can be ruined by mint sauce, no matter how skilful the sauce-mixer.

#### WEST RIDING

As we were witnessing the beginnings of the A.A. by three men and one looney, on the panto stage, so were the West Yorkshire Society of Architects celebrating its diamond jubilee.

Six young men in earnest consultation started that Society, in, of course, the traditional small attic (back).

One still survives, Mr. William H. Thorp, to whom Astragal sends greetings and congratulations on the success of his early efforts.

#### LANCASTER

Another dinner and celebration at the same time was at Lancaster, with all the local builders and not a few of the local architects present—(I wonder if Charlie Pearson was there?).

And all the speakers were very rightly very proud of Lancaster and its building record. But when some went on to deplore modern building developments and their "disastrous" effects on craftsmanship, they were on less sure ground.

Whether we like it or not, building technique is changing and the proportion of new specialists in relation to the old craftsmen is increasing daily.

It is up to us to see that the change is really a constructive one and not to spend too much time in weeping over the old order.

#### JERRY BUILDING

Various remedies have from time to time been suggested (I've done a bit of that sort of thing myself) and now the Cardiff R.P. Association re-suggests that a solution be found in more building inspectors.

A doubtful remedy—at any rate until we find inspectors with a broader outlook than that acquired through the detailed study of Acts and byelaws, plus a lot of building construction textbooks and a necessarily limited acquaintance with building crafts.

Perhaps the quickest way to reform would, after all, be to reduce the standard even more, so that the buying public would at last see the evil and raise an outcry that would serve as a lesson for decades.

ASTRAGAL

## NEWS

POINTS FROM  
THIS ISSUE

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- "The formation of the 'Unattached' Representatives' Association at last provides a channel through which 'unattached' registered architects can communicate with their representatives on the Registration Council" . . . . . 905

DEGREE FOR THE PRESIDENT  
OF THE R.I.B.A.

At the annual meeting of the Court of the University of Wales at the Masonic Hall, Haverfordwest, the degree of Doctor of Law was conferred on Mr. Percy Thomas, President of the R.I.B.A.

## EXHIBITION

An exhibition of linocut engravings, organized by the A.A. Students' Art Club, is to be held at the Architectural Association, 36 Bedford Square, W.C.1, from March 11 to April 3, 1937.

The following information has been issued by the promoters:

1. The exhibition is open to any artist.
  2. Works must be clearly labelled with the artist's name and the title of the subject.
  3. Works must be mounted and framed in a manner suitable for hanging against a silver wall.
  4. Every care will be taken of works submitted, but no responsibility can be accepted for loss or damage.
  5. Works must be submitted, carriage paid, on or before noon, Monday, March 8, 1937, to John Mackay, 36 Bedford Square, London, W.C.1.
  6. Artists intending to submit works are asked to advise the undersigned, stating probable number and approximate size of works, so that provision can be made for the hanging of the works.
  7. Further particulars may be had on application.
- John Mackay, 36 Bedford Square, London, W.C.1.

## SLUM CLEARANCE AND REHOUSING

The most recent figures showing the position of slum clearance and rehousing are summarized as follows:

THE  
ARCHITECTS'  
DIARY

## Thursday, December 31

LE PLAY SOCIETY. Sixth Annual Conference to be held at the University of London, Molet Street, W.C.1. Until January 6.

ELECTRIC ILLUMINATION EXHIBITION. At the Science Museum, South Kensington, S.W. Until April 25. Weekdays: 10 a.m. to 6 p.m. Sundays: 2.30 to 6 p.m.

## Monday, January 4

SOCIETY OF CHEMICAL INDUSTRY. London Section. At Burlington House, W.1. "The Zinc Industry." By S. Robson. 8 p.m.

## Tuesday, January 5

ARCHITECTS' AND SURVEYORS' APPROVED SOCIETY. Annual General Meeting to be held at 66 Portland Place, W.1. 6.30 p.m.

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. Evening to be arranged by the Students' Club. 8.30 p.m.

LONDON SOCIETY, Lancaster House, S.W.1. Children's New Year Party. 4.15 p.m.

## Wednesday, January 6

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. At the Institution of Mechanical Engineers, Storey's Gate, S.W.1. Discussion on Effects of Water-vapour content in the atmosphere of interest to heating and ventilating engineers, to be opened by J. A. Macintyre. 7 p.m.

## Friday, January 8

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. Liverpool and District Branch. At 111 India Building, Water Street, Liverpool. Annual Meeting. 7 p.m.

## Monday, January 11

R.I.B.A., 66 Portland Place, W.1. Award of Prizes and Studentships. Criticism by H. Austen Hall on works submitted for prizes and studentships. Announcement of the Council's nomination for the Royal Gold Medal, 1937. 8.30 p.m.

Clearance Areas and Orders. — During November local authorities declared areas comprising 4,721 houses representing the displacement of 18,844 persons, as compared with 4,308 houses and a displacement of 16,341 persons in October.

The Orders submitted during November covered 3,763 houses and the displacement of 13,700 persons, as compared with 4,805 houses and the displacement of 19,851 persons in October.

The Orders confirmed during November covered 4,055 houses and 16,382 persons, as compared with 5,604 houses and 24,818 persons in October. The total number of houses in such Orders is now 121,561, involving the displacement of 525,133 persons.

Rehousing Progress.—The latest available figures are those for October. At the end of that month there were 57,329 houses under construction, as compared with 58,409 at the end of September and 57,302 at the end of August. The houses definitely allocated to 1930 Act purposes were 43,114, but a considerable proportion of the balance will probably be eventually allocated to that Act.

6,831 houses were completed during October, as compared with 6,804 during September and 5,941 during August, the great majority in each case being allocated to 1930 Act purposes. The figure for completions during October is a record.

New houses approved during November numbered 5,496, as compared with 5,828 in October and 5,557 in September.

WEST YORKSHIRE SOCIETY OF  
ARCHITECTS

A lecture, entitled "Architecture and the Dictators," was delivered by Mr. R. A.

Duncan, at a recent meeting of the above Society in the Leeds College of Art.

Mr. Duncan said that a dictator had of necessity to present a façade of a demonstration of his beliefs and policy, and he had to use the arts as propaganda material. The development of the arts under a dictatorship, whether of the Right or of the Left, was to a great extent artificial, and natural growth was warped.

Germany, said Mr. Duncan, had been the home of modern architecture with its international flavour, but with the rise of Hitler, the Nazis called it the "Jewish Renaissance." There had, therefore, been a marked decline in modernist design in Germany and a return to romanticism.

The Russians had first been attracted by modern architecture because it was so different from Tsarist architecture. Their limited technical equipment, however, caused endless trouble in their modern buildings, which were unsuited to the climate and to their capacity to produce them.

Though Italy under Mussolini adopted modernism in architecture, the latest buildings showed an increasing Imperialist swagger, and some pretensions to proclaim Italians as the inheritors of the Roman Empire.

Dictators, said Mr. Duncan, were not going to be good patrons of architecture, because they were trying to tie it to propaganda. Democracy was not an ideal patron either. The initiation of a great deal of the work done under a democracy was in the hands of people lacking a strong cultural background, many of them living quite humbly.

## CHADWICK LECTURE

A Chadwick Lecture under the Bosson Lectures and Scholarship Gift, was given at the R.I.B.A. on December 17, by Mr. Herbert A. Welch, F.R.I.B.A. Mr. Welch, who dealt with "The Construction of the Modern House," asked: "What do we mean by 'The Modern House'?" He then quoted from Professor Lethaby in 1920: "Our aim should be to develop a fine tradition of living in houses. It is a matter of experiment, like flying. We should seek to improve in detail, point by point. Exquisite living on a small scale is the ideal. 'House-like' should express as much as 'ship-shape.' Our airplanes and motors, and even bicycles, are in their way perfect. We need to bring this ambition for perfect solutions into housing of all sorts and scales."

The lecturer continued: "The chief obstruction to our having better houses has been the superstition that they should be built in a style. There is a great difference between being built in an imitative style, such, for instance, as Elizabethan, Jacobean or Georgian, and being built with style. A motor-car is built with thought for 'style,' that is, finish and elegance, but it is not built to look like a sedan chair or a stage coach. To be concerned with style imitations and period design is not only irrational in itself, but it blocks the way to any possibility of true development. To go on building houses in the cocked-hat and brass-candlestick style is not only rather imbecile play-acting, but it destroys rational growth. We have to put an efficiency style in the place of this trivial, sketchy

picturesque. Even leaving out the style trimmings would be something. If you cut away disease and surplusage, you strengthen and consolidate. We have to prune our building forms as we prune a fruit tree, and sternly cut away the dead wood. Whenever we concentrate on some directing datum, some reality like health, serviceableness, or even perfect cheapness, true style will certainly arise as the expression of this and the other human quality embodied.

"The dwelling house should be sound, dry, light, warm and sweet. We should save in all thoughtless extravagance, and concentrate on the conquest of dirt, disorder and waste. Houses must be built for living in. A false and confusing opposition between science and art has been allowed to arise, but properly there is no strife between science and art in architecture. The art of house-building is practically one with the science of housing. If we must worry over strict definitions, 'science' may stand for codified preliminary knowledge, and 'art' for operative skill, experiment and adventure. Science is what you know; art is what you do. The best art is founded on the best science in every given matter. The notion that there are special 'art forms' or 'art colours' has led to all sorts of pretence and sham picturesqueness. Art is, in fact, high competence in doing what is worthy to be done.

"Those of us who have reached or passed middle age were trained at a time when the hand craftsmanship was at its highest. Our designs, surfaces and the choice of materials were influenced accordingly.

"We are now at the beginning of the age of mechanical production. The machine has to a great extent replaced hand labour. However much we might regret the change, we must face it as an accomplished fact. No good purpose can be served by looking back and sighing for the past, however much joy we obtained from it—and we had a lot indeed—the present and the future call for a fresh line of thought, and we must address ourselves to the problem of fashioning the machine to our act, as we previously fashioned the mechanic or craftsman. The result will be a *different* expression, but there is no reason why it should be less satisfying or less beautiful.

"What we now call the 'modern house' first appeared in this country in 1926. Since then, however, the new manner has gained a firm hold in this country. The progress has been gradual, due partly to our innate conservatism, but largely to the administration or mis-administration by local authorities of the powers given to them by the Country and Town-Planning Acts and by their byelaws—many of which are years out of date."

#### THE LATE WILLIAM SOUTHALL

We regret to record the death of Mr. William Southall, L.R.I.B.A., of Chapel Gate, Retford, in his seventy-sixth year.

Mr. Southall was articled to Mr. C. Greenhalgh, of Gainsborough, and afterwards had offices in Manchester, London and Doncaster. During his residence in Retford for the past forty years, Mr. Southall had designed many of the prominent buildings in the town and country district, and was also responsible for the design of many buildings in North Notts and North Lincolnshire.



## THOUGHTS ON STATUARY

By Osbert Lancaster

**P**RESUMABLY those who envisage and produce plans and models of the stream-lined cities of the future consider that the inhabitants of that brave new world will have outgrown the desire to commemorate the illustrious dead by the erection of monuments, for against the background of those functional skyscrapers and elevated motor-tracks one looks in vain for the prancing silhouette of a deceased general or the austerer mass of a side-whiskered civic benefactor. In making no allowance for the accommodation of these bronze and marble worthies, M. le Corbusier and his friends are, I fancy, guilty of a psychological error; with the achievement of the millennium, it is possible that memorial statuary will vanish along with unemployment, war and motor accidents, but until that time it seems probable that humanity's natural fondness for perpetuating in concrete form the transient delights of *pompes funèbres* will continue to flourish. Few passions are so widespread and common to so many otherwise totally dissimilar peoples; when one considers the streets and parks of London, one feels that nowhere else on earth can there be so many statues to the acre, but this foolish idea will never survive a week-end in Paris or a short stroll down the Siegers Allee in Berlin. Moreover, at a time when the enmity between Left and Right, Fascist and Communist is discernible in almost every sphere of human activity, on this one subject there appears to be universal agreement. Rome erects a marble statue of Mussolini a hundred feet high; Moscow promptly announces the appearance of Lenin two hundred feet high in chromium steel. So it becomes apparent that, whichever of these rival faiths finally triumphs, those who resent the human form more than life-size towering above the pavements of our towns and the trees in our parks, and interfering with the traffic, will be forced to conceal their resentment, or else disappear into concentration camps on a charge of *lèse-majesté*.

Unwelcome as this conclusion may be

to some (personally, I confess to an unfashionable weakness for statuary), it is one that must be faced. Too often in the past have the most progressive and enlightened members of the architectural profession, and more particularly the critics and other guardians of taste, adopted a *laissez-faire* attitude in regard to public monuments: they have implied in their remarks, and still more by their silence, that they consider the whole business of erecting monuments ridiculous and anachronistic, and one which can only be left to those with less rigorous standards than theirs. It is, alas, quite true that the great majority of public statues erected in the last hundred years have not the remotest claim to be considered as serious works of art; but, nevertheless, even in London there are a number of admirable monuments, and there is no reason why those erected in the future should not achieve an equally high standard. However, it must not be forgotten that conditions have changed, and that a slavish imitation of ancient examples can therefore only lead to disaster. For example, the celebrated statue of King Charles I at Charing Cross is justly regarded as a masterpiece of its kind, but it cannot be denied that it has lost much of its original effect owing to the erection of large groups of buildings in the immediate vicinity, which has destroyed the scale and proportions in relation to which it was originally conceived.

In the monumental, as in so many other branches of art, the present generation find themselves in the position of being forced to start afresh where the eighteenth century left off; the intervening period, regarded as a whole, must be written off as a bad debt on which it were foolish to suppose that any further interest is likely to be paid. It is not to be denied that in the nineteenth century, as in every other period of the world's history, great individual figures made an appearance, but either they continued the old tradition—as, for example, Alfred Stevens at his best (i.e. the Wellington Monument in St. Paul's)—or else they were sufficiently gifted to triumph over the obstacles of contemporary taste, and employed its third-rate idiom to produce something that achieved a certain greatness despite the style in which it was executed. This, however, was a miracle that occurred but once or twice, and of which the best example is probably Gilbert's original design for the Shaftesbury memorial fountain. With these few exceptions, the monuments with which the Victorians so generously peopled our streets and squares constitute one of the most worthless collections in all the lumber rooms of art. Occasionally, one catches an echo of



better things long past; there is a certain dash about the way the Duke of Cambridge rides his horse down Whitehall, and the pedestal which used to support that evangelical general at Knightsbridge, who has now been banished by the L.P.T.B., had a massive suitability lacking in the architectural adjuncts of most of the equestrian statues of the period, and the Crimea Memorial in Waterloo Place composes well, and is conceived in a just relation to the neighbouring buildings. However, when one regards the great achievements of the previous century, one is only too conscious of the sad falling off.

What, then, are the virtues which the Victorians so sadly neglected and after which the designer of monuments should strive? First, and most important, the relation of the statue to the base on which it stands (for the moment I assume that the statue itself is a fairly creditable performance). The importance of this has all too frequently been overlooked, with the most disastrous results; small and puny mannikins pose gracefully on vast monoliths and gigantic heavyweights balance on chocolate boxes. A classic example of the just relationship between statue and base is the Colleoni statue in Venice. In this connection, at the risk of appearing dogmatic, I humbly put forward the proposition that, when a statue is erected in an open space and unconnected with any building, it should be visible from all sides, and that the practice of providing a background of masonry, despite the excellent effect which it occasionally creates, is not one to be encouraged. The Reformation monument in Geneva is an example of this device being employed to the best possible advantage; the Cavell memorial vividly demonstrates the dangers which it entails.

Second, the relationship of the statue to its site and the buildings which surround it. The difficulties with which the designer has here to contend are nowadays well-nigh insuperable; at the time of its erection the statue may be surrounded by eighteenth-century houses in red brick, and three months later they have been replaced by neo-Babylonian office buildings in Portland stone. However, one thing is certain: unless the site chosen is one surrounded by ancient monuments which are unlikely to be replaced even in this utilitarian age, the scale adopted must be far larger than that which has hitherto been customary. Consider the awful fate of the Marble Arch, which is nowadays, one gathers, frequently taken for the box office of a neighbouring cinema. I hold no brief for the Quadriga on Constitution Hill, but the proportions of the new St. George's Hospital will have to be

formidable indeed to rob that monument of its effect. However, it is not only the buildings around the site which must be taken into consideration, but also the layout of the streets. The finest example in London of admirable placing is the statue of George I in St. James's Square; the proportions are exactly right, the layout could not be better and, so long as the Haymarket Theatre is allowed to survive, the view of it from King Street will remain one of the most delightful vistas in London.

Third, the avoidance at all costs of the picturesque. Styles and objects which can with comparative safety be incorporated in pictures can seldom survive a translation to a three-dimensional plane, where their incidence is always disastrous. Examples of this particular failing are the Peter Pan statue in Kensington Gardens, the jersey-clad boys with a football on the memorial to Quintin (Polytechnic) Hogg in Regent Street, the gentleman with a railway signal at the bottom of the Boulevard Raspail, and, dare I say it? the artillery memorial on Constitution Hill.

Finally, a plea for the column. The advantages of this type of monument seem to me to be very great; when it is well-placed and simply designed (e.g. the Duke of York's) it is a definite ornament to the landscape, it cannot be overshadowed by other buildings, and the quality of the statue itself becomes a matter of minor importance. Moreover, it raises the sculptor's work high above the level of the more vigorous forms of artistic controversy; had Mr. Epstein been responsible for Lord Nelson, the authorities would have been saved much trouble and a quantity of cleaning.

## COMPETITION NEWS

### LAYOUT OF AN ESTATE

The Broadstairs and St. Peter's Urban District Council invites the submission of designs for the laying-out of an area forming part of the late Lord Northcliffe's North Foreland Estate, as a high-class residential area and the preservation and improvement of the amenities of the sea front.

Copies of the Conditions and Instructions to competitors are obtainable from Mr. E. F. Owen, Clerk of the Council, Pierremont Hall, Broadstairs (Deposit £1 is.) The latest date for submission of designs is March 6.

### Competitions Open

**FEBRUARY 1, 1937.**—Sending-in Day. Competition for two senior elementary schools promoted by the *News Chronicle*. 1: A large senior mixed elementary school for 480 children suitable for an urban district. 2: A smaller senior mixed elementary school for 160 children in rural surroundings. Assessors: Professor W. G. Newton,

M.A. (OXON), F.R.I.B.A., Brian O'Rorke, M.A., A.R.I.B.A., and George E. Kendall, O.B.E., F.R.I.B.A. (architect to the Board of Education). Premiums: Section 1, £500, £200 and £100 for the designs placed first, second and third, respectively; section 2: design placed first £300, design placed second £100. Conditions, etc., are obtainable (Deposit 10s.), from: Schools Architectural Competition, *News Chronicle*, 19-22 Bouverie Street, London, E.C.4.

**FEBRUARY 1, 1937.**—Layout and design of 400 houses on Muirhead Housing Site for the Troon Town Council (open to chartered and/or registered architects in private practice in Scotland). Assessor: Charles G. Soutar, F.R.I.B.A. Premiums: £150, £100 and £50. The last day for questions was December 14, 1936. Conditions of the competition may be obtained on application to the Joint Town Clerks, Council Chambers, Troon. (Deposit £1 is.)

**FEBRUARY 6, 1937.**—Sending-in Day. Cottage Hospital at Dawlish. Limited to architects of British nationality practising within 200 miles of Dawlish. Assessor: Leslie T. Moore, F.R.I.B.A. Premiums: £100 (to merge), £75, and £50. Conditions of the competition are obtainable from the Honorary Secretary, Dawlish Cottage Hospital, Dawlish, Devonshire. (Deposit £1 is.)

**MARCH 5, 1937.**—Police and Fire Brigade Head-quarters for the Town Council of the Borough of Royal Leamington Spa (open to architects in the area of the Birmingham and Five Counties Architectural Association). Assessor: Mr. R. Norman Mackellar (F.R.I.B.A.). Premiums: £150, £100 and £70. The last day for questions was December 11, 1936. Conditions of the competition were obtainable on application before November 13, 1936, to Mr. Leo Rawlinson, Town Clerk, Town Hall, Leamington Spa.

**MARCH 12, 1937.**—Sending-in Day. Technical College, Commercial College and College of Art and Crafts, Birmingham, for the Corporation of the City of Birmingham. Assessor: James R. Adamson, F.R.I.B.A. Premiums: £750, £500 and £250. The last day for questions was October 19, and the conditions, etc., are obtainable from the Chief Education Officer, Margaret Street, Birmingham, 3. (Deposit £2 2s.)

**JUNE 1, 1937.**—Sending-in Day. Extension of St. Andrew's Cathedral, George Street, Sydney, for the Authority in the Diocese of Sydney of the Church of England. (Open to architects who are British subjects, and members of the Royal Australian Institute of Architects, the R.I.B.A., or the Allied and Associated Societies.) Assessors: His Grace the Archbishop of Sydney, Sir Giles Gilbert Scott, R.A., F.R.I.B.A., and Bertrand J. Waterhouse, F.R.I.B.A. Premiums: £500, £300 and £200. The last day for submitting designs (which must be forwarded direct to Sydney) is June 1, 1937. The last day for questions was August 11.

### Change of Address

Messrs. Adams, Holden and Pearson have removed their offices from 9 Knightsbridge, Hyde Park Corner, S.W.1, to 25 and 26 Torrington Square, W.C.1 Telephone: Museum 3033-4.



## CHIVELSTON COURT, WIMBLEDON COMMON

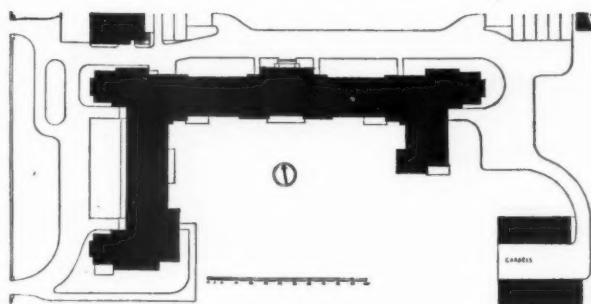


DESIGNED BY ERNEST SCHAUFELBERG

**GENERAL PROBLEM**—The demolition of an existing house and the erection of a block of 32 flats, with a number of garages; converting an existing lodge into a porter's flat on the first floor and two garages, store room and transformer chamber on the ground floor; and laying out the garden and drives.

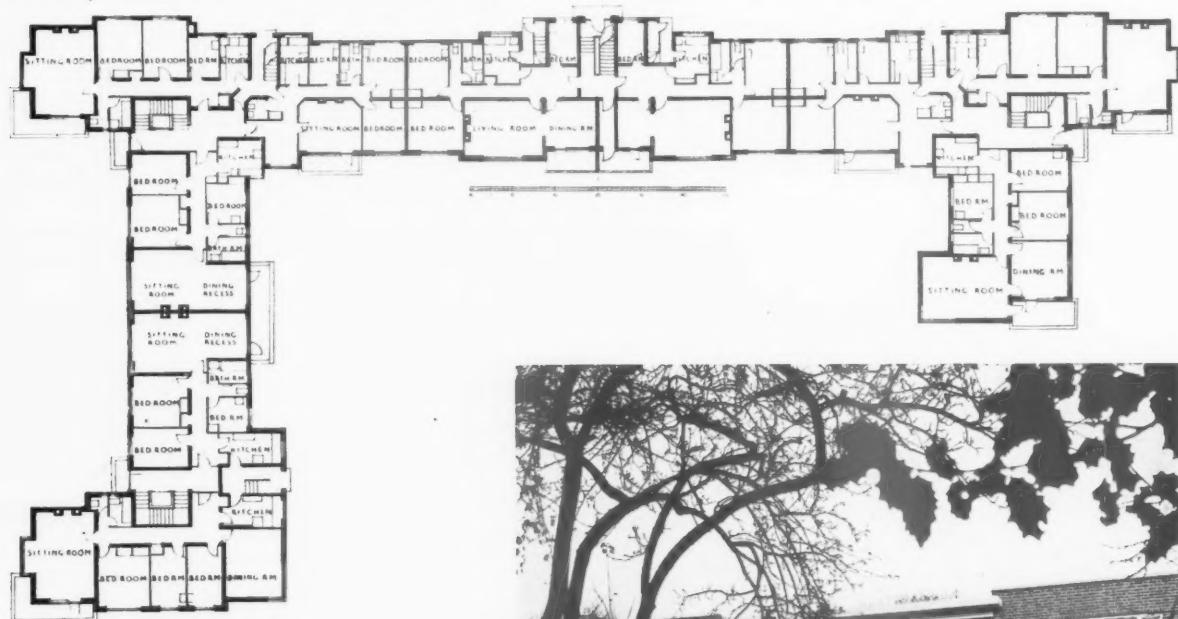
**SITE**—Level and rectangular, and 2 acres in area. Under town planning regulations 16 flats per acre were allowed, and the building was limited to four storeys in front, facing Parkside, and three storeys in the rear.

The photograph is of the west, the entrance front, facing Parkside, and overlooking Wimbledon Common.



SITE PLAN

## CHIVELSTON COURT, WIMBLEDON COMMON,

GROUND  
FLOOR  
PLAN

**PLAN**—The restrictions concerning the number of flats and the height of the building, in conjunction with the object of preserving as large a garden as possible, led to the adoption of the L-shaped plan. Each flat has a balcony or terrace overlooking either the Common or the garden. The garages are at the back of the garden and are screened by trees and shrubs and by a garden trellis.

**CONSTRUCTION**—The walls are brick; the floors, main stairs and balconies, concrete. Internal walls, where they form part of the structure, are brick, otherwise they are breeze blocks. Service stairs are iron, with perforated treads and no risers. The flat roof is covered with asphalt, laid to fall, on 1-in. boarding. Between the boarding and the wooden joists is a layer of insulating material. Where there is a parapet wall the gutter is of asphalt, and where the roof projects, as in the higher part of the building, it is of zinc.

**ELEVATIONAL TREATMENT**—External walls are rose-coloured, sand pressed, facing bricks with white pointing, and concrete surfaces are rendered white. The metal windows have wood surrounds and wood mullions. The front entrance doors are metal. Parapets to balconies are of 4½-in. brickwork, reinforced with concrete piers, and rendered white inside.

The photographs show: left, staircase landing and lift in the west wing; above, typical balconies on the garden front. On the facing page is a photograph of the entrance doorway, staircase windows, and balconies at the north corner of the west front.

S.W. :    DESIGNED BY    ERNEST    SCHAUFELBERG



## CHIVELSTON COURT, WIMBLEDON COMMON



**INTERNAL FINISH**—Entrance halls, staircases and landings are treated with beige plastic paint, with gold spots, and finished as follows: skirting, black cellulose; radiators and strip above skirting, gold; lift enclosures and entrance doors, red; floors, red rubber; handrails, silver bronze. The panels to the lift enclosures are obscured glass.

Other finishes are:—

**Bathrooms:** floor, blue rubber; walls, white glass lining, 5 ft. high, finished with blue border; ceiling, blue; skirting, black rubber.

**Kitchens:** floor, blue rubber; walls and fittings, cream flat oil paint. The door and cupboard frames are metal.

All doors are flush, and door furniture is silver bronze.

**SERVICES**—Central heating and constant hot water. An open fireplace is provided in each sitting-room; electric and gas points are also provided. The kitchens are fitted for electrical or gas cooking.



DESIGNED BY  
ERNEST SCHAUFELBERG

**RENTS**—£200 to £300. Lock-up garages, including washing facilities, 10s. per week.

The photographs show: left, an entrance door to a flat; top, a small bedroom; bottom, a kitchen.

For list of general and sub-contractors see page 920.



## LETTERS

FROM

## READERS

*The Modern House*

SIR,—The publication of a special number by your very swagger contemporary and stable companion, *The Architectural Review*, is an "event." In anticipation (or should it be expectation, A. H. P.?) of *The Modern English House*, I was wondering whether I should be able to pinch the office copy or should have to buy one for myself to take home, as I did with the Concrete number. And now, here it is: *The Modern English House*.

I turned not unnaturally to see what kind of showing my own firm's advertisement had made in such company, and was covered at once with the utmost confusion. I felt as I might have done had I walked into a nudist colony with my hat on. THE WRETCHED THING HAD A ROOF.

And yet I'd liked that little house when I saw it this summer, liked it so much that I took its photograph. Liked its cheerfulness and homeliness, liked the lines of it. Thought it pleasantly of today without being too consciously modern. Liked its pleasant cinnamon-coloured little bricks with the gay-coloured faience dressings. But that roof has fairly put the tin hat on it.

Is your contemporary right? Does it show us the modern English house? Should the number not have been called "Modern Tendencies in English Domestic Architecture"? Is this rooflessness the whole story as is suggested? Is the flat roof essential to the development of modern planning and the use, otherwise, of modern materials?

Skilful "modern" photography has a good deal to do with the appearance (as presented to us) of the exteriors, with views through trees and the softening effect of good clouds.

Go to Frinton, as I did, on a cold, wet, blustery, winter evening, and the impression is not so good. It is the interiors of today that one likes, with their clean lines and lack of clutter. We seem to have gained light and comfort, and—because of so much light possibly—cleanness.

In his introduction, the Editor says that the essence of the modern house is the plan. Of the modern house? Hasn't it always been so?

I have always understood that one great advantage of the flat, as compared with the pitched roof, is the great flexibility that is possible in planning, but in the houses reviewed it does not appear that the utmost has been made of that possibility. A great majority of

CYRIL CARTER

CHARLES HOLDEN, F.R.I.B.A.

ARTHUR E. V. NEWNHAM,  
Honorary Secretary of the  
"Unattached" Representatives' Association

the accommodation is contained within a rectangle which could economically be covered by a pitched roof, which, incidentally, I believe is still held to be cheaper than the flat roof if the latter is properly dealt with.

It is all very interesting, but I still feel the number to have been misnamed, as it seems to me to deal with an aspect only of the modern house, though possibly an important one.

But I am probably talking of something I know nothing about. It is probably just another case of the manufacturer being hopelessly behind the times. But I see that I am not alone. At least four other firms, quite nice people, too, as I happen to know, and not without intelligence, have illustrated that anachronism, the roof.

Possibly, my little Belgian house might run the risk of being called "artistic." Some might even damn it by calling it pretty, but I am not at all sure that it might not be quite pleasant to live in. I like it.

CYRIL CARTER

*London University*

SIR,—I shall be much obliged if you will kindly repair an omission from your reference to the new University buildings in the December 10 issue.

We have every reason to acknowledge most gratefully the generous help received from our consulting engineer for the structure, Mr. R. Travers Morgan, and for the heating and electrical work, Mr. J. Stinton Jones, also Mr. Hope Bagenal for his guidance in matters relating to the acoustics of the building and the London Sanitary Protection Association for the plumbing and sanitary work.

CHARLES HOLDEN

*"Unattached" Representatives' Association*

SIR,—I am instructed to inform you that the present Council Representatives of the "Unattached" Registered Architects have formed this Association with the following object in view:—

To enable the representatives to meet, and jointly consider all matters connected with the Architects' (Registration) Act, which affect the "Unattached" Registered Architects, whom they represent on the Registration Council.

It should be mentioned that the Association is confined to past and present council representatives of the "Unattached" Registered Architects,

and that there is no intention of extending it to form another architectural body.

The representatives forming this Association are the present representatives, as follows:—

Mr. Gordon W. Jackson—chairman.  
Mr. W. A. Hudson—vice-chairman.  
Mr. H. Bailey.  
Mr. T. W. Beck.  
Mr. S. L. Head.  
Mr. A. E. V. Newnham—hon. secretary.

It is intended shortly to address to all "Unattached" Registered Architects a communication dealing with matters connected with the Act.

The formation of this Association at last provides a channel through which "unattached" registered architects can communicate with their representatives.

ARTHUR E. V. NEWNHAM,  
Hon. Sec.

## IN PARLIAMENT

[BY OUR SPECIAL REPRESENTATIVE]

*By-pass Road in Northumberland*

In the House of Commons last week, before members rose for the Christmas recess, Mr. Mander asked the Minister of Transport if he would state the present position with regard to the proposal to make a by-pass road in Northumberland through the Roman camp of Corbridge, at present under excavation by the Office of Works.

Captain Hudson said that no proposal had yet been submitted to the Minister. He understood that discussions had taken place between the County Council and the Office of Works, who had approved the line, and that proposals for safeguarding the route under the Restriction of Ribbon Development Act were now being prepared for approval.

*Housing*

Mr. Leach asked the Minister of Health if he would consider favourably the case of the local authorities who had not yet completed their housing programmes under the 1930 Act and might not be able to do so before the expiry on March 31 of the Exchequer contributions, so that an assurance of further assistance might be given to them in cases where it could be shown that the delay had been legitimate or unavoidable.

Mr. R. S. Hudson said that Exchequer contributions would continue at the present rate until March 31, 1938. The contributions in respect of houses which were not completed until after that date would depend on the result of the review to be undertaken after October 1, 1937, and would be provided for in an Order to be made after that review. The Minister would approach the question with a full sense of all the issues involved, including the importance to the health services of the country of the completion of the slum clearance campaign.

*Overcrowding*

Mr. Rostron Duckworth asked the Minister of Health whether, in view of the fact that New Year's Day was to be an appointed day under the Housing Act, 1935, he could state what steps would be taken to inform the public before that date as to their precise responsibilities and obligations with regard to overcrowding.

Sir Kingsley Wood said that local authorities were empowered to publish the information referred to and he had in circulars and on other occasions stressed the necessity of their making full use of these powers. He had no reason to suppose that in any area for which the appointed day was January 1 next, the local authority had failed to give adequate information to the public.

# HOUSE AT IVER, BUCKINGHAMSHIRE DESIGNED BY F. R. S. YORKER

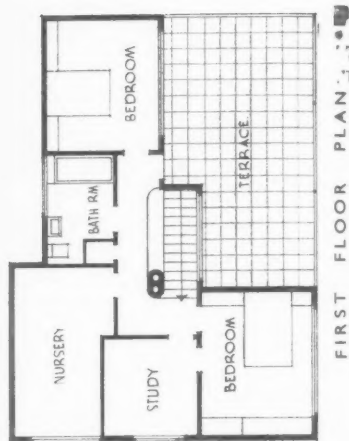
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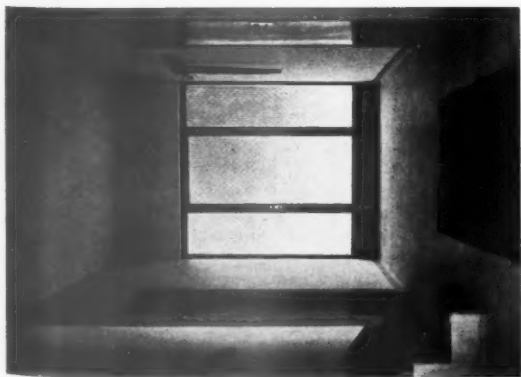
THE ARCHITECTS' JOURNAL for December 31, 1936



**SITE** — A level one in Iver High Street. From the paved terrace at the first-floor level of the house there is an uninterrupted view to the south.

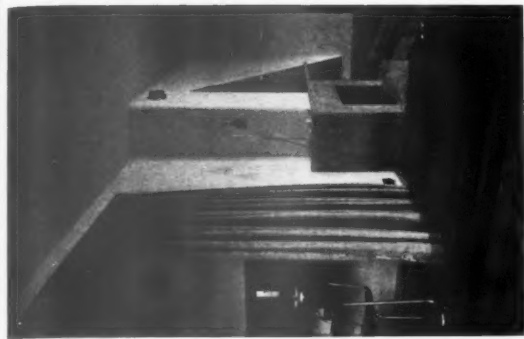
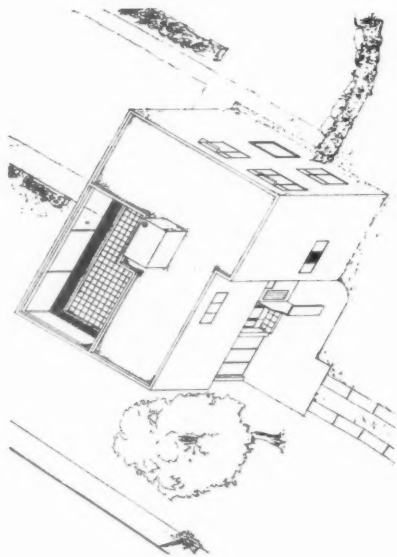
**CONSTRUCTION** — Reinforced concrete walls, 5 ins. thick, with concrete slab roof. Floors are : ground, reinforced concrete, covered with Columbian pine or jointless flooring ; first, hollow tile, screed and cork lino ; cork tile in bathroom. The walls, partitions and roof are insulated. Windows are metal, and doors are flush alder, waxed polished in wood linings and with chrome lever handles. The entrance door is cross-reeled glass in a wood frame. The garage has a wood roll shutter. Externally, the walls are finished in white flat paint, the metal and woodwork in light grey paint. The photograph shows the garden front.





**INTERNAL FINISH** — Walls are finished with skim coat plaster on insulation board, distempered; ceilings, distemper direct on insulation board; woodwork, glossy paint. The built-in furniture is Swedish pine in the bedroom and Indian white mahogany in the dining recess. The kitchen cupboards are painted.

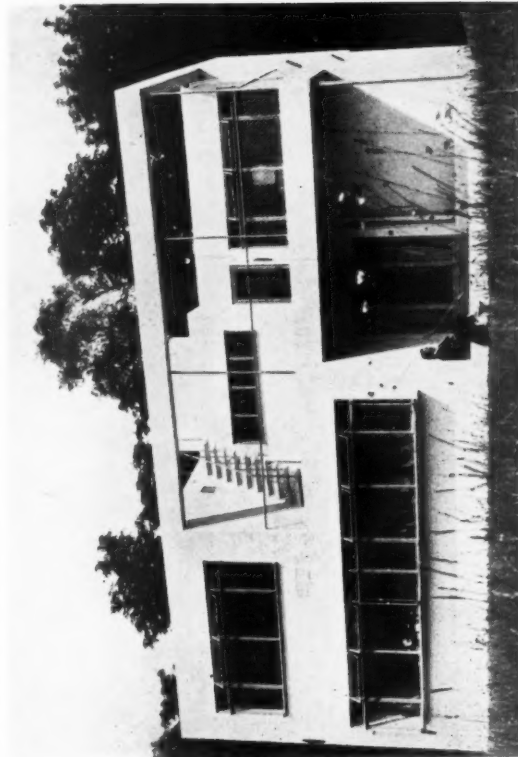
**SERVICES** — In the living room is an open fire, elsewhere are electric fires. Lighting is by electricity.



**COST PER FT. CUBE** — 1s. 3½d., including built-in furniture in bedroom, kitchen, and dining recess.

The photographs show: two views of the south, garden front; top, left, the entrance hall; top, right, the living room.

For list of general and sub-contractors, see page 921.







## R. I. B. A.

### COUNCIL MEETING

Following are some notes from a recent meeting of the Council of the R.I.B.A. :—

#### Examinations

**Appointment of Examiners.** 1: The Board reported that as a matter of urgency Mr. C. A. Minoprio (A.) had been appointed to act as a Problems in Design and Testimonies of Study examiner in place of Mr. Hubert Lidbetter, who was unable to continue to act in this capacity. 2: The Board reported that as a matter of urgency it had appointed Mr. Cecil Kennard to act, in conjunction with Mr. C. S. White, as examiner for Subject B.2 (Iron and Steel Construction, Reinforced Concrete) of the final and special final examinations, in place of Mr. W. E. Vernon Crompton, who had been compelled to resign owing to ill-health. 3: The Board reported that as a matter of urgency it had appointed Mr. E. G. Allen to act as a Thesis examiner in place of Mr. W. E. Vernon Crompton, who had been compelled to resign for reasons stated above.

**Examination for the R.I.B.A. Diploma in Town Planning.** The Board reported that Mr. J. H. Napper (A.) had passed the examination for the R.I.B.A. Diploma in Town Planning held in July, 1936, by the Town Planning Joint Examination Board.

#### Schools

**The School of Architecture, Robert Gordon's College, Aberdeen.** On the recommendation of the Board it was decided that the recognition of the three years' full-time certificate course for exemption from the R.I.B.A. Intermediate Examination, and of the three years' full-time day course with, in addition, three years' attendance in the evening school combined with office employment during the day for exemption from the R.I.B.A. Final Examination, be continued.

**The School of Architecture, Edinburgh College of Art.** On the recommendation of the Board it was decided that the recognition of the certificate course for exemption from the R.I.B.A. Intermediate Examination, and of the diploma course for exemption from the R.I.B.A. Final Examination, be continued.

**The R.W.A. School of Architecture, Bristol.** On the recommendation of the Board it was decided that the recognition of the four years' part-time course and the three years' full-time course for exemption from the R.I.B.A. Intermediate Examination be continued.

**The School of Architecture, The Polytechnic, Regent Street, London.** On the recommendation of the Board it was decided that the recognition of the three years' full-time course for exemption from the R.I.B.A. Intermediate Examination be continued. It was further decided that the five years' full-time course be recognized under the usual conditions for exemption from the R.I.B.A. Final Examination except that portion relating to professional practice. It was also decided that the school be allowed to hold the examination in professional practice with the other examinations in the final year instead of at the R.I.B.A. provided that the examination in professional practice was conducted in the same way as it is at present conducted at the R.I.B.A., i.e. by senior independent practising architects and not as part of the ordinary examinations of the school.

**The School of Architecture, The Northern Polytechnic, London.** On the recommendation of the Board it was decided that the recognition of

the three years' full-time course and the five years' evening course concurrent with experience in an architect's office, for exemption from the R.I.B.A. Intermediate Examination, be continued.

#### Building Byelaws

**Proposed Revision of Model Building Byelaws.** Information was received by the Council from the Minister of Health that he had appointed Mr. Eric W. B. Scott (F.) to serve on the Advisory Committee set up to assist in the revision of the model building byelaws and that Mr. Scott had agreed to serve.

#### Housing and Town Planning

**The International Federation for Housing and Town Planning.** The following representatives were appointed to serve on the International Federation for Housing and Town Planning: Professor Patrick Abercrombie (F.), Professor S. D. Adshead (F.), and Messrs. H. T. Buckland (F.), W. A. Harvey (F.), W. Harding Thompson (F.). **Court of Governors, University College, Hull.** Mr. F. J. Horth (F.) was re-appointed as the R.I.B.A. representative upon the Court of Governors of the University College, Hull.

#### British Standards Institution

**Building Divisional Council.** On the recommendation of the Science Standing Committee Mr. L. W. Thornton White (A.) was appointed as one of the R.I.B.A. representatives on the Building Divisional Council of the British Standards Institution in place of Mr. W. E. Vernon Crompton.

#### Other Committees

**The Standardization of Pigments for Use with Concrete and Other Products.** Mr. O. P. Bernard (L.) was appointed to represent the R.I.B.A. on Technical Committee B.44, which had been set up by the British Standards Institution to consider the standardization of pigments for use with concrete and other products.

**Technical Committee B-26, Acoustics.** The Science Standing Committee reported that as a matter of urgency it had appointed Mr. Hope Bagenal (A.) to represent the R.I.B.A. on the British Standards Institution Technical Committee B-26, Acoustics, in place of Mr. Alister G. MacDonald, who had found it necessary to resign therefrom.

**Technical Committee B-29, Sequence of Trade Headings and Specification Items.** The Science Standing Committee reported that Mr. F. R. S. Yorke (A.) had been appointed to succeed Mr. Vernon Crompton on the Technical Committee B-29, Sequence of Trade Headings and Specified Items.

**British Standard Specifications.** A report on the question of British Standard Specifications prepared by the Science Standing Committee was approved for submission to the director of the British Standards Institution.

#### Personnel of R.I.B.A. Committees

**Women Members' Committee.** Miss Rosemary Owen Smith (A.) was appointed as a member of the Women Members' Committee in place of Miss Elsie Rogers (A.), who is unable to serve. **Junior Members' Committee.** Mr. H. Myles Wright (A.) was appointed as a member of the Junior Members' Committee in place of Mr. Henry Braddock (A.), who is unable to serve. The Junior Members' Committee reported that Mr. H. Frank Hoar (A.) had been co-opted to serve on the committee as representative of the Art Standing Committee.

**R.I.B.A. Camera Club.** The Social Committee reported that it had considered and approved the draft constitution of the R.I.B.A. Camera Club and had invited the club to appoint two representatives to serve on the committee.

**Revision of the Rules of the South Wales Institute of Architects.** The revised rules of the South Wales Institute of Architects were formally approved by the Council.

**Applications for Loan of Drawings.** (i) It was agreed to lend some drawings from the library to the Westminster City Council for inclusion in an exhibition of town planning in West-

minster. (ii) It was agreed to lend some drawings from the library to the Royal Academy for inclusion in the Exhibition of British Architecture.

**Reinstatements.** The following ex-members were reinstated :—

As Associates: Messrs. Valmer Dudley Bouchard, Albert Edward Bullock, H. Reginald Parkin, Thomas Ridge, Douglas Rogers Stark, Philomorus Edwin Stephens, Herbert Waller, and Bernard Geoffrey Warr. As Licentiates: Messrs. Charles Ewan, Robert Ewan, Archibald Sinclair Gold, and Edward Stockwell.

**Transfer to the Retired Members' Class.** The following members were transferred to the Retired Members' Class :—

As Retired Fellows: Messrs. Arthur Edward Henderson and Reginald Minton Taylor. As Retired Associate: Mr. Henry Wheeler Anderson. As Retired Licentiates: Messrs. Frank Edward Milne and William John Wadman.

**Resignations.** The following resignations were accepted with regret :—Messrs. John Horner Hargreaves (A.), Thomas Cockrill (L.), Walter Edward Horsfall (L.), and Frederick Avenit Wiblin (L.).

#### INTERMEDIATE EXAMINATION

The R.I.B.A. Intermediate Examination qualifying for election as Student R.I.B.A. was held in London, Belfast, Edinburgh, Hull, Manchester, Newcastle and Plymouth, from November 6 to 12. Of the 175 candidates examined 80 passed and 95 were relegated. The successful candidates are as follows :

H. B. Ansell, J. W. Ball, W. Binney, L. Blease, M. R. Bool, (Mrs.) A. H. J. Tatton Brown, J. D. Cadwallader, J. L. E. Caldwell, N. K. Cale, G. R. Castle, H. R. Clark, A. H. Clarke, R. W. Clayton, S. E. Cooper, P. McG. Corsar, G. Cowley, E. L. Crawford, A. R. Crisp, (Miss) N. H. Cuthbertson, H. Daley, W. G. H. Davey, R. Davies, J. S. Dixon, J. F. Dixon, W. H. Drake, A. Earnshaw, F. E. Finch, A. Gemmell, M. R. G. Golding, G. A. Gostling, B. G. Green, C. W. Gummer, H. J. Hall, R. M. Halsey, R. J. Harris, K. Hart, T. C. Hartley, J. M. Hatton, K. H. Haworth, W. R. Hazlewood, (Miss) C. Hindshaw, S. M. Holloway, E. E. James, R. D. Johnson, A. Kaufman, (Miss) M. Kohn-Speyer, J. S. Lacey, G. Lang, H. W. Langham-Hobart, C. E. Longdin, T. K. Makins, R. F. Malcolmson, R. H. Marshall, A. R. G. Milner, S. Morrison, D. Myers, E. Narracott, W. J. Parsons, C. W. Pearce, A. Pomfret, J. T. Redpath, F. H. Roberts, L. Rossington, J. R. Royce, N. A. Royce, H. Sanger, P. R. Sawyer, H. V. Shaw, G. E. Smee, L. R. Smith, G. Steel, J. O. Stevens, C. H. Thorp, R. B. Thorpe, S. T. Tomlinson, S. E. Tong, E. Wade, H. Whitehead, R. Woods and E. Wright.

#### Trading Estate Progress

Work on the 310-acre site of the Government-financed Trading Estate in the Special Area of South Wales, between Cardiff and Pontypridd, began on Monday, December 21.

The first building is to be a paper mill for the British Coated Board and Paper Co., Ltd., and the contract, which stipulates that local labour shall be used wherever possible, only foremen being introduced from outside, has been placed with E. Taylor & Co., Littleborough, Lancs., who have been responsible for the building of some of Lancashire's finest cotton mills.

The second series of contracts for the provision of estate roads and drainage system, filling and levelling of the site and providing railway sidings are now advertised and tenders are returnable by January 5, 1937. This preliminary work alone will mean considerable employment in the Special Area and much unskilled labour will be needed.



## SHOPS

## Blinds

[By Bryan Westwood and Norman Westwood]



The Dutch type of blind applied to the circular headed windows of a Belgian provision shop.

**B**LINDS are not only used to protect goods from the sun, but also to reduce reflections, give shelter from the rain and lend attraction to the façade. There are few sites where they are entirely unnecessary. Such examples occur where the front is protected and has a northerly aspect, or where the window is set back far enough for the upper part of the front to throw sufficient shadow to protect the goods.

There is considerable variation in the requirements of local authorities as to minimum heights for the blind-arms from the pavement and the throw-out of the blind itself.

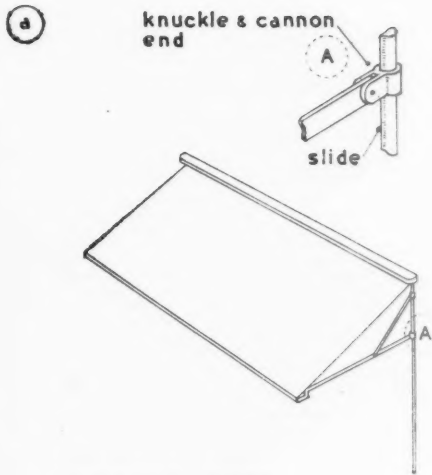
In London the blind lath must not be lower than 8 ft. from the pavement and the arm must not be lower than 7 ft. 6 ins. at the end next the building. Under one of the Police Acts there is a ruling that 8 ft. is to be the minimum, and a number of provincial authorities enforce this, though, with the usual inconsistency, in some places 7 ft. 6 ins. is allowed. As a general rule the blind may not project nearer than 15 ins. to the front edge of the pavement.

The position of the blind-box is arbitrary, but, other things being equal, and in order to get as much light as possible into the shop, it is best incor-

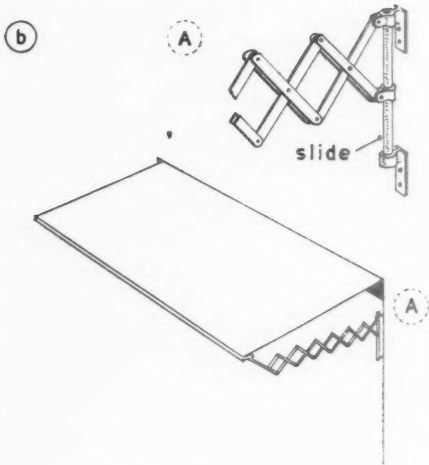
porated in the transome if the normal type of blind is used. By this means the name on the fascia is not obscured; and accordingly blinds have become flatter and difficulties arise in the design of the arms.

The usual arms with knuckle cannon joints and guides on the shopfront are seldom satisfactory with the modern shopfront where the blind-roller is often only 9 ft. from the pavement. In such cases this type of arm is quite useless if a reasonable projection is required, say 7 ft. 6 ins. To get over this difficulty trellis extension arms are being used, but these are hard to operate by reason of the many joints and certainly do not improve the appearance of the shopfront.

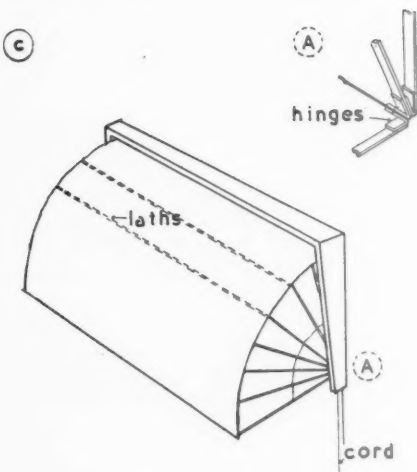
This being so, arms have been introduced which fold into the blind-box; these have a knuckle joint, as shown in the diagram. This joint is very difficult to construct satisfactorily as the arms are liable to become distorted and then will not fold into the blind-box. This latter has to be constructed with the roller in a higher position than normal, to accommodate the arms immediately below it. This type of arm, generally speaking, is not satisfactory, especially with wide blinds, being very heavy to operate by



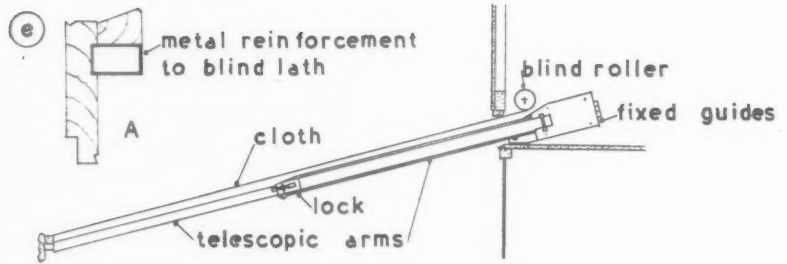
NORMAL TYPE



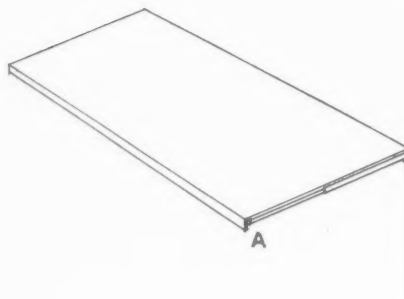
TRELLIS TYPE



DUTCH TYPE



BLIND EXTENDED

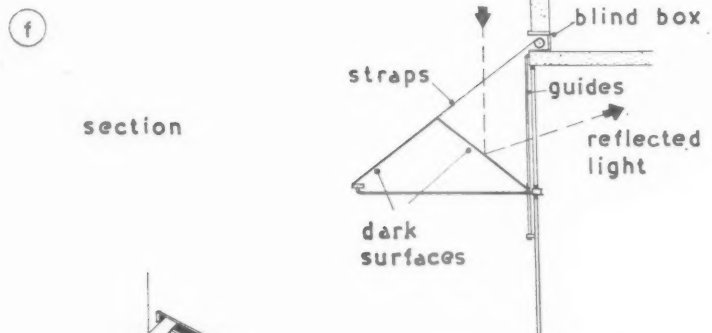


BLIND CLOSED

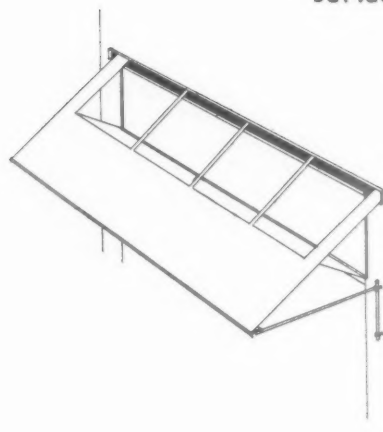
SUPER SLIDE-AWAY BLIND ARM

A.B.C. CO. PATENT

Diagrams of the various types of blind described in the text



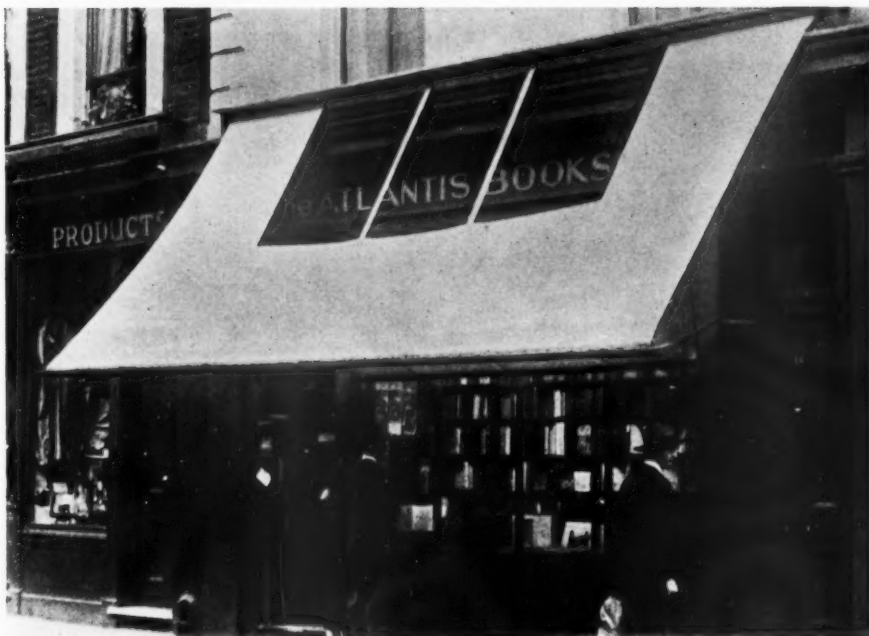
section



perspective

THE REFLECTOPLAN

DR. NEUMANN'S PATENT.



A book shop, where the ordinary blind has been adapted to the Reflecto-plan principle. Greatly increased light is obtained inside the shop when the blind is extended.



A dress shop in Berlin showing a carefully detailed blind of the usual type operating at transome level. The shop front is of travertine with bronze window frame and door.

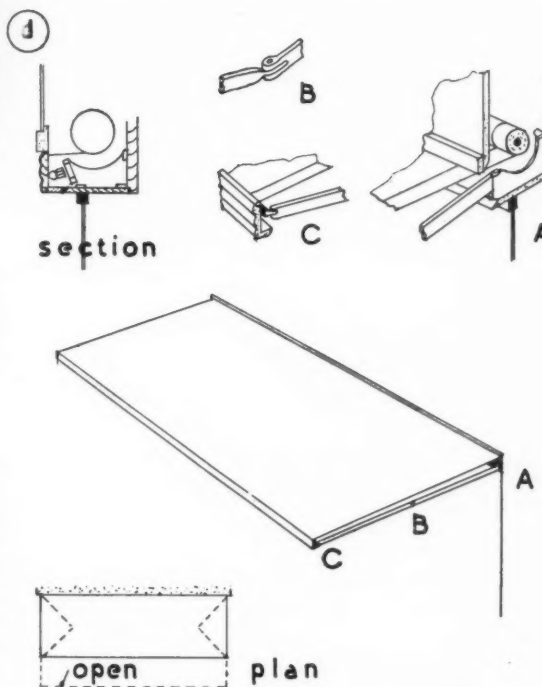
hand, and as with previously mentioned types the application of electricity to roll them up is not easy. The difficulty is that the blind will not lower itself under its own weight unless springs are provided to move it past the dead centre, i.e. for the first 18 ins. or so.

#### Telescopic Arm Type

To overcome all these difficulties telescopic arms have been introduced and patented. These can be either operated by long-arm outside the shop, by hand gear from inside the shop, or by electricity, using a simple push button for extending or withdrawing the blind. By using this new type of arm the architecture of the shopfront is not spoiled, as the arms are not fitted to the shopfront and no fascia stays are necessary. Another advantage is that where the blinds are controlled by hand gear or electricity they can be extended to any required position. Lengths of blind approximately 100 ft.

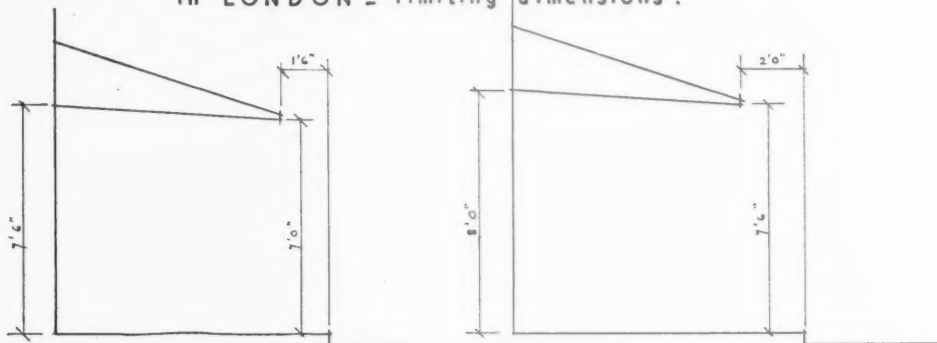
long have been erected and can be raised or lowered by pressing a button. The lath only is in one piece, the rollers and main blinds being in sections with spring connections—the gap between the sections is covered by a blind about 4 ft. wide rolled on a small roller behind the main rollers, so that the whole ensemble appears as one blind.

The only disadvantage of these blinds, apart from higher initial cost, occurs where there is not room for the arms to be housed in the space above the



The single knuckle folding arm type of blind. Simple and efficient in appearance; but with the disadvantage that, with a large projection, the arms may become distorted and fail to fold back into the blind box.

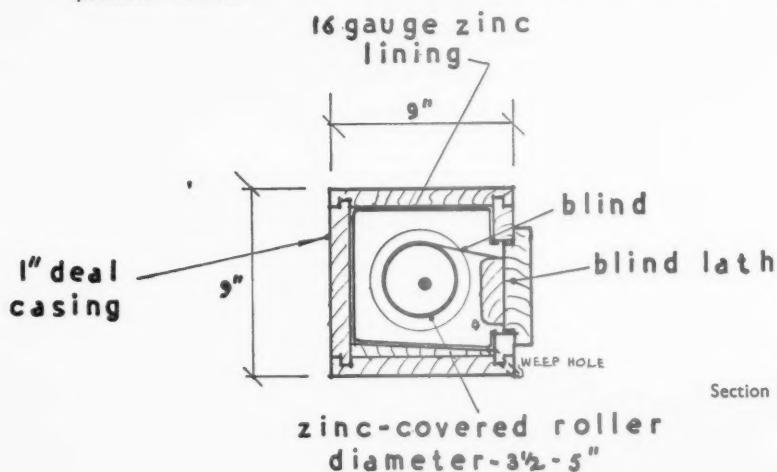
# BLINDS . Regulations as to height and projection in LONDON - limiting dimensions .



L.C.C.

CITY.

Although the blinds are allowed to be lower at the front edge than the rear, in practice they are constructed level, since the sag of the lath itself would otherwise bring it lower than the permitted minimum.



Section through a typical blind box.

windows, but this can generally be overcome by collaboration between the manufacturers and the architect before the shopfront is set out. By using these arms no strain is put on the shopfront, as in the case of trellis arms. To prevent the usual sagging of front laths they can be reinforced with a patented method of drawn-steel tubing, which gets over this defect very well.

## Dutch Blinds

These are an entirely different type. They are simple and can be very decorative, but they are limited in application because, being quadrant-shaped in section, the projection cannot exceed the height. They are also apt to be untidy when not in use owing to the folds of the material. This can be overcome by having a broad lath to act as a fascia covering the top and sides when closed and lying horizontally when the blind is lowered. This type of blind has the advantage that it can be applied to circular-headed windows, as shown in the photograph on page 909.

## Latest Development

The latest development in blinds is called "The Reflectoplan." This type of blind is illustrated on page 910.



Shop in Regent Street, London. Designed by Messrs. Courtney Pope. An example of an open treatment almost entirely in glass. A small window provides the rather more intimate setting required for small goods, while the large window gives a good view of the interior.

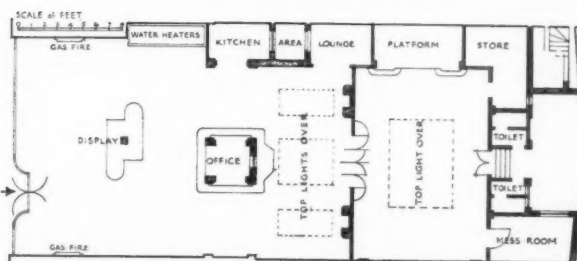


**SHOPS****GAS SHOWROOMS, WANDSWORTH • Designed by H. W. Binns**

The front is timber framed with breeze infilling and finished in faience tiles. Doors, window surrounds and ventilation louvres are stainless steel externally and walnut internally. Lettering is stainless steel on front face and pillar-box red on return faces.

Internally dado is of walnut with ebonized mahogany plinth, with upper walls of wood-floated plaster of an ivory colour.

Main showroom floor is of small wood blocks with pattern lines in walnut.





Showrooms of Siemens-Wake gas and heating apparatus company in Vienna designed by Professor Max Fellerer. The lettering is blue neon seated in bronze on a stainless steel fascia. Pilasters are of sandstone, and window framing of steel painted pale blue. The projecting sign contains flood lights, glowing downwards and throwing a strong beam of light upwards.

The upper surface of half of the blind is used to throw light into the shop. In order to avoid sunlight in the windows it is essential that the blind-box should be above the fascia, so that the lower edge of the blind is level with the transome.

Black cloth can be used for the under surface of the blind and thus effect a reduction in reflection. A small metal gutter is provided to catch the water from the inner slope of the blind, and throw it clear of the window at each end. Even on a dull day the light inside the shop is considerably greater with the blind in action than when it is rolled up.

No satisfactory method has yet been evolved

for blinds on corners. The usual method is to have short lengths of blinds covering the gaps left by the larger blinds; or spandril pieces can be hooked into place. Some time ago a German blind was introduced which was reefed instead of being rolled, but this has not proved successful.

The usual cloth for blinds is 18 oz. or 21 oz. white duck sailcloth. The usual diameter of the springs to blind rollers is  $3\frac{1}{2}$  ins. to 5 ins., depending on the length. The blind-box is usually made of deal, which must be protected adequately with a lining of zinc to prevent deterioration due to moisture which collects when the blind is rolled up wet.

## L I T E R A T U R E

HEATING AND AIR  
CONDITIONING

[BY C. C. HANDISYDE]

*Heating and Air Conditioning of Buildings.* By Faber and Kell. London. The Architectural Press. Price 25s.

THAT life is becoming more and more complex every day would scarcely be denied by anyone, least of all by people connected with the building industry. If, therefore, a new book or a new material appears on the market one always feels inclined to ask first of all why it has been produced, secondly, for whose use it is intended, and, thirdly, whether it does its job well.

It might be thought that the numerous books on heating would adequately cover all existing requirements, but the authors' justification for writing *Heating and Air Conditioning* is that most of the books which attempt to deal fully with the subject are of American origin and, therefore, are not very satisfactory for use in England, where heating practice is considerably different.

The second point, "For whose use is the book intended," is covered in this case by the answer: "Everyone connected with heating and air-conditioning problems." The book is very clearly written and is well illustrated with sketches and photographs. Much of the fundamental science connected with heating is explained in such a way that it should form a very valuable background for architectural students. Many of the chapters are devoted to rather advanced problems, which are dealt with in considerable detail and will, therefore, be outside the scope of the work of the average architect; though no doubt they will be very useful to heating engineers.

It is not possible to make a detailed criticism of a book of this sort which gives over 400 pages of technical information, starting with general problems in connection with heating and going on to describe various heating systems, boilers, methods of providing hot water supplies, different fuels, air-conditioning and refrigerators. Many interesting facts can be found in a study of some of the numerous tables and charts, such as the one giving the insulating values of various building materials. All sorts of information is included, and it is amusing to note among other details that one of the complaints that a heating engineer had to deal with was that in one installation the resulting humidity was such as to lead to the disappearance

of permanent waves in the hair of girls occupying the building!

On first reading the book a number of minor points occur on which one feels that a rather fuller explanation would be desirable and in some cases one would like to ask the authors why they say certain things, but in a book covering such a wide field this is almost inevitable.

An architect is responsible for every part of a building and a careful explanation of such problems as comfort conditions, taking into account radiation and humidity and not merely temperature, should prove a considerable help to the conscientious architect who really tries to give his clients value for money in all sections of their buildings. It is from this point of view, rather than with the intention that any architect should try to become an expert on heating, that I feel that this book should be so useful both to senior students and those in practice.

## FRENCH ARCHITECTURE

[BY ROBERT HURD]

*Three Hundred Years of French Architecture 1494-1794.* By Sir Reginald Blomfield, R.A. Maclehose. Price 7s. 6d.

FROM the outset it is clear that Sir Reginald Blomfield is a sane but doughty champion of architectural nationalism in his interpretation of historical development. He believes in the persistence of the French genius. His attitude is the more remarkable in that the average historian searches so frantically for outside influence to explain cultural (and especially architectural) developments, that he often overlooks the effects of native genius. For instance, French architecture of the late fifteenth and early sixteenth centuries is commonly supposed to have been swamped by Italian culture as a result of the Italian expeditions; in actual fact, as Sir Reginald shows conclusively, Italian design in France remained for long a "costly exotic, an affair of the Court disregarded and disliked by the people" despite the efforts of successive Italianising kings, Charles VIII, Louis XII and François I. He quotes as one proof the *Manoir D'Ango*, built by a shipbuilder in 1532 near Dieppe; and, certainly, though there was Italian ornament, the majority of contemporary buildings remained French in essential form. In a different sense Bullant's work, later in the sixteenth century, revealed equally the persistence of national characteristics, this time in a reaching after heroic scale, and in the

exercise of a severe restraint worthy of thirteenth century gothic.

The period covered by this survey starts with the Italian expeditions of Charles VIII and ends with the French Revolution, during which time renaissance architecture in France began, suffered the growing pains of experiment, and eventually flowered in the seventeenth century, afterwards gradually losing vitality until the dead hand of pedantry settled its fate at the end of the eighteenth century.

Incidentally, the career of Le Nôtre (which the book discusses fully) furnishes so significant a contrast with modern practice that it is worth mentioning that this famous garden-designer had a fair training as artist and designer before settling down to his life's work—"unlike our landscape gardeners and municipal engineers," observes the author drily, "who assume that they can do these things by the light of nature. . . ." The pity is that so few of them are likely to read those words.

Sir Reginald Blomfield writes with confidence, and anyone wishing to read a concise, well-written and original survey of this period of French Architecture should get this book. It is fully illustrated.

A CAREER IN PUBLIC  
HEALTH

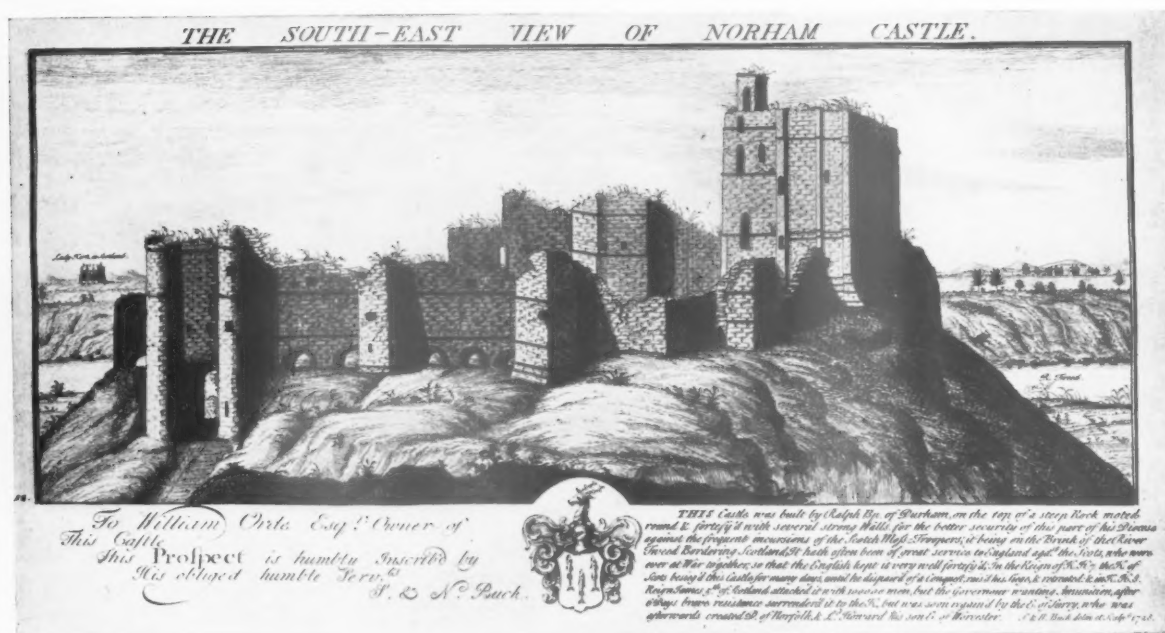
[BY DR. J. L. BURN]

*The Last Thirty Years in Public Health.* By Sir Arthur Newsholme. London: Geo. Allen and Unwin, Ltd. Price 15s.

READERS who are interested in recent social history, and particularly those who require an historical survey of Poor Law and the Relief of Destitution, will find chapters of great interest in this book. The author was the Principal Medical Officer to the Local Government Board (1908-19), and is in a position to give an authoritative account of such matters as the evolution of National Health Insurance, and the establishment of the Venereal Disease Service. His distinguished official and post-official career is described.

Otherwise, in my opinion, the book is exceedingly disappointing. A more personal title would have been appropriate, for the book is personal, if not egotistical. One should have thought that a book devoted to public health in the last thirty years would have dealt more adequately with the subject of nutrition. Out of four hundred pages, only one page of somewhat scrappy remarks are given to a subject of such vast public health importance. To take another example, housing is undoubtedly a prominent feature of public health during the period mentioned in the title; yet it is scarcely mentioned.







*Warkworth Castle and the River Coquet. From the Official Guide to Warkworth Castle, Northumberland.*

strain of contemporary building practice. So many of our building details are nowadays carried out by specialists. But that is the fault of the building industry as a whole and is not particular to "Mitchell."

The book is essentially a text book, complete with several pages of questions taken from the examinations of the R.I.B.A., the Surveyors' Institution, the Institute of Builders and the Institution of Structural Engineers.

L. W. T. W.

## STEEL STRUCTURES

*The Analysis and Design of Steel Structures.* By Almon H. Fuller and Frank Kerekes. London: Macmillan & Co. Price 25s.

THE two authors of this book are on the staff of the Department of Civil Engineering of Iowa State College, and the book itself is a development of the notes which they have used for teaching purposes over a number of years.

The material is presented from the standpoint of the student who is only beginning structural work, and problems are used extensively, not only to illustrate the principles which have been developed in the text, but also to present many extensions and applications which have not been discussed, but which are so closely related to the text as to be easily within the grasp of any student who is interested enough to do a certain amount of exploration.

The authors are mainly concerned with civil engineering and a good deal of the

book is concerned with bridge design, but there are several chapters on steel-frame buildings, and a good deal of useful information on timber falsework scaffolding, and various types of timber beams and trusses.

W. E. J. B.

## SOCIETIES AND INSTITUTIONS

### CARDIFF PUBLICITY CLUB

Mr. Percy Thomas, P.R.I.B.A., in an address on national and local planning at a recent meeting of the Cardiff Publicity Club, said there were many problems before them today, the problem of urban overcrowding, of countryside preservation, and industrial location. Whatever the solution was, whether satellite towns or clearing and re-planning large portions of existing towns, it meant planning ahead.

All those things called for courage and vision, not only on the part of architects and town planners but on the part of their national and municipal leaders.

He looked forward to the day when every city would have a plan prepared for its future development, a plan not made for the moment but for 50 to 100 years ahead, dealing with industrial location and transport as well as housing and civic amenities. It might have to be amended from time to time, but all subsequent development would have that ultimate ideal in view.

It was said that Britain was a C3 nation. The establishment of national playing fields and of health centres and clinics, the teaching of hygiene, and the encouragement of sport and physical exercises were all good in themselves, but they could not do away with one root cause of an unfit nation—congested smoky towns.

The cure was to open up the towns to admit air and sunlight. One way, of course, was to build higher without increasing the existing densities of population, thereby freeing land for parks, public gardens, and easier traffic flow.

The financial aspect of the problem was, of course, of importance, but experience had shown often enough that a boldly planned scheme paid for itself.

The engineering aspect was also important, but the needs of traffic should not be allowed to outweigh those of health or industry, or indeed of amenity.

The problem was one for a creative planner, to plan a living town—not merely a traffic system.

### SMOKE ABATEMENT SOCIETY

Definite proposals for dealing with the smoke nuisance were made by Mr. Charles Gandy, chairman of the Executive Committee of the National Smoke Abatement Society, before the Midland District Conference of the British Commercial Gas Association at Stoke-on-Trent.

The smoke from domestic sources or quasi domestic sources, e.g. offices, commercial premises, hotels, etc., said Mr. Gandy, was more important as a source of pollution than that produced by industrial operations. The only effective method of controlling smoke from non-industrial premises was by the establishment of smokeless zones—in other words, by means of bye-laws under which smoke emission from such premises could be made a statutory offence, not generally, but only within well-defined areas to be specified in such bye-laws.

He suggested that local authorities should be empowered by Act of Parliament to make bye-laws under which the emission of smoke could be prohibited in certain areas or zones selected by the authority concerned.

## LAW REPORTS

## NUISANCE FROM NOISE—INJUNCTION GRANTED

*Peters and another v. Willment Bros.—Chancery Division. Before Mr. Justice Luxmoore*

THE motion by Mr. A. D. Peters, a literary agent, and Mr. W. T. Cranfield, a journalist, both of Adam Street, Adelphi, against Willment Bros., contractors, of Baltic Wharf, Waterloo Bridge, for an injunction to restrain the defendants from using pneumatic drills or other noisy tools or machinery in the demolition work being carried out by them on the site at the Adelphi, so as to cause a nuisance by noise, was again before the court.

Mr. Norman Daynes, K.C., for the plaintiffs, stated that the site being demolished had been built in two stages, the one about a hundred years ago and the other some fifty years ago. The latter part was now being excavated and its foundation consisted of Portland cement. Only the central part of the site had so far been broken up. He understood that the first stage would last about ten weeks, and that the pneumatic drilling would last that period unless a great number of drills were used, in which case the time necessary would be four weeks. There were three alternatives to the pneumatic drill method, the old method of sledge and hammer, the hydraulic cart-ridges method, which required only intermittent use of a pneumatic drill, and a third known as the plug and feather method.

Counsel then read an affidavit by Mr. Peters, which stated that his work necessitated quiet and that the fact that Adam Street was a cul de sac, almost without traffic, had been a great attraction, inducing him to take a long lease. His complaint was that the noise of the defendants' operations made the conduct of his business impossible and that the constant noise and vibration were having a detrimental effect on his nerves.

Mr. Cranfield had also sworn an affidavit, in which he said he was the London correspondent for a Toronto newspaper, his work being continuous for twenty-four hours. He lived on the premises and was unable to escape from the noise outside normal business hours. His secretary had been so affected by the noise that she had suffered a nervous breakdown through having to carry out exacting duties under such conditions.

Other affidavits were read in support of the plaintiffs' complaints.

Mr. Fergus Morton, K.C., for the defendants, said he had evidence of people who were not annoyed by the noise. He contended that the use of pneumatic drills was absolutely necessary to the work.

His lordship said that no one could say that pneumatic drills were in law such a necessity that people must put up with them.

Counsel then read an affidavit by Mr. Charles Sydney Willment, which stated that the excavation work was begun in October last, when pneumatic drills were first used on the site. From that date till November 1, one petrol-driven compressor, operating two drills, was in use. On November 1 a further compressor was brought into use, operating four drills, of

which seldom more than three had ever been worked at the same time. The work involved the breaking up of concrete and stonework, and it was quite impossible to continue operations without the use of pneumatic drills. Apart from any question of expense, he knew of no alternative method which, in the circumstances, would be practicable for carrying out on the site the necessary excavation work. He was quite satisfied from a wide experience that no satisfactory alternative method existed. The use of three drills and one crane was the absolute minimum of apparatus which it was possible to use for a big contract of that nature, and was really most inadequate for the proper carrying out of the work. He estimated that the work could, apart from contingencies, be completed within four weeks if no restrictions were placed on him. If he were restricted to the use of three drills the work could not be done in less than ten weeks.

Counsel read a number of affidavits in support of the defendants' case.

Commenting on the case, Mr. Morton said his clients were, in fact, making use of the plug and feather method, and they had adopted various suggestions which had been made to them for minimizing noise.

His lordship said he was satisfied on the evidence that the plaintiffs were suffering serious annoyance, and whilst he was willing to give every facility for a speedy trial, he thought it absolutely necessary that the drills should stop.

Mr. Morton cited to his lordship a decision in the Chancery Division in 1911 as an authority for the proposition that if a man was carrying out works with reasonable skill and care with a lawful object, and if the works were of a temporary nature, he might cause a nuisance, but no action would lie for it.

His lordship, in giving judgment, said he did not see why, because this noise was only going to last for an indefinite period of perhaps ten weeks, the plaintiffs should not be allowed to carry on their business. Here was something quite unreasonable—a number of pneumatic drills being used for a long period. He granted the plaintiffs an injunction restraining the defendants or their servants from using pneumatic drills or other noisy instruments on the Adelphi site, but he would not restrain them from using pneumatic drills or other drills for the purpose of drilling holes for the reception of hydraulic cartridges for the splitting of the concrete foundations.

Mr. Morton said it would be impossible to use cartridges for the second stage of the excavation.

His lordship said defendants could apply to the court in case of difficulty.

Mr. Daynes asked if the defendants could specify a time of the day during which they would drill the necessary holes.

Mr. Morton said his clients would do their best to arrange matters.

## DISPUTED CONTRACT

*Burnham, Ltd. v. Wates (Streatham), Ltd.—King's Bench Division. Before Mr. Justice Haake*

This was an action by Burnham, Ltd., painters and decorators, of Spencer Park, Wandsworth, against Wates (Streatham),

Ltd., estate developers, for damages for alleged breach of contract.

Defendants denied that a concluded contract was made.

Lord Reading, K.C., for the plaintiffs, said his clients had been in existence about five years at the time the matters in question arose. During that time they had done painting and paperhanging in 3,700 houses on the estates developed by the defendant company. In 1934, plaintiffs were asked by the defendants to estimate for the painting and decorating of houses which the defendants were erecting at Worcester Park. Plaintiffs put in a price and they contended that they were given a definite order for the work early in January, 1934. They accordingly started work on a house. Towards the end of January defendants asked plaintiffs for an estimate for a higher class of decorations, and plaintiffs sent in an estimate of £1 a house extra. Defendants replied that the tender was unsuccessful. Plaintiffs' contention now was that under those circumstances they were thrown back on the order given them early in January. On February 15, when plaintiffs went to Worcester Park they found another firm doing the decorating work. They then brought their action contending that there was a clear contract on January 9, and that it was binding on the defendants.

Defendants, in reply, set up that there never was a contract. They said plaintiffs were asked to make an offer for the work and that that offer was not accepted by them. They also set up that they were entitled to place the order for the decorations where they chose.

Mr. Blackwell, a director of the plaintiff company, gave evidence, and for the defence Mr. R. L. Wates, a director of the defendant company, said that the order to plaintiffs was not for any specific number of houses and could be cancelled at any time.

His lordship, in giving judgment, said he was of opinion that the plaintiffs had established that a concluded contract had been entered into between the parties. Plaintiffs were entitled to recover the profits they would have made, which would have been at the rate of 15 per cent. on 305 houses, viz. £435, with costs.

Judgment for plaintiffs for £435, with costs. His lordship granted a stay of execution pending an appeal, on the defendants bringing the damages into court and paying the costs on the usual undertaking.

## ALLEGED NEGLIGENT SUPERVISION AGAINST ARCHITECT.—HEAVY DAMAGES

*Gotwick, Ltd., and another v. Lewis.—Official Referee's Court. Before Mr. T. Eastham, K.C.*

This was an action by Gotwick, Ltd., and Lady Helen Green, the widow of Sir Frederick Green, to recover damages for alleged negligence against Mr. W. A. Lewis, A.R.I.B.A.

The action arose out of alterations and additions at Gotwick Manor, East Grinstead, the residence of the late Sir Frederick Green, and carried out in 1931-33.

The plaintiffs' case was that the work was carried out by Messrs. Williams and Yeates, of Oxted, Surrey, and that the defendant, Mr. Lewis, was negligent and guilty of breach of duty in failing to prepare adequate accurate or suitable plans and specifications



and failing to supervise properly the execution of the work, allowing unauthorized variations, extras and omissions, certifying for payment work that was not carried out by the builders and issuing certificates for excessive amounts. The alterations and additions cost some thousands of pounds.

Mr. Lewis, by his defence, denied negligence and pleaded that Sir F. Green acted as his own clerk of works and gave orders for work on his own account and that he also approved the workmanship and materials. Mr. Lewis also pleaded that in granting the certificates to the contractors he acted as a quasi arbitrator, and that therefore his decisions could not be questioned by the plaintiffs. He said he relied on valuations that had been made, and counterclaimed for £334 as being the balance of fees due to him. Defendant denied all the plaintiffs' allegations against him and pleaded that he exercised all proper professional skill and attention on the work.

Mr. Croom Johnson, K.C., and Mr. Valentine Holmes appeared for the plaintiffs, and Serjeant Sullivan, K.C., and Mr. Phillimore, for the defendant.

Mr. Croom Johnson said the work done by the contractors was of a most indifferent kind. Gotwick Manor, built in 1912, was bought by Sir F. Green in 1922. In 1928, Gotwick, Ltd., was formed, which purchased the premises and leased them to Sir F. Green at a rental of £250 per annum. He then decided to enlarge the house and add a dairy and a laundry, and his architect was the defendant. The tender for the work was some £15,000. Plaintiffs' complaint was that defective work had never been remedied by the builders, that the defendant had no made investigation and did not exercise any real judgment on his own part. Thousands of pounds had to be expended to remedy the defects.

Counsel added that almost the whole of the trouble in regard to the building work was due in large part to lack of supervision by the defendant, and submitted that defendant could not excuse his conduct by the plea that he was acting in a quasi judicial capacity.

#### JUDGMENT

The Official Referee, in giving judgment, after stating the nature of the action and the issues involved, said he preferred the evidence given by the plaintiffs' witnesses to that of the defendant's witnesses. The most reliable witness, he thought, was Mr. H. E. Mathews, Sen., an architect of considerable experience, who gave evidence for the plaintiffs. A great volume of evidence was given during the course of the hearing of the case as to the several matters in dispute. From the evidence given he found that Sir Frederick Green, in making the contract with Mr. Lewis, did so acting as the agent of the plaintiff company, who were the undisclosed principals. As the builders at the time in question were in financial difficulties it was of the greatest importance for the architect to supervise the work with special care in order to see that the work was not scamped. The Referee found that Mr. Lewis had not visited the work as often as he should have done, with the result that the builders' work was very badly done. That bad work

ought to have been seen by Mr. Lewis. It was part of the defendant's case that the twisting of the woodwork and the defects in the plastering were due to the overheating of the house, but he (the Referee) found, as a fact, that the house was not excessively heated. The builders had been paid during the course of the work £8,950, which was more than they were entitled to, even if the work had been good work. Messrs. Minter, Ltd., the contractors, who had made good the defective work, had been paid £5,241 for such work. He came to the conclusion and found that the fair and reasonable cost of making good the defective work, as the result of the defendant's negligence, was £3,714 13s. 8d., which, added to £500 paid as fees to the architects, made £4,214 13s. 8d., for which amount judgment would be entered for the plaintiff company against the defendant, Mr. Lewis. He found that Mr. Lewis was not negligent in preparing the specification for the work, and he also dismissed the

claim made against him for alleged inadequate or inaccurate plans. As Sir Frederick Green had entered into the contract as the agent for the plaintiff company, Lady Green, as executrix of Sir F. Green, had no claim against the defendant, and her claim would be dismissed, as defendant owed no duty to her. He also dismissed the defendant's counterclaim for remuneration on the ground that in the circumstances his services were useless.

Judgment was entered accordingly.

The Official Referee, at the close of his judgment, thanked counsel engaged in the case for the great assistance they had afforded him in a very difficult and complicated case.

Upon the application of counsel for Mr. Lewis, the Official Referee granted a stay of execution pending an appeal by the defendant from the judgment to the Court of Appeal, on condition that the amount of the damages were brought into court and notice of appeal given in fourteen days.

## TRADE NOTES

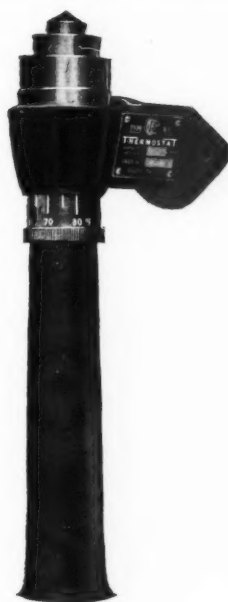
[EDITED BY PHILIP SCHOLBERG]

### Thermostat Design

THE ideal position for a thermostat is, of course, in the centre of the room, hanging on a lead from the ceiling, but there are few clients who will allow this sort of thing, and the thermostat generally appears on the wall. Here it works well enough, provided it is well away from any source of heat, but there are one or two other considerations, as the actual temperature of the wall itself may, by conduction, give a false temperature, and there is nearly always a cushion of air, about 1½ in. thick, clinging to the surface

of the wall and subject to abnormal temperature variations for one reason or another.

Whether or not these sources of error lead to any serious temperature disturbances is perhaps open to argument, but none the less any thermostat designed to overcome them is to be commended. The British Thermostat Company have just introduced a new type (R.T.) specially designed to deal with these variations, and it is illustrated below.

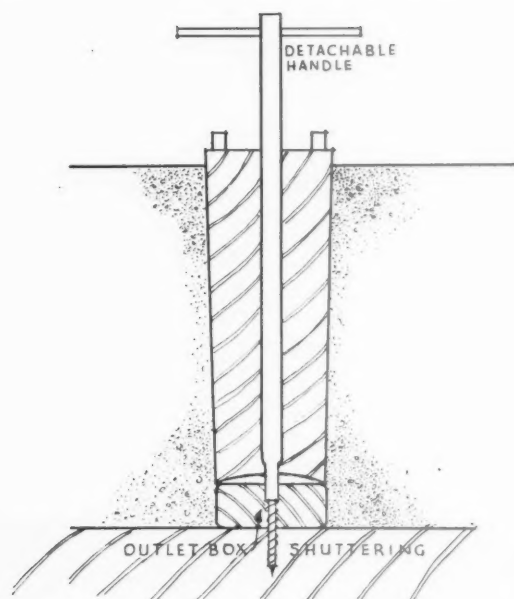


*The R.T. type thermostat looks well and has every excuse for working better still. (See note above)*

It is of the bi-metallic type with magnetically assisted quick make and with contacts rated to carry up to 10 amps. at 250 volts a.c. or 1 amp. at 250 volts d.c. The important features of the design are, first, that the sensitive element is spaced sufficiently far from the wall to avoid the abnormally heated air cushion; second, the contact area between the backplate and the wall is small and the conductive heatpath between the backplate and the main body of the instrument housing is at the top, so that conducted heat, already reduced to a minimum, cannot affect the sensitive element. The thermostat is contained in a vertical bakelite tube, open at the top and bottom to permit free circulation of air, and thus assist rapid operation. The switch contacts and connections, at which a certain amount of heat might be generated, are also located in the top of the housing and therefore cannot affect the bi-metallic element, their only action, indeed, being to encourage the flow of convection currents through the instrument; and in one model there is a small subsidiary electric heating element to increase this air circulation.

The housing seems to me a commendably clean piece of design, and the outlook of the firm responsible for it is summed up well





*A new method of fixing outlet boxes in concrete floors. (See note on this page.)*

enough in their statement that "no attempt has been made to disguise it, and so detract in any way from its primary function."

I shall obviously have to institute a monthly bouquet if any more manufacturers become as intelligent as this.

#### *Fixing Outlet Boxes*

In an ordinary small concrete job it is nearly always possible to connect all the screwed conduit runs and outlet boxes and lay the whole rather spidery contraption on top of the floor shuttering, after which the pouring of the floor does everything necessary.

There are times, however, when conduit has to be run under the floor finish, and a certain amount of trouble is liable to crop up here, for the outlet boxes must be cast in the floor and it may be difficult to keep them in position, for the usual block of wood is always liable to get misplaced, and is none too easy to remove afterwards.

The tapered core shown above should therefore be quite a useful help for this sort of thing, for the outlet box is held firmly to the shuttering by the long central screw and the core can be quite easily removed and used again on the same job.

A device which is probably of greater interest to the large contractor or the electrical specialist than to the ordinary jobbing builder, but none the less worth noting.

#### *Addresses*

The British Thermostat Co., Ltd., Windmill Road, Sunbury-on-Thames, Middlesex.  
The Automatic Equipment Manufacturing Co., 84A Kirkwood Road, Peckham, S.E.15.

#### **Manufacturers' Items**

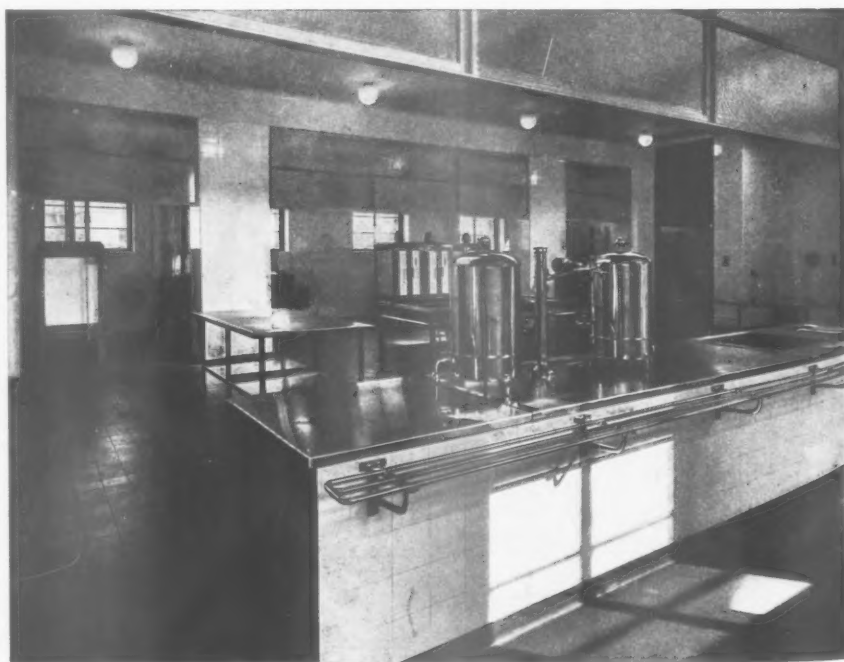
On January 1 last The British Oxygen Company inaugurated a pension fund

wards since joining the company's service. In the event of ill-health of incapacitating severity, on a medical certificate being submitted to this effect, the pension becomes immediately payable provided the invalid has served for 10 years or more, irrespective of the number of years' contributions made to the fund. In case an employee is retired as redundant after 20 years' service, the pension is payable immediately, provided the employee has attained the age of 55 years (for men) and 50 years (for women). In the case of the workpeople's fund, members who are paid off on account of lack of work due to bad trade, still remain members for a period of 24 weeks without contributory payment and continue as such on coming back to work within that period.

Both funds are guaranteed by The British Oxygen Company in the sense that if any loss is incurred at any time it must be made good by the company.

## THE BUILDINGS ILLUSTRATED

CHIVELSTON COURT, WIMBLEDON (pages 901-904). Architect: Ernest Schaufelberg. The general contractors were Griggs and Son, Ltd., and the principal sub-contractors and suppliers included: General Asphalt Co., Ltd., asphalt, roofing felt and waterproofing material; Helical Bar and Engineering Co., Ltd., reinforced concrete; Goldstein & Co., glass; Cellulin Flooring Co., Ltd., patent flooring, stairtreads; C. & P. Agencies, Ltd., grates; Wandsworth Gas Co., gas fixtures, fittings and light fixtures; Matthew Hall & Co., Ltd., plumbing; Doulton & Co., Ltd., sanitary fittings;



*The kitchen in the Senate House, London University (illustration by courtesy of James Slater and Co.)*

Taylor, Pearce & Co., Ltd., door furniture; Williams and Williams, Ltd., casements and window furniture; Phoenix Electrical Co., Ltd., electric wiring and bells; R. Cattle, Ltd., fireproof doors; Haywards, Ltd., iron staircases; Christie (Decorators), Ltd., decorative plaster; Conrad Parlanti, Ltd., metalwork; Decorative Marble Co., marble; Ian Henderson & Co., furniture; J. Burley and Sons, Ltd., shrubs and trees; Marryat and Scott, Ltd., lifts; Metropolitan Water Board, water supply; Mantelcraft, Ltd., kitchen cabinets; Frodsham, metal door frames; Sparton Refrigeration, Ltd., refrigerators; British Ogro, Ltd., doorfurniture. **HOUSE AT IVER, BUCKS** (pages 906-907). Architect: F. R. S. Yorke. The general contractors were F. Bradford & Co., and

the principal sub-contractors and suppliers included: Ruberoid Co., Ltd., ruberoid and ruberdal (special roofings); Honeywill and Stein, Ltd., heraklith (partitions); Vitrea Drawn Sheet Glass Co., Ltd., glass; Chance Bros. & Co., Ltd., reeded glass; British Magnesite Flooring Co., Ltd., patent flooring; Ideal Boilers and Radiators, Ltd., boilers; W. W. Symper, electric wiring; Troughton and Young, Ltd., ultralux light fixtures; Berry's Electric, Ltd., electric heating; Adamsez, Ltd., sanitary fittings; Dryad Metal Works, Ltd., door furniture; Williams and Williams, Ltd., casements; J. Dean, rolling shutters; Venesta, Ltd., doors; Easiwork, Ltd., furniture; Contemporary Woodwork, Ltd., furniture.

**BUXTON. School.** The Buxton Education Committee is to erect a senior school at Silverlands, at a cost of £26,214.

**CARLISLE. Police and Fire Station.** The Carlisle Corporation has approved plans by the surveyor for the erection and furnishing of the new police and fire stations, including the provision of a new police court and housing accommodation for firemen and police firemen on the site acquired in Rickergate, Warwick Street, and Peter Street, at a total estimated cost of £60,767.

**CARLISLE. Houses.** Plans passed by the Carlisle Corporation: 36 houses, Blunt Street, Messrs. J. and R. Bell, Ltd.

**CARLISLE. Technical School.** The Carlisle Education Committee has purchased a site in Compton Street, for the erection of a technical school.

**CARLISLE. Swimming Pool.** The Carlisle Corporation has considered the provision of an open-air swimming pool, and asked the surveyor to obtain information from inland towns with regard to recently constructed swimming pools.

**CARLISLE. Workshops.** The Joint Sub-Committee, representing the City and Counties of Cumberland and Westmorland, and the workshops for the blind, has acquired a site for new workshops for the blind at Petheril Bank, Upperby.

**CHESTER. Extensions.** The Chester Education Committee is to enlarge the city and county schools in accordance with the specifications of the city surveyor and the director of education, at a cost of £57,165.

**CHESTER. School.** The Chester Education Committee is to erect an elementary school at Newton, at a cost of £18,156.

**CHESTER. Houses.** Plans passed by the Chester Corporation: 26 houses, Kingsway, Newton, Mr. R. Holmes.

**ROCHDALE. School.** The Rochdale Education Committee is to erect a senior school at Brimrod, at a cost of £22,615.

**ROTHERHAM. Houses.** Plans passed by the Rotherham Corporation: 18 houses, Richard Road, Messrs. Fraser & Co.

**ROTHERHAM. Houses.** The Rotherham Corporation is to obtain tenders for the erection of approximately 592 houses.

**SCARBOROUGH. Public Swimming Bath.** The Scarborough Corporation has further considered proposals for a suggested layout of the site of "Woodend" in the Crescent, for the erection of a public swimming bath thereon.

**SCARBOROUGH. Houses.** Plans passed by the Scarborough Corporation: 25 houses, Scamer Road, Mr. F. W. Plaxton; six houses, Dean Road, Mr. W. H. Mansfield.

**SCARBOROUGH. Houses.** The Scarborough Corporation is considering a scheme for the erection of 98 further houses on the Barrowcliff estate.

**TYNEMOUTH. Houses.** The Tynemouth Corporation is to erect a further 248 houses on the Ridges estate, and tenders are to be obtained.

**TYNEMOUTH. Dwellings.** The Ministry of Health has approved the proposed arrangement by the Tynemouth Corporation with the Sir James Knott Memorial Trust for the erection of 135 dwellings in Percy Square.

**TYNEMOUTH. Houses, etc.** Plans passed by the Tynemouth Corporation: Youth centre and business premises, Church Way, for Y.M.C.A.; eight houses, Balmoral Gardens, for Mr. J. R. Wallace; six houses, Wallsend Road, for Messrs. Marshall and Tweedy; 20 houses, Glanton Road, for Messrs. F. R. N. Haswell and Son; 12 houses, Seacrest Avenue, for Messrs. A. and E. Brannen.

**WAKEFIELD. Houses.** Plans passed by the Wakefield Corporation: Eight houses, Farne Avenue, Messrs. Newbold and Hartley; nine houses, Eden Avenue, Messrs. Nicholson and Sons, Ltd.

**WAKEFIELD. Extensions.** The Wakefield Education Committee has prepared plans for extensions at Snapethorpe school, at an estimated cost of £18,026.

## THE WEEK'S BUILDING NEWS

### LONDON AND DISTRICT (15 miles radius)

**KINGSBURY. Open-air Swimming-bath.** The Wembley U.D.C. is to construct an open-air swimming-bath in Roe Green Park, Kingsbury.

**LONDON. Nurses' Home and Training School.** Plans passed by the City of London Corporation: Five-storey building for the purposes of a probationary nurses' home and training school for St. Bartholomew's Hospital, Red Lion Buildings, Cock Lane.

**MIDDLESEX. Elementary School.** The Middlesex Education Committee has purchased land in Railway Terrace, Feltham, for the erection of an elementary school.

**PADDINGTON. Flats.** The Paddington B.C. is to erect flats five storeys in height on the North Wharf Road and Dudley Street area, at an estimated cost of £30,780.

**STEPNEY. Re-developments.** The L.C.C. is to clear and re-develop an area in Malay Street, Stepney, at a cost of £77,500.

**TOOTING. New Hospital.** The L.C.C. is to prepare a scheme for the erection of a new hospital within the curtilage of St. Benedict's Hospital, Tooting.

### SOUTHERN COUNTIES

**BRIGHTON. Developments.** Mr. G. W. Warr, on behalf of the executors of Mr. S. G. Witting, is to develop the Hollingbury Copse estate, Brighton.

**BRIGHTON. Dwellings.** The Brighton Corporation is to erect dwellings on the Nelson Place site for the re-housing of persons displaced by slum clearance schemes, at an estimated cost of £26,001.

**BRIGHTON. Extensions.** The Brighton Corporation Electricity Committee is to extend the Southwick power station, at a cost of £205,000.

**BRIGHTON. Houses, etc.** Plans passed by the Brighton Corporation: 33 bungalows, Rottingdean Vale estate, Falmer Road, Ovingdean, Mr. Harry Easter; block of flats, Westcombe, Dyke Road, Westcombe Court (Brighton), Ltd.; 46 houses, Redhill Drive, The Dyke Road Estate (Brighton), Ltd.; 30 houses, Wilmington Way, Mr. Charles Wm. Parkes.

**LANCING. Police Station.** The West Sussex C.C. is to prepare plans for the erection of a police station at Lancing.

### SOUTH-WESTERN COUNTIES

**EXETER. Reconstruction.** The Exeter Corporation is to reconstruct Cowley railway bridge, at a cost of £23,500.

**EXETER. Flats.** The Exeter Corporation has approved plans by the city architect for the provision of eight bed-sitting-room flats and 20 one-bedroom flats in Smythen Street.

**SWANSEA. Developments.** Mr. H. Wyman is to develop the Caer-Eithen Estate, Swansea.

**SWANSEA. Community Centre.** The Swansea Corporation has approved plans by the borough architect for the erection of a community centre at Town Hill.

**SWANSEA. Cinemas, etc.** Plans passed by the Swansea Corporation: Cinema, Eversley Road, The Adelphi Cinema Co.; eight houses, Middle Road, Messrs. J. and A. Zammit, Ltd.; cinema, Townhill Road, Townhill Cinema Co., Ltd.; 15 houses, Pentregethin Road, Mr. J. C. Oliver; cinema, Gower Road, Mr. Max Corne; 12 houses, Carmarthen Road, Mr. E. E. Edmunds.

**TORQUAY. Extensions.** The Governors of Torbay Hospital, Torquay, are to extend the premises at a cost of £15,000.

**TORQUAY. Houses.** The Maidencombe Estates, Ltd., are to erect 65 houses at Maidencombe, Torquay.

**TORQUAY. Houses.** The Torquay Corporation has approved a revised layout plan providing for the erection of 300 houses, and the construction of a portion of a new by-pass road, at Watcombe, and the erection of a clock tower as a central feature in the open space in the centre of the estate.

**TORQUAY. Swimming Pool.** A swimming pool is to be constructed at the Grand Hotel, Torquay.

### EASTERN COUNTIES

**NORWICH. Technical College.** The Norwich Education Committee is to erect a technical college and school of art and crafts in Ipswich Road, at a total estimated cost of £199,834.

**NORWICH. Schools.** The Norwich Education Committee is to erect a school for about 320 senior boys in the Lakenham district, and a school for about 360 senior girls in the Earlam district.

### MIDLAND COUNTIES

**WALSALL AND WEST BROMWICH. Extensions.** The Wallsall and West Bromwich Joint Board is to enlarge the Barr mental colony at a cost of £50,000.

### NORTHERN COUNTIES

**BARROW-IN-FURNESS. Houses.** Plans passed by the Barrow-in-Furness Corporation: 24 houses, Carisbrooke Crescent, Messrs. Russell Bros.; 86 houses, Hawcoat Lane, Messrs. J. Parkinson and Sons, Ltd.; 109 houses, Davy Street, Mr. A. Ingham.

**BLACKPOOL. Houses.** Plans passed by Blackpool Corporation: Six houses, Longton Road, Messrs. F. Parkinson and Son; 10 houses, Carleton Avenue, Mr. H. H. Whitehead; seven houses, Henson Avenue, Messrs. Yates and Walsh; six houses, Sandhills Avenue, Mr. T. Foster; 47 houses, Milford Avenue, etc., Messrs. R. Fielding and Son; 40 houses, Lakeway, Messrs. J. Gregson and Son; nine houses, Common Edge Road, Messrs. Rimmer and Foster; 13 houses, Caxton Avenue, etc., Mr. J. Ridyard.

**BRADFORD. Houses.** The Bradford Corporation has approved plans by the city architect for the erection of 54 houses at White Abbey Road and Jervaulx Crescent, at a cost of £21,000.

# 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				I	II				I	II					
			s.	d.	s.	d.		s.	d.	s.	d.		s.	d.					
A <sub>1</sub>	<b>ABERDEEN</b> ...	S. Wales & M.	1	5	1	1	A <sub>2</sub>	<b>EASTBOURNE</b> ...	S. Counties	1	5	A	Northampton...	Mid. Counties	1	6	1	2	
A <sub>1</sub>	Aberdeen ...	Scotland	1	5	1	1	A <sub>1</sub>	Ebbw Vale ...	S. Wales & M.	1	6	A	North Shields...	N.E. Coast	1	6	1	2	
A <sub>2</sub>	Abergavenny ...	S. Wales & M.	1	5	1	1	A <sub>1</sub>	Edinburgh ...	Scotland	1	5	A	North Staffs ...	Mid. Counties	1	6	1	2	
A <sub>2</sub>	Abingdon ...	S. Counties	1	5	1	1	A <sub>2</sub>	Exeter ...	S.W. Counties	1	5	A <sub>1</sub>	Norwich ...	E. Counties	1	6	1	1	
A	Accrington ...	N.W. Counties	1	5	1	1	B	Exmouth ...	S.W. Counties	1	4	A	Nottingham ...	Mid. Counties	1	6	1	2	
A <sub>2</sub>	Addlestone ...	S. Counties	1	5	1	1						A	Nuneaton ...	Mid. Counties	1	6	1	2	
A	Adlington ...	N.W. Counties	1	5	1	2													
A	Aldrie ...	Scotland	1	5	1	2	A <sub>3</sub>	<b>FELIXSTOWE</b> ...	E. Counties	1	5	1	<b>OAKHAM</b> ...	Mid. Counties	1	5	1	0	
A	Aldrich ...	E. Counties	1	5	1	1	A	Filly ...	Yorkshire	1	5	1	A	Oldham ...	N.W. Counties	1	6	1	2
A	Altrincham ...	N.W. Counties	1	5	1	2	A	Fleetwood ...	N.W. Counties	1	4	1	A <sub>2</sub>	Oswestry ...	N.W. Counties	1	5	1	0
B <sub>2</sub>	Appley ...	N.W. Counties	1	5	1	2	B <sub>1</sub>	Folkestone ...	S. Counties	1	4	1	A <sub>1</sub>	Oxford ...	S. Counties	1	6	1	1
A	Ashton-under-Lyne	N.W. Counties	1	5	1	2	B <sub>2</sub>	Frome ...	N.W. Counties	1	5	1							
B <sub>1</sub>	Aylesbury ...	S. Counties	1	4	1	0													
B <sub>1</sub>	<b>BANBURY</b> ...	S. Counties	1	4	1	0	A	<b>GATESHEAD</b> ...	N.E. Coast	1	4	1	A	<b>P AISLEY</b> ...	Scotland	1	6	1	2
B <sub>1</sub>	Bangor ...	N.W. Counties	1	4	1	0	A <sub>1</sub>	Gillingham ...	S. Counties	1	4	1	B <sub>2</sub>	Pembroke ...	S. Wales & M.	1	3	1	2
A <sub>2</sub>	Barnard Castle ...	N.E. Coast	1	5	1	2						A <sub>1</sub>	Perth ...	Scotland	1	6	1	2	
A	Barnesley ...	Yorkshire	1	5	1	2	A <sub>1</sub>	Glamorgan-shire, Rhondda Valley District	S. Wales & M.	1	6	1	A	Peterborough ...	E. Counties	1	6	1	2
B	Barnsley ...	S.W. Counties	1	5	1	1	A	Glasgow ...	Scotland	1	7	1	A	Plymouth ...	S.W. Counties	1	6	1	2
A	Barrow ...	N.W. Counties	1	5	1	1	A	Gloucester ...	S.W. Counties	1	5	1	A	Pontefract ...	Yorkshire	1	6	1	2
A	Barry ...	S. Wales & M.	1	5	1	2	A	Goole ...	Yorkshire	1	5	1	A <sub>1</sub>	Pontypridd ...	S. Wales & M.	1	6	1	1
A <sub>1</sub>	Basingstoke ...	S.W. Counties	1	4	1	0	A	Gosport ...	S. Counties	1	5	1	A <sub>2</sub>	Portsmouth ...	S. Counties	1	5	1	1
A <sub>2</sub>	Bath ...	S.W. Counties	1	4	1	0	A <sub>1</sub>	Grantham ...	Mid. Counties	1	5	1	A	Preston ...	N.W. Counties	1	6	1	2
A <sub>2</sub>	Batley ...	Yorkshire	1	5	1	1	A <sub>2</sub>	Gravensend ...	S. Counties	1	6	1							
A <sub>1</sub>	Bedford ...	E. Counties	1	5	1	1	A <sub>1</sub>	Greenock ...	Scotland	1	5	1	A	<b>QUEENSFERRY</b> ...	N.W. Counties	1	6	1	2
A <sub>2</sub>	Berwick-on-Tweed	N.E. Coast	1	5	1	1	B	Grimby ...	Mid. Counties	1	5	1							
A <sub>2</sub>	Bewley ...	Mid. Counties	1	5	1	1													
A <sub>2</sub>	Bicester ...	S. Counties	1	5	1	1	A	<b>HALIFAX</b> ...	Yorkshire	1	5	1	B	Reading ...	S. Counties	1	5	1	1
A <sub>1</sub>	Birkenhead ...	N.W. Counties	1	5	1	1	A	Hanley ...	Mid. Counties	1	5	1	B	Reigate ...	S. Counties	1	4	1	0
A	Birmingham ...	Mid. Counties	1	5	1	1	A	Harrogate ...	Yorkshire	1	5	1	A <sub>1</sub>	Relford ...	Mid. Counties	1	5	1	0
A <sub>1</sub>	Bishop Auckland	N.E. Coast	1	5	1	1	A	Hartlepool ...	N.E. Coast	1	5	1	A <sub>1</sub>	Rhondda Valley	S. Wales & M.	1	6	1	1
A	Blackburn ...	N.W. Counties	1	5	1	1	A	Hartlepool ...	N.E. Coast	1	5	1	A	Ripon ...	Yorkshire	1	5	1	0
A	Blackpool ...	N.W. Counties	1	5	1	1	B	Hastings ...	S. Counties	1	4	1	A	Rochdale ...	N.W. Counties	1	6	1	2
A	Blyth ...	N.E. Coast	1	5	1	2	A <sub>2</sub>	Hatfield ...	S. Counties	1	5	1	B	Rochester ...	S. Counties	1	4	1	0
B <sub>1</sub>	Bognor ...	S. Counties	1	4	1	0	A <sub>2</sub>	Hereford ...	S.W. Counties	1	5	1	A <sub>1</sub>	Ruabon ...	N.W. Counties	1	6	1	1
A	Bolton ...	N.W. Counties	1	5	1	1	A <sub>1</sub>	Hertford ...	E. Counties	1	5	1	A <sub>2</sub>	Rugby ...	Mid. Counties	1	6	1	2
A <sub>2</sub>	Boston ...	Mid. Counties	1	5	1	1	A <sub>2</sub>	Heysham ...	N.W. Counties	1	6	1	A	Rugby ...	Mid. Counties	1	5	1	1
A <sub>1</sub>	Bournemouth ...	S. Counties	1	5	1	1	A	Howden ...	N.E. Coast	1	5	1	A	Runcorn ...	N.W. Counties	1	6	1	2
B <sub>2</sub>	Bovey Tracey ...	S.W. Counties	1	5	1	1	A	Huddersfield	Yorkshire	1	5	1							
A	Bradford ...	Yorkshire	1	5	1	2	A	Hull ...	Yorkshire	1	5	1	A <sub>1</sub>	<b>ST. ALBANS</b> ...	R. Counties	1	6	1	1
A <sub>1</sub>	Brentwood ...	E. Counties	1	6	1	1						A	St. Helena ...	N.W. Counties	1	6	1	2	
A <sub>1</sub>	Bridgend ...	S. Wales & M.	1	5	1	1						P <sub>2</sub>	Salisbury ...	S.W. Counties	1	6	1	1	
B	Bridgewater ...	S.W. Counties	1	5	1	1						A <sub>1</sub>	Scarborough	Yorkshire	1	3	1	2	
A <sub>1</sub>	Bridlington ...	Yorkshire	1	5	1	1	A	<b>ILKLEY</b> ...	Yorkshire	1	5	1	A	Scunthorpe ...	Mid. Counties	1	6	1	2
A <sub>1</sub>	Brighton ...	S. Counties	1	5	1	1	A	Immingham ...	Mid. Counties	1	5	1	A	Sheffield ...	Yorkshire	1	6	1	2
A <sub>2</sub>	Brighton ...	S. Counties	1	5	1	1	A <sub>2</sub>	Ipswich ...	E. Counties	1	5	1	A	Shipley ...	Yorkshire	1	6	1	2
A	Bristol ...	S.W. Counties	1	5	1	2	B <sub>2</sub>	Isle of Wight ...	S. Counties	1	4	1	A <sub>2</sub>	Shrewsbury ...	Mid. Counties	1	5	1	1
B	Brixham ...	S.W. Counties	1	5	1	1						A <sub>2</sub>	Skipton ...	Yorkshire	1	5	1	1	
A	Bromsgrove ...	Mid. Counties	1	5	1	1	A	<b>JARROW</b> ...	N.E. Coast	1	5	1	A <sub>2</sub>	Slough ...	S. Counties	1	5	1	1
B	Bromyard ...	Mid. Counties	1	5	1	1						A <sub>1</sub>	Solihull ...	Mid. Counties	1	6	1	1	
A	Burnley ...	N.W. Counties	1	5	1	1	A	<b>KEIGHLEY</b> ...	Yorkshire	1	5	1	A <sub>2</sub>	Southampton	S. Counties	1	5	1	1
A	Burnsall ...	Mid. Counties	1	5	1	1	A <sub>2</sub>	Kendal ...	N.W. Counties	1	5	1	A <sub>2</sub>	South-on-Trent	E. Counties	1	6	1	2
A	Burton-on-Trent	Mid. Counties	1	5	1	2	A <sub>2</sub>	Kewick ...	N.W. Counties	1	5	1	A	St. Shields ...	N.E. Coast	1	6	1	2
A	Bury ...	N.W. Counties	1	5	1	2	A <sub>2</sub>	Kettering ...	Mid. Counties	1	6	1	A <sub>1</sub>	Stafford ...	Mid. Counties	1	6	1	1
A	Buxton ...	N.W. Counties	1	6	1	1	A <sub>2</sub>	Kidderminster	Mid. Counties	1	5	1	A	Stirling ...	Scotland	1	7	1	2
							B <sub>1</sub>	King's Lynn ...	E. Counties	1	4	1	A	Stockport ...	N.W. Counties	1	6	1	2
												A	Stock-on-Tees	N.E. Coast	1	6	1	2	
A <sub>1</sub>	<b>CAMBRIDGE</b> ...	E. Counties	1	6	1	1	A	<b>LANCASTER</b> ...	N.W. Counties	1	5	1	A	Stoke-on-Trent	Mid. Counties	1	6	1	2
B <sub>1</sub>	Canterbury ...	S. Counties	1	4	1	0	A <sub>1</sub>	Leamington ...	Mid. Counties	1	6	1	B	Stroud ...	S.W. Counties	1	6	1	0
A	Cardiff ...	S. Wales & M.	1	6	1	1	A <sub>1</sub>	Leeds ...	Yorkshire	1	6	1	A	Sunderland ...	N.E. Coast	1	6	1	2
A	Cardle ...	N.W. Counties	1	6	1	2	A	Leek ...	Mid. Counties	1	6	1	A	Swansea ...	S. Wales & M.	1	6	1	2
A	Carmarthen ...	S. Wales & M.	1	6	1	1	A	Leicester ...	Mid. Counties	1	6	1	A	Swindon ...	S.W. Counties	1	5	1	0
B	Carnarvon ...	N.W. Counties	1	6	1	1	A	Leigh ...	N.W. Counties	1	6	1							
A	Cararforth ...	N.W. Counties	1	6	1	2	A	Leves ...	S. Counties	1	3	1							
A	Casleford ...	Yorkshire	1	6	1	2	A <sub>2</sub>	Lichfield ...	Mid. Counties	1	5	1	A <sub>1</sub>	<b>TAMWORTH</b> ...	N.W. Counties	1	6	1	1
A <sub>2</sub>	Chatham ...	S. Counties	1	6	1	1	A <sub>2</sub>	Lincoln ...	Mid. Counties	1	5	1	B	Taunton ...	S.W. Counties	1	4	1	0
A	Chelmsford ...	E. Counties	1	6	1	1	A <sub>1</sub>	Liverpool ...	N.W. Counties	1	5	1	A	Teeside Dist.	N.E. Counties	1	6	1	2
A	Cheltenham ...	S.W. Counties	1	5	1	1	A <sub>2</sub>	Llandudno ...	N.W. Counties	1	5	1	A <sub>2</sub>	Teignmouth ...	S.W. Coast	1	5	1	1
A	Chester ...	N.W. Counties	1	6	1	2	A <sub>1</sub>	Llanelli ...	S. Wales & M.	1	6	1	A <sub>1</sub>	Todmorden ...	Yorkshire	1	6	1	2
A	Chesterfield ...	Mid. Counties	1	6	1	2	A	London (12-miles radius)		1	8	1	A <sub>2</sub>	Torquay ...	S.W. Counties	1	6	1	1
B <sub>1</sub>	Chichester ...	S. Counties	1	4	1	0	A	Do. (12-15 miles radius)		1	7	1	A <sub>1</sub>	Truro ...	S.W. Counties	1	3	1	1
A	Chorley ...	N.W. Counties	1	6	1	2	A	Lone Eaton ...	Mid. Counties	1	6	1	A <sub>2</sub>	Tunbridge Wells	S. Counties	1	5	1	0
B <sub>1</sub>	Cirencester ...	S. Counties	1	6	1	0	A	Loughborough	Mid. Counties	1	6	1							
A	Clydebank ...	Scotland	1	6	1	2	A <sub>1</sub>	Luton ...	E. Counties	1	8	1	A	Tunstall ...	Mid. Counties	1	6	1	2
A	Coalville ...	Mid. Counties	1	6	1	2	A <sub>2</sub>	Lymington ...	N.W. Counties	1	6	1	A	Tyne District	N.E. Coast	1	6	1	2
A <sub>2</sub>	Colchester ...	E. Counties	1	6	1	1													
A	Colne ...	N.W. Counties	1	6	1	1	A <sub>1</sub>	<b>MACCLESFIELD</b> ...	N.W. Counties	1	6	1	A	<b>WAKEFIELD</b> ...	Yorkshire	1	6	1	2
A <sub>2</sub>	Colwyn Bay ...	N.W. Counties	1	5	1	1	A <sub>2</sub>	Malden ...	S. Counties	1	5	1	A	Wals					



## 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, adjust-

ment 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

	per hour	s. d.
Bricklayer	1 8	
Carpenter	1 8	
Joiner	1 8	
Machinist	1 8	
Mason (Banker)	1 8	
Plumber	1 9	
Painter	1 7	
Paperhanger	1 7	
Glazier	1 7	
Slater	1 8	
Scaffolder	1 4	
Timberman	1 4	
Navy	1 3	
General Labourer	1 3	
Lorryman	1 5	
Crane Driver	1 7	
Watchman	2 10	0

## MATERIALS

## EXCAVATOR AND CONCRETOR

	per ton	£ s. d.
Grey Stone Lime	2 2	0
Blue Lias Lime	1 18	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 13	0
Thames Ballast	6	6
Crushed Ballast	7	0
Building Sand	7	6
Washed Sand	8	6
Broken Brick	8	0
Pan Breeze	10	3
Coke Breeze	6	6

## DRAINLAYER

## BEST STONEWARE DRAIN PIPES AND FITTINGS

	per F.R.	each	s. d.
Straight Pipes	0 9	1 1	
Bends	3 6	3 3	
Taper Bends	4 6	6 3	
Rest Bends	3 0	3 0	
Single Junctions	4 9	6 6	
Double	1 6	2 6	
Straight channels	2 9	4 0	
3" Channel bends	4 6	6 6	
Channel junctions	2 9	4 0	
Channel tapers	6 9	8 9	
Yard gullies	16	0	19 6
Interceptors	1 6	2 6	
IRON DRAINS:			
Iron drain pipe	5 0	10 6	
Bends	9 0	15 0	
Inspection bends	8 9	18 0	
Single junctions	13 6	30 0	
Double junctions	5	—	
Lead Wool	—	—	
Gaskin	—	—	

## BRICKLAYER

	per M.	£ s. d.
Flettons	2 12	0
Grooved do.	2 14	0
Phorpres bricks	2 15	0
Cellular bricks	2 15	0
Stocks, 1st quality	4 10	0
2nd	4 2	6
Blue Bricks, Pressed	8 14	0
Wirecuts	7 12	6
Brindles	7 0	0
Bullnose	9 0	0
Red Sand-faced Facings	6 18	6
Red Rubbers for Arches	12	0
Multicoloured Facings	7 10	0
Luton Facings	7 10	0
Phorpres White Facings	3 17	3
Rustic Facings	3 12	3
Midhurst White Facings	5 0	0
Glazed Bricks, Ivory, White or Salt glazed, 1st quality:		
Stretchers	21	0 0
Headers	20	10 0
Bullnose	27	10 0
Double Stretchers	29	10 0
Double Headers	26	10 0
Glazed Second Quality, Less Buffs and Creams, Add Other Colours	1 0	0
2" Breeze Partition Blocks	5 10	0
3" " " "	1 10	0
4" " " "	2 1	0
5" " " "	2 6	0

## MASON

	per F.C.	£ s. d.
Portland stone, Whitbed	4 4	
Basebed	4 7	
Bath stone	2 10	
York stone	6 6	
Sawn templates	7 6	
Paving, 2"	1 8	
3"	2 6	

## SLATER AND TILER

	per M.	£ s. d.
First quality Bangor or Portmadoc slates d/d F.O.R. London station:		
24" x 12" Duchesses	28 17	6
22" x 12" Marchionesses	24 10	0
20" x 10" Countesses	19 5	0
18" x 10" Viscountesses	15 10	0
18" x 9" Ladies	13 17	6
Westmorland green (random sizes)	8 10	0
Old Delabole slates d/d in full truck loads to Nine Elms Station:		
20" x 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	9	
hand-made	9 1	
Nails, compo	1 4	
copper	1 6	

## CARPENTER AND JOINER

Good carcassing timber					F.C.	£	s.	d.
Birch					as 1" F.S.	2	2	2
Deal, Joiner's					"	9		9
" 2nds					"	5		5
Mahogany, Honduras					"	1	3	3
" African					"	1	1	1
" Cuban					"	2	6	6
Oak, plain American					"	1	0	0
" Figured					"	1	3	3
" plain Japanese					"	1	5	5
" Figured					"	1	5	5
" Austrian wainscot					"	1	6	6
" English					"	1	11	11
Pine, Yellow					"	1	0	0
" Oregon					"	4		4
" British Columbian					"	1		4
Teak, Moulmein					"	1		2
Burma					"	2		3
Walnut, American					"	2		3
French					"	2		3
Whitewood, American					"	1		1
Deal floorings,					Sq.	18	6	0
"					"	1	6	0
"					"	1	2	0
" 1 1/2"					"	1	5	0
" 1 1/4"					"	1	10	0
Deal matchings,					"	14	8	0
"					"	15	6	0
"					"	16	0	0
Rough boarding,					"	18	0	0
"					"	16	0	0
" 1 1/2"					"	18	0	0
Plywood, per ft. sup.								
Thickness								
Qualities	A	B	B	B	A	B	B	B
	d.	d.	d.	d.	d.	d.	d.	d.
Birch 60 x 48	4	2 1/2	5	3 2 1/2	7	5	4	8
Cheng Alder	-	2 1/2	-	3 1/2	-	-	-	-
Oregon Pine	-	2 1/2	-	3 1/2	4	3 1/2	-	5 1/2
Gaboon								
Mahogany	4	3 1/2	-	5 4 1/2	7	6 1/2	-	8
Figured Oak	6 1/2	5	-	7 1/2	10	8	-	11
Scotch glue							lb.	s.







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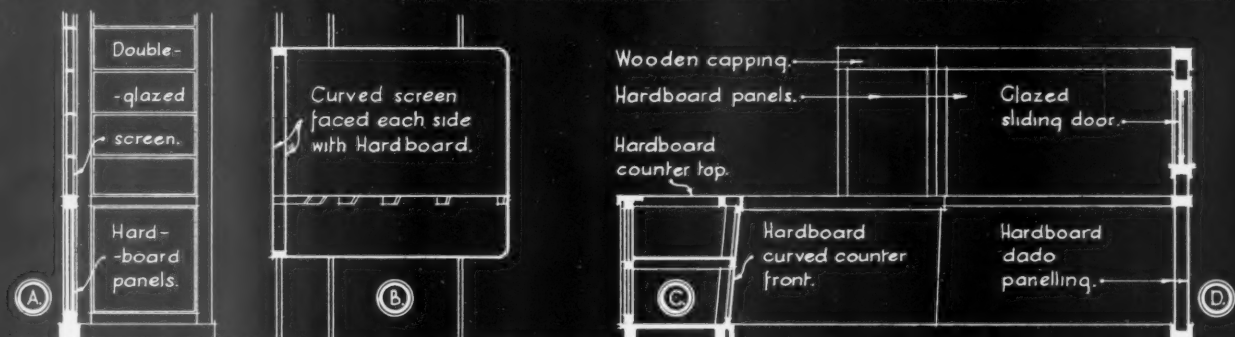
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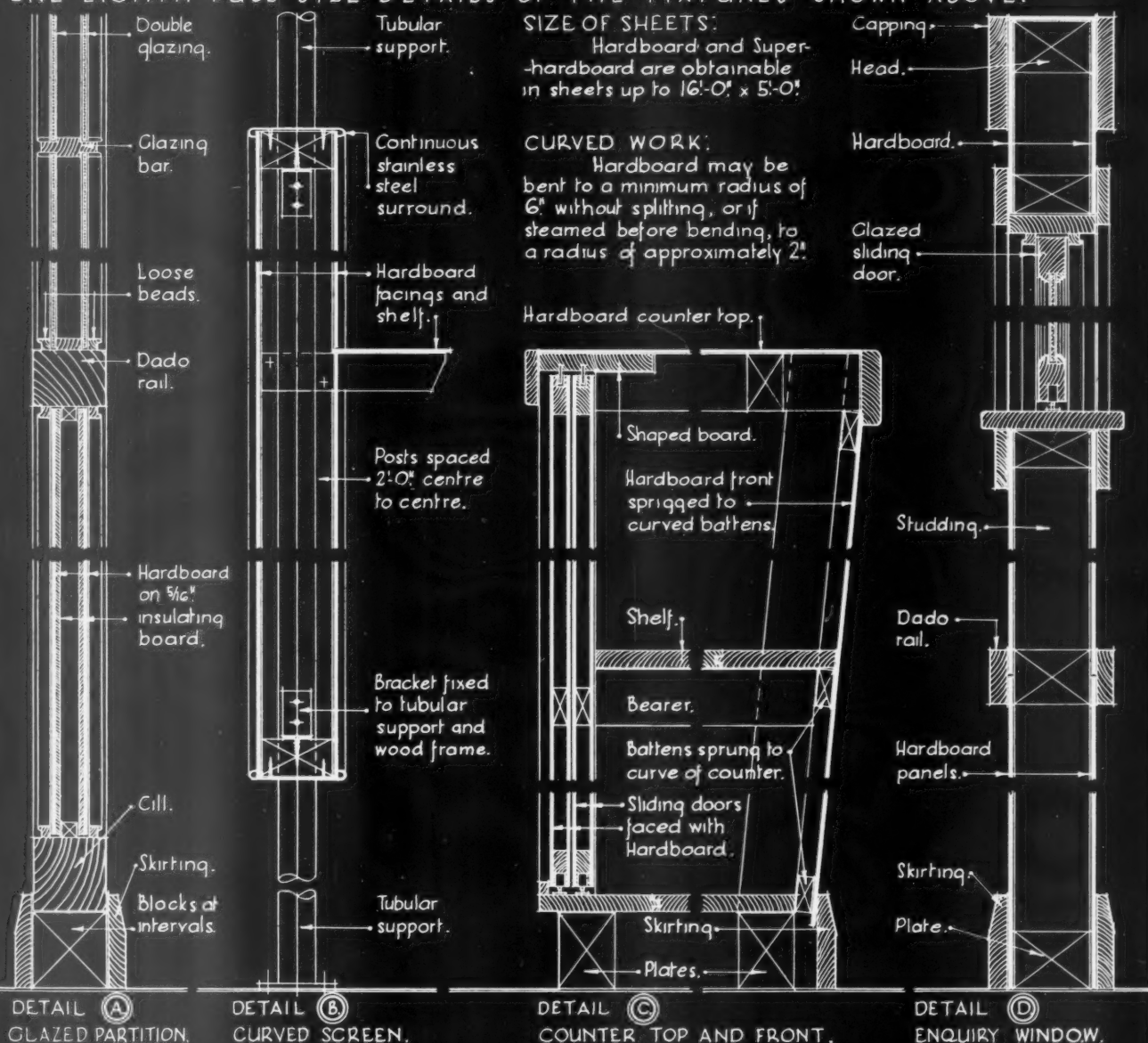
# THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

## LLOYD HARDBOARD AND SUPERHARDBOARD: INTERNAL FINISHINGS.



TYPICAL SECTION THROUGH A PARTITION, SCREEN, RECEPTION COUNTER, & ENQUIRY WINDOW.

### ONE EIGHTH FULL SIZE DETAILS OF THE FIXTURES SHOWN ABOVE.



#### SIZE OF SHEETS:

Hardboard and Super-hardboard are obtainable in sheets up to 16'-0" x 5'-0"

#### CURVED WORK:

Hardboard may be bent to a minimum radius of 6" without splitting, or if steamed before bending, to a radius of approximately 2"

Information from G.W. Glover & Partners, for Edward Lloyd Wallboards, Ltd.

INFORMATION SHEET: LLOYD HARDBOARD (C): PARTITIONS, SCREENS, & COUNTERS.  
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1. Oscar & Baynes.



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INFORMATION SHEET

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HARDBOARD

Subject : Lloyd  $\frac{1}{8}$  in. and  $\frac{3}{16}$  in. Hardboard and  
Super Hardboard

**Lloyd Hardboard :**

This board is made from selected wood fibre, compressed during manufacture to give toughness and durability. It has a hard, smooth, grainless surface, and will not split or disintegrate.

**Lloyd Super Hardboard :**

Super hardboard is similar to hardboard, but possesses greater durability and toughness.

**Size :**

Hardboard and super hardboard are obtainable in sheets up to 16 ft. by 5 ft.

**Fixing :**

Hardboards should be sprigged to wood framing, the heads driven just below the surface and the holes stopped. Joints may be treated in a similar way to ordinary insulating board (see Sheet 302).

**Curved Work :**

Hardboard may be bent without splitting to a minimum radius of approximately 6 ins., and if steamed before bending, to a radius of approximately 2 ins.

The details on this Sheet show the use of hardboard or super hardboard for partition panelling, curved work, and counter tops and fronts.

**Detail A :**

This detail shows a sound resisting double partition with glazed upper part, and a dado faced with hardboard.

The framing shown consists of 4 in. by 4 in. cill, posts, and head, with a 4 in. by 3 in. dado rail. The upper part is double glazed, with loose beads. The dado panel is formed of two thicknesses of  $\frac{5}{16}$  in. insulating board spaced 1 in. apart, faced

with  $\frac{1}{8}$  in. hardboard, and secured with wooden beads.

Rooms up to 16 ft. square may be panelled without vertical joints.

**Detail B :**

This is a detail of a curved screen, faced each side with hardboard, and with a stainless steel surround.

The framing consists of a 4 in. by 2 in. head and cill, with 4 in. by 2 in. posts at 2 ft. intervals. Each side is faced with a single sheet of hardboard bent to the curve of the screen. The shelf is also cut out of a single sheet and supported on brackets fixed to the posts. The screen is carried by tubular supports fixed between the floor and ceiling, and bracketed to the wooden framing.

**Detail C :**

This detail shows the use of hardboard for counter tops, counter fronts, and for facing sliding cupboard doors. The counter framing consists of 3 in. by 2 in. posts and bearers and 4 in. by 3 in. plates. 2 in. by 1 in. battens are sprung to the curve of the counter front and fixed to the posts to receive the hardboard, which is sprigged to the battens at frequent intervals. The skirting and counter bands are also sprung to the curve of the counter and fixed by screws. The counter top may be sprigged to the bearers or fixed by adhesive.

The flush sliding doors consist of deal skeleton framing to which the hardboard is fixed by panel pins or adhesive. The exposed edges of the door may be finished with a strip of hardwood mitred to the facing, or a hardwood cover strip.

**Detail D :**

This is a detail of an enquiry window in a hardboard panelled partition. An opening is formed by trimming the studding, and a wrot lining and architrave are fixed. The glazed door slides in the thickness of the partition. The hardboard is sprigged to the studs and the horizontal joint covered by the dado rail. Panels up to 16 ft. long are possible without a vertical joint.

**Previous Sheets :**

Previous Sheets in this series were 302, 316, 336, 374, and 416.

Manufacturers : Edward Lloyd Wallboards, Ltd.

Address : Shell Mex House, Strand, W.C.2.

Telephone : Temple Bar 9221



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## THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

## RECOMMENDATIONS FOR THE INSTALLATION OF ESCALATORS.

## SAFETY DEVICES :

Every escalator machine should be provided with an electrically released, mechanically applied brake which should operate to stop the escalator automatically when the power is interrupted from any cause.

## EMERGENCY STOP BUTTONS &amp; SWITCHES :

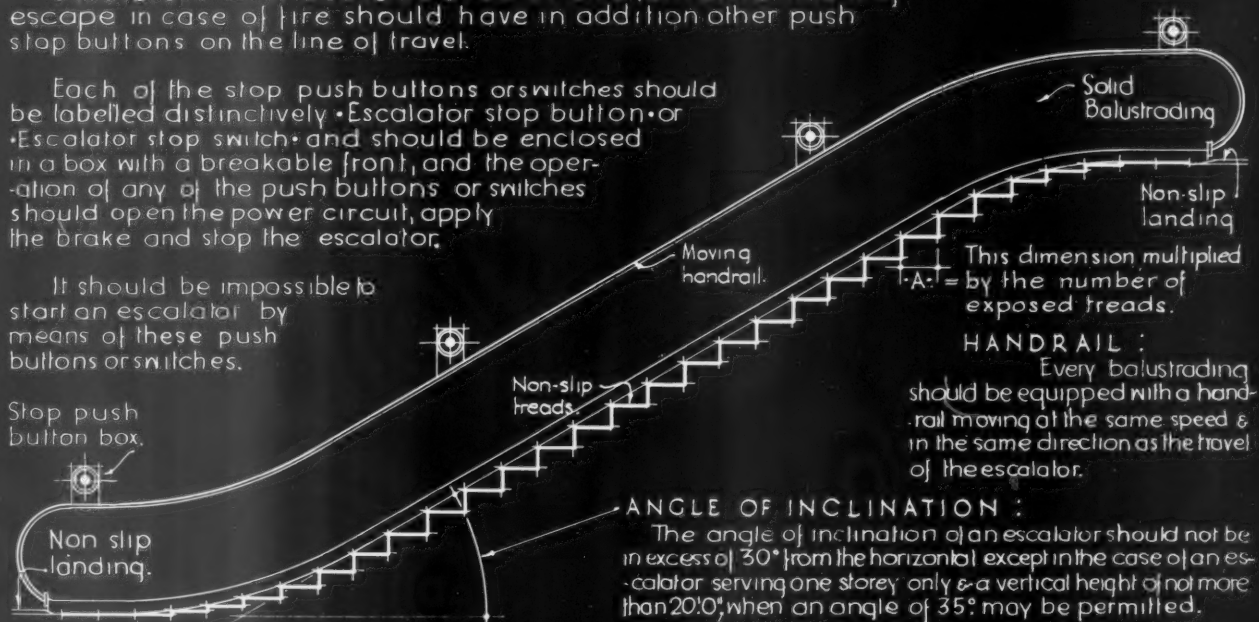
An emergency stop push button or switch accessible to the passengers should be placed conveniently and conspicuously at the top and bottom of each escalator.

Escalators intended to be used as an alternative means of escape in case of fire should have in addition other push stop buttons on the line of travel.

Each of the stop push buttons or switches should be labelled distinctly •Escalator stop button• or •Escalator stop switch• and should be enclosed in a box with a breakable front, and the operation of any of the push buttons or switches should open the power circuit, apply the brake and stop the escalator.

It should be impossible to start an escalator by means of these push buttons or switches.

Stop push button box.



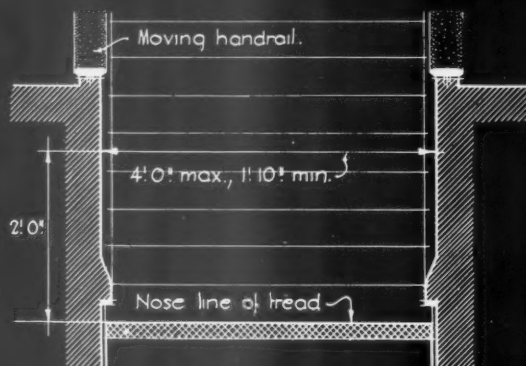
## HANDRAIL :

Every balustrading should be equipped with a handrail moving at the same speed & in the same direction as the travel of the escalator.

## ANGLE OF INCLINATION :

The angle of inclination of an escalator should not be in excess of  $30^\circ$  from the horizontal except in the case of an escalator serving one storey only & a vertical height of not more than 20'0" when an angle of  $35^\circ$  may be permitted.

## DIAGRAMMATIC LONGITUDINAL SECTION THROUGH AN ESCALATOR



## DIAGRAMMATIC CROSS SECTION

## WIDTH OF ESCALATORS :

The width of an escalator should be measured between the balustrading at a vertical height of 2'0" above the nose line of the treads.

Escalators should not be wider than 4'0" or narrower than 1'10". Escalators wider than 2'5" should have a horizontal tread formation.

## BALUSTRADING :

Escalators should be provided on each side with solid balustrading. On the escalator side the balustrading should be smooth, without depressed or raised panelling or moulding. Glass panels should not be used.

## TREADS &amp; LANDINGS :

Escalator treads & landings should be of non-slip type.

## CAPACITY AND LOADING OF ESCALATORS :

The contract load of an escalator 2'0" wide or less should be computed from the following formula:—

$$\text{Contract load in pounds} = 110 \cdot A.$$

The contract load of an escalator from 2'0" to 4'0" wide should be computed from the following formula:—

$$\text{Contract load in pounds} = 4 \cdot 6 \cdot W \cdot A.$$

Where: W = The width of the escalator in inches.

A = The horizontally projected length in feet of the exposed treads.

*Information from the Code of Practice for the Installation of Lifts and Escalators by permission of the B.I.N.C.*

INFORMATION SHEET: INSTALLATION & EQUIPMENT OF ESCALATORS  
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1 • *Rea & Byrne*



THE ARCHITECTS' JOURNAL  
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INFORMATION SHEET

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## ESCALATORS

Summary of Recommendations given in the  
B.I.N.C. Code

### Trusses and Girders :

(a) The factor of safety to be used in the design of escalator trusses or girders shall be not less than five, based on the static loads and the breaking stress of the material used.

(b) The escalator truss or girder shall be so designed that it will retain the steps and running gear safely, in case of the failure of the track system to retain the running gear in its guides.

### Chains :

(a) All step chains shall have a factor of safety of not less than ten. Chains of cast steel or of materials requiring periodical heat treatment shall not be used.

### Track Arrangements :

The track arrangement shall be designed to prevent the displacement of the treads and running gear if the tread chain breaks.

### Application of Power :

Each escalator shall be driven by an individual electric motor, save that two or more escalators placed side by side and operated as a single unit may be driven by one motor.

### Starting and Stop Buttons :

(a) Starting push buttons or switches which are within reach of the passengers shall be of the key operated type, and shall be enclosed in a box with such a lock and key.

(b) Escalators intended to operate in the ascending direction shall be equipped with a safety mechanism so that in the case of accidental reversal of the escalator the power shall be cut off, the brake applied and the

escalator stopped. On a reversible escalator this safety mechanism shall be arranged to be inoperative when the escalator is descending and operative when the escalator is ascending.

(c) All escalators shall be provided with a safety mechanism which will open the power circuit, apply the brake and bring the escalator to a gradual stop in the event of the speed exceeding the normal running speed by 25%, up to a running speed of 100 ft. per minute, 16% at 180 ft. per minute, and varying proportionately between these limits for intermediate speeds.

(d) All escalators shall be provided with a safety device to open the power circuit, apply the brake and bring the escalator to a gradual stop in the event of the tread chain or chains breaking.

(e) Where escalators are equipped with tightening devices, operating by means of tension weights, provision shall be made to retain these weights in case the ropes or other fixings to the weights should fail.

(f) Each escalator operated by a polyphase alternating current motor shall be provided with a device which will prevent the motor starting while the phase rotation is in the wrong direction, or if a failure of any phase should occur.

For recommendations regarding stop emergency push buttons and safety devices, see front of this Sheet.

### Machine Room Lights and Access :

(a) There shall be a suitable light in every escalator machine room, which can be lighted without passing or reaching over any part of the machinery.

(b) Reasonable access shall be provided to the interior of the escalator for inspection or maintenance.

The material given on this Sheet is taken from the Code of Practice for the installation of lifts and escalators, issued by the Building Industries National Council.

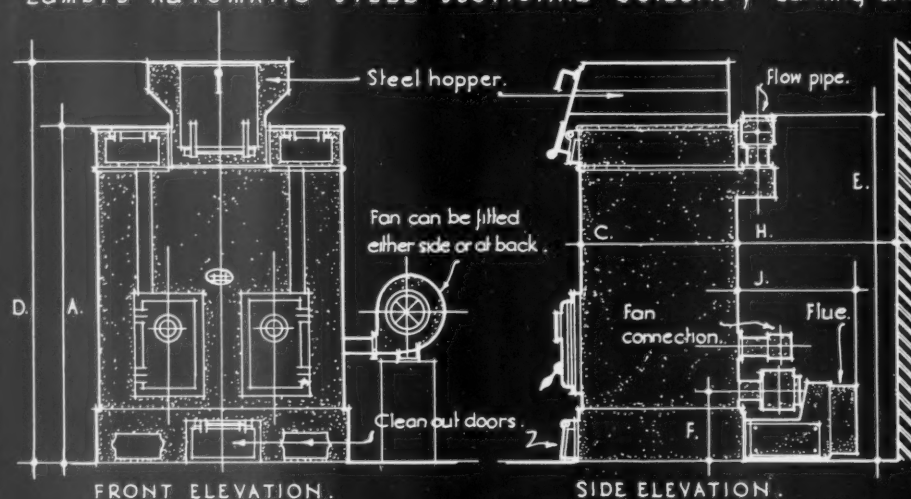
The diagrams and notes given here are an interpretation and summary of the provisions of the Code ; for full details reference should be made to the Code itself, copies of which are obtainable from the Council (price 1s. 3d.).







## THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

LUMBYS AUTOMATIC STEEL SECTIONAL BOILERS, burning anthracite peas of  $\frac{3}{8}$ " to  $\frac{5}{8}$ " size.

## OPERATION &amp; CONTROL.

The boiler is operated by a small quiet-running electric fan approx.  $1\frac{1}{2}$ " W.G. pressure, and controlled by a thermostat which can be set at any temperature to suit the weather, & which automatically stops & starts the fan according to the flow pipe temperature.

## RE-FUELLING &amp; CLINKERING.

This is done once in every twenty-four hours.

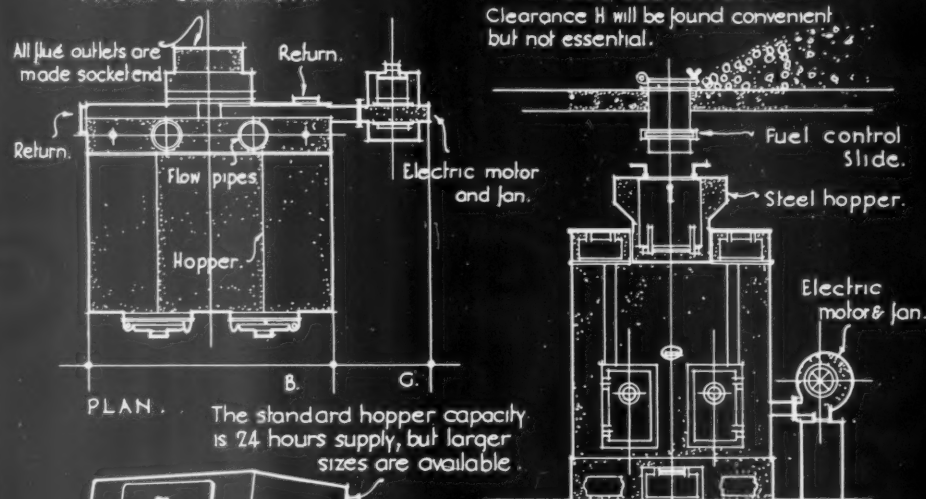
The boiler is made from  $\frac{5}{16}$ " to  $\frac{1}{2}$ " M.S. boiler plates & tested to 80 lbs  $\text{sq. in.}$  pressure.

## DOMESTIC SUPPLY.

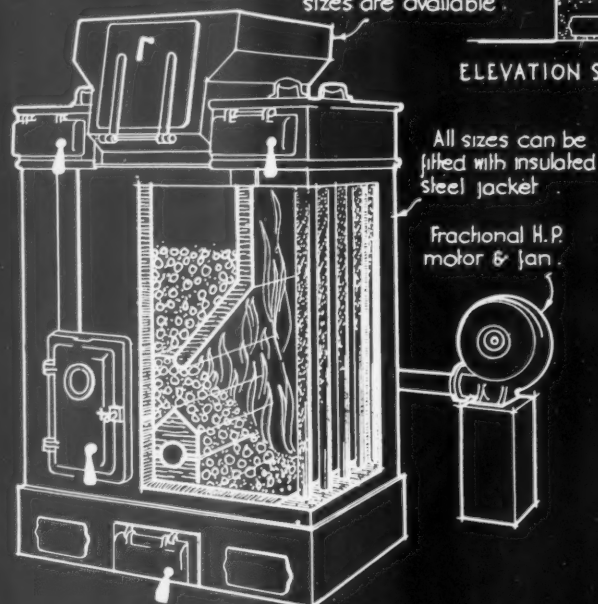
One boiler can be arranged to give heating and domestic supply conjointly or independently. Thus the heating can be cut off during the summer & the boiler worked only for domestic supply in conjunction with a calorifier or indirect heater.

## RANGE OF BOILERS.

Batteries of boilers can be arranged, and can be provided with a common flue shaft.



The standard hopper capacity is 24 hours supply, but larger sizes are available.



SECTIONAL ELEVATION SHOWING WATERWAYS AND ECONOMISER TUBES.

TABLE GIVING APPROXIMATE DIMENSIONS • (Inches)

NUM. BER.	A.	B.	C.	D.	E.	F.	G.	H.	J.	FLUE DIAM.
0.	43.	20.	15.	•	45.	9.	15.	•	4.	5.
01.	47.	20.	19.	•	49.	10.	15.	•	4.	6.
1.	47.	27.	14.	57.	42.	12.	15.	14.	5.	6.
2.	55.	27.	18.	64.	50.	12.	15.	18.	5.	7.
3.	53.	31.	24.	63.	56.	10.	15.	24.	17.	8.
4.	57.	42.	27.	70.	60.	12.	16.	27.	18.	10.
5.	63.	44.	33.	76.	67.	12.	16.	33.	21.	10.
6.	64.	51.	33.	80.	68.	13.	16.	33.	21.	12.
7.	72.	52.	36.	86.	75.	14.	18.	36.	21.	12.
8.	75.	66.	37.	90.	79.	16.	18.	37.	23.	14.
9.	78.	68.	37.	92.	82.	16.	18.	37.	23.	14.
10.	87.	70.	39.	102.	91.	16.	21.	39.	24.	16.
11.	93.	70.	44.	108.	97.	16.	21.	44.	26.	18.

Nos 0 & 01 boilers have front feed door, hoppers not being necessary.

Information from Lumbys Ltd.

INFORMATION SHEET: AUTOMATIC STEEL SECTIONAL BOILERS.  
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1 • *By an a. Bayne.*

THE ARCHITECTS' JOURNAL  
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INFORMATION SHEET

• 453 •

AUTOMATIC BOILERS

Product: Lumbys automatic steel sectional boiler.

Operation:

Lumbys automatic steel sectional boilers burn small anthracite peas, which are fed automatically into the firebox by gravity. There are no firebars or grate, and the fuel is converted into gas with the aid of mechanical draught supplied by a quiet-running electrically-driven fan.

Warm secondary air is supplied to various zones of the combustion chamber, and this completes the combustion of the gases. The gases then pass through economiser tubes and result in a chimney temperature rarely exceeding 300° F.

Control:

The boiler is thermostatically controlled, and the motor automatically stops and starts the fan according to the flow pipe temperature required. The consumption of fuel can be arrested at night by switching off the fan. The fire will then slumber for 12 hours, and after starting the fan next morning, the boiler will be at work in 5 to 10 minutes.

Construction:

The sections are made from best Siemens-Martin steel plates with a tensile strength of 26-28 tons per sq. in. They are stayed, and tested to 80 lbs. per sq. in. to pass all insurance company requirements. The economiser tubes are of heavy gauge iron and are expanded in at top and bottom. There are no welds in the fire zone.

Accessibility:

All parts of the boiler are accessible, and airtight doors are fitted for cleaning out.

Elasticity:

The elasticity of the boiler is such that there can

be no fear of undersizing, and the boilers have a large reserve of power.

Fuel:

The fuel recommended is Rhos anthracite peas or equal,  $\frac{3}{8}$  in. to  $\frac{5}{8}$  in. in size, with an ash content of not more than 3 per cent. to 4 per cent.

The approximate weight of the fuel is 50 lbs. per cubic foot.

Cost:

The prices of these boilers range from £60 to £420, and include hopper, electric fan for alternating current, immersion type thermostat, double pole switch and fuses, and cleaning tools.

Steam Heating:

Boilers can be arranged for low pressure steam by the addition of a steel drum, etc.

Table of Ratings, Fuel Capacity, etc.:

Boiler No.	Heating power, B.T.U.'s per hour	Radiation sq. ft.	Heating surface sq. ft.	Fuel Capacity (Anthracite)	Horse Power of Motor A.C.	Flue outlet dia. (ins.)
0	50,000	345	15	85 lbs.	.05	5
01	75,000	520	20	100 lbs.	.05	6
1	100,000	690	27	125 lbs.	.05	6
2	150,000	1,040	42	175 lbs.	.05	7
3	220,000	1,525	57	2 $\frac{1}{2}$ cwts.	.07	8
4	375,000	2,600	98	4 "	.125	10
5	500,000	3,450	126	5 $\frac{1}{2}$ "	.125	10
6	625,000	4,340	162	6 $\frac{3}{4}$ "	.125	12
7	750,000	5,200	190	8 "	.2	12
8	875,000	6,080	235	9 $\frac{1}{2}$ "	.2	14
9	1,000,000	6,950	265	10 $\frac{1}{2}$ "	.2	14
10	1,250,000	8,680	310	13 "	.25	16
11	1,500,000	10,400	380	15 $\frac{1}{2}$ "	.33	18

Patent: The design of the boilers is covered by Patent No. 415,290

Manufacturers: Lumbys Limited

Address: Greetland Boiler Works, Halifax

Telephone: Elland 125

Telegrams: Lumbys, Greetland

London Office and Showrooms:

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