LUTON AND FOLKESTONE

OF all the architects in Britain it is probable that only a small proportion have ever been commissioned to carry out a school building scheme. And of this proportion not more than half have the designing of schools as a continuously important part of their work.

The remainder are busy on other buildings. They want schools to be well designed and they have noticed that progress does not seem to be taking place very quickly. The designing of schools, however, has become rather a specialized business, and those who are not specialists have been very ready to believe that justifications exist for each seeming defect.

For the past six months this JOURNAL has contained a lot about schools, and those who are not immediately concerned with school buildings may have had moments when that lot appeared too much. But there is a special reason, which the smallest reflection must surely show to be overwhelming, why no architect can allow himself to be indifferent to the problem of school design.

The time of children's school life, according to the economic condition of their parents, extends for varying periods between the ages of two and nineteen; and for all children covers the nine years from five to fourteen. Exceptional individuals may develop their general æsthetic and cultural attitude towards the surroundings of living after leaving school. The mass do not.

What the average child thinks about the design of things on leaving school, the state of his or her enthusiasm for and appreciation of good form, colour and texture remains with little modification through adult life.

Put bluntly, therefore, the architect cannot concur in children leaving homes generally unfortunate in all aspects of good design and passing ten years in schools equally deficient, without forfeiting the chance of a future generation appreciative either of the importance of architecture or of the necessity of architects.

Architects cannot, at the moment, see that the surroundings of children in their homes are well designed. They can, however, if they give their minds to it, do much towards ensuring that schools are suitable in every aspect as training centres for the next generation during the most sensitive and impressionable time of their lives. And no work could be more worth while.

The results of the Luton and Folkestone Competitions have been triumphant examples of one way, and probably the best way, of architects helping to create better schools. This JOURNAL has been at pains to advertise these competitions, to encourage architects to go in for them, and to examine, not the winners' alone, but all the schemes sent in. The success of these results is one of the most encouraging events of the last years. The impression that mysteries, only to be comprehended by the life-long specialist, control the whole planning of schools has been shown to have no basis in fact; the changes which have taken place in educational policy have been provided with two buildings tailored to their measure; and in the elevational expression of the winning schemes there is, as well as balance and orderliness, an expression both of fresh air and freedom.

In holding open competitions for these two schemes the Bedfordshire and Folkestone education committees took a course which is rare. The experiment was daring, and education committees are not often daring. What is more, the experiment might have been a failure which would have set back progress in school design for a decade. In estimating the success of the results the great, indeed the principal, part played by the promoters must be given its proper place.

The remainder of the praise belongs perhaps in equal portions to the two assessors, Professor W. G. Newton and Mr. Verner O. Rees, and to the winners, Messrs. Marshall and Tweedy and Mr. E. Wamsley Lewis.

Looking at the winning designs the first impression is almost of surprise at the things which are not there —the small quadrangles, cramped halls and squat rectangular plan-forms to which this country has become habituated.

In positive achievement the winning schemes have secured the big things of good aspect, properly emphasized assembly halls, and a simplicity which is imaginative. The plans are not perfect (no plan ever is); Messrs. Marshall and Tweedy's laboratories are rather tangled up with their ordinary classrooms, and Mr. Lewis's babies' room might be better away from his administration. But criticisms like these cannot diminish the lesson of the competitions.

It has been shown—and this is the really important thing – that architects are more than capable of providing the surroundings of modern education if the ability available is only given a general opportunity.

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NOTES & TOPICS

SOUTHAMPTON

ALMOST the only product of modernity which members of the R.I.B.A. could not enjoy at the Conference was the "Queen Mary"; and it was universally considered a pity that the Cunard-White Star will keep taking their greatest venture over to New York with such monotonous regularity.

*

But every other modern convenience was available. Members could, and did, fly over Southampton, the Solent and the Isle of Wight. They could have outings in some of the very latest of charabancs. And the water and the air, thick with flying boats and power boats, provided all that was most fitting in atmosphere to Mr. G. A. Jellicoe's "Architecture of Tomorrow" and Professor W. G. Holford's "Planning of a Great Seaport."

*

Mr. Holford's paper had all the thoughtful distinction which we have learnt to expect from him, and contrasted Liverpool's and Southampton's special problems in a way that must have proved to the least technical listener how much is included in the phrase "Civic Design."

*

It seems a special pity that one result of the development of Southampton by the Council and the railway company has been to cut off the inhabitants almost entirely from a view of their own waterfront.

*

Watching other people working is so really enjoyable a recreation that Southampton's visitors would probably increase beyond belief if really good opportunities were provided for indulging in it.

TRAVEL AMENITIES

Speeding departing provincial guests recently from two of the northern railway termini, I made close acquaintance with two forms of railway facility becoming increasingly popular—conducted long-distance rambles by L.M.S., and "half-day" long-distance excursions by L.N.E.R.

*

Of the former, a merry party of some 150 week-end ramblers to Wales, made the midnight platforms of Euston look incongruously gay. Of the latter, the sheer luxury of the seating of a Sunday morning excursion from King's Cross made me keen to travel.

*

Would that the L.N.E.R. provided such luxury on their normal trains, long-distance and otherwise. After travelling in a large and comfortable tub chair in a brightly painted coach, with large areas of plate glass window and with a buffet car and a cinema car as additional luxury, it is a bit discouraging to travel the same 200 miles in a miserable compartment, at precisely three times the cost and taking ten minutes more over the journey by the best normal work-a-day express—to say nothing of the large baulks of mahogany which usually obstruct the view.

WEDGWOOD

The results of modern research, combined with the impossibility of adapting a 167-year old factory to take advantage of them, have decided the firm of Wedgwood to move from Etruria.

*

A new factory, a new town, a new smokeless garden village in fact, is contemplated. Whatever the sentiment, whatever the details, I salute a firm which, having spent 167 years in growing, topsy fashion, now has the imagination to *plan* its accommodation to meet probable developments for the next 100 years or so.

ART IN COMMERCE

Industry and commerce, combined with the economies of modern transport, seem determined to knock all local romance out of the acquisition of both everyday and once-in-a-while things.

*

We have all known that lots of oriental brass and bric-a-brac is made in and around Birmingham. But it came as something of a shock the other day to learn that the exquisite little bottles holding a well-known make of Parisian scent are not only made, but were designed, in the black heart of industrial West Yorkshire.

*

A picnic Stilton may taste very fine in the valleys between Uppingham and Oundle, but the cheese has probably travelled to Piccadilly and back to reach a ripe maturity. And you can still achieve the old traditional Cornish silver-grey roof if you now import the slates from Norway.

JOURNEY TO ABERDEEN

Mr. Percy Thomas has been at Aberdeen this week. And this news, which is not the pale foreshadow of a joke, is the result of the Aberdeen Council's determination to look ahead in affairs municipal.

*

Like that of many other cities, Aberdeen's municipal departments have outgrown their present accommodation. In such a situation the procedure of local authorities in general is now only too well known.

*

The rival factions on the council concerned or (let it be said in a whisper) the rival landowners having influence

The R.I.B.A. becomes air-minded: Sir Ian MacAlister alighting from a De Haviland air liner at Southampton airport.

on the council, each choose a site; join battle for ten years or so; and, at long last, agree upon some fœtid neutral angularity between some railway sheds and the fever hospital—prior to inviting architects to do what they can with it.

*

Aberdeen has shown that it can think differently. It has had four different suggestions sketched out and has then asked the President of the R.I.B.A. to go up and help to decide which is best.

*

In the sturdy democratic words of the *Glasgow Herald*, "Thomas will report on the whole situation."

CHARING CROSS BRIDGE

Charing Cross Bridge is in the news again. This time as a recommendation of the London and Home Counties Traffic Advisory Committee to the Minister of Transport. They advise that a traffic bridge should be built alongside the railway bridge and that Charing Cross Station should be rebuilt so as to allow the bridge approach to start on the north side from the Strand, in more or less the same position as the present Station yard, and on the south side from York Road.

*

Most people agree that a bridge at Charing Cross would be a very desirable thing to have, but the west end of the Strand appears to be amongst the worst places in London to bring a lot of additional traffic. On the south side, however, the result may be yet more serious, for unless the bridge is considered as part of the planning of the whole area it may completely wreck what appears to be London's one chance of doing some really large-scal planning.

ANOTHER RIVAL

The Country Gentlemen's Association has written to me and, somewhat surprisingly, has invited me to become one of its members.

*

This, indeed, seemed very flattering, and so, viewing my window box with more than usual pride, I turned with interest to the pamphlet in which are set out the various services rendered by the Association to its members, and was astonished to read under the heading "professional services" the following:—

> Architecture:
>
> The design of country and town houses, and the alteration and adaptation of such houses to modern requirements.

*

As it appears that one of the principal objects of the Association is to enable its members to obtain goods more cheaply than they otherwise could, it would be interesting to know whether fees on the R.I.B.A. Scale are charged for this work, or whether the 10,000 members, all possible clients of some architect or other, can get their work done at specially advantageous rates.

TRAFFIC SIGN CONFUSION

Some months ago, you will remember, I raised the question of serious confusion between traffic lights and adjoining advertisements illuminated by red, amber or green lights, neon or otherwise.

*

And now one London authority is contemplating legislation to prohibit private illuminated signs in the direct line of vision within so many yards of traffic lights.

*

The regulation ought obviously to be extended throughout the country. There are at least two flagrant cases on the Great North Road, for example, where, to approaching traffic, red traffic lights centre upon large neon signs—and they are frequently seen by strangers only at the last minute to allow of a sudden stop amid shrieks from maltreated tyres.

*

Or are the traffic lights themselves wrongly placed and designed? Would they be better suspended over the centre of the road, or let into the road surface, or both?

FILMS

The Building Industry as a whole has not been particularly bright or pioneering in seeing the educational value of documentary films, though some of the larger branches of the Industry have already produced films of no mean merit, especially in publicity value.

*

Now, I understand, the documentary film is to play its part in telling of building and its many processes.

*

As a beginning, the R.I.B.A. building has been filmed, and this week Mr. Percy Thomas is to speak the commentary. So that in a few weeks' time everyone within reach of a cinema will have the unique opportunity of seeing No. 66 Portland Place as clearly and as dramatically as documentary can put it over.

ASTRAGAL

NEWS

POINTS FROM THIS ISSUE

WESTMINSTER HOUSE SITE

The Middlesex County Council decided last week to make a further appeal to the Government to contribute towards the cost of adding the Westminster House site to the Canning Enclosure, Parliament Square, to form a permanent open space.

CAMPION HALL, OXFORD

The new Campion Hall in Brewer Street, Oxford, designed by Sir Edwin Lutyens, R.A., was opened last week by the Duke of Berwick and Alba.

TIMBER EXHIBITION TRAIN

On Monday last, Earl de la Warr, Parliamentary Secretary to the Board of Education, presided at a ceremony to mark the departure of the timber exhibition train from Paddington Station, on a twelve-weeks' tour of 27 provincial cities and towns.

Samples of 72 different kinds of wood are carried in the train, and seven different woods are used in the interior design of the coach, which is the work of Mr. R. D. Russell. A picture gallery shows the life of a tree from felling to final conversion into furniture; the growth of comfort; the part wood plays in transport—in barges, State coaches, motor boats and yachts; and in agriculture—in the construction of farm waggons, wooden bridges and windmills. Admission to the train is by free ticket, obtainable at the local shops and bookstalls of Messrs. W. H. Smith.

ROYAL SANITARY INSTITUTE

Delegates from all parts of the world will meet in Southport from July 6 to 11 to discuss public health at the Health Congress of the Royal Sanitary Institute.

The Minister of Health, the Right Hon. Sir Kingsley Wood, who is President of the Congress, will deliver his inaugural address on Monday next, July 6.

THE ARCHITECTS' DIARY

Thursday, July 2

ROYAL ACADEMY, *Burlington House, Piccadilly, W.1. Summer Exhibition. Until August 8.*

ROYAL SCOTTISH ACADEMY. *At Edinburgh. Until September 5.*

LONDON SOCIETY. *First Garden Party to be held in the grounds of the London Museum, S.W.1. 3 p.m. to 6 p.m.*

INSTITUTION OF ELECTRICAL ENGINEERS. *Conversazione to be held at the Natural History Museum, Cromwell Road, S.W. 8.30 p.m. to 11.30 p.m.*

GARDEN CITIES AND TOWN PLANNING ASSOCIATION. *Housing and Town Planning Tour to Hamburg and the Baltic Ports. Departure from Waterloo Station at 8 a.m.*

Monday, July 6

ROYAL SANITARY INSTITUTE. *At Southport. 47th Health Congress and Exhibition. Until July 11.*

Friday, July 10

TOWN PLANNING INSTITUTE. *At Caxton Hall, Caxton Street, Westminster, S.W.1. "London's Green Belt." By Alderman Ewart G. Culpin. 6 p.m.*

FIRE-PROOFING OF TIMBER

Speaking at the annual general meeting of the Timber Development Association at the London Chamber of Commerce, Cannon Street, on June 24, Mr. E. H. B. Boulton, said that the Forest Products Research Laboratory at Princes Risborough was at present carrying out tests on behalf of the Timber Development Association in regard to the fire-proofing of timber, and he was hopeful that when they were completed the Association would be able to announce a satisfactory process of fire-proofing at one-sixth to one-eighth of present costs.

Not only would the treatment greatly increase the resistance of wood to fire; it would also act as an excellent toxic for the prevention of dry rot.

R.I.B.A. CONFERENCE

The R.I.B.A. Conference was held at Southampton from June 24 to 27. At the inaugural meeting, held in the Chantry Hall on June 25, Mr. Percy Thomas delivered his presidential address and papers entitled "The Architecture of Tomorrow" and "The Planning of a Great Seaport" were read by Mr. G. A. Jellicoe, A.R.I.B.A., and Professor W. G. Holford, A.R.I.B.A. Extracts from the presidential address and the two papers are printed on this and the pages following.

PRESIDENTIAL ADDRESS

You are aware that the two papers which we are to have the pleasure of hearing this morning are not concerned with the past history of our art. They deal with the problems of today and tomorrow. I am glad of this because I want to talk to you, not of what architects have done in the past, but of what they can do in the future if the community has the wisdom to give them the opportunities that they are justly entitled to. Twelve months ago, in my Inaugural Address, I made a plea for the greater employment of architects in our public and private lives. Since then I have endeavoured to use what opportunities have come my way to repeat that plea in almost every important city in the country, and I make no excuse for again referring to it today. It is the most important subject in our professional life, and it affects not only our lives but the lives of millions of our fellow citizens. I am not exaggerating when I say that one of the crying needs of our time is that the qualified designer should hold a far more important place in the community than he does at present. It ought to be obvious to everyone, but it is extraordinary how many people overlook it, and the result is that an enormous number of buildings are erected every year in this country without the services of a qualified architect, and when it is a matter of planning it does not occur to them that the only person who ought to be allowed to plan is the person who has learned how to do it. Still worse, they even tend to overlook the need for planning altogether. Our modern towns and the extensions of our old ones have nearly all grown up without any plan whatever, and the results of this neglect are so disastrous that an immense amount of energy and public money has to be devoted to the task of correcting the evils that result from it.

It is remarkable how many people keep their minds in water-tight compartments in this matter of design and planning. If it is a question of a cathedral, a church, or a town hall, they recognize that, of course, they must have an architect.

But it does not occur to them that the need is just as obvious in the case of every kind of building and in the grouping of buildings and the lay-out of streets which go to make a town plan.

What is the origin of this curious "blind spot" in the public mind? They do not make a similar mistake in the case of the other professions. If they are involved in a law-suit they recognize as a matter of course that they must employ the services of the best solicitors and the best barristers that they can afford. If they are ill, they at once call in the physician or the surgeon. If they have toothache they go straight to the dentist. If their drainage is defective, they call in a sanitary engineer without question. If they want a portrait painted they look for a skilled artist.

But in this matter of architecture they are as likely as not to entrust themselves to people who have not a shadow of qualification for the work.

I fancy the reasons for this curious aberration are two. In the first place, the public are surrounded all their lives by so much bad design and bad planning that they come to take it for granted. In the second place, they have never come to realize what a high degree of skill is required to produce either good architecture or good planning. Almost every man thinks he could design his own house or his own factory if he had the time to spare. It seems to him a comparatively simple thing that only requires common sense. He just does not realize that the production of good architecture requires, first of all, a long and laborious training in all the elements of the art, and then the devotion of a lifetime to the solution of all the varied problems that the architect has to deal with.

I am not for a moment attempting to idealize the architect. There are bad architects as well as good ones, just as there are bad surgeons as well as skilful ones, feeble barristers as well as brilliant men. But the fact that there are some practitioners of an art who do not reach a high level is not a reason for dispensing with all of them

and employing only people who have no qualifications, good or bad.

No one who looks at the matter without prejudice can fail to admit the enormous difference that exists between the work—broadly speaking—of the qualified and the unqualified man. You have only to think of some actual instances in our own country. Think of some examples of fine planning—places that people go far to see, places that the whole nation is proud of. At once you think of Bath and the New Town of Edinburgh, of Cheltenham, and of such bits of city planning as Nash's great London scheme from St. James's Park to Regent's Park. Compare them with the ordinary type of street and lay-out in the ordinary city or town. What caused the difference? Simply the fact that Wood and Craig and Adam and Papworth and Nash were employed to create the fine examples that I have mentioned, and that nobody in particular was employed on most of the rest. It isn't a matter of expense and extravagance; many of these great schemes were remarkably cheap in cost, and some of them paid for themselves many times over. It is purely and simply the difference that comes from employing trained talent.

Think for a moment of the other end of the scale—the kind of thing that the nineteenth century could really do when it tried. If anyone thinks I exaggerate I invite him to give himself two experiences. Let him approach London from Kent and drive slowly through South London till he gets to Waterloo. Then let him enter London from the Essex side and drive slowly to Liverpool Street Station. If he will do that, if he will look carefully at what he sees as he goes by and will reflect on how it came to pass, he will agree with me. He will have traversed some of the most terrible areas that can be found anywhere in this country, terrible in their senseless ugliness, their hopeless confusion and congestion, their meanness and squalor. He will have passed miles and miles of houses that have been slums ever since they were first built. They are not decent housing that has become slum property. They have been hopeless from the start.

When you reflect upon the influence of those miles and miles of ugliness, disorder, and squalor upon the minds and characters of those who are brought up and live their lives in those surroundings, you will realize the enormous magnitude of the evil, the task that lies before the community in trying to get rid of it, and the pressing duty that rests upon all of us to avoid the creation of such areas in the future.

Do not imagine for one moment that we are in no danger of repeating these errors. In the short period since the war many of our cities and towns have been enlarged by the creation of great new built-up areas all round them, and I am sorry to say that in a great many cases the errors of the nineteenth century have been repeated. Within half a generation vast areas have been "developed," as they call it, in such a way that they are simply the slums of the future.

It is, then, our duty as citizens, as well as our duty as architects, to do everything in our power to prevent a repetition of these evils. I believe there are distinct signs of an awakening of public interest in these matters, and the members of the Allied Societies who are here today, representing as they do every part of the country, should take advantage of that interest and carry on

G. A. Jellicoe

the campaign for the greater use of the architect in every town and village in these islands. They will have the satisfaction of knowing that not only will they be providing opportunities for the architects of the future, but they will be bringing greater beauty, comfort and efficiency into our national life.

THE ARCHITECTURE OF TOMORROW

By G. A. Jellicoe

This paper does not discuss function or planning of building, but is concerned only with the quality of *architecture* that may develop in the immediate future. We all know and appreciate what is meant by "functional design," but in the opinion of many a building that expresses its function only does not necessarily become good architecture.

The forecasts of architecture in history are interesting in making such a prophecy. Thus the Baroque stage-designs of the eighteenth century came to overflow the theatre and themselves became architecture during the course of years; and similarly we are able to see in the theatrical settings of Gordon Craig, at the end of the last century, the germ of the strong masses of modern building. The stage of to-day may be the architecture of to-morrow. Many a production during the last few years on the London stage points the way of architectural aspiration.

Another source of prophecy may be found in the work of painters, sculptors and all persons concerned with the decorative arts, for the creation of these is rapid, and history shows that architecture by its very substance lingers behind the other arts. Of all the arts, I imagine that of sculpture is most nearly related to our own, and when we see such forms as those by Henry Moore, we feel that there is a force in the world to-day that is struggling towards a new significance.

To many people these new shapes are grotesque, but no one can deny their solidity and strength. Similarly in architecture, the most significant buildings of our time are those that are reduced to the simple planes and masses of function only; these shapes to many are equally repellent, and to the average man are æsthetically insufficient.

It is the purpose of this paper to foreshadow how building may once again acquire graciousness without loss of significance. Good architecture has the qualities of commodity, firmness and delight, and it seems to me that lack of delight means lack of graciousness.

If we examine how building may become architecture, we find that there are two sources of inspiration. There is the question, "What will be the new relation to Mankind?" and afterwards, "What will be the new relation to Landscape?" Let us first discuss the former.

The most vivid illustration I know in the whole history of architecture to express what is meant by the quality of humanity drawn into architecture, is that showing the mouldings designed by Michael Angelo for St. Peter's at Rome. How vivid and vital they are, and how full of meaning. Remove them and reduce those wall surfaces to function and how great will be the loss, for all time. They form a document more valuable than any book. None among all the classic columns and entablatures built in our time can make such claim to vitality, for they are written in a language that is dead.

Of modern buildings in this country the de la Warr pavilion at Bexhill is probably the most expressive. Fine in conception and vivid in detail as it is, however, I feel sure that the brilliant designers would be the first to agree that it is only a short way on the path towards the architecture of the future. It is beyond me to prophesy what qualities of the human being will be caught by this new architecture. It will respond to nothing in history that we have yet met. I know only that science in building is insufficient by itself to make building an art; that mankind insists upon warmth of heart in building; and that no individual architect can force the issues of Evolution.

In the future, men may be housed in buildings containing ten or twenty thousand persons, but just as the course of history has again shown that human nature must remain individual, so these well-ordered buildings will contain within their structure a wealth of design which will give a sense of poverty to the great buildings of this nature that are now being built. It may be that the impulse will come when man has conquered the machine and has greater leisure and more philosophy.

The relation to landscape is one in which I am particularly interested, and I think it is safe to say that a new landscape is being formed, without precedent in the past. So far it has been accepted that all buildings belong to the soil on which they are built, either resting upon it strongly, as in classic architecture, or growing from it like flowers, as in Gothic architecture. The new landscape may be formed of buildings descended, as it were, from the skies. Transport now means that materials can be brought more cheaply from afar, and so buildings may contrast with, rather than form part of, the landscape. You will have seen in many illustrations of modern work how buildings are sometimes detached from the ground by standing on piers or columns; the underside being used for a garage, or some similar purpose. Thus the idea of delicacy of touch with the earth is emphasized, as though the buildings were not yet properly fastened to the ground. I think this is a very sensitive and poetic idea—white gulls alighted on the green fields—and one which may well lead to a new outlook in, for instance, garden design. The new garden may be in the form of claws put out by the house, whereas in the old days the garden was an extension of the house, modelled, like the house itself, as part of its surroundings. So, in time, new plant forms will influence decorative design within the house itself.

In looking into the future there is one thing of which I am sure. Through a period of chaos and indecision, we shall achieve law and order and noble architecture once again. This vision of a city of the future is not far removed from what is, to my mind, still the greatest work of landscape architecture the world has ever known—the Acropolis at Athens.

THE PLANNING OF A GREAT SEAPORT

By Professor W. G. Holford

Beyond the physical growth of Southampton all sorts of external influences have been at work, and these cannot be detected from an observation car. In its long and interesting history the fortunes of trade have waxed and waned in a most remarkable degree. The Romans chose the east bank of the Itchen for the port which was to serve Venta Belgarum, the future Winchester. The Saxons founded

a settlement known as "Hamtun": and if, as seems very possible, it was here that Canute rebuked the waves, he was more prudent than history leads us to believe; for the waves are never boisterous at Southampton, and the tidal range is comparatively small. Had he chosen Liverpool for the ceremony he might very well have drowned. The safe harbour and the quiet approach established Southampton as a passenger port in the days of the Normans. Thereafter it entered the wine and the wool trade. The principle held good then as it does now that the busy port is one which acts as a clearing house. Southampton imported French wines, and exported wool from Hampshire, the Midlands and the West Country. Late in the fourteenth century Southampton became the chief centre of the Levant trade, and rose to be the third port of England, the other two being London and Bristol. But then Italian shipping began to decline, the export of wool was prohibited by Henry VIII, and what remained of the Levant trade moved to London. Southampton lapsed into inactivity.

During the reign of Elizabeth a remedy was applied, and clothmaking was introduced as Southampton's first industry. Walloons and Frenchmen were encouraged to settle in the town to establish their manufactures. It is interesting to notice that the restrictions on the export of wool reacted in favour of Southampton as soon as it possessed factories of its own to handle the wool. It is just possible that Southampton may once again open its doors to strangers by establishing part of its dock system as a modern free port, that is, a protected area where all ships may enter, discharge and load again, and where goods may be stored, manufactured and re-exported—all without customs formalities.

Southampton's flourishing period of textile industrialism did not last long. The Civil War, the plague of 1665, and Colbert's restrictions on the import of cloth into France combined to bring about a second period of depression. Notice how sensitive a port is to changes in the tariff scales of a foreign country.

In the seventeenth century Southampton started sending ships and men to Newfoundland, and was among the first to establish connections with the New World. In 1620 the "Mayflower" sailed from the West Quay. The opening up of Empire trade routes has always been a resource for Britain in difficult times, and it is today. The majority of ships built in Great Britain during the last decade have been for the colonial trade; and the *Liverpool Post* has pointed out recently that Africa and Australia alone have provided more work for British shipbuilders than all the rest of the world put together.

In the middle of the eighteenth century Southampton floated back to prosperity on the tide of fashion. Frederick, Prince of Wales, visited it for sea-bathing, and immediately "virtue was discovered in its air and water, its handsome High Street, and the beauty of its surroundings." At the end of the century the French wars caused a decline in patronage, and in 1820 the first steamboat appeared in the harbour.

The industrial revolution pursued a very moderate course at Southampton; nevertheless, it was the turning-point of its career as a port. History had proved more than once that its physical advantages were not in themselves sufficient to ensure prosperity. It now began to acquire other advantages, due to the inventiveness of man. The first dock was opened in 1843. The following year the whole length of the railway line from London was ready for use. Its population of 19,000 in 1831 grew to 60,000 fifty years later. Then in 1892 the docks were taken over by the railway company. The rate of progress was immediately accelerated, because the unique possibilities of the port as a passenger terminal were now systematically exploited.

This development, however, created a new problem for the town, which now no longer owned its foreshore nor controlled its harbour. The general term "the planning of Southampton" has therefore either a very vague or a very complex significance. Planning in the twentieth century is nearly as much a matter of private enterprise as it was in the nineteenth. On the one hand the Southern Railway is determining the future of the port and its railway approaches on what is evidently a progressive policy; on the other hand, the Corporation has powers under the Housing Acts and the Town and Country Planning Act to go part of the way only in determining the future plan of the town.

At the R.I.B.A. Conference: Professor S. D. Adshead (left) and Professor W. G. Holford, author of the paper entitled "Planning a Great Seaport."

It is not my business to criticize the plans of the Southern Railway for port development, nor the proposals of the Borough Council for new roads and widenings, character and density zoning, and the provision of open spaces. But, keeping the problems of Southampton in mind, it may be interesting to pass in review some of the general considerations that affect the planning of seaports.

There are, however, two qualifications to be made: first, the problem of the marine terminal is in many respects a national and not a private one. Seaport planning requires a fusion of commercial, municipal and national interests if it is to be constructive. Conversely, no two ports in the world are alike, neither in their physical characteristics nor in the character of their trade. What is essential to Southampton may be unimportant to Liverpool. Therefore comparisons can only be made in general terms. The Port of Liverpool is one of the most astounding monuments to the enterprise of man that one could find anywhere. Endowed with fewer natural advantages than Southampton, with a racing tide, and an approach channel that requires constant dredging, it has, nevertheless, grown to occupy a place in the national economy which has every appearance of being unassailable. Even in this period of depression it carries on an export trade of greater value than any other port in the kingdom, London included. It has made mistakes by which other ports may profit; for instance, the fault of not leaving enough room for expansion between its docks and the belt road and railway that separate them from the town. But a detailed comparison with Southampton would not be of much value. Merseyside is so much bigger in scale and so different in kind. Its population is a million and a quarter to Southampton's 180,000. It has 38 miles of lineal quayage in the port to Southampton's five and a half. It loads and discharges 13 million tons of cargo in a year, while Southampton handles barely a million. On the other hand, half a million passengers pass through Southampton in a year, and it will interest you to know that 100,000 of them are bound for, or returning from, cruises. Blunt Lancashire critics have even grumbled that Southampton is not a port at all, but a railway station. Making allowance for northern rivalry, this remark is nevertheless to the point. Southampton has not the same vast industrial hinterland for whose produce it is the natural outlet. It is instead the ideal passenger terminal, the point of conjunction of road lines, railway lines, air lines and sea routes, with speed, facility and convenience as its chief recommendations, whether it is dealing with human beings or with types of perishable cargo.

The main items in port planning is the provision of all the necessary facilities for the various types of water-borne commerce. The first of these concerns the location of wharves and transit sheds for general cargo, the connections between rail and water carriers at as many points as possible, and the provision of dry docks and ship-repair yards on the waterfront. Taking into account its particular type of trade, Southampton appears to be well catered for in all these respects.

Next comes the problem of accessibility to the wharves by streets and railways. One of the most simple and effective arrangements of this is to be seen at Marseilles, with its wide, straight dock road, set well back from the waterfront, and its "old port" for the small craft, yachts and excursion steamers, with very wide quays, situated almost in the heart of the city. The railway connections, however, are not so satisfactory. The wharves at Southampton are extremely accessible, but it may not be long before the pedestrian will be at odds with the trains and the motor-cars. When dealing with public facilities later on, I am going to suggest that an elevated roadway along a part of the front would greatly assist the traffic problem.

Public markets and cold storage are the next items to be reckoned with; also the provision of a separate fisherman's harbour and fish wharf, when the town is big enough to warrant it. There is an interesting one at Boston. The oil and spirit jetties and the coal wharves should, of course, be placed to one side, or near the outskirts. At Southampton the coal wharves are on the banks of the Itchen.

Then comes the big problem of the housing and transportation of the dock workers. From the experience of other ports it seems that the accommodation should be of two kinds: garden suburb or housing estate development at a distance, with the provision of some cheap and direct means of transport between it and the docks; and urban flats or tenements as near as possible to the dock estate.

The question of the location of industries is too complicated to discuss in detail, but it must be remembered that any extensive plant spread across the waterfront of a harbour will block land that may be wanted for future port development.

Now comes the question of facilities for the public. The first essential is good accommodation for passengers landing from ships, whether they are ocean liners or excursion launches. New York, which is one of the largest passenger ports in the world, is notoriously bad in this respect. The contrast is sharp indeed between the traveller's first vision of the New York skyline, with its mounting spires seen across a pearly sea, and his succeeding impression of dirty wharves, ill-smelling cargo, the chaos of the customs, and the scramble for a taxicab. Liverpool's reception at the landing stage is clean and efficient, but sometimes a trifle chilly. Southampton is a cheerful port at which to land, but even here a great deal more could be done in the designing (or even painting) of landing sheds, and in the provision of better accommodation for sightseers and friends.

More serious than this is the lack of facilities for the visitor to the port, and in particular for the ordinary citizen of Southampton who would like to take his recreation on his own foreshore. Except for the space between the Town Quay and the Royal Pier, there is now no outlet from the town to the main waterfront, there is no promenade, and there is no point of vantage, save the end of the pier, from which he can indulge in the glorious pastime of watching the ships come and go. There is already a little piece of the reclaimed area to the west of the Royal Pier which is scheduled as a recreation

ground. It is tucked away out of sight of the main docks, and is not in a very good position for other reasons. But an elevated roadway or footway might be built along the Town Quay from this point, with branches on to an upper level of the pier and on to the roofs of the sheds on the Town Quay jetty. It might descend at Queen's Park, having brought the pedestrian safely over the head of the traffic.

Finally, there is the question of air transport to be considered. In this matter, too, Southampton is favourably situated, and a comparison with Liverpool brings out the essential difference between the two ports. The establishment of a seaplane base on the Mersey, adjacent to the existing aerodrome, is out of the question at present. It would necessitate the building of an embankment six to eight miles long, to enclose the requisite area of water unaffected by tide. The airport, however, already handles a great deal of traffic, and is probably the busiest in England after Croydon. Southampton, on the other hand, is an excellent seaplane base. It has stretches of water in several directions long enough and calm enough to offer safe landing and taking off. In the near future, at least, the chief importance of aircraft to the port seems to be as connecting links with the fast ocean liners and as taxis. Some ships, such as the "Bremen," can carry a 'plane of their own; others could be met at sea by an amphibian, which would take a passenger over the side and convey him direct to any aerodrome in the British Isles. It is too early to say whether Southampton has possibilities as a terminus or a port of call for a transatlantic air service. At present I believe Liverpool is considered more likely, both for the route taken by airships from Germany and for the aeroplane route made possible by intermediate seadromes in the Atlantic. For the manufacture and testing of seaplanes Southampton is of course ideal.

DINNER

The annual dinner was held on board the *R.M.S. Asturias* on Thursday last.

Proposing the toast "The Borough of Southampton and the County of Hampshire," the President said they could be in no more appropriate surroundings than the dining saloon of a great liner in Southampton Docks. From its earliest history Southampton had been associated with ships and shipping.

From the time when the town was the only port for trade with Normandy to the present year which saw that triumph of British shipbuilding, the *Queen Mary*, depart on her maiden voyage, Southampton had been one of the great ports of a great seafaring nation.

To many people Southampton was the very threshold of romance and adventure.

As architects they thought that Southampton had other claims. Not only did it possess relics of its long and distinguished history, but it was the proud possessor of one of the finest Civic Centres in the country. Its new university, its schools, now building or about to be built, its great parks and open spaces, showed that the citizens of the present generation were in every way following the example of their ancestors. It was not enough, however, that a town should rest upon the glories of the past and upon the preservation of its ancient monuments.

It seemed to him that there were two ways in which a town could leave evidence for future generations of its greatness.

Either, like some of the industrial cities of this country, by increasing the number of its warehouses and factories, by increasing the wealth of, at any rate, some of its citizens—and by very little else; or else, by the creation of a fine town, by the erection of noble buildings and by the cultivation of all that was beautiful among its citizens.

He was delighted that in Southampton they proposed to proceed with that portion of their Civic Centre that comprises the Art Gallery. In these democratic days one must look to the civic authorities to encourage the love of fine arts.

Replying, the Mayor of Southampton expressed the pleasure of the Borough Council that the Association had chosen the town for it conference.

While Southampton was rich in ancient buildings, it also had some very fine examples of modern architecture.

The Civic Centre was a brilliant example and a permanent memorial to the genius of Mr. Berry Webber. Southampton had carried through some big schemes within the past few years and other big schemes were under consideration. The town was not behind the times in housing and slum clearance, but despite the changes the charm of past architectural beauties was not lost. Slowly but surely Southampton was advancing towards the fulfilment of its destiny—the greatest port in the country and one of the greatest cities.

Judge Barnard Lailey, K.C., also replied.

"The R.I.B.A. and its Allied Societies" was proposed by the Lord Bishop of Winchester and responded to by Lt.-Col. R. F. Gutteridge, President of the Hampshire and Isle of Wight Architectural Association.

COMPETITION NEWS

EXHIBITION STAND

We are informed by Messrs. Ascot Gas Water Heaters, Ltd., that the result of their competition for a stand at the forthcoming Building Trades Exhibition will be announced at a meeting to be held at the Building Centre, 158 New Bond Street, W.1, on Friday, July 10, at 6 p.m. for 6.30 p.m. Competitors and their friends will be invited to the meeting; and the whole of the designs will be on exhibition at the Building Centre from July 10 to July 18.

CENTRAL BATHS, HACKNEY

Mr. F. J. Horth, F.R.I.B.A., has been appointed assessor of the competition for new central baths for the Hackney Borough Council.

NEW SCHOOL AT WORCESTER

The following notice has been issued by the R.I.B.A.: "The Competitions Committee desires to call the attention of members to the fact that the conditions of the competition for a new school, Worcester, are not in accordance with the Regulations of the R.I.B.A. The Competitions Committee is in negotiation with the promoters in the hope of securing an amendment. In the meantime, members should not take part in the competition."

THE GLASGOW COMPETITION

We regret that the name of the author of the design placed fourth in the competition for a five-apartment semi-detached cottage for the Glasgow Corporation was incorrectly given in last week's issue. The design was submitted by Miss Helen Jackson.

THE FOLKESTONE COMPETITION

THE DESIGNS REVIEWED

(By Our Competition Critic)

As announced in last week's issue, Mr. Verner O. Rees, F.R.I.B.A., the assessor of the competition for proposed elementary schools in Surrenden Road, Folkestone, has made his award as follows:—Design placed first, No. 53 (£200): Mr. E. Wamsley Lewis, A.R.I.B.A., of Kia Ora, Radipole, Weymouth. Design placed second, No. 37 (£125): Mr. K. H. Urquhart, of 19 Wellesley Court, Strawberry Hill, Twickenham. Design placed third, No. 6 (£75): Messrs. G. P. Wicks and H. G. Huckle, of 12 Court Way, N. Acton, W.3. Commended: No. 29, Mr. E. D. J. Matthews, 3 Paul's Bakehouse Court, Godliman Street, London, E.C.4; No. 32, Mr. R. C. Moira and Miss Betty L. C. Leed, of 34 Addison Road, London, W.14; and No. 49, Mr. R. M. V. Messenger, of 148 High Street, Herne Bay.

An exhibition of the designs submitted will be held at the Lady Sassoon Room, Public Library, Grace Hill, Folkestone, from July 6 to July 11, and will be open each day between the hours of 10 a.m. and 1 p.m. and 2.30 p.m. and 6.0 p.m.

THOSE who went in for the Harcourt School competition were faced with some rather large problems. There was first of all the site, an oblong very nearly bisected along its greater dimension by a sewer which could neither be diverted nor removed. There were then the levels, the question of aspect and the all present question of cost.

Taking these decisions in their order, most of the competitors decided to keep the school buildings to the north of the sewer and to combine them in one building. With this group of the competitors all was so far well, for the assessor subsequently endorsed their opinion. But then came some decisions which were sharp alternatives—whether to try to place all the accommodation on one floor, or to place it on two; whether to stake one's little all on good aspect, or to follow the levels as closely as possible for the sake of economy, and to do the best one could with aspect afterwards.

Over these various fences the competitors came with varying degrees of success. The record of their progress is perhaps best explained by taking some individual examples.

The winner, Mr. E. Wamsley Lewis, was undoubtedly of the "stand no nonsense" type. He went for aspect. Placing the two halls in the centre of the available space end to end and lying north and south, he then drew from the ends of this central block two lines of classrooms facing the south-east, leaving the levels more or less to take care of themselves. Having then, no doubt, found that he was unable to get in the whole of the senior accommodation on one floor, the winner still stood no nonsense and put the special rooms on the first floor immediately over the ordinary senior classrooms. Nor was that all; having the art room still without a home, he placed it on a third floor surmounting the whole building as a most effective circular room lit on all sides. It is by such strong-mindedness that one wins competitions.

Once these major decisions were taken, Mr. Lewis's plan fell into place in detail most admirably—with the sole exception of the distressing cloakrooms and lavatories.

Those lavatories were indeed a thorn in the flesh to all competitors. In theory they should adjoin the entrance hall and also be near the assembly hall, and a large number of competitors struggled truly desperately to achieve this placing. Mr. Lewis did place the girls' cloakrooms and lavatories near their entrance but the full length of the classroom block away from the senior assembly hall. Repeating this method with the Junior boys' lavatories, he placed the Junior girls' and Infants' lavatories where he could in the centre of the Junior block. It is certain that a great deal of the success of his plan is attributable to his forgoing a striving after an ideal plan for which the site was not suited. The real fault which can be found with the winning plan lies in the babies' room, with its cloakrooms and lavatories, being placed adjoining the staff rooms and next to all the hurly-burly of the Junior assembly hall.

This drawback, and a sneaking wonder whether all the winners' beautiful paved terraces can be put in for the £25,000 allowed, are the only criticisms which can be set against the advantages which Mr. Lewis secures in his plan.

Mr. Urquhart, the author of the second premiated design, has produced a plan of great ingenuity. As has been mentioned, the great difficulties in the Folkestone Competition were the fact that the sewer which almost divided the site in half could not be built over, and the extraordinary difficulty of getting a comparatively large amount of accommodation all on a single floor, whilst at the same time securing good aspect to the classrooms.

Mr. Urquhart has been as ruthless as the winner. He has not paid much attention to levels, and he has paid even less attention to the present fairly widespread feeling in favour of single-floored elementary schools. He has drawn a straight line down the centre of the available ground and given this line a bulb at either end. At one end the bulb consists of the Junior entrance, cloakrooms and assembly hall; the other bulb consists of Senior girls' entrance and some of the special rooms. The ground floor of the "line" in between those two bulbs is devoted to the Junior classrooms, the first floor being occupied by the Senior classrooms and the remainder of the special Senior rooms.

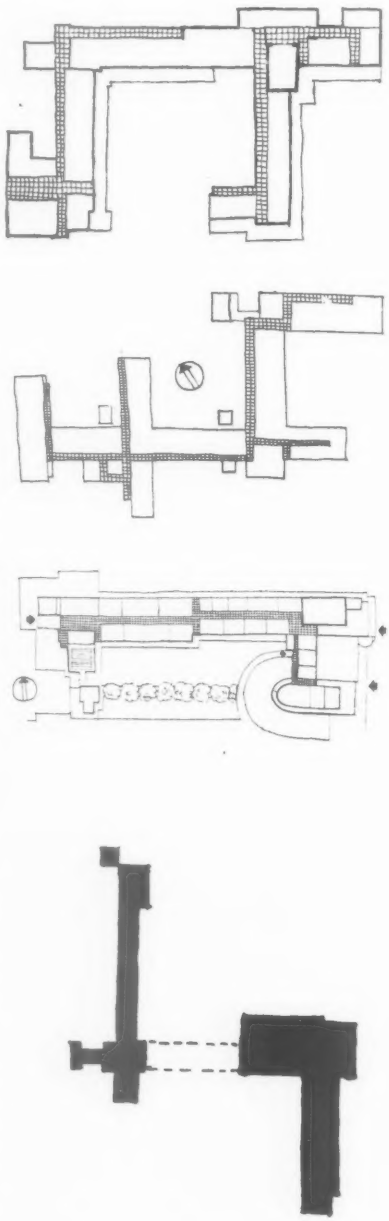
This design thus gives an aspect for all ordinary classrooms just west of south, whilst also getting the two schools separate yet united in a single compact block.

The making of the whole of this plan lies in the boldness of placing the Senior assembly hall on the first floor supported by columns and utilizing the space below as a covered playground.

The defects of the plan are very few, once one has accustomed oneself to the Senior school being placed on the first floor, and the largest would appear to lie in the assembly hall stage adjoining the main staircase hall, with consequent confusion when guests are entering at the same time as the choir, or amateur dramatic talent is approaching the stage from staff or needlework rooms being used as green rooms. The only remaining access to this assembly hall is from the covered court below up the staircase tower.

The second prize-winner's elevations are not particularly interesting, whilst having excellent lighting and being modern in general form.

The authors of the third design, Messrs. Wicks and Huckle, have made a desperate effort at getting the accommodation all on one floor in the space left available by the unfortunate sewer. Their solution is the use of a central corridor, securing cross-ventilation by placing on the further side of the corridor from the classrooms such cloakrooms and staff rooms as can be kept conveniently low. The plan so produced is really extremely ingenious and given suitable materials and perhaps a little more money than was allowed in the conditions, there would seem to be no reason why it should not be successful in practice.



Block plans of the designs submitted by the following competitors from top to bottom: Mr. Moira and Miss Leed; Mr. H. Myles Wright; Messrs. Wicks & Huckle; and Mr. Harry Moncrieff.

The Junior block would appear to work very well with south or east light for all the classrooms; to which there must be added a particularly nice-looking babies' room. But when the authors come to deal with the Senior school their plan becomes rather involved. The whole of the accommodation could not be got on the ground floor, so Messrs. Wicks and Huckle placed the more offensive rooms on the first floor in a separate unit. In order to get over the difficulty that the rooms on the first floor would, if their access corridor were placed over the ground floor access corridor, cut off the cross ventilation of the ground floor classrooms, the authors have adopted a south corridor for the special rooms which is cantilevered over the ground floor block. There really seems no reason at all why this method should not work in practice; its drawback would seem to lie in the possible costliness of its execution.

Taken broadly it seems a pity that the third premiated design cannot be tried out. It is one of large possibilities which certainly should not be overlooked by the Board of Education.

COMMENDED DESIGNS

Mr. Moira and Miss Leed, the authors of one of the commended designs, make another sporting effort to get their classrooms facing south-east whilst keeping all of the accommodation on the ground floor. It is a good attempt, but has resulted in some awkwardnesses in planning. This scheme would seem to show that good planning in the sense of spaciousness and easy and obvious circulation has been best achieved by the adoption of a two-floored plan.

OTHER SCHEMES

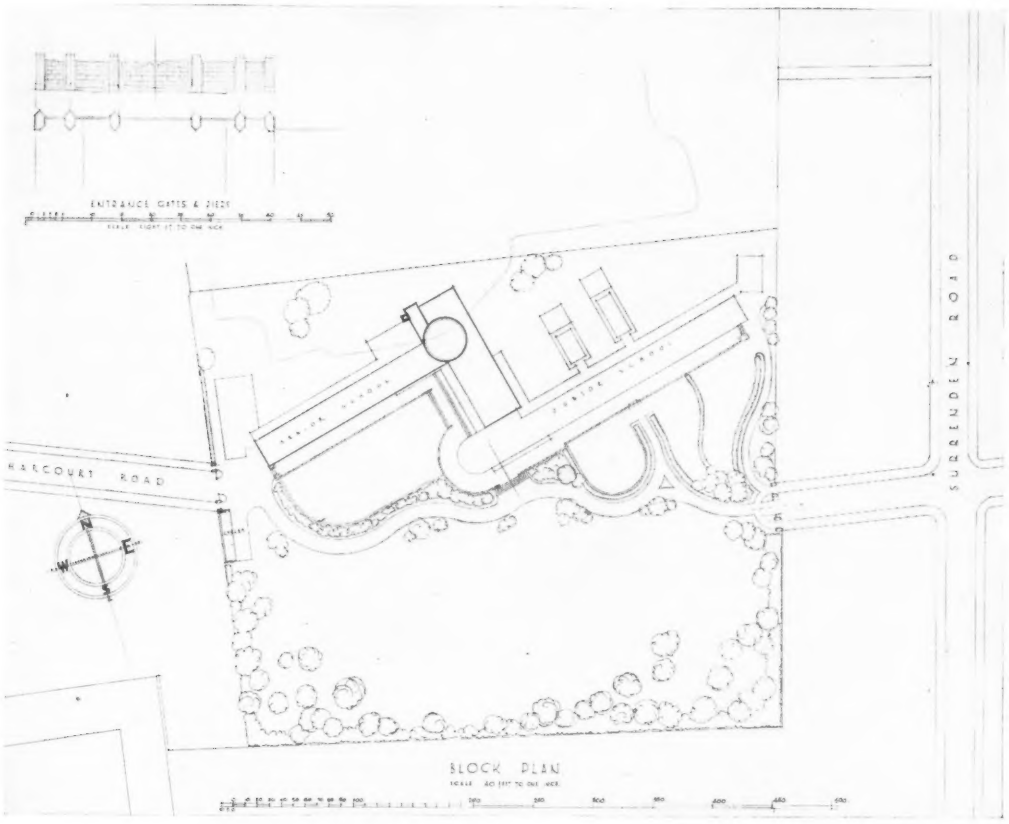
Miss Shufflebotham and Mr. Sheppard adopt a scheme in which the halls are placed back to back in the centre of a line parallel with the sewer and on its north side, and the classrooms branch out in four legs towards the south-west, giving a south-east aspect to all of them. A drawback to this scheme would seem to be in the unusually large cloakroom accommodation given — accommodation which does not absolve them from the necessity of employing a partial first floor. The elevations are very interesting in an extremely progressive way and would have been exciting in execution.

The "field" as a whole shows many schemes in the old and grand manner, of enclosed courtyards and extremely cramped planning, whilst tending to prove that all the schemes using the portions of the site on both sides of the sewer were rejected fairly rapidly from the running.

Of these schemes Mr. Harry Moncrieff's is easily the best, using as he does the space between the two schools as a covered exercise terrace and obtaining a south light for all his classrooms. This scheme, despite the very large area it occupies, still uses two floors—the special rooms being on the first floor of the senior block—and this drawback, combined perhaps with the fact that the scheme has not been worked out in sufficient detail, is the reason for its failure.

Miss G. Margaret Turner and Mr. B. A. LeMare also use the whole of the site in a scheme of particularly interesting elevations, but their planning is somewhat confused and lacks any really easy sense of direction.

Mr. H. Myles Wright was another of the whole-hogging one floor competitors (with



Site plan of the winning design. By E. Wamsley Lewis.

the exception of the senior staff rooms and library) and seems to have failed by attempting to include every advantage. The building follows the levels, places the halls back to back, and obtains south-east or south lighting for all ordinary class-rooms and north-west for special rooms, whilst observing a rigorous subdivision of each unit of the plan.

Its real unwisdom would seem attempting a single-floored plan on this particular site, with the result that the circulation and units of the plan straggle somewhat. And the lavatory difficulty has also hit the scheme hard.

Mr. Clive Entwistle has a scheme curiously like that of the second premiated design, consisting of a straight line with a bulb at either end, but he places his whole building to the south of the sewer, being the only scheme to adopt this method. It has the disadvantage of placing the classroom windows near to the back of the gardens of the houses bordering the south of the site, whilst at the same time leaving unused a larger portion of the site lying to the north of the sewer. This defect, together with the fact that the scheme is perhaps too sketchily finished may have accounted for his exclusion.

Messrs. G. Kay Green and Victor Henrich have submitted a staggered plan of some interest, grouping the two assembly halls in the centre without the two schools being connected to any appreciable degree. They obtain excellent aspects for their classrooms, but the staff rooms and administration generally is rather awkwardly placed about the assembly halls. The elevations of this scheme are also very good—the elevational standard of the more progressive schemes generally being very high.

Since the efforts of those who really tried to think hard about the problem have made the competition so successful, it is perhaps better to leave unmentioned the 20 or so, out of the 71 schemes submitted, whose ideas had firmly resisted educational changes. It doesn't matter, these schemes said almost audibly, where or how a child is educated as long as he dislikes it all sufficiently. But the world is growing dreadfully weak-minded.

THE ASSESSOR'S REPORT

Following are some extracts from Mr. V. O. Rees' report:

Seventy-one designs have been submitted in response to your invitation to architects in this country to send in designs for the proposed new schools in Folkestone. Having considered carefully all the designs sent in I have no hesitation in selecting the design numbered 53 for the first premium and in recommending that its author be appointed your Architect for the building of the Schools.

Design No. 53 has provided a south-east aspect to all the class-rooms, and has arranged all the accommodation in a compact building form, which should have good ventilation from all quarters. It is a scheme which is exactly suited to the site. The building is so placed as to be well removed from the fences separating the adjoining gardens from the lower part of the site. This part of the site becomes available, therefore, as a playing field for the Schools during the period that must elapse before the Northern portion of the site behind the proposed buildings can be utilized for this purpose. The general massing and the detailed elevations give promise of a most interesting building. Although sounder than the other schemes in respect of major considerations, there are a number of detail faults in the plans that can be remedied without difficulty, and without injury to the general scheme.

The senior girls' cloakrooms and lavatories should be replanned to give greater convenience and to be in accord with customary practice. The semi-circular projection containing head teacher's and medical inspection rooms of the Junior School should be modified.

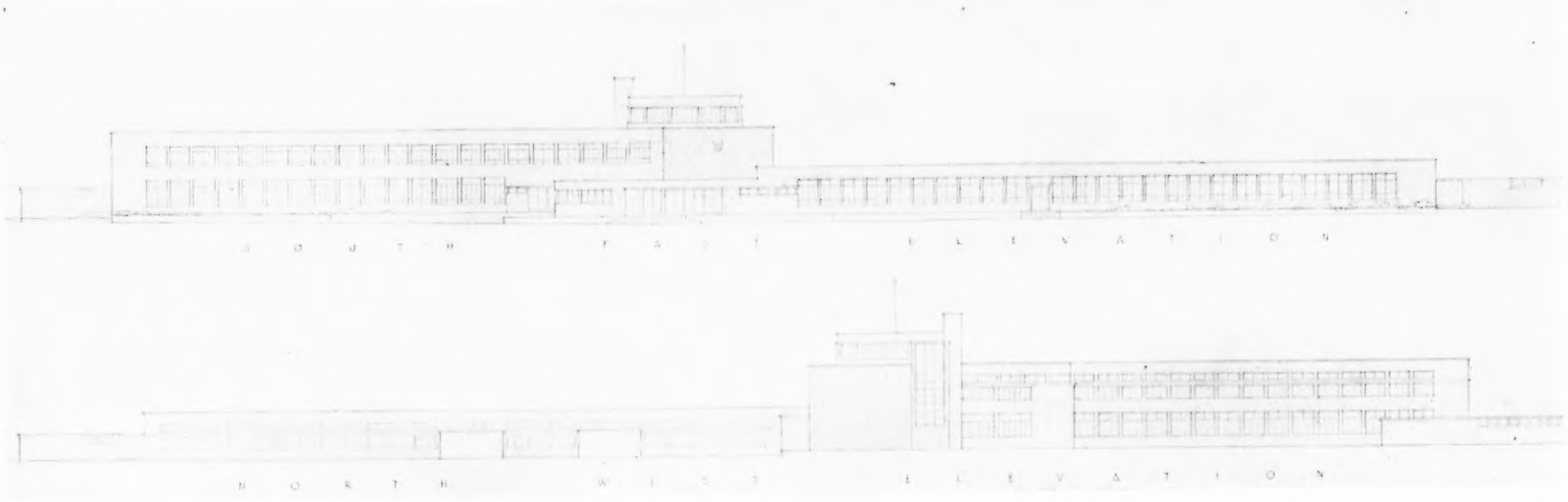
Further study should be given to the approaches and playground to achieve greater simplicity and convenience. The circular shape of the art-room is not suitable for the purposes set out in the Competition Conditions.

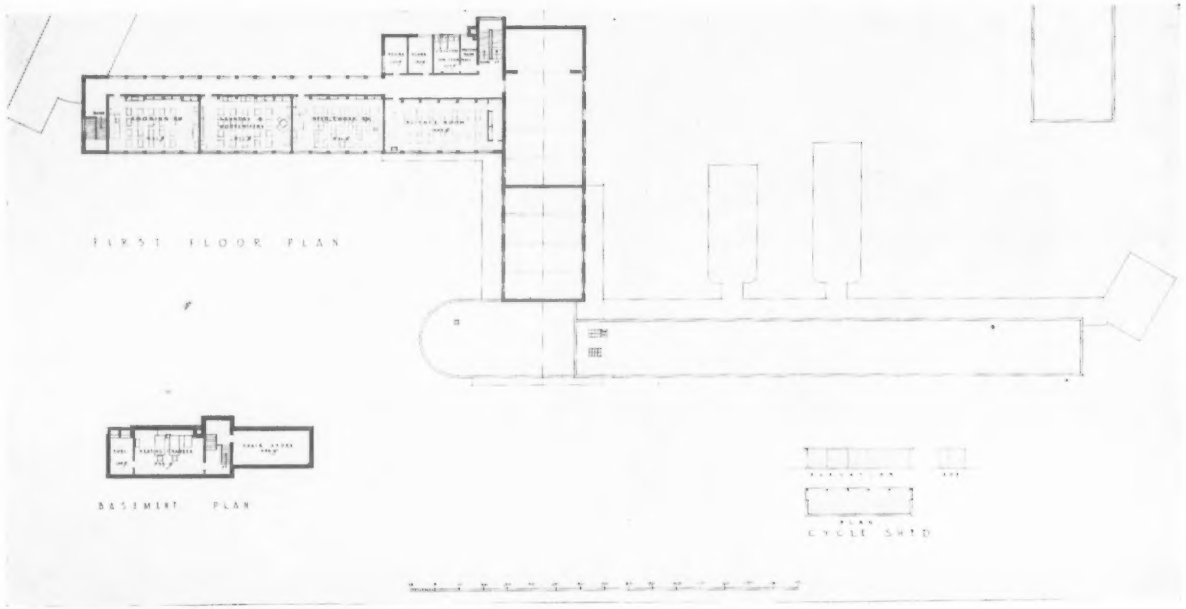
The total cost as given by the author I consider to be somewhat low. The cost of the Schools will probably exceed the figures given, viz. £24,946 15s. 0d. and is likely to be found to be about £26,500. The Conditions allow the competitors a margin for building tenders of 10 per cent. above their estimates. If care is taken during the stage when detailed plans are prepared I consider that a tender should be obtainable within this sum.

Design 37 has a straightforward plan, in which most of the senior girls' school is arranged on the first floor. The aspect is south-south-west. It is well organized from the point of view of repetition of structural units, which would tend to economy, and the elevations in brick of much interest have been derived logically from the plan. Neither the orientation nor the ventilation of the building is as good, however, as that of design No. 53. At 1s. 0½d. it is stated to cost £23,858, and with other items the total is £25,937.

Design No. 6 is an able but unequal scheme, with good elevational possibilities. The class-rooms face south-south-west, and have good ventilation. The department for infants is especially well arranged as a unit in the south-east corner. Although the class-rooms have cross-ventilation by clerestory windows over the main corridors, the latter would be found to be insufficiently ventilated. The rates at which the author of this design has priced his cubic contents are insufficient, and in my opinion the cost of the design would be found to be about £27,000.

Two general comments should be made in regard to many of the designs that were submitted. The importance of placing the new buildings as far back as possible from the fences of the adjoining gardens was not sufficiently appreciated, nor was sufficient importance attached to the orientation of the class-rooms.





W I N N I N G

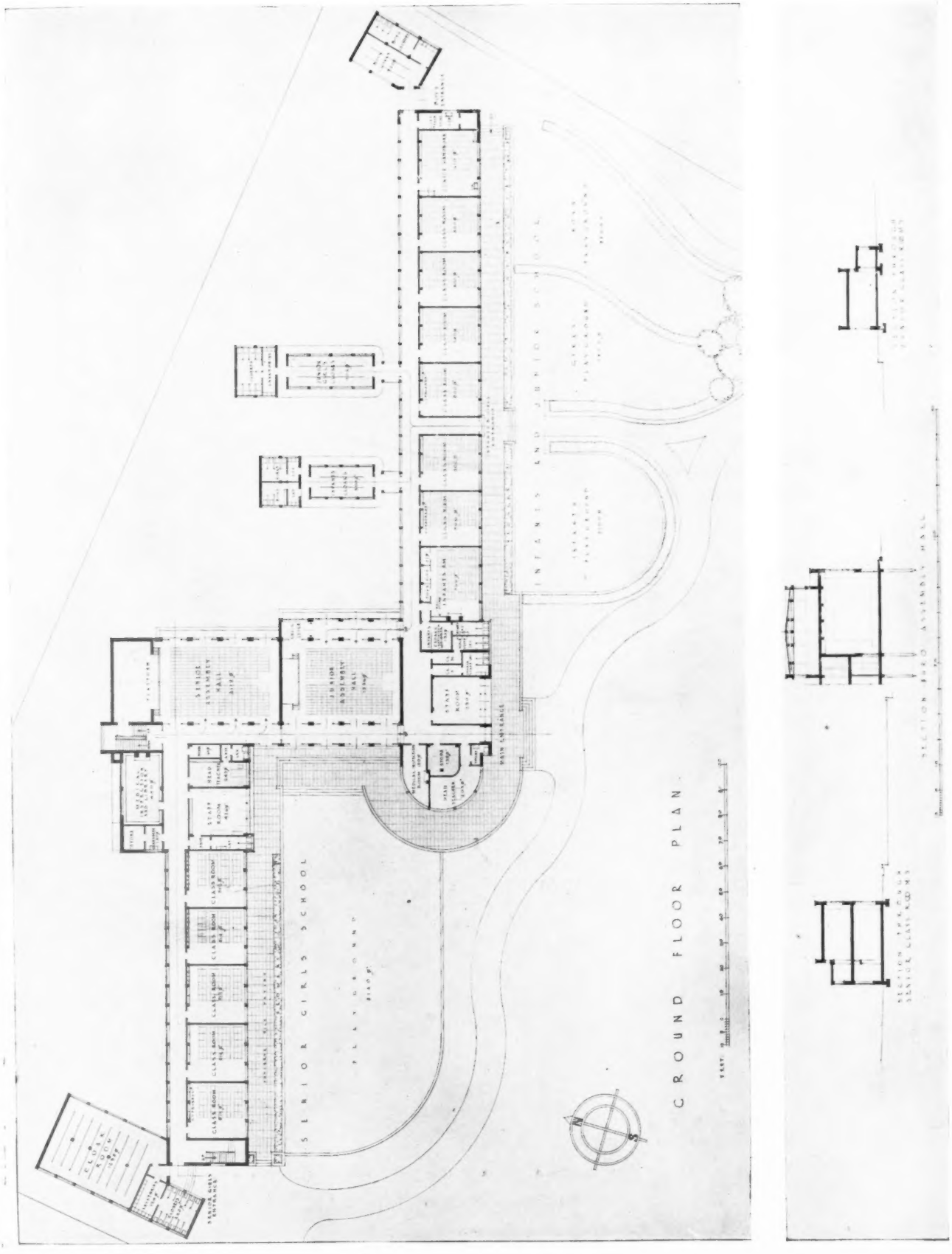
D E S I G N

B Y

E. W A M S L E Y

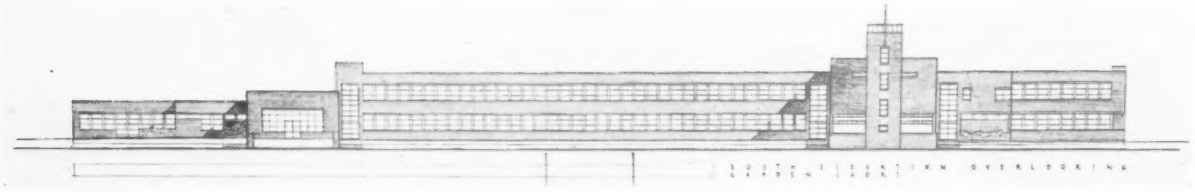
L E W I S

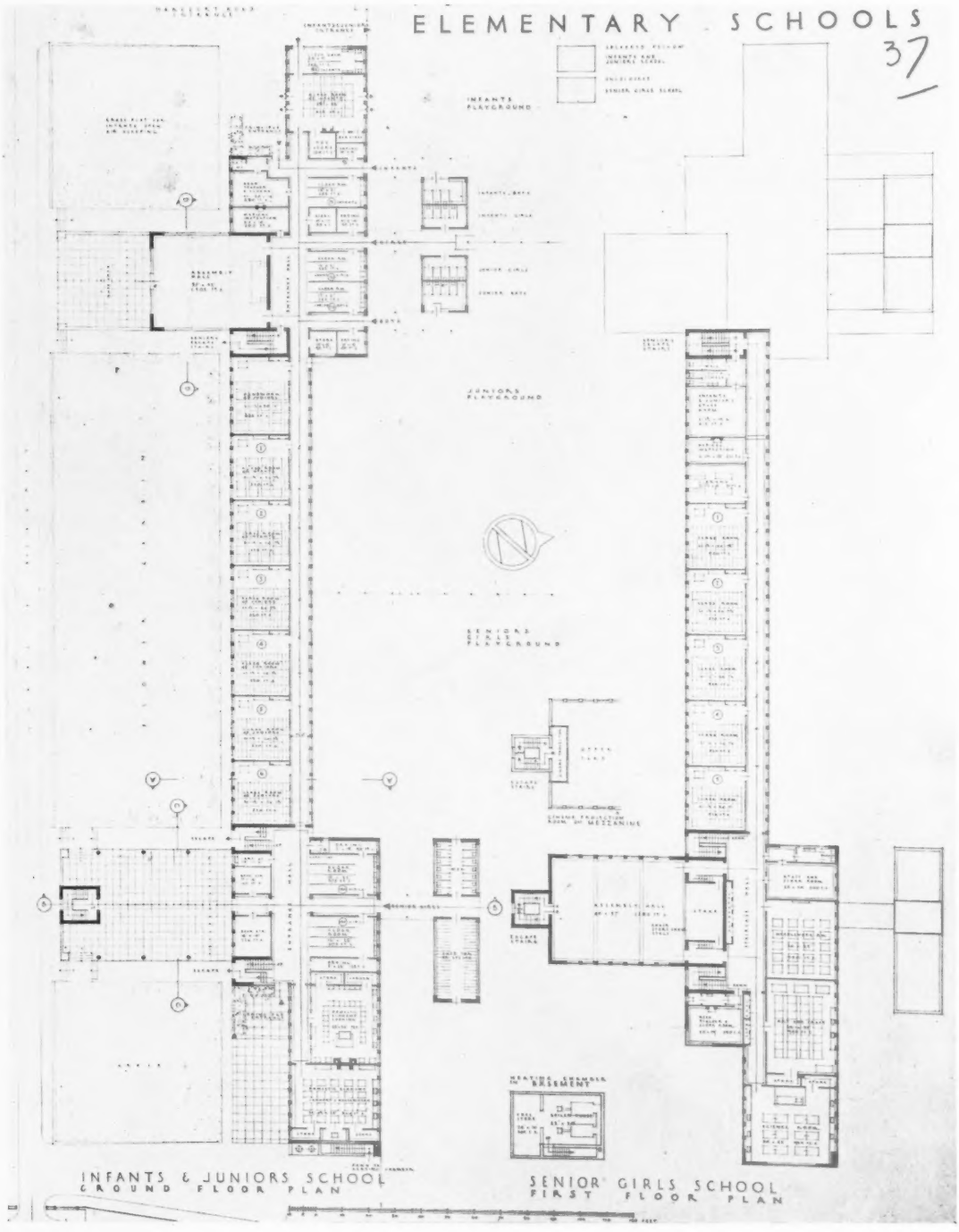
On this and the page facing are reproduced elevations, sections and plans of the winning design.


INFANTS AND JUNIOR SCHOOL
SENIOR ASSEMBLY HALL
JUNIOR ASSEMBLY HALL
SENIOR GIRLS SCHOOL
PLAYGROUND
CLASS ROOM
CLOAK ROOMS
GROUND FLOOR PLAN
SECTION THROUGH SENIOR ASSEMBLY HALL
SECTION THROUGH SENIOR CLASS ROOMS

THE FOLKESTONE COMPETITION

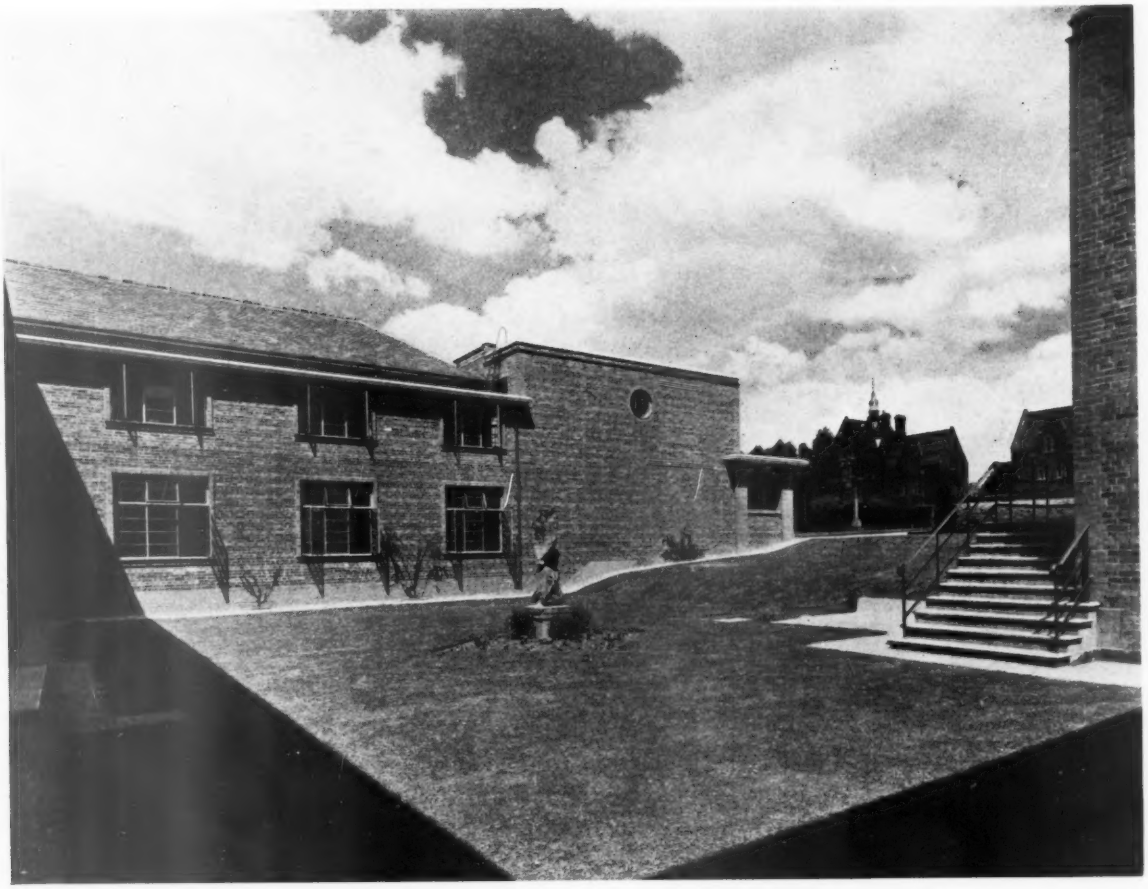
DESIGN PLACED SECOND: BY K. H. URQUHART

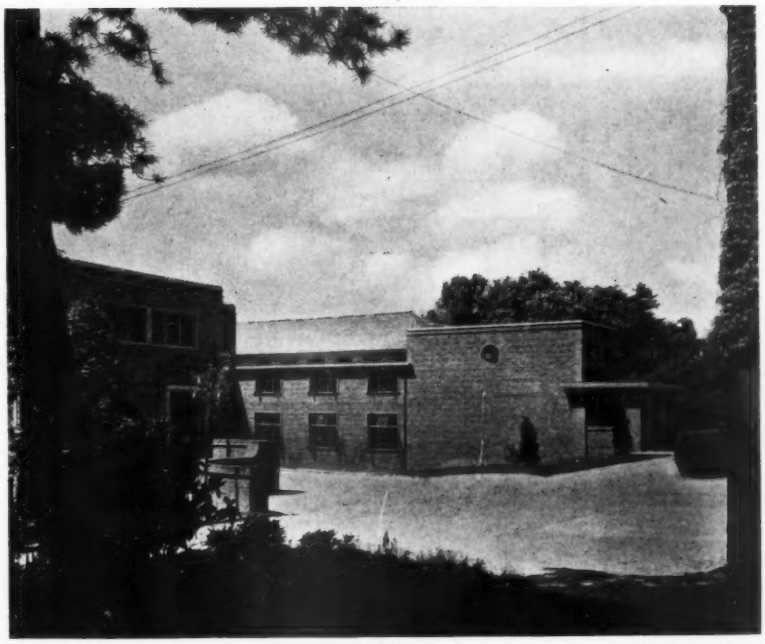




Main elevation and plans of the design placed second.

SCIENCE BLOCK, ST. JOHN'S SCHOOL, LEATHERHEAD





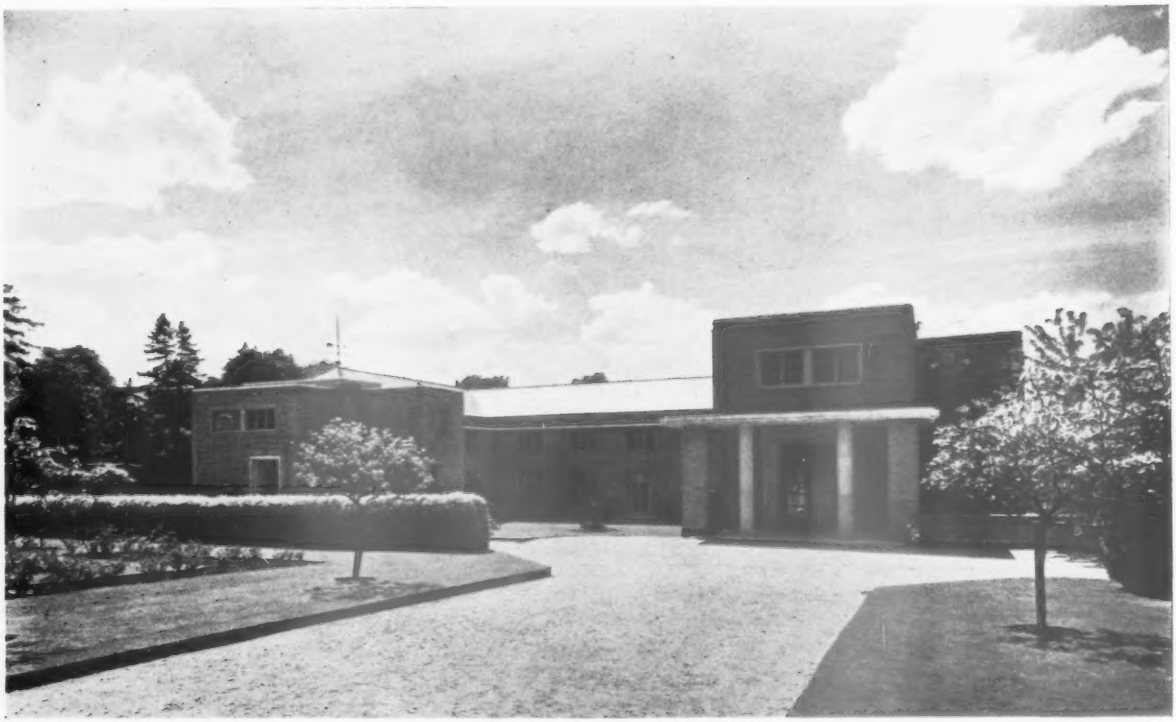
GENERAL PROBLEM.—*A block of classrooms and laboratories to take the place of those out of date; planned so that it will be completed by the erection of an assembly hall.*

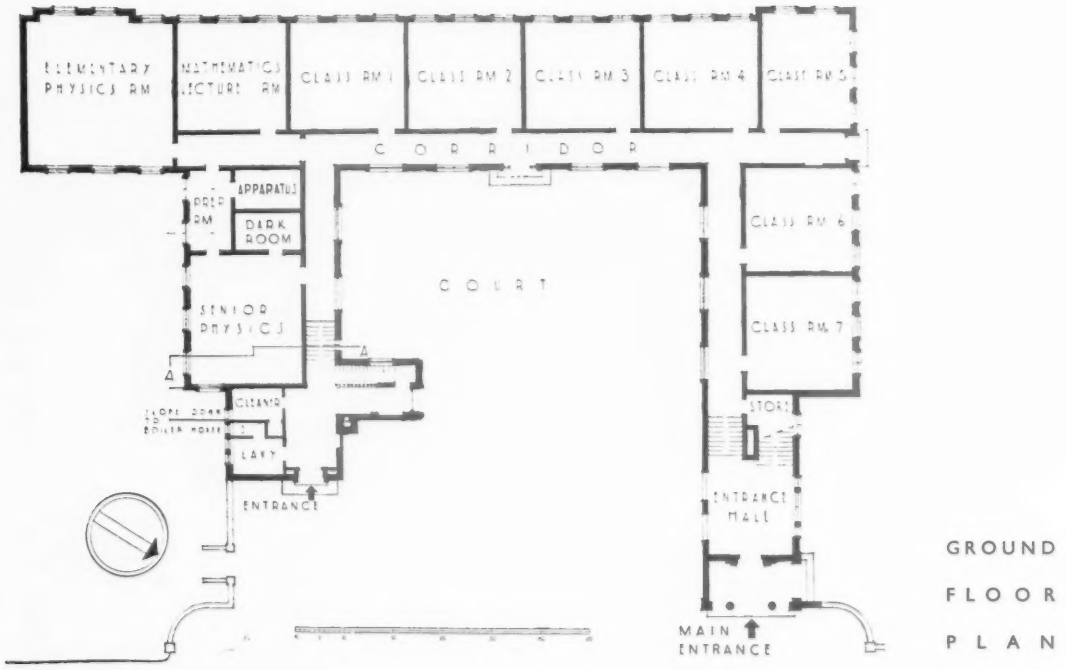
SITE.—*At St. John's School, Leatherhead, Surrey. The block is placed somewhat apart from the existing school buildings. This was done so that the most modern requirements could be incorporated in the design and planning of the new block without conflict with the Victorian Gothic character of the older buildings.*

The photographs show: above, looking from the south corner of the courtyard towards the north-west wing of the new classrooms, with in the distance a glimpse of the Victorian Gothic buildings of the existing school; right, the north-east front and main entrance to the classrooms and laboratories.

DESIGNED BY OSWALD P. MILNE

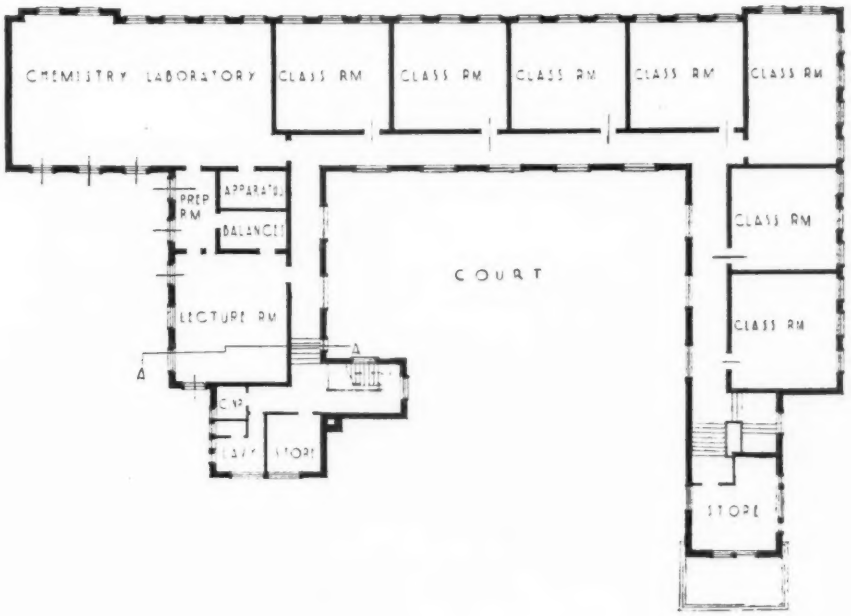
SCIENCE BLOCK, ST. JOHN'S SCHOOL,



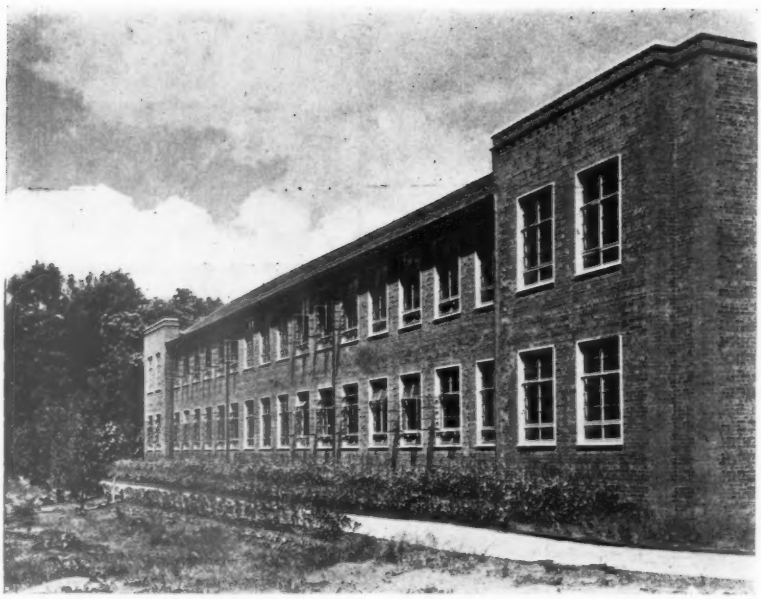


PLAN.—*This was controlled by the levels of the ground and the manner in which the new block is grouped with the existing building. The main entrance is placed centrally on a main access of the school grounds. The new block forms three sides of the courtyard; the fourth side, comprising the assembly hall, is to be built. The photograph is of the north-east front, showing on the left the secondary entrance, and on the right the main entrance to the classrooms and laboratories.*

LEATHERHEAD: BY OSWALD P. MILNE



FIRST FLOOR PLAN



CONSTRUCTION.—*The walls are of brick; the roof is supported on light steel trusses; and the flooring is hollow tile. The building is carried out in direct brick construction, with both pitched and flat roofs. Pitched roofs are used for the classrooms, etc., to give greater insulation against heat; and flat concrete roofs, covered with insulating tile, for the corridors.*

ELEVATIONAL TREATMENT.—*Local hand-made brick facings, and metal windows.*

INTERNAL FINISHES.—*The walls throughout are of sand lime bricks, pointed with a cream mortar. The floors of the corridors are finished in terrazzo, those of the classrooms in jarrah blocks, and those of the laboratories are in jarrah strips. The main staircase is finished in terrazzo. All the laboratory fittings and furniture were designed by the architect.*

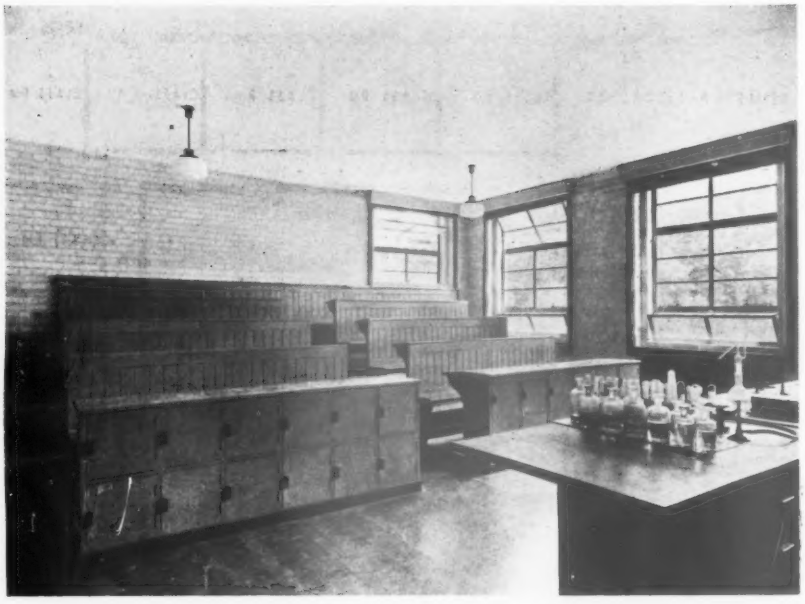
SERVICES.—*Heating and hot water are provided from boilers in the heating chamber, the radiators being fitted in recesses under the windows. Hot-water pipes and electric conduits generally are exposed, but all are arranged in a tidy manner on the face of the sand lime bricks.*

Price £18,312. Price per foot cube, 1s. 6d., including all laboratory fittings, etc.

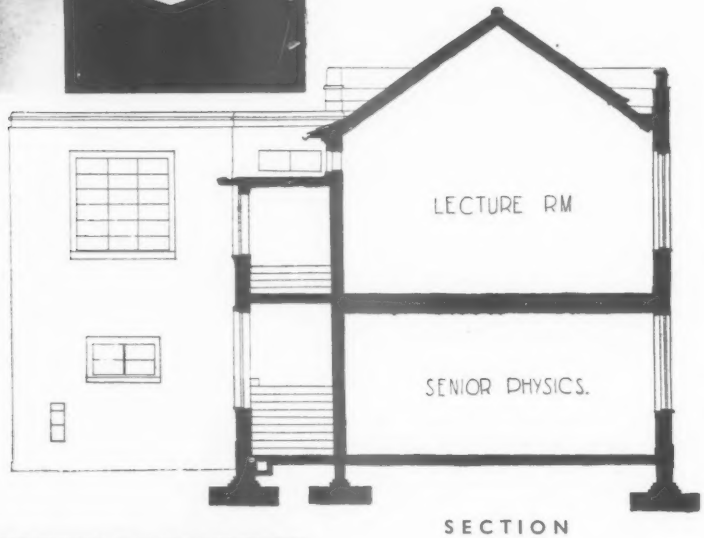
The photograph is of the south-west front.

D

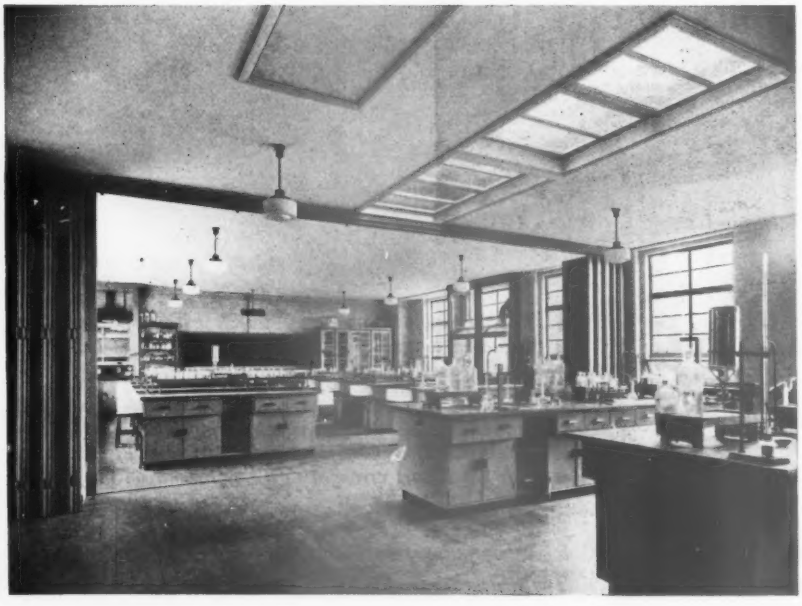
SCIENCE BLOCK, ST. JOHN'S SCHOOL,



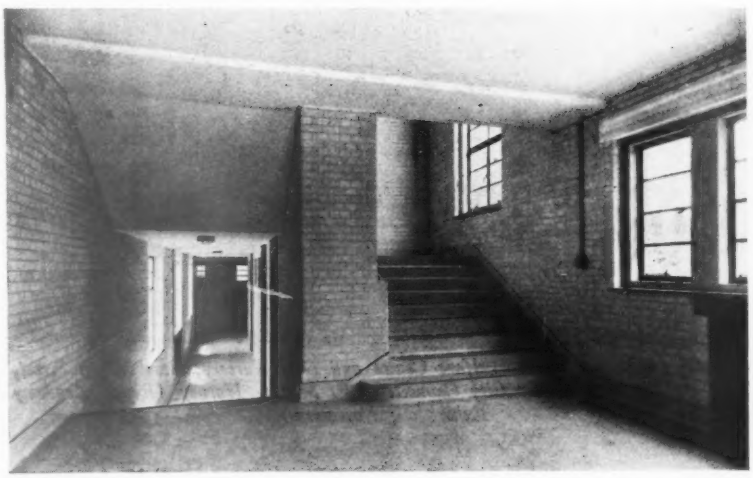
The photographs show: top, a lecture room; below, the chemistry laboratory on the first floor.



SECTION



LEATHERHEAD: BY OSWALD P. MILNE



The photographs show : above, the main staircase at first-floor level ; left, in the main entrance hall, looking towards the corridor leading to the classrooms on the ground floor, and the staircase to the first floor.

For general and sub-contractors see page 32.

LETTERS FROM READERS

R.I.B.A. Elections

MALCOLM MacTAGGART, L.R.I.B.A.

SIR,—On the front page of THE ARCHITECTS' JOURNAL for June 11 the following sentence occurs :—

"The Institute is a democratic body because if it fails to be representative of its membership it fails in its primary purpose."

Let us see where such a statement leads us.

First, consider the constitution of the Council. This is as follows :—

1	President
4	Vice-Presidents
2	Past Presidents
1	Honorary Secretary
1	Honorary Treasurer
50	Fellows
9	Associates
6	Licentiates
7	Members of any Class
Total 81	

Secondly, consider the condition governing Fellowship as distinct from other classes of membership. With a few, and very minor, exceptions, eligibility depends upon having been for seven years a "principal," either private or salaried.

Thirdly, consider the numbers of Fellows, Associates, and Licentiates. The current issue of the Kalendar gives :—

Fellows	1,754
Associates	3,399
Licentiates	2,386

By adding these three facts together, we adduce a position wherein less than a 25 per cent. minority of (mostly) "principals" have an unassailable control over the affairs of more than a 75 per cent. majority of (mostly) "non-principals" or assistants.

It would, I think, be pardonable to boggle at describing as democratic any institution thus governed. But let us make the allowance that, for all appearances to the contrary, the Institute *might* be democratic—let us allow that the interests of Fellows *might* be representative of the interests of Associates and Licentiates as a whole. What does our supposition involve? It involves the necessity that the Fellows by their own ability, effort and money, not only should be supplying the existing public demand for architectural services, but should actually be creating that demand. The taboo upon advertising makes it unnecessary to weigh the question of what effort and money might do in creating demand. What, then, of ability? Ability is implicitly repudiated by the Fellows themselves (who decide these things) from being a distinguishing mark of Fellowship, since Fellows are elected not for possessing in a higher degree the technical ability that should be necessary to any corporate member of the R.I.B.A., but according to a standard of purely commercial opportunity! The demand for architectural services, therefore, exists irrespectively of any special contribution by the Fellows, who, in their characteristic position of "principals" employing "non-principals," are obviously acting in the intention of taking more than they give.

Whose fault it is that the Institute is *not* democratic, it would not be democratic for me to decide. On the one hand, there is a 75 per cent. majority, "deserving all it gets" since it is too petty and vacillating to sink its differences in the common cause of securing its own just interests, and, on the other, a 25 per cent. minority that sees nothing false in the continued manipulation of existing demand to its own ends.

MALCOLM MACTAGGART

The South Side of the River

G. B. J. ATHOE (Secretary of the Incorporated Association of Architects and Surveyors)

SIR,—I have read your notes headed "The South Side" with pleasurable interest, as the information given tends to show that what I have been saying for years is now receiving official support. For it appears that authority, in the shape of the Southwark Borough Council, has adopted a plea which I advanced publicly six years ago—and have reiterated time and again ever since—that the south side of the Thames, especially that stretch lying between Lambeth and Southwark, cried aloud for wholesale demolition and development.

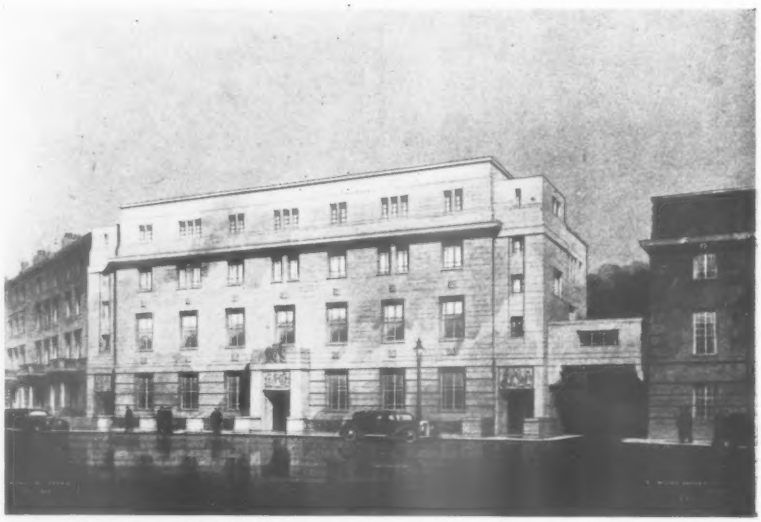
There should be no difficulty whatever. To rebuild many, many acres of ground would not entail the raising of capital without security. The scheme would pay for itself.

I am only sorry that the Government has not seized this heaven-sent opportunity to give up those ministerial palaces in Whitehall and remove them bodily across the water. The realization of the property would pay for the rebuilding in Lambeth and adjoining districts, and the new Government offices would certainly be no further from the Houses of Parliament than, say, the Admiralty is to-day. The move, too, would "develop" the present area marvellously.

I agree with you that the scheme should be planned as a whole from Lambeth to Southwark and that it should be the subject of an *open*, not a limited, competition.

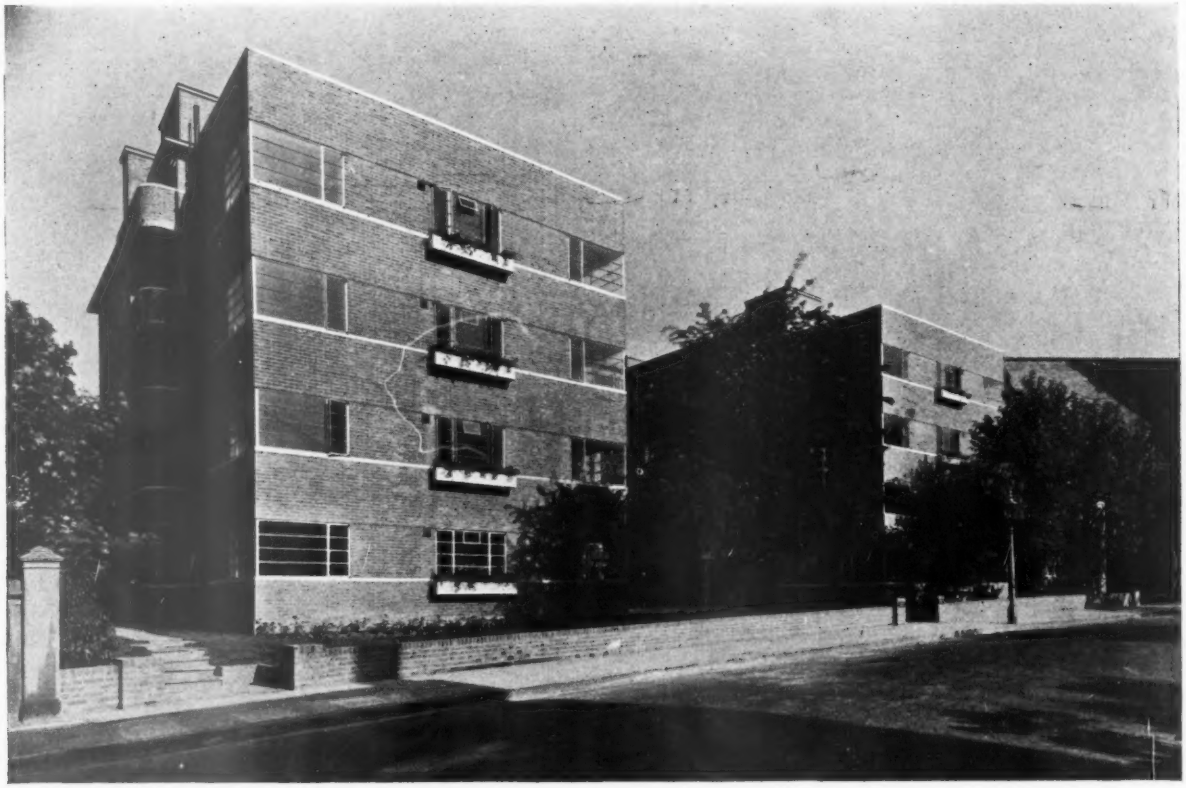
As I have said, it is gratifying to know that six years' hammering away at the subject looks as if it has not been so much waste of breath and ink.

G. B. J. ATHOE



New Maternity and Child Welfare Centre and Day Nursery, Bessborough Street, S.W., for the Westminster City Council. F. Milton Harvey (Royal Academy Exhibition, No. 1443.)

SELWYN COURT: FLATS AT RICHMOND



DESIGNED BY

STANLEY C. RAMSEY

GENERAL PROBLEM.—*A block of twenty-eight residential flats, lock-up garages, and a cottage, accommodating the porter and the estate manager's office.*

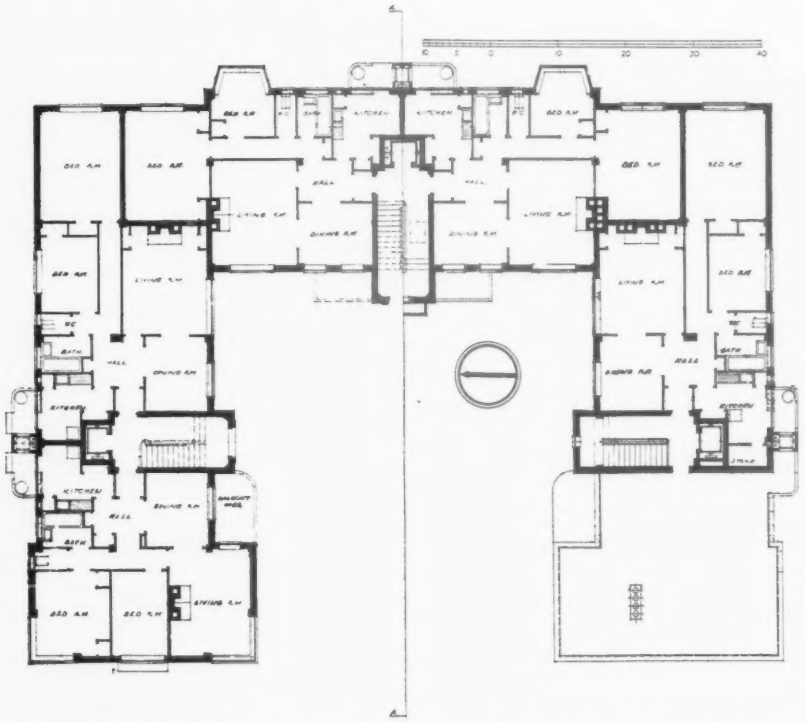
SITE.—*Church Road, Richmond Hill, Surrey, a few minutes' walk from Richmond Park.*

PLAN.—*A courtyard type of plan was adopted to provide a pleasant outlook for the principal rooms. To comply with the requirements of the local and town planning authorities with regard to the height of the building compared with the adjoining properties in Church Road the two projecting wings are four storeys. The main block is five storeys high, and roof gardens are provided on the two lower wings. The courtyard is laid out with lawns and flower beds, with rustic crazy paving paths.*

ELEVATIONAL TREATMENT. — *Sand-faced bricks with copings and flower boxes of artificial stone; steel casement windows; and entrance doors of oak, waxed polished.*

The photographs show: above, the west, Church Road, front; and right, the west entrance from the courtyard.

SELWYN COURT: FLATS AT RICHMOND

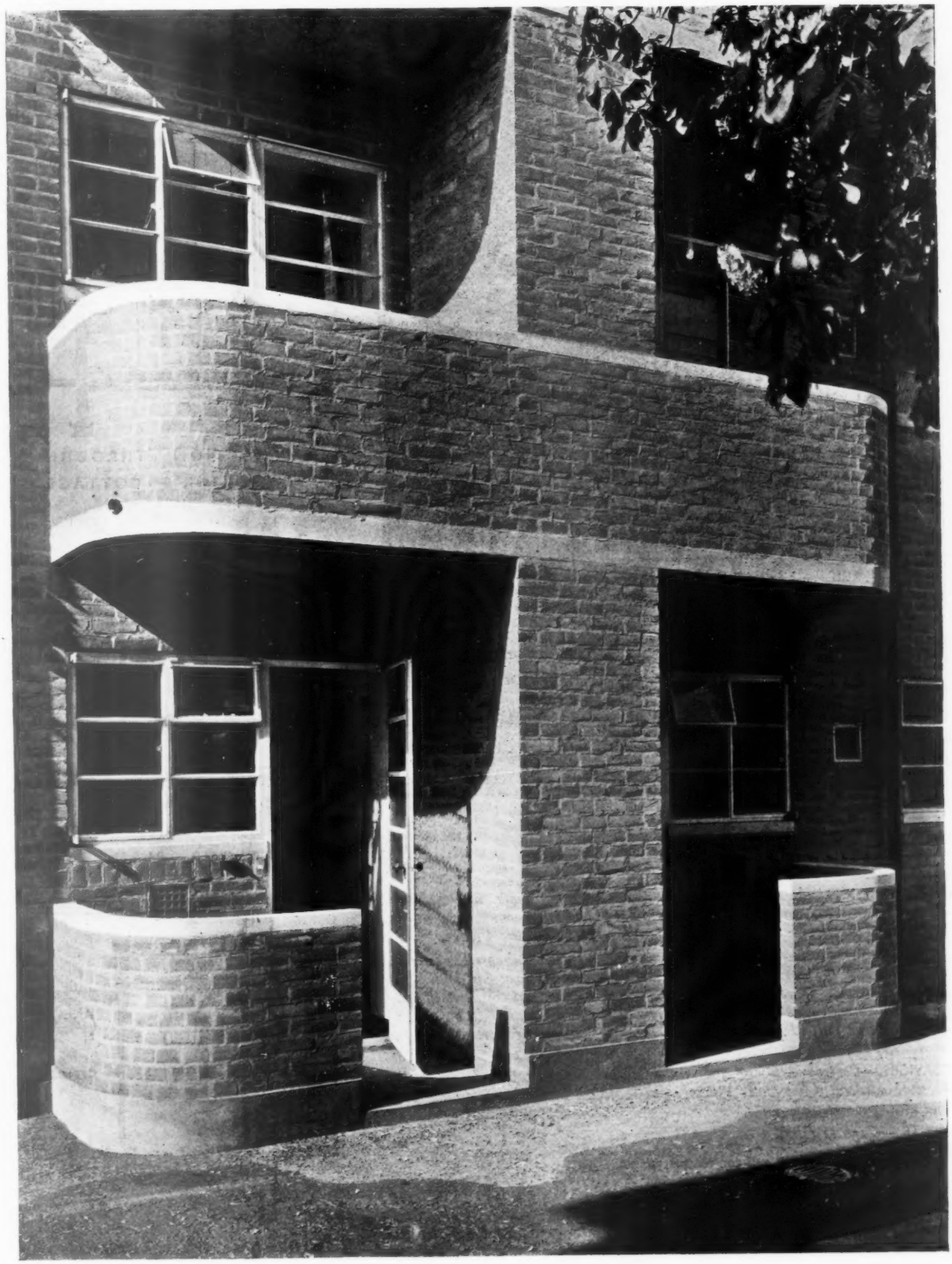


HALF GROUND FLOOR PLAN HALF FIRST FLOOR PLAN

SECTION A—A

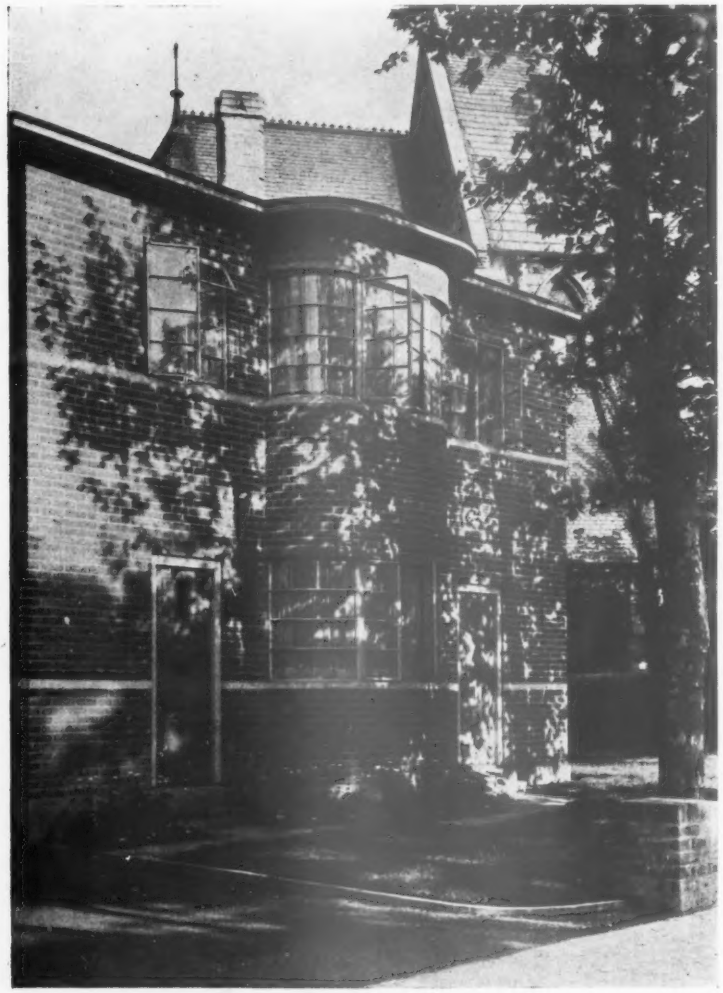
The photographs show : above, the north entrance from the courtyard. The south, and facing, entrance is of similar design. Left, the service balconies and lift tower on the south side. A photograph, taken from ground floor level, of the service lift and the first floor balcony appears on the facing page.

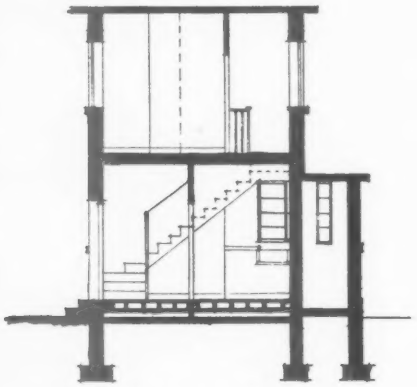
SURREY: BY STANLEY C. RAMSEY



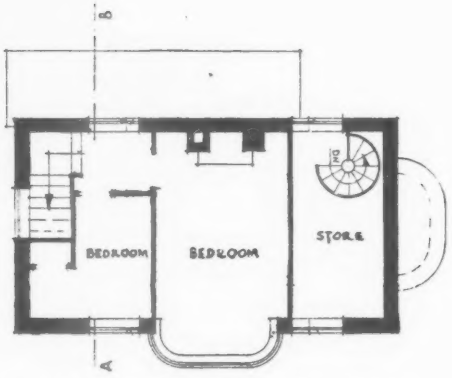
SELWYN COURT: FLATS AT RICHMOND

DESIGNED BY STANLEY C. RAMSEY





SECTION THROUGH PORTER'S COTTAGE



PORTER'S COTTAGE: FIRST FLOOR PLAN

CONSTRUCTION.—*Reinforced concrete frame, floors, roofs and staircase. External walls are brick, 11 in. cavity; party walls between flats are 9 in. brick. The internal partitions are breeze blocks and the roofs are asphalt.*

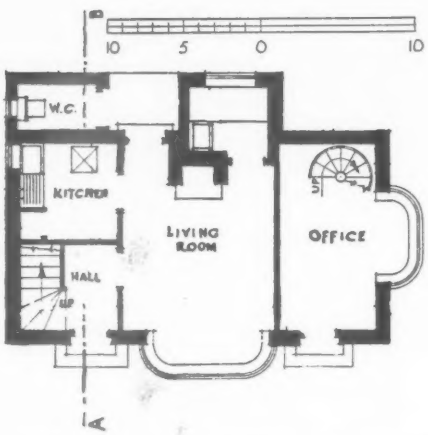
INTERNAL FINISHES.—*The floors of the entrance halls, and staircase landings and the stair-treads are terrazzo. Each kitchen, bathroom and w.c. has a tiled floor and a tiled dado. In the dining-room, hall, and sitting-room the floors are oak, in the remaining rooms the floors are deal. All wood floors are laid on 3 in. by 2 in. fillets on felt. In each kitchen are built-in fitments, refrigerator, and gas, or electric, cooker.*

SERVICES.—*Central heating and domestic hot water supply is by a low pressure accelerated hot water system, with radiators in the halls, dining-rooms and sitting-rooms.*

RENTS.—*£150 to £175.*

For list of general and sub-contractors see page 32

The photograph and plans are of the cottage, accommodating the porter and the estate manager's office. It stands at the south end of the flats with the entrance front facing Church Road.



PORTER'S COTTAGE: GROUND FLOOR PLAN

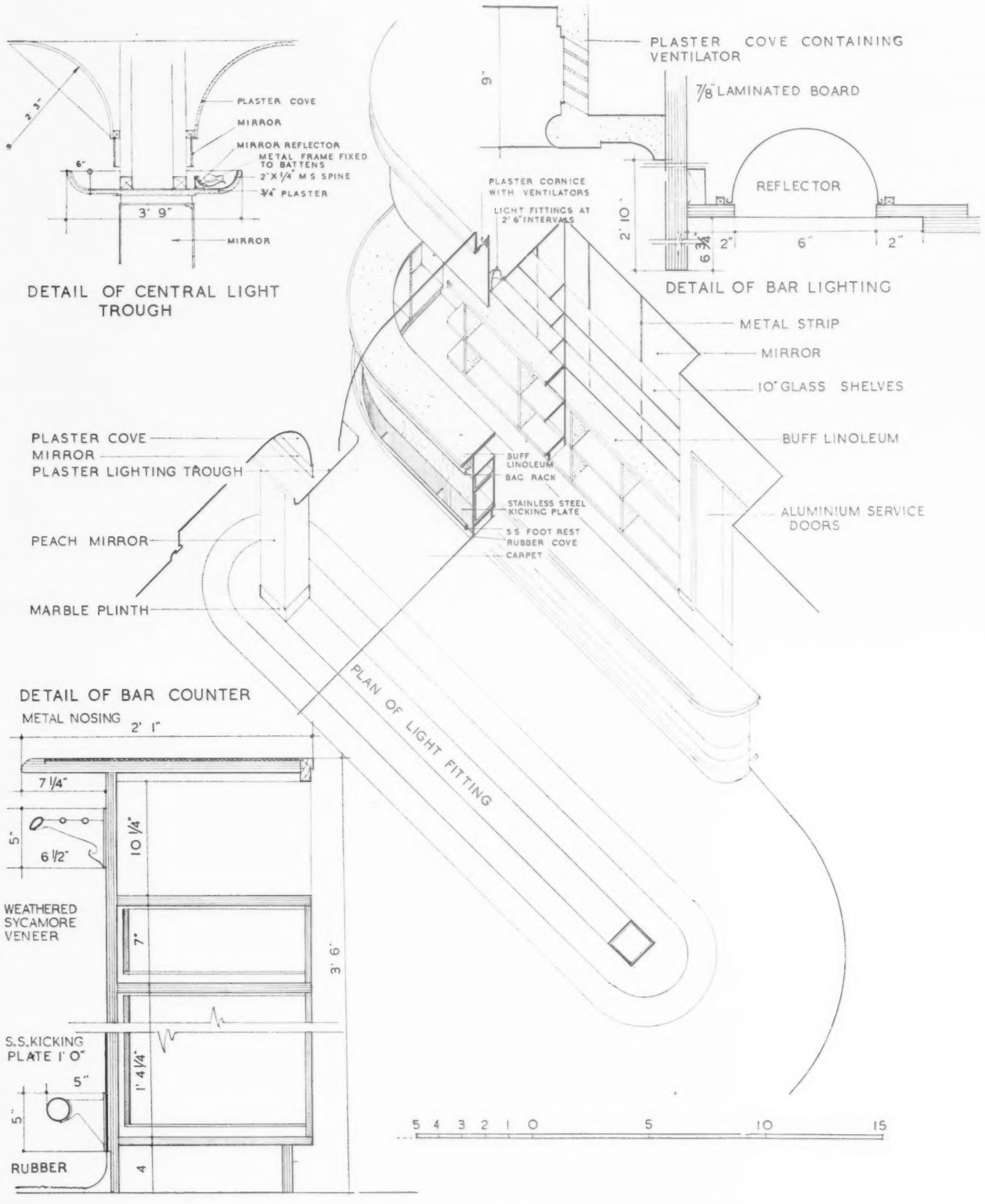
WORKING DETAILS: 447

LUNCH BAR • RESTAURANT IN REGENT STREET, W. • PAKINGTON AND ENTHOVEN

The lunch counter illustrated above has a buff linoleum top and is faced in English weathered sycamore veneer with a stainless steel kicking plate. The columns are faced in peach mirror and the lighting trough joining them is the same colour as the walls, but varnished. The plaster lighting trough is carried by a mild steel frame to which it is attached by means of wires drawn through holes in the steel. An axonometric and details are shown overleaf.

WORKING DETAILS : 448

LUNCH BAR • RESTAURANT IN REGENT STREET, W • PAKINGTON AND ENTHOVEN



Axonometric and details of the cocktail bar illustrated overleaf

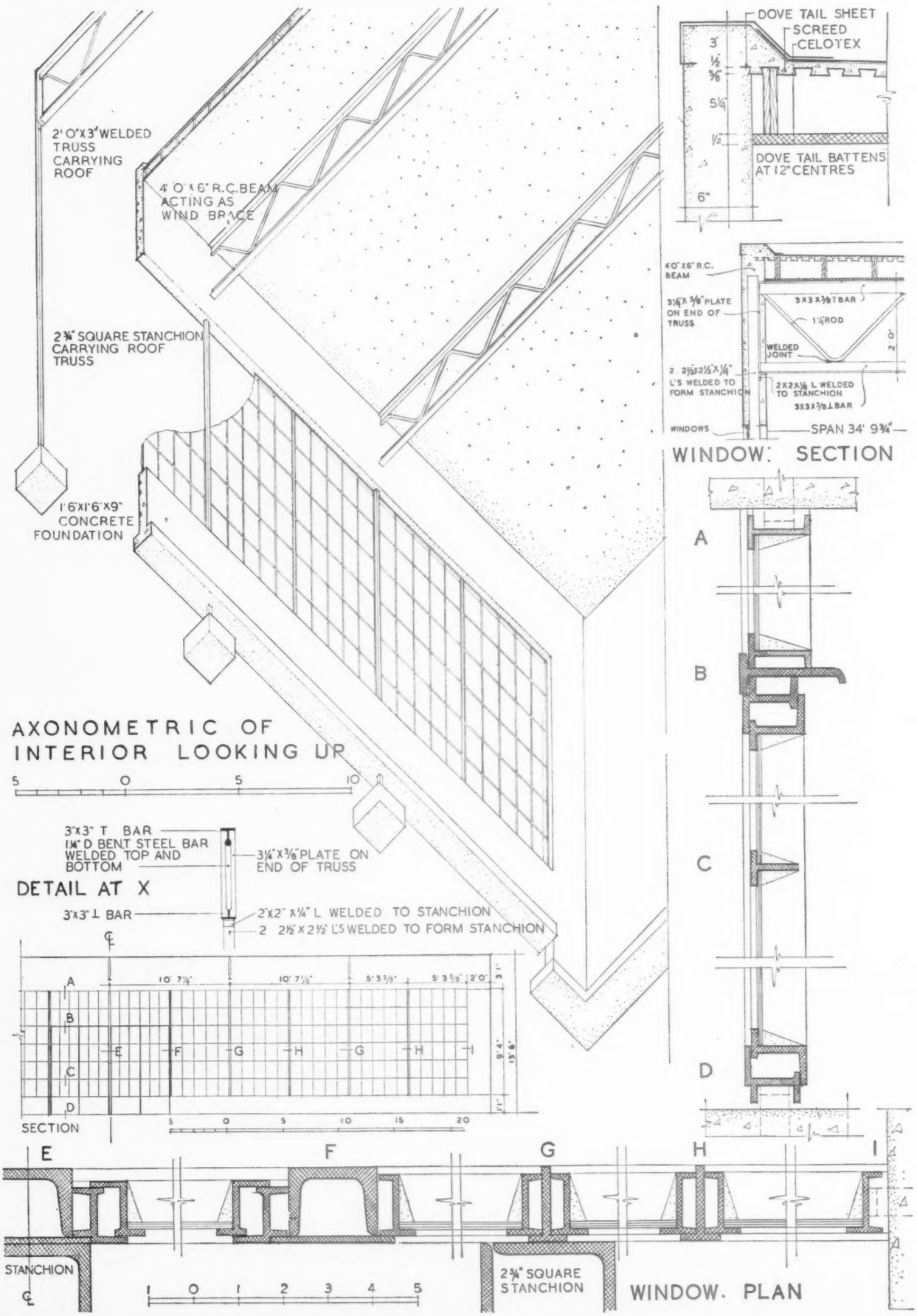
WORKING DETAILS : 449

ROOF AND WINDOW • WHITTINGHAME COLLEGE, BRIGHTON • A. V. PILICHOWSKI

In the window and ceiling illustrated above free use is made of welded steel. The square stanchions are made up of two angle sections, the trusses of a continuous bent rod welded to the T-sections at top and bottom. An axonometric and details are shown overleaf.

WORKING DETAILS : 450

ROOF AND WINDOW • WHITTINGEHAME COLLEGE, BRIGHTON • A. V. PILICHOWSKI



Axonometric and details of the window illustrated overleaf

LITERATURE

MORE INFORMATION

[*By ESMOND JONES*]

The Architects' Journal Library of Planned Information: Volume 2. Edited by Sir John Burnet, Tait & Lorne. London: The Architectural Press. Price 21s.

THE Information Sheets published each week in the JOURNAL have now become so well known that to describe what they are is no longer necessary even for the youngest architectural reader. But the appearance of the second volume of the collected sheets gives a chance of stocktaking—of estimating what has been achieved, its worth and of just glancing at all that remains to be done.

The origin of the sheets in those prepared by Sir John Burnet, Tait and Lorne for the use of their own staff, and their immediate success in architects' offices generally, brought to several people almost simultaneously the dazzling possibility of how useful they might prove for summarizing and tabulating all the mass of data which is needed at one time or another by every architect. It was, indeed, one of those ideas which, when carried out, seem so simple and effective that everyone wonders why it was not thought of long before.

The aim of the editors in carrying out the idea has apparently been to divide the sheets into two divisions—what may be called planning data, and information dealing with construction, materials and equipment. And no one who remembers pre-information sheet days—the agonized telephoning for the size of a tennis court, or the rummaging in the catalogue case for the one which was always lost—can fail to bless the name of the man who first thought of such a labour-saving device.

It is easy, of course, particularly at present, when the information already dealt with is only a fraction of that which is constantly required, to find fault when some needed data are found not yet to have been included; one cannot help feeling at such times that the information one wants is far more important than a lot which has been included. But this is only an additional even though unwilling tribute to the success of the Sheets.

Volume 2 contains the 118 Sheets published during 1935 and prompts speculation in two different directions: on where the Sheets are ultimately leading, and on what they ought to contain.

The answer to the first of these ponderings seems just now to evade all search; nobody can tell, for nobody knows.

All that is known by the architect at present is that building construction and specification have complicated out of all knowledge in the last twenty years. The present writer is too youthful to speak with first-hand knowledge of pre-war practice, but he has examined many specifications and plans prepared in a pre-war provincial office. In those days one had, apparently, stone, brick and timber, tiles, slates and plaster. And excepting for about twenty proprietary paints, boilers and castings that was about *all* that an architect had to play with. What is more, two and a half years was not then considered a very long time for a £25,000 job to take in building. *Eheu, fugaces. . . .*

Where are we now? We are in the midst of an architecture where time means money with a vengeance—labourers' time, contract time, and the wretched architect's time in particular. And calm with a calm approaching desperation, after a client who has been contemplating rebuilding his offices for seven years has suddenly demanded the new building complete in six months, that much-tried man turns to survey the thousand proprietary materials, equipments and finishes which play the predominant part in modern building contracts.

In selecting amongst the available products those which are from every aspect best suited to his purpose, the architect wants to know certain things about each—what they are made of, how they function, how to construct them, their standard sizes, where they can be got and how much they cost. Catalogues may supply all the final details (if they can be found), but for immediately accessible, orderly and brief information concerning a wide variety of products *Information Sheets* would seem the ideal medium.

The immediate task of the editors, therefore, in regard to the Sheets containing information of proprietary products is to see that no firms save reliable firms are asked to supply data for them, and conversely, that *all* the well-known products are included as soon as possible. And from the manufacturer's point of view it must be obvious that so labour-saving a method of first enquiry for the architect must more and more tend to become the principal way of final selection.

The future of the Sheets giving planning data seems almost limitless at present. The regulations of the various local authorities and public companies would seem to offer possibilities of great usefulness if any general agreement exists throughout the country in matters affecting building and estate planning; which is doubtful. Detailed planning still has myriads of useful dimensions not yet reduced to an ordered white on black. The future is therefore safe for a long time.

Of the present volume's contents nothing much can be said. The variety of the contents gives all the charm of a lucky dip, whilst the juxtaposition of some items forms now and then weird little cautionary tales (Bottle-racks, Road surfaces, Hospital wards).

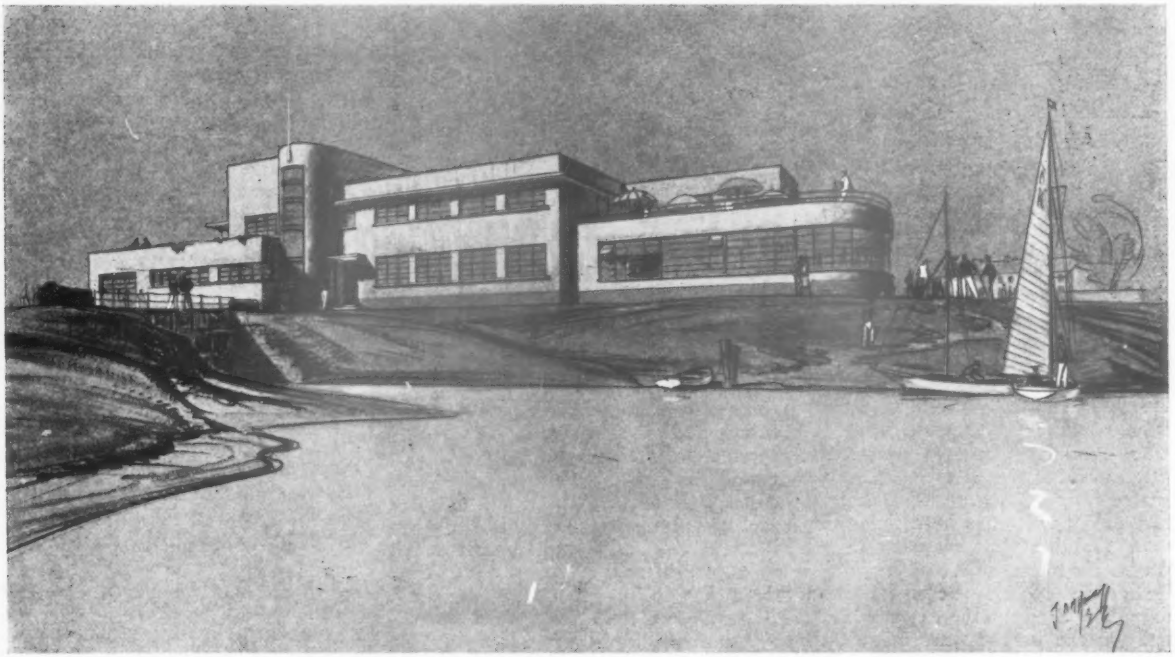
A conclusion must mention the extraordinarily well-sustained standard of fine draughtsmanship and a plea that the editors' watch upon the relevance of all information given to the matter in hand should never be allowed to relax in the least degree.

MORE REINFORCED CONCRETE

[*BY W. E. J. BUDGEN*]

Principles of Plain and Reinforced Concrete Construction: By E. Probst, DR.-ING. London: Edward Arnold & Co. Price 30s.

HAD a book with this title been published in England a few years ago the section devoted to the properties of concrete would have been found to occupy at the most the first two chapters, while the remainder of the book would have been given up to the mathematical analysis of various combinations of two materials, called by the writer steel and concrete. Actually, these two materials would have been inventions of the calculator's brain, enabling him to achieve the formulæ he required without any of the inconvenient idiosyncrasies of the materials we use in our reinforced concrete structures. It is, however, typical of the more modern approach to reinforced concrete that in this book over one-half of the contents deals with the properties of concrete as established by research and experience, and that, while the remainder contains some theory, a large part of it consists of summaries of tests to check theoretical conclusions. After these the author, at the beginning of chapter 7, says: "It has been shown in the foregoing chapters that the general assumptions which form the basis of the stresses in bending have to be changed to some degree in the calculation of reinforced concrete sections. As the true distribution of stress and the movement of the neutral axis with increasing load cannot be taken into account, the calculated stresses in the concrete and steel must differ to some extent from



Proposed Yacht Club, Sussex. By Oliver Law (Royal Academy Exhibition, No. 1381)

those which really occur." He puts forward methods of calculation which give results nearer the truth than those in common use, but these appear to be too complicated to be of value for practical design.

Engineers who are interested in the development of concrete design and construction will, however, find the book a very valuable summary of the information available on concrete and particularly that obtained from continental research.

The book is translated from the German and while the translation is on the whole good, the frequent slight misuse of semi-technical terms, such as "remaining" for "permanent" and "bearing" for "carrying," could have been avoided with advantage.

THE THICK-SKINNED

[BY E. H. W. ATKINSON]

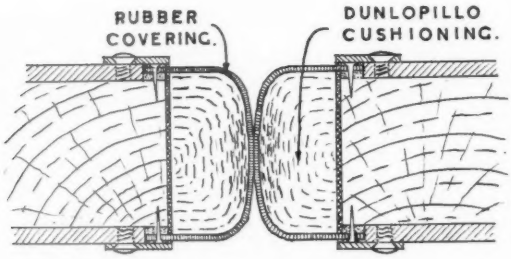
Wirral Countryside: A Cautionary Guide. The Wirral Society. Liverpool: The University Press, and London: Hodder and Stoughton. Price 6d.

THREE years ago the first edition of this excellent cautionary guide was published. Such is the thick-skinnedness of those against whose misdeeds it was directed that very little alteration has been able to be made from the set of horrid examples then chosen. But it has at last and at least been found possible to illustrate good garages as well as bad from within the Hundred of Wirral, by the inclusion of a photograph of a new one at Bromborough.

Wirral's tragedy, as Professor Patrick Abercrombie says in his foreword, was that the change in its character, from that of a remote tongue of farm land lying between two great estuaries to that of a dormitory and playground for Liverpool and Birkenhead, started before town planning was recognized as an essential precedent of growth. Town planning since it arrived has achieved some stopping of the rot in Wirral, although one could have wished in certain instances for a more vigorous application of its principles.

The one area in Wirral which is still unspoiled, and fortunately it is considerable, is that of Lord Leverhulme's land. The Wirral Society has the good fortune to have him for its president. His preface to the cautionary guide lays proper stress on "the first duty of anyone who builds . . . to consult a qualified architect." What one sees as one passes through Wirral by no means convinces one that this duty is everywhere assumed. But there is improvement, and most of it is to be credited to the Wirral Society's conscience-stirring work. Still, on balance, does a score of one good petrol station in three years really entitle the society to take its cautionary guide out of a cover (architect-designed, by the way) of a very cautionary brick red and put it into one of reassuring green?

House at Warsash, Hampshire. By Stanley D. Adshead (Royal Academy Exhibition, No. 1348)



TRADE NOTES

[EDITED BY PHILIP SCHOLBERG]

Safer Swing Doors

HOW many hundreds of fingers, wrists and feet have been trapped in swing doors? I haven't the least idea, never any of mine certainly, but I have seen other people suffer quite severely from a big heavy door closed smartly by a good strong spring. The usual felt or rubber strip has to be fairly well supported, and although it is good enough as a draught excluder, yet does little to lessen impact damage.

•

Messrs. Mewes and Davis therefore deserve plenty of credit for suggesting a new use for a now well-established material. The steel deck entrance doors on the *Queen Mary* have been fitted with strips of Dunlopillo cushioning covered in sheet rubber thick enough to withstand constant abrasion; the Dunlopillo is soft and spongy, and, since it is slightly compressed when the doors are closed, it should provide a good anti-draught finish (a particularly important point for ship work) and also allow the doors to close on the podgiest of fingers without inflicting any serious damage.

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The section at the head of these notes shows how the detail work is carried out, and there seems to be no reason why the same principle should not be applied equally successfully to the ordinary revolving door.

Bakelite

Bakelite products are familiar enough wherever one goes, but it so happens that I had never seen the moulding material in process of manufacture until I went to the new Bakelite works at Tyseley, about a fortnight ago. Nor had I realized that Bakelite resin was patented in the U.S.A. by Dr. Baekeland as long ago as 1909.

•

The whole process falls fairly clearly into different stages: phenol and formaldehyde, suitably brewed, give a transparent solid resin which can be ground up to give moulding materials or dissolved in suitable solvents to produce paints, varnishes and lacquers.

•

The moulding powder is made from this resin, with the addition of wood meal as a filler, and the necessary pigments to give the required colour, the mixture being then kneaded by hot rollers and converted to sheet form, after which it is ground and becomes ready for use. The final conversion of the material into the hundred and one forms in which the public sees it involves one more process in which both heat and pressure are applied to a mould of the required shape.

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It should perhaps be explained here and now that Bakelite, Ltd., are *not* responsible for the designs which one sees in the shops, they merely sell the raw material in the required colour. I feel that it is only fair to make a point of this, for I spent some time denouncing the paucity of invention that applies feathers and/or rope mouldings to a pressing, and was told that it wasn't Bakelite's fault, but that of the "artists" of the actual manufacturer or selling agent. So the hard thoughts I've sometimes had about Bakelite as a firm should be diverted to many different criminals.

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And the question of design reminds me that the object of the visit was largely to see the new office block, which has been designed by Mr. Bernard Cox. Here there is, quite naturally, a fair amount of Bakelite to be seen, but the owners have resisted the obvious temptation to use their product everywhere, and have limited it to places where they consider it is most suitable, and where its use is logical and justified by ease of upkeep, wearing properties or any other virtues. Any firm which admits frankly that there are things for which its product isn't quite perfect is such a refreshing rarity that one naturally believes the claims they *do* make.

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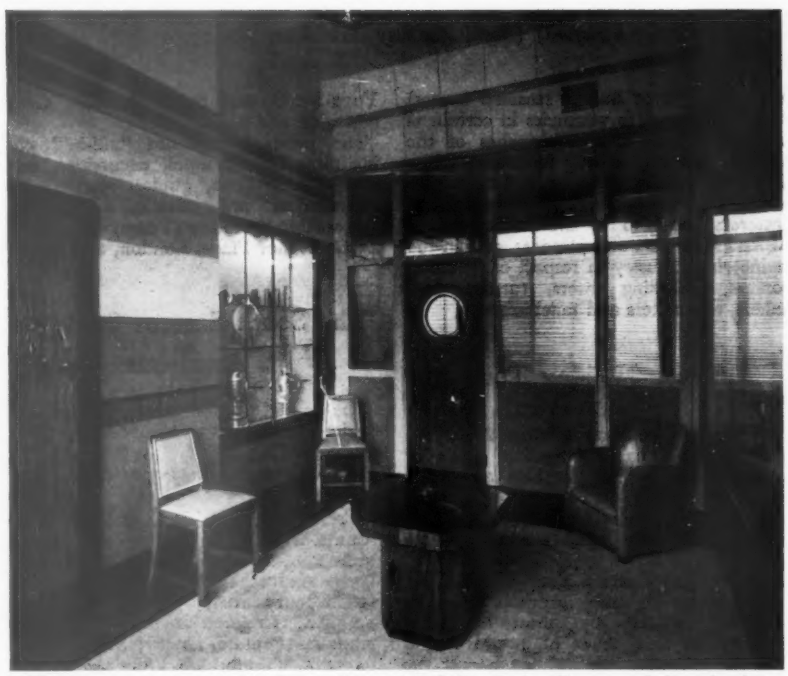
Laminated Bakelite is also quite simply produced: long rolls of paper or fabric are coated with resin, cut into sheets and finally pressed hydraulically and heated at the same time; the thickness of the final sheet depending on the number of layers used. For electrical and other industrial work the finish is usually plain, but a variety of decorative finishes are available, mottles, figured walnuts and other woods too unbelievably perfect to be true. The workers seem to take a pride in these as examples of manufacturing virtuosity, which they very obviously are: the directors and research workers would, I think, rather let Bakelite look like Bakelite. So any architect who wants to use it in a sensible way will probably get plenty of encouragement and help.

Addresses

The Dunlop Rubber Co., Ltd., St. James's House, St. James's Street, S.W.1.
Bakelite, Ltd., 68 Victoria Street, S.W.1.

The address of Konkerwind, Ltd., was wrongly given in these notes on June 11. It should be: 190 Piccadilly, W.1.



Waiting room in the Birmingham offices of Bakelite Ltd. Doors and door furniture, architraves, dado, cills and table tops are Bakelite, while the walls above dado height are in figured sycamore. (*See note on this page.*)

THE BUILDINGS ILLUSTRATED

SCIENCE BLOCK, ST. JOHN'S SCHOOL, LEATHERHEAD (pages 15 to 19). The general contractors were E. H. Cummins & Co., Ltd. The principal sub-contractors and suppliers included :—British Reinforced Concrete Co., reinforcement fabric; Permanite, Ltd., roofing over flats, tanking; Caxton Floors, Ltd., hollow tile floors; A. H. Herbert & Co., Ltd., Claygate mottled facing bricks and Old Delabole slates; Acme Flooring and Paving Co., Ltd., jarrah floors; W. W. Jenkins & Co., Ltd., patent flooring, terrazzo stairtreads; Benham and Sons, Ltd., central heating, boilers; Comyn Ching & Co., Ltd., door furniture; Williams and Williams, Ltd., special metal casements; Educational Supply Association, Ltd., special laboratory fittings, class-room desks and blackboards, etc.; Croft Granite Brick and Tile Co., Ltd., supplied Clipsham artificial stone; R. Grant and Son, roof trusses; Tyler and Freeman, Ltd., electric wiring; Shanks & Co., Ltd., sanitary fittings.

FLATS AT RICHMOND (pages 21 to 24). The general contractors were Limpus and Son, Ltd. The principal sub-contractors and suppliers included :—Trussed Concrete Steel Co., Ltd., foundations and reinforced concrete; W. T. Lamb and Sons, Ltd., facing bricks; Patent Impervious Stone and Construction Co., Ltd., artificial stone; J. A. King & Co., Ltd., partition blocks; Benham and Sons, Ltd., central heating and boilers; Gas Light and Coke Co., Ltd., gasfitting; Richmond Electric Installations, electric wiring and bells; W. N. Froy and Sons, Ltd., door furniture, mantels, sanitary fittings; Albion Iron Co., Ltd., sanitary fittings; Henry Hope and Sons, Ltd., casements; Venesta, Ltd., flush doors; Arrowsmith, Ltd., carving over main entrance; J. Burley & Sons, Ltd., garden works ; Peerless Kitchen Cabinets, Ltd., kitchen fittings ; Zeros Sales, Ltd., refrigerators; Keighley Electrical Engineering Co., Ltd., lifts; Sheath Bros., speaking tubes.

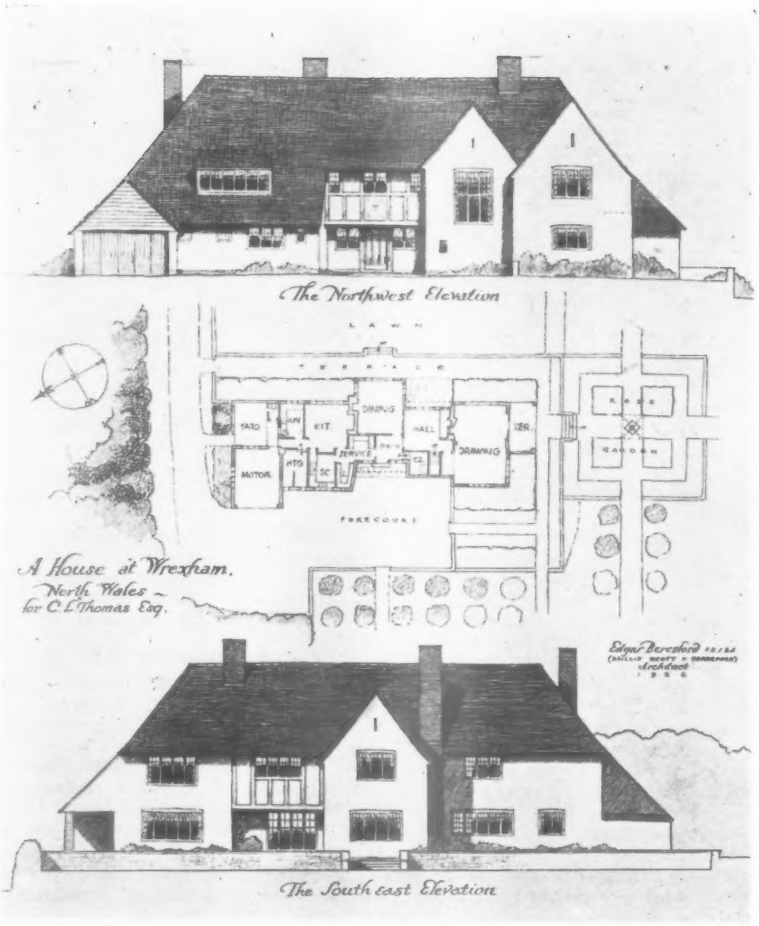
IN PARLIAMENT

Mr. Jenkins asked the Minister of Health if his attention had been drawn to a recent judgment in the Court of Appeal which places on the tenants of controlled dwellings the onus of proof of such control; and whether he would take immediate steps to introduce amending legislation.

Sir K. Wood said he was giving consideration to this matter.

Mr. Ellis Smith asked the Minister of Labour in what sections of industry there was a lack of supply of skilled labour; and would he give a list of the trades in which skilled workers could not be found to meet the needs of industry.

Lt.-Col. Muirhead said that the Department's information on this subject was mainly derived from the working of the Employment Exchanges and the difficulties which the Exchanges may experience in filling particular vacancies. As the honourable Member would appreciate, the circumstances varied from case to case but the principal difficulties at present experienced (apart from those due to seasonal causes) were with regard to vacancies in certain of the most highly skilled branches of the building and engineering industries. The difficulties in the building industry were mainly in respect of bricklayers and plasterers, and to a smaller extent of carpenters, joiners and masons; and in the engineering industry in respect of precision workers, including fitters, turners, tool makers, tool setters and machinists.



House at Wrexham, North Wales. By Edgar Beresford (Baillie, Scott and Beresford) (Royal Academy Exhibition, No. 1489)

I.A.A.S. Holiday Tours

The Incorporated Association of Architects and Surveyors has arranged a series of holiday tours for its members and their friends (including ladies) during August and September. Architects and Surveyors who are non-members are invited to participate.

The tours, each lasting a fortnight, include :—(i) A comprehensive tour of Germany, visiting the most important cities, towns and places of interest : cost £18 per person; (ii) Wiesbaden and the Rhine, visiting many interesting places : Cost £12 10s. 0d. per person. (iii) Grand Tour through Germany and Austria to Yugo-Slavia and the Dalmatian Coast : cost £22 per person.

The prices quoted are "all-in" costs, including travel, hotel, excursions, coach and steamer fares, guides, etc.

Particulars are obtainable from the Organizing Secretary (Tours) c/o. I.A.A.S., 43 Grosvenor Place, London, S.W.1.

The South-Eastern Society of Architects

The annual general meeting of the above Society was held at the Shoreham Airport on Saturday, June 20.

The following Officers were elected for the ensuing year :—

President : Mr. R. Goulburn Lovell, F.R.I.B.A., A.T.P.I. Vice-presidents :—Messrs. C. R. B. Godman, F.R.I.B.A. (Brighton area); H. Anderson, F.R.I.B.A. (Canterbury area); T. Graham Crump, L.R.I.B.A. (Croydon area); A. J. Stedman, F.R.I.B.A. (Guildford area); Stanley Philpot, F.R.I.B.A. (Tunbridge Wells area). Hon. Treasurer : Mr. Cecil Burns, F.R.I.B.A. Hon. Secretary : Mr. Colin Hay Murray, F.R.I.B.A.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS (15 Miles Radius)

BERMONDSEY. *Institute.* The trustees of the Lucas-Tooth Boys' Training Fund are to erect an institute for physical training in Bermondsey, at a cost of £20,000.

EALING. *Schools.* The T.C. has approved sketch plans by the borough engineer for extensions to the central schools. The T.C. is also to co-operate with the county authority in erecting a school for about 400 infants and juniors to serve West Twyford, Priory Park and Waddington Estate, on a site to be selected.

EALING. *Housing.* The borough surveyor is to investigate and report upon the possibility of erecting houses or flats on the Southern Works site. It is also proposed to prepare and submit to the M.H. for confirmation an Order for the compulsory acquisition of two plots of land in Carlyle Road, for housing purposes.

FULHAM. *Slum Clearance.* A large scheme of slum clearance and redevelopment is to be undertaken by the B.C. The Housing Committee proposes that the following dwellings be provided for :—(*a*) On sites already acquired 200; (*b*) on sites proposed to be acquired, 271; on proposed clearance areas, 93; (*d*) on proposed redevelopment areas, 960. Total, 1,524 dwellings.

HAMMERSMITH. *Flats.* The B.C. has approved a scheme, costing £146,982, for the erection of 14 blocks of flats, comprising 61 two-room, 148 three-room, 38 four-room, and 22 five-room dwellings. Each flat is to be lighted by electricity.

HAMPTON HILL. *Flats.* The U.D.C. has under consideration an application by Mr. A. C. Crowtan for permission to erect 36 blocks of four flats on the site of the Isolation Hospital, Uxbridge Road, Hampton Hill.

PADDINGTON. *Cinema.* A cinema is to be erected on the site of 319–321 Edgware Road, Paddington.

PUTNEY. *Houses.* Plans by Mr. A. S. Earl, Kingston Vale, S.W.15, for the erection of 21 houses at Roehampton Vale and Stag Lane, have been approved.

PUTNEY. *Flats.* Messrs. Humphreys, Ltd., are to erect blocks of flats on the site of Ross Court, at the junction of West Hill and Putney Heath.

SOUTHFIELDS. *Flats.* Four blocks of flats are to be erected on the site of the "Limes," Wimbledon Park Road, from plans prepared by Mr. C. M. Butler.

SOUTHFIELDS. *Flats, etc.* The B.C. has approved plans submitted by Mr. B. de Helsby for the proposed erection of a block of flats and a block of garages on the Forest Lodge Estate, West Hill.

STANMORE. *School.* The Middlesex Education Committee is to erect an elementary school for 900 in Thistlecroft Gardens, Stanmore.

TEDDINGTON. *Houses.* The U.D.C. has approved plans for 30 houses at Blackmore's Grove and Station Road, for Watts & Co.; 15 houses at Anlaby Road for Mr. S. Warner; and 17 houses at Victor Road and Church Road for Mr. F. J. Disney.

TWICKENHAM. *Bungalows.* Plans submitted by Mr. E. A. Beaumont for the proposed erection of 200 bungalows on the Dene estate have now been approved by the T.C. The site is one of 19½ acres and lies between the Southern Railway and the Duke of Northumberland's river.

WANDSWORTH. *Flats.* In connection with the proposed erection of two blocks of flats in the Wandsworth Plain area, the Council has appointed Messrs. L. A. Francis & Sons, Vernon House, Sicilian Avenue, W.C.1, as quantity surveyors.

WANDSWORTH. *Flats.* The B.C. has now approved sketch plans by the Council's architect for two blocks of flats proposed to be erected on the Garratt Lane frontage of the Garratt Lane housing site.

WEALDSTONE. *School.* The Roman Catholic authorities are to erect a school for 400 at Wealdstone, Middlesex.

SOUTHERN COUNTIES

BEXHILL. *Church hall, etc.* Plans passed by the Corporation, Church hall, Woodsgate Park, for St. Stephen's Church Council; 6 houses Uplands Gardens, for Mr. R. W. Moore; 2 houses, Pembury Grove, for Mr. R. A. Larkin; block of flats, corner Marina and Albert Road, for Mr. Armitage on behalf of Mr. A. Blackburn Craig.

GRAVESEND. *Police Station.* The Corporation is considering plans by the borough architect for a new police station and fire brigade premises and is to inspect such premises recently erected at Derby.

GRAVESEND. *Alterations, etc.* Plans passed by the Corporation. Alterations, 36-9, High Street and 1-2 King Street for Messrs. Bryant and Rackstraw Ltd.; works, Lower Higham Road, for Messrs. Norcon, Ltd.; 4 shops and flats, Milton Road, for Mr. L. G. Ekins; 4 bungalows, Bellman Avenue, for Mr. A. E. V. Newnham; 12 houses, Hillside Avenue, for Messrs. Barton and Burles.

HASTINGS. *School.* The Hastings Education Committee has purchased land in Red Lake, Ore, for the erection of an infants school and open air school.

HASTINGS. *Estate Development.* Plans passed by the Corporation; estate development, vicinity of Downs Road, for Messrs. Jeffery & Wyatt; alterations, 5 Bank Buildings, for Messrs. Newbery; 8 houses, Harold Road, for Mr. A. J. Dicker; 2 houses, Filsham Road, for Mr. H. J. Altoun; 2 houses, Milward Road, for Mr. J. S. D. Hicks; offices, Fairlight Road, for Ore Building Society.

EASTERN COUNTIES

COLCHESTER. *School.* The Colchester Education Committee is to erect a junior school in the Harwich Road area.

COLCHESTER. *Extensions.* The Colchester Education Committee has approved plans by Mr. H. A. Beckett for extentions at Wilson Marriage school.

COLCHESTER. *Houses, etc.* Plans passed by the Corporation : 16 houses, Shrub End Road, for Mr. F. Hum; extensions, county hospital, Gray Road, for Messrs. Duncan, Clark and Beckett; 32 houses, Barn Hall Avenue, for Mr. S. E. Baillie; laundry extensions, Ipswich Road, for Messrs. W. A. Hills & Son; 4 houses Berechurch Road, for Mr. F. C. Barrett; pavilion, Lexden Road, for Mr. N. Thorogood; 4 houses, Littlebury Gardens, for Mr. E. J. Busbridge; shops and house, Old Heath Road, for Mr. C. Fisher; additions, 117 High Street, for George Hotel, Ltd.; dairy, Berechurch Road, for Mr. S. Mann.

NORTHERN COUNTIES

BOLTON. *Houses.* Plans passed by the Corporation : four houses, Andrew Lane, for Messrs. F. & H. Douglas; mission hall, Winchester Way, for Independent Methodist trustees; extensions, 45 Newport Street, for Messrs. S. Greenhough & Sons; ten houses, Albert Road, for Mr. William Gornall; works extensions, Fairclough Street, for Messrs. John Dickinson & Co., Ltd.; extensions, 5 Eastbank Street, for Mr. William Jones; 28 houses, Broxton Avenue, for Mr. J. Hough; 16 houses, Edge Hill Road, for Mr. C. Thomasson; 14 houses, off Edge Hill Road, for Mr. J. Unsworth; eight houses, Smithills Dean Road, for Messrs. Reddy and Southern.

CARLISLE. *Police and Fire Stations.* The Corporation has approved plans for the erection of police and fire stations in Rickergate.

CARLISLE. *Alterations, etc.* Plans passed by the Corporation : Alterations, City Picture House, English Street, for Union Cinemas, Ltd.; four houses, Brampton Road, for Mr. A. Sharp; two houses, London Road, and 30 houses, Currock Road, for Border Engineering Contractors, Ltd.; eight houses, Knowefield estate, for Messrs. A. Blakeley & Sons; two houses, Hill Crest, for Messrs. T. Irwin & Sons; six houses, Dalston Road, for Messrs. H. E. Hidgson & Co.; three shops, Warwick Road, for Mr. S. Mann; 55 houses, Caldew Vale, for Messrs. H. Laing & Son, Ltd.; central schools, The Swifts, for Education Committee; ten houses, Stanwix, for Mr. J. W. Watt; 80 houses, Warwick Road, Mr. E. J. Hill; two houses, Warwick Road, for Mr. H. Foxall; ten houses, Burgh Road, for Messrs. Benwell & Slack; two houses, Newtown Road, for Mr. H. E. Scarborough; six houses, Knowefield, for Mr. N. Williss.

CHESTER. *Houses.* Messrs. Thos. B. Gorst & Sons have prepared a scheme for the erection of 500 houses on the Blacon Point estate, Chester.

CHESTER. *Extensions, etc.* Plans passed by the Corporation : Extensions, Reliance Works, Waterloo Road, for Messrs. Williams, Ltd.; five houses, Christleton Road, for Mr. A. E. Garner; alterations, 45 City Road, for Britannic Assurance Co., Ltd.; 24 houses, Broadway, for Messrs. T. B. Gorst & Sons; alterations, Brook Street, for London Central Meat Co., Ltd.; two houses, Lorne Street, for Mr. F. Kennerley; works extensions, Saltney, for Rustproof Metal Co.; 20 houses, Sandy Lane, for Mr. R. Walker.

CHESTER. *Housing Scheme.* The Corporation is negotiating for eight acres at Buddicom for a housing scheme.

HELSBY. *School.* The Education Committee has purchased a site at Helsby for the erection of an elementary school.

HYDE. *Housing.* The Corporation has purchased a housing site in Mill Lane.

ROTHERHAM. *Fire Station.* The Corporation has approved an estimate of £36,600 for the erection of a fire station and firemen's dwellings.

ROTHERHAM. *Houses.* The Corporation is to prepare plans for the erection of another 200 houses at Canklow.

ROTHERHAM. *Houses.* Mr. A. Watson is to erect 438 houses on an estate in Wortley Road, Rotherham.

RUNCORN. *Welfare Centre.* The Cheshire C.C. is obtaining a site in Runcorn for the erection of a welfare centre.

YORK. *Additions, etc.* Plans passed by the Corporation. Additions, Skeldergate, for Messrs. T. F. Wood & Co., Ltd.; 6 houses, off Millfield Lane, for Messrs. Sorrell and Scaife; 12 houses, Danum Road, for Mr. T. Gledhill; 4 houses, Nunthorpe Court estate, for Mr. H. Williamson; 40 houses, Maple Grove, for Mr. W. S. Mobley; 2 houses, Thretholme Drive, for Mr. T. F. Clark; 11 houses, Sycamore Terrace, for Mr. E. Sherry; 8 houses, Forest Way, for Messrs. T. and M. Caffery; 10 houses, Holgate Rise, for Mr. J. N. Dunn; 3 houses, White House Rise, for Messrs. R. J. Pulleyn and Sons; 10 houses, Tang Hall Lane, for Heworth Homes Estate Co.; additions, Mill Mount Hotel, for Mr. R. A. Crooks; additions, Shoulder of Mutton Inn, Heworth Green, for Tadcaster Tower Brewery Co., Ltd.; alterations, Greyhound Hotel, Spurriergate, for Messrs. J. J. Hunt, Ltd.; alterations, George IV Inn, Redeness Street, for John Smith's Tadcaster Brewery, Ltd.

WALES

CARDIFF. *Library.* The Corporation is to select a site in Western Avenue for the erection of a library for the Llandaff district.

CARDIFF. *Baths.* The Corporation is considering proposals for extending the Guildford Crescent baths at a cost of £10,000 and the erection of further baths at a cost of £50,000.

CARDIFF. *Church.* The Corporation has sold land in Mill Road, Ely, for the erection of a Roman Catholic church and presbytery.

RATES OF WAGES

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

			I s.	I d.	II s.	II d.
A_1	ABERDARE ...	S. Wales & M.	1	5½	1	1½
A	Aberdeen ...	Scotland	1	6½	1	2
A_1	Abergavenny ...	S. Wales & M.	1	6	1	1½
A_2	Abingdon ...	S. Counties	1	5	1	0½
A	Accrington ...	N.W. Counties	1	6½	1	2
A_2	Addlestone ...	S. Counties	1	5	1	0½
A	Adlington ...	N.W. Counties	1	6½	1	2
A	Airdrie ...	Scotland	*1	6½	1	2
C	Aldeburgh ...	E. Counties	1	2½		11
A	Altrincham ...	N.W. Counties	1	6½	1	2
B_2	Appleby ...	N.W. Counties	1	3		11½
A	Ashton-under-Lyne	N.W. Counties	1	6½	1	2
B_1	Aylesbury ...	S. Counties	1	4	1	0
B_1	BANBURY ...	S. Counties	1	4	1	0
B_1	Bangor ...	N.W. Counties	1	4	1	0
A_2	Barnard Castle	N.E. Coast	1	5	1	0½
A	Barnsley ...	Yorkshire	1	6½	1	2
B	Barnstaple ...	S.W. Counties	1	4½	1	0½
A	Barrow ...	N.W. Counties	1	6½	1	2
A	Barry	S. Wales & M.	1	6½	1	2
B_1	Basingstoke ...	S.W. Counties	1	4	1	0
A_2	Bath	S.W. Counties	1	5½	1	1½
A	Batley ...	Yorkshire	1	6½	1	2
A_2	Bedford ...	E. Counties	1	5½	1	1½
A_2	Berwick-on-Tweed	N.E. Coast	1	5½	1	1½
A_2	Bewdley ...	Mid. Counties	1	5½	1	1½
B_2	Bicester ...	S. Counties	1	3		11½
	Birkenhead ...	N.W. Counties	*1	7½	1	2½
A	Birmingham ...	Mid. Counties	1	6½	1	2
A_1	Bishop Auckland	N.E. Coast	1	6	1	1½
A	Blackburn ...	N.W. Counties	1	6½	1	2
A	Blackpool ...	N.W. Counties	1	6½	1	2
A	Blyth	N.E. Coast	1	6½	1	2
B_1	Bognor ...	S. Counties	1	4	1	0
A	Bolton ...	N.W. Counties	1	6½	1	2
A_2	Boston ...	Mid. Counties	1	5	1	0½
A_2	Bournemouth...	S. Counties	1	5½	1	1½
B_2	Bovey Tracey	S.W. Counties	1	3		11½
A	Bradford ...	Yorkshire	1	6½	1	2
A_1	Brentwood ...	E. Counties	1	6	1	1½
A	Bridgend ...	S. Wales & M.	1	6½	1	2
B	Bridgwater ...	S.W. Counties	1	4½	1	0½
A_1	Bridlington ...	Yorkshire	1	6	1	1½
A	Brighouse ...	Yorkshire	1	6½	1	2
A_2	Brighton ...	S. Counties	1	5½	1	1½
A	Bristol ...	S.W. Counties	1	6½	1	2
B	Brixham ...	S.W. Counties	1	3½		11½
A	Bromsgrove ...	Mid. Counties	1	5½	1	1½
B	Bromyard ...	Mid. Counties	1	3		11½
A	Burnley ...	N.W. Counties	1	6½	1	2
A	Burslem ...	Mid. Counties	1	6½	1	2
A	Burton-on-Trent	Mid. Counties	1	6½	1	2
A	Bury	N.W. Counties	1	6½	1	2
A	Buxton ...	N.W. Counties	1	6	1	1½
A_1	CAMBRIDGE	E. Counties	1	6	1	1½
B_1	Canterbury ...	S. Counties	1	4	1	0
A	Cardiff ...	S. Wales & M.	1	6½	1	2
A	Carlisle ...	N.W. Counties	1	6½	1	2
B	Carmarthen ...	S. Wales & M.	1	4½	1	0½
B	Carnarvon ...	N.W. Counties	1	4½	1	0½
A	Carnforth ...	N.W. Counties	1	6½	1	2
A	Castleford ...	Yorkshire	1	6½	1	2
A_2	Chatham ...	S. Counties	1	5	1	0½
A	Chelmsford ...	E. Counties	1	5	1	0½
A	Cheltenham ...	S.W. Counties	1	5	1	0½
A	Chester ...	N.W. Counties	1	6½	1	2
A	Chesterfield ...	Mid. Counties	1	6½	1	2
B_1	Chichester ...	S. Counties	1	4	1	0
A	Chorley ...	N.W. Counties	1	6½	1	2
B_1	Cirencester ...	S. Counties	1	4	1	0
A	Clitheroe ...	N.W. Counties	1	6½	1	2
A	Clydebank ...	Scotland	1	6½	1	2
A	Coalville ...	Mid. Counties	1	6½	1	2
A_2	Colchester ...	E. Counties	1	5½	1	1½
A	Colne	N.W. Counties	1	6	1	1½
A_2	Colwyn Bay ...	N.W. Counties	1	5½	1	1½
A_1	Consett ...	N.E. Coast	1	6	1	1½
A_2	Conway ...	N.W. Counties	1	5½	1	1½
A	Coventry ...	Mid. Counties	1	6½	1	2
A_2	Crewe	N.W. Counties	1	5½	1	1½
A	Cumberland ...	N.W. Counties	1	[illegible]	1	0½
A	DARLINGTON	N.E. Coast	1	6½	1	2
A	Darwen ...	N.W. Counties	1	6½	1	2
B	Deal	S. Counties	1	4	1	0
A_2	Denbigh ...	N.W. Counties	1	5	1	0½
A	Derby	Mid. Counties	1	6½	1	2
A	Dewsbury ...	Yorkshire	1	6½	1	2
B	Didcot ...	S. Counties	1	4½	1	0½
A	Doncaster ...	Yorkshire	1	6½	1	2
B_1	Dorchester ...	S.W. Counties	1	4	1	0
A	Driffield ...	Yorkshire	1	5	1	0½
A_2	Droitwich ...	Mid. Counties	1	5½	1	1½
A	Dudley ...	Mid. Counties	1	6½	1	2
A_2	Dumfries ...	Scotland	1	6	1	1½
A	Dundee ...	Scotland	1	6½	1	2
A	Durham ...	N.E. Coast	1	6½	1	2
A_2	EASTBOURNE	S. Counties	1	5½	1	1½
A_1	Ebbw Vale ...	S. Wales & M.	1	6	1	1½
A	Edinburgh ...	Scotland	1	6½	1	2
A_1	Glamorgan-shire, Rhondda Valley District ...	S. Wales & M.	1	6	1	1½
A_2	Exeter ...	S.W. Counties	*1	5½	1	1½
B	Exmouth ...	S.W. Counties	1	4½	1	0½
A_2	FELIXSTOWE	E. Counties	1	5	1	0½
A	Filey	Yorkshire	1	5	1	0½
A	Fleetwood ...	N.W. Counties	1	6½	1	2
B_1	Folkestone ...	S. Counties	1	4	1	0
A	Frodsham ...	N.W. Counties	1	6½	1	2
B_2	Frome ...	S.W. Counties	1	[illegible]		11½
A	GATESHEAD	N.E. Coast	1	6½	1	2
A	Gillingham ...	S. Counties	1	4½	1	0½
A	Glasgow ...	Scotland	1	7	1	2½
A_2	Gloucester ...	S.W. Counties	1	5½	1	1½
A_2	Goole ...	Yorkshire	1	5½	1	1½
A_2	Gosport ...	S. Counties	1	5½	1	1½
A_2	Grantham ...	Mid. Counties	1	5	1	0½
A_1	Gravesend ...	S. Counties	1	6	1	1½
A	Greenock ...	Scotland	*1	6½	1	2
A	Grimsby ...	Mid. Counties	1	6½	1	2
B	Guildford ...	S. Counties	1	4½	1	0½
A	HALIFAX ...	Yorkshire	1	6½	1	2
A	Hanley ...	Mid. Counties	1	6½	1	2
A	Harrogate ...	Yorkshire	1	6½	1	2
A	Hartlepools ...	N.E. Coast	1	6½	1	2
B	Harwich ...	E. Counties	1	4½	1	0½
B_1	Hastings ...	S. Counties	1	4	1	0
A	Hatfield ...	S. Counties	1	5½	1	1½
B	Hereford ...	S.W. Counties	1	4½	1	0½
A	Hertford ...	E. Counties	1	5½	1	1½
A	Heysham ...	N.W. Counties	1	6½	1	2
A	Howden ...	N.E. Coast	1	6½	1	2
A	Huddersfield ...	Yorkshire	1	6½	1	2
A	Hull	Yorkshire	1	6½	1	2
A	ILKLEY ...	Yorkshire	1	6½	1	2
A	Immingham ...	Mid. Counties	1	6½	1	2
A_2	Ipswich ...	E. Counties	1	5½	1	1½
B_2	Isle of Wight ...	S. Counties	1	4½	1	0½
A	JARROW ...	N.E. Coast	1	6½	1	2
A	KEIGHLEY ...	Yorkshire	1	6½	1	2
A_2	Kendal ...	N.W. Counties	1	5	1	0½
A_2	Keswick ...	N.W. Counties	1	5	1	0½
A_1	Kettering ...	Mid. Counties	1	6	1	1½
A_2	Kidderminster	Mid. Counties	1	5½	1	1½
B_1	King's Lynn ...	E. Counties	1	4	1	0
A	LANCASTER ...	N.W. Counties	1	6½	1	2
A_1	Leamington ...	Mid. Counties	1	6	1	1½
A	Leeds	Yorkshire	1	6½	1	2
A	Leek	Mid. Counties	1	6½	1	2
A	Leicester ...	Mid. Counties	1	6½	1	2
A	Leigh	N.W. Counties	1	6½	1	2
B	Lewes	S. Counties	1	3		11½
A_2	Lichfield ...	Mid. Counties	1	5½	1	1½
A	Lincoln ...	Mid. Counties	1	6½	1	2
	Liverpool ...	N.W. Counties	*1	8	1	3
A_2	Llandudno ...	N.W. Counties	1	5½	1	1½
A	Llanelly ...	S. Wales & M.	1	6½	1	2
	London (12-miles radius)		1	8	1	3
	Do. (12-15 miles radius)		1	7½	1	2½
A	Long Eaton ...	Mid. Counties	1	6½	1	2
A	Loughborough ...	Mid. Counties	1	6½	1	2
A_1	Luton	E. Counties	1	6	1	1½
A	Lytham ...	N.W. Counties	1	6½	1	2
A_1	MACCLESFIELD	N.W. Counties	1	6	1	1½
A_2	Maidstone ...	S. Counties	1	5	1	0½
A_2	Malvern ...	Mid. Counties	1	5	1	0½
A	Manchester ...	N.W. Counties	1	6½	1	2
A	Mansfield ...	Mid. Counties	1	6½	1	2
B_1	Margate ...	S. Counties	1	4	1	0
A	Matlock ...	Mid. Counties	1	5	1	0½
A_1	Merthyr ...	S. Wales & M.	1	6	1	1½
A	Middlesbrough	N.E. Coast	1	6½	1	2
A_2	Middlewich ...	N.W. Counties	1	5½	1	1½
B_2	Minehead ...	S.W. Counties	1	3½		11½
B_2	Monmouth ... & S. and E. Glamorganshire	S. Wales & M	1	3½		11½
A	Morecambe ...	N.W. Counties	1	6½	1	2
A_2	NANTWICH ...	N.W. Counties	1	5½	1	1½
A	Neath	S. Wales & M.	1	6½	1	2
A	Nelson ...	N.W. Counties	1	6½	1	2
A	Newcastle ...	N.E. Coast	1	6½	1	[illegible]
A	Newport ...	S. Wales & M	1	6½	1	2
A	Normanton ...	Yorkshire	1	6½	1	2
A	Northampton	Mid. Counties	1	6½	1	2
A	North Shields...	N.E. Coast	1	6½	1	2
A	North Staffs ...	Mid. Counties	1	6½	1	2
A_1	Norwich ...	E. Counties	1	6	1	1½
A	Nottingham ...	Mid. Counties	1	6½	1	2
A	Nuneaton ...	Mid. Counties	1	6½	1	2
A	OAKHAM ...	Mid. Counties	1	5	1	0½
A	Oldham ...	N.W. Counties	1	6½	1	2
A_2	Oswestry ...	N.W. Counties	1	5	1	0½
A_1	Oxford ...	S. Counties	1	6	1	1½
A	PAISLEY ...	Scotland	*1	6½	1	2
B_2	Pembroke ...	S. Wales & M.	1	3		11½
A	Perth	Scotland	*1	6½	1	2
A_1	Peterborough	E. Counties	1	6	1	1½
A	Plymouth ...	S.W. Counties	*1	6½	1	2
A	Pontefract ...	Yorkshire	1	6½	1	2
A_1	Pontypridd ...	S. Wales & M.	1	6	1	1½
A_2	Portsmouth ...	S. Counties	1	5½	1	1½
A	Preston ...	N.W. Counties	1	6½	1	2
A	QUEENSFERRY	N.W. Counties	1	6½	1	2
A_2	READING ...	S. Counties	1	5½	1	1½
B	Reigate ...	S. Counties	1	4½	1	0½
A	Retford ...	Mid. Counties	1	5	1	0½
A_1	Rhondda Valley	S. Wales & M.	1	6	1	1½
A	Ripon	Yorkshire	1	5	1	0½
A	Rochdale ...	N.W. Counties	1	6½	1	2
B	Rochester ...	S. Counties	1	4½	1	0½
A_1	Ruabon ...	N.W. Counties	1	6	1	1½
A	Rugby ...	Mid. Counties	1	6½	1	2
A_2	Rugeley ...	Mid. Counties	1	5½	1	1½
A	Runcorn ...	N.W. Counties	1	6½	1	2
A_1	ST. ALBANS ...	E. Counties	1	6	1	1½
A	St. Helens ...	N.W. Counties	1	6½	1	2
B_2	Salisbury ...	S.W. Counties	1	3½		11½
A_1	Scarborough ...	Yorkshire	1	6	1	1½
A	Scunthorpe ...	Mid. Counties	1	6½	1	2
A	Sheffield ...	Yorkshire	1	6½	1	2
A	Shipley ...	Yorkshire	1	6½	1	2
A_2	Shrewsbury ...	Mid. Counties	1	5½	1	1½
A_2	Skipton ...	Yorkshire	1	5½	1	1½
A_2	Slough ...	S. Counties	1	5½	1	1½
A_1	Solihull ...	Mid. Counties	1	6	1	1½
A_2	Southampton	S. Counties	1	5½	1	1½
A_1	Southend-on-Sea	E. Counties	1	6	1	1½
A	Southport ...	N.W. Counties	1	6½	1	2
A	S. Shields ...	N.E. Coast	1	6½	1	2
A_1	Stafford ...	Mid. Counties	1	6	1	1½
A	Stirling ...	Scotland	1	7	1	2½
A	Stockport ...	N.W. Counties	1	6½	1	2
A	Stockton-on-Tees	N.E. Coast	1	6½	1	2
A	Stoke-on-Trent	Mid. Counties	1	6½	1	2
B	Stroud ...	S.W. Counties	1	4½	1	0½
A	Sunderland ...	N.E. Coast	1	6½	1	2
A	Swansea ...	S. Wales & M.	1	6½	1	2
A	Swindon ...	S.W. Counties	1	5	1	0½
A_1	TAMWORTH ...	N.W. Counties	1	6	1	1½
B	Taunton ...	S.W. Counties	1	4½	1	0½
A	Teesside Dist....	N.E. Counties	1	6½	1	2
A_2	Teignmouth ...	S.W. Coast	1	5½	1	1½
A	Todmorden ...	Yorkshire	1	6½	1	2
A_1	Torquay ...	S.W. Counties	1	6	1	1½
B_2	Truro	S.W. Counties	1	3½		11½
A_3	Tunbridge Wells	S. Counties	1	5	1	0½
A	Tunstall ...	Mid. Counties	1	6½	1	2
A	Tyne District	N.E. Coast	1	6½	1	2
A	WAKEFIELD	Yorkshire	1	6½	1	2
A	Walsall ...	Mid. Counties	1	6½	1	2
A	Warrington ...	N.W. Counties	1	6½	1	2
A_1	Warwick ...	Mid. Counties	1	6	1	1½
A_1	Wellingborough	Mid. Counties	1	6	1	1½
A	West Bromwich	Mid. Counties	1	6½	1	2
A_2	Weston-s.-Mare	W. Counties	1	5½	1	1½
A_2	Whitby ...	Yorkshire	1	5½	1	1½
A	Widnes ...	N.W. Counties	1	6½	1	2
A	Wigan ...	N.W. Counties	1	6½	1	2
B	Winchester ...	S. Counties	1	4½	1	0½
A_2	Windsor ...	S. Counties	1	5½	1	0½
A	Wolverhampton	Mid. Counties	1	6½	1	2
A_2	Worcester ...	Mid. Counties	1	5½	1	1½
A_3	Worksop ...	Yorkshire	1	5	1	0½
A_1	Wrexham ...	N.W. Counties	1	6	1	1½
A	Wycombe ...	S. Counties	1	5	1	0½
B	YARMOUTH ...	E. Counties	1	4½	1	0½
B	Yeovil ...	S.W. Counties	1	4½	1	0½
A	York	Yorkshire	1	6½	1	2

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

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

CURRENT PRICES

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

WAGES

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

MATERIALS

EXCAVATOR AND CONCRETOR

		£	s.	d.
Grey Stone Lime	per ton	2	2	0
Blue Lias Lime	"	1	16	6
Hydrated Lime	"	3	0	9
Portland Cement, in 4 ton lots (d/d site, including Paper Bags)	"	1	19	0
Rapid Hardening Cement, in 4-ton lots (d/d site, including Paper Bags)	"	2	5	0
White Portland Cement, in 1-ton lots	"	8	15	0
Thames Ballast	per Y.C.		6	6
¾" Crushed Ballast	"		7	0
Building Sand	"		7	6
Washed Sand	"		8	6
2" Broken Brick	"		8	0
¾" "	"		10	3
Pan Breeze	"		6	6
Coke Breeze	"		8	9

DRAINLAYER

BEST STONEWARE DRAIN PIPES AND FITTINGS

		4" s.	4" d.	6" s.	6" d.
Straight Pipes	per F.R.	0	9	1	1
Bends	each	1	9	2	6
Taper Bends	"	3	6	5	3
Rest Bends	"	4	3	6	3
Single Junctions	"	3	6	5	3
Double	"	4	9	6	6
Straight channels	per F.R.	1	6	2	6
¾" Channel bends	each	2	9	4	0
Channel junctions	"	4	6	6	6
Channel tapers	"	2	9	4	0
Yard gullies	"	6	9	8	9
Interceptors	"	16	0	19	6
IRON DRAINS:					
Iron drain pipe	per F.R.	1	6	2	6
Bends	each	5	0	10	6
Inspection bends	"	9	0	15	0
Single junctions	"	8	9	18	0
Double junctions	"	13	6	30	0
Lead Wool	lb.		6		—
Gaskin	"		5		—

BRICKLAYER

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

MASON

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

SLATER AND TILER

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

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

CARPENTER AND JOINER

		£	s.	d.
Good carcassing timber	F.C.		2	2
Birch	as 1" F.S.			9
Deal, Joiner's	" "			5
" 2nds	" "			4
Mahogany, Honduras	" "		1	3
" African	" "		1	1
" Cuban	" "		2	6
Oak, plain American	" "		1	0
" Figured	" "		1	3
" plain Japanese	" "		1	2
" Figured	" "		1	5
" Austrian wainscot	" "		1	6
" English	" "		1	11
Pine, Yellow	" "		1	0
" Oregon	" "			4
" British Columbian	" "			4
Teak, Moulmein	" "		1	3
" Burma	" "		1	2
Walnut, American	" "		2	3
" French	" "		2	3
Whitewood, American	" "		1	1
Deal floorings, ¾"	Sq.		18	6
" 1"	"	1	1	6
" 1¼"	"	1	2	0
" 1½"	"	1	5	0
" 1¾"	"	1	10	0
Deal matchings, ¾"	"		14	0
" 1"	"		15	6
" 1¼"	"	1	4	0
Rough boarding, ¾"	"		16	0
" 1"	"		18	0
" 1¼"	"	1	6	0

Plywood, per ft. sup.

Thickness	¼"			⅜"			½"			⅝"		
Qualities	A	B	BB	A	B	BB	A	B	BB	A	B	BB
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch 60 × 48	4	2½	2	5	3	2¾	7	5	4	8	6	5
Cheap Alder	–	2	1½	–	3½	2	–	–	–	–	–	–
Oregon Pine	–	2½	–	3	2½	–	4	3½	–	5	4½	–
Gaboon Mahogany	4	3½	–	5	4½	–	7	6½	–	8	7	–
Figured Oak	6½	5	–	7½	5½	–	10	8	–	1/–	9	–

		s.	d.
Scotch glue	lb.		8

SMITH AND FOUNDER

Tubes and Fittings

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

		¼"	½"	1"	1¼"	2"
Tubes, 2'–14' long	per ft. run	4	5½	9½	1/1	1/10
Pieces, 12"–23" long	each	10	1/1	1/11	2/8	4/9
" 3"–11½" long	"	7	9	1/3	1/8	3/–
Long screws, 12"–23½" long	"	11	1/3	2/2	2/10	5/3
" " 3" M–½" long	"	8	10	1/5	1/11	3/6
Bends	"	8	11	1/7½	2/7½	5/2
Springs not socketed	"	5	7	1/1½	1/11½	3/11
Socket unions	"	2/–	3/–	5/6	6/9	10/–
Elbows, square	"	10	1/1	1/6	2/2	4/3
Tees	"	1/–	1/3	1/10	2/6	5/1
Crosses	"	2/2	2/9	4/1	5/6	10/6
Plain sockets and nipples	"	3	4	6	8	1/3
Diminished sockets	"	4	6	9	1/–	2/–
Flanges	"	9	1/–	1/4	1/9	2/9
Caps	"	3½	5	8	1/–	2/–
Backnuts	"	2	3	5	6	1/1
Iron main cocks	"	1/6	2/3	4/2	5/4	11/6
" with brass plugs	"	—	4/–	7/6	10/–	21/–

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

	Fittings. Per cent.		Per cent.
Gas	57½	Galvanized gas	47½
Water	52½	" water	42½
Steam	47½	" steam	37½

		s.	d.
Rolled steel joists cut to length	cwt.	12	9
Mild steel reinforcing rods, ¼"	"	10	6
" " ½"	"	10	3
" " ¾"	"	10	0

SMITH AND FOUNDER—*continued*

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

		¾" s.	¾" d.	4" s.	4" d.
Cast-iron rain-water pipes of ordinary thickness metal	F.R.		8		10
Shoes	each	2	0	3	0
Anti-splash shoes	"	4	6	8	0
Boots	"	3	0	4	0
Bends	"	2	7	3	9
" with access door	"		—	6	3
Heads	"	4	0	5	0
Swan-necks up to 9" offsets	"	3	9	6	0
Plinth bends, 4½" to 6"	"	3	9	5	3
Half-round rain-water gutters of ordinary thickness metal	F.R.		5		6
Stop ends	each		6		6
Angles	"	1	7	1	11
Obtuse angles	"	2	0	2	6
Outlets	"	1	9	2	3

PLUMBER

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

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

PLASTERER

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

GLAZIER

		s.	d.	s.	d.
Sheet glass, 21 oz., squares n/e 2 ft. s.	F.S.				2½
" " 26 oz. " "	"				3
Flemish, Arctic, Figures (white)*	"				7
Blazoned glasses	"			2	6
Reeded: Cross Reeded	"				11
Cathedral glass, white, double-rolled, plain, hammered, rimpled, waterwite	"				6
Crown sheet glass (n/e 12" × 10")	"			2	0
Flashed opals (white and coloured)	"	1	0 and	2	0
¼" rough cast; rolled plate	"				5½
¼" wired cast; wired rolled	"				9½
¼" Georgian wired cast	"				11
¼" Polished plate, n/e 1 ft.	"	†10 to		‡1	1
" " 2	"	†1	2 "	‡1	4
" " 4	"	†2	3 "	‡2	6
" " 8	"	†2	9 "	‡3	2
" " 20	"	†3	1 "	‡3	9
" " 45	"	†3	3 "	‡4	0
" " 100	"	†4	0 "	‡4	10
Vita glass, sheet, n/e 1 ft.	"			1	0
" " " 2 ft.	"			1	3
" " " over 2 ft.	"			1	9
" " plate, n/e 1 ft.	"			1	6
" " " 2 ft.	"			3	0
" " " 5 ft.	"			4	0
" " " 7 ft.	"			5	0
" " " 15 ft.	"			6	0
" " " over 15 ft.	"			7	6
"Calorex" sheet 21 oz., and 32 oz.	"	2	6 and	3	6
" rough cast ¼" and ½"	"		8½ "	1	0
Putty, linseed oil	lb.				3

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

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

PAINTER

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

CURRENT PRICES FOR MEASURED WORK

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

EXCAVATOR AND CONCRETOR

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

DRAINLAYER

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

BRICKLAYER

		£	s.	d.
Brickwork, Flettons in lime mortar	Per Rod	26	10	0
" " in cement	"	27	12	6
" Stocks in cement	"	34	0	0
" Blues in cement	"	50	0	0
Extra only for circular on plan	"	2	0	0
" backing to masonry	"	1	10	0
" raising on old walls	"	2	0	0
" underpinning	"	5	10	0½
Fair Face and pointing internally	F.S.			1½
Extra over fletton brickwork for picked stock facings and pointing	"			8
" " " red brick facings and pointing	"			11
" " " blue brick facings and pointing	"		1	4
" " " glazed brick facings and pointing	"		3	6
Tuck pointing	"			7½
Weather pointing in cement	"			3
Slate dampcourse	"			10
Vertical dampcourse	"		1	1

ASPHALTER

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

MASON

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

SLATER AND TILER

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

CARPENTER AND JOINER

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

CARPENTER AND JOINER—*continued*

		s.	d.
1½" deal moulded sashes of average size	F.S.	1	9½
2" " " " " "	"	1	11½
1½" deal cased frames double hung, of 6" × 3" oak sills, 1¼" pulley stiles, 1¼" heads, 1" inside and outside linings, ⅜" parting beads, and with brass faced axle pulleys, etc., fixed complete	"	3	7
2" " " " " "	"	3	10
Extra only for moulded horns	Each		6
1½" deal four-panel square, both sides, door	F.S.	2	0
2" " " " " "	"	2	8
1½" " but moulded both sides	"	2	4
2" " " " " "	"	3	0
4" × 3" deal, rebated and moulded frames	F.R.	1	0
4½" × 3⅜" " " " "	"	1	4
1¼" deal tongued and moulded window board, on and including deal bearers	F.S.	1	9
1¼" deal treads, 1" risers in staircases, and tongued and grooved together on and including strong fir carriages	"	2	6
1⅛" deal moulded wall strings	"	2	1
1⅛" " outer strings	"	2	4
Ends of treads and risers housed to string	Each	1	9
3" × 2" deal moulded handrail	F.R.	1	3
1" × 1" deal balusters and housing each end	Each	2	0
1⅜" × 1⅜" " " "	"	2	9
3" × 3" deal wrought framed newels	F.R.	1	3
Extra only for newel caps	Each	6	0
Do., pendants	"	6	0

SMITH AND FOUNDER

		£	s.	d.
Rolled steel joists, cut to length, and hoisting and fixing in position	Per cwt.		16	6
Riveted plate or compound girders, and hoisting and fixing in position	"	1	0	6
Do., stanchions with riveted caps and bases and do.	"		19	0
Mild steel bar reinforcement, ½" and up, bent and fixed complete	"		17	6
Corrugated iron sheeting fixed to wood framing, including all bolts and nuts 20 g.	F.S.			11
Wrot-iron caulked and cambered chimney bars	Per cwt.	1	10	0

PLUMBER

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

		½" s.	½" d.	¾" s.	¾" d.	1" s.	1" d.	1½" s.	1½" d.	2" s.	2" d.	4" s.	4" d.
Lead service pipe and fixing with pipe hooks	F.R.	10		1	0	1	3	2	0	2	10	—	
Do. soil pipe and fixing with cast lead tacks	"	—		—		—		—		—		5	6
Extra, only to bends	Each	—		—		—		—		2	0	6	9
Do. to stop ends	"	6½		8		9		11		1	0	—	
Boiler screws and unions	"	3	3	3	9	5	0	8	0	—		—	
Lead traps	"	—		—		—		6	3	8	9	—	
Screw down bib valves	"	6	9	9	6	11	0	—		—		—	
Do. stop cocks	"	7	0	9	6	12	6	—		—		—	
4" cast-iron ½-rd. gutter and fixing	F.R.											1	0
Extra, only stop ends	Each											1	0
Do. angles	"											1	6
Do. outlets	"											2	9
4" dia. cast-iron rain-water pipe and fixing with ears cast on	F.R.											1	2
Extra, only for shoes	Each											1	3
Do. for plain heads	"											5	6

PLASTERER AND TILING

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

GLAZIER

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

PAINTER

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

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INFO

365. THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

THERMOLUX LAMINATED DIFFUSING GLASS IN EAST & WEST LIGHTED FACTORY BUILDINGS :

Graphs showing the relation between illumination and industrial efficiency.

DESCRIPTION :

The graphs show the months during which daylight, adequate for various working efficiencies is obtained on horizontal indoor working planes.

CONDITIONS :

The foot-candle intensities are based on outdoor averages derived from the whole sky over a period of 10 years in the latitude of 51° 26' N. at the various Greenwich Mean Times indicated.

ILLUMINATION :

Under the given conditions it may be assumed that the illumination is inadequate during the months when the curve falls below the desired performance percentage line.

SUNLIGHT :

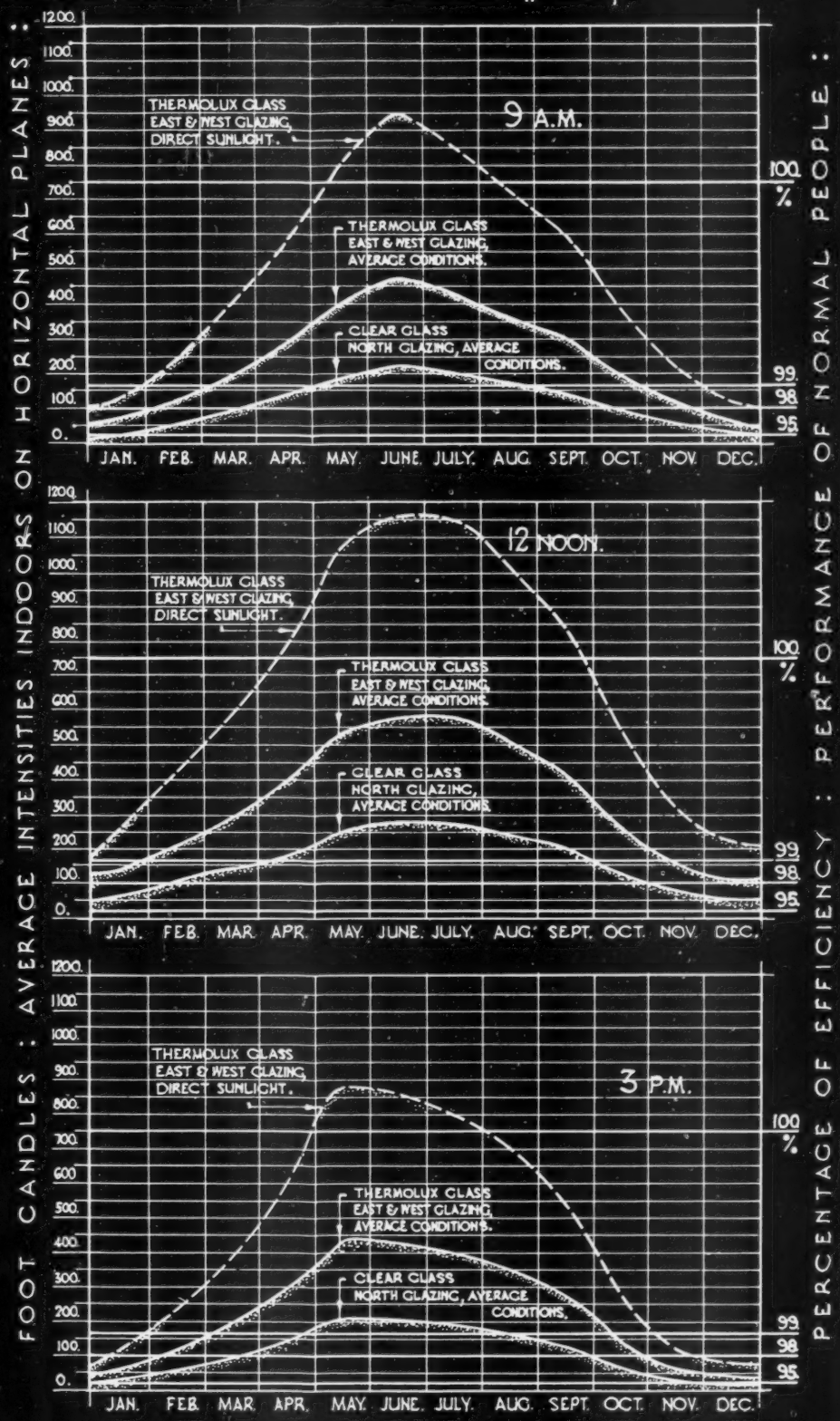
It will be noticed that for clear glass North glazing, only the average intensities are given, as increases due to direct sunlight do not, on an average, exceed 2½% with this form of glazing.

Using East and West Thermolux glazing however, these maximum intensities, due to direct sunlight, are approximately double the average figures and are shown dotted on each graph.

RELATIVE EFFICIENCY :

The percentages given represent the degree of efficiency of normal people in detecting objects which subtend an angle of two minutes at the eye e.g. 6-point type at a distance of 13".

This is 6 point type



Information from The Thermolux Glass Co. Ltd.

Figures have been extracted from the Joint Report of the Industrial Health Research Board and the Illumination Research Committee entitled, "The Relation between Illumination and Industrial Efficiency. I. The Effect of Size of Work."

INFORMATION SHEET : SMOOTH-SURFACED LAMINATED DIFFUSING GLASS, No. 2.

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

THE ARCHITECTS' JOURNAL
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INFORMATION SHEET
• 373 •
THERMOLUX DIFFUSING GLASS

General :

This is the second sheet dealing with top-lighted buildings of different orientations, and shows by means of graphs the relationship between illumination and efficiency. For the actual distribution of light within the buildings see Sheet No. 1 of this series (No. 372).

Test Conditions :

Figures used in the calculations were extracted from the joint report of the Industrial Health Research Board and the Illumination Research Committee, entitled "The Relation between Illumination and Industrial Efficiency. 1. The Effect of Size of Work." The investigation was carried out at the National Physical Laboratory, where the performance of eighteen normal male subjects was measured. The work done consisted in cancelling all the Landolt broken rings having a given gap orientation on specially prepared test sheets. The test characters were printed in black on matt paper having a reflection factor of 0·84, and the gap width was such that, at a distance of 13 in. from the eye, the angle subtended at the eye was two minutes. This angle corresponds with that of 6-point type, shown in the panel overleaf.

Times of Tests :

The tests were made at 10.30 a.m. and 2.30 p.m. over a period of days with short test periods at varying illuminations. It should be noted that a considerable increase in illumination would be required if the work were finer or if the reflection factor were less than the figure of 0·84 utilised, e.g. objects subtending an angle of less than two minutes at the eye, or objects subtending two minutes at the eye but placed on a darker coloured background. Furthermore, for spells of work comparable in duration with those of industry, the percentages of performance would be relatively lower than those shown.

Light Transmission and Diffusion :

65 per cent. to 70 per cent. of the light is transmitted through Thermolux glass of 1/25 inch interlayer, the sun's light rays being diffused and directed evenly into the whole body of the room, i.e. they are not concentrated in patches.

Heat Losses from within :

The coefficient of heat transmission is 0·6 to 0·7 B.T.U. per square foot per hour per 1 deg. F. difference in temperature : transmission through ordinary glass is 1·0 to 1·1.

Comparative Lighting and Heat Insulation Efficiency of Thermolux and Clear Glass Roofing :

Roof dimensions are as shown on Sheet No. 372, "Smooth-surfaced laminated diffusing glass No. 1." The "Comparison of Light available indoors" refers to the relative intensities of illumination available at the working plane indoors, assuming that a value of 100 represents the light transmitted by an ordinary North glazed roof of 60° pitch when the sky is evenly overcast.

The expression "Overcast" means a completely overcast grey sky.

"Heat Losses" are the percentages of the losses through an ordinary north glazed roof of 60° pitch, containing clear or cast glass.

Where glazing on both slopes is indicated, it is assumed that the total glass area is twice the area on any one slope.

Colour Values (indoors)

The light transmitted by the glass is undistorted, and gives all indoor colours true relative values with richness of tone.

Method of Glazing

The threads of glass silk forming the interlayer must always be glazed parallel to the ground (in roofs at right angles to the slope, in canopies parallel to the wall, in ceiling lights at right angles to the best source of light). The glass must not be cut after manufacture, otherwise it can be glazed in the normal way.

Specifications :

Specifications of sizes must state distinctly which dimension is the height, or parallel to which dimension the threads are to run. As an alternative, plans should be attached. If the glass is intended for roofs or lay (ceiling) lights this must be stated, as glass for this purpose is supplied of greater thickness than for upright glazing.

Standard Thicknesses, Sizes and Prices :

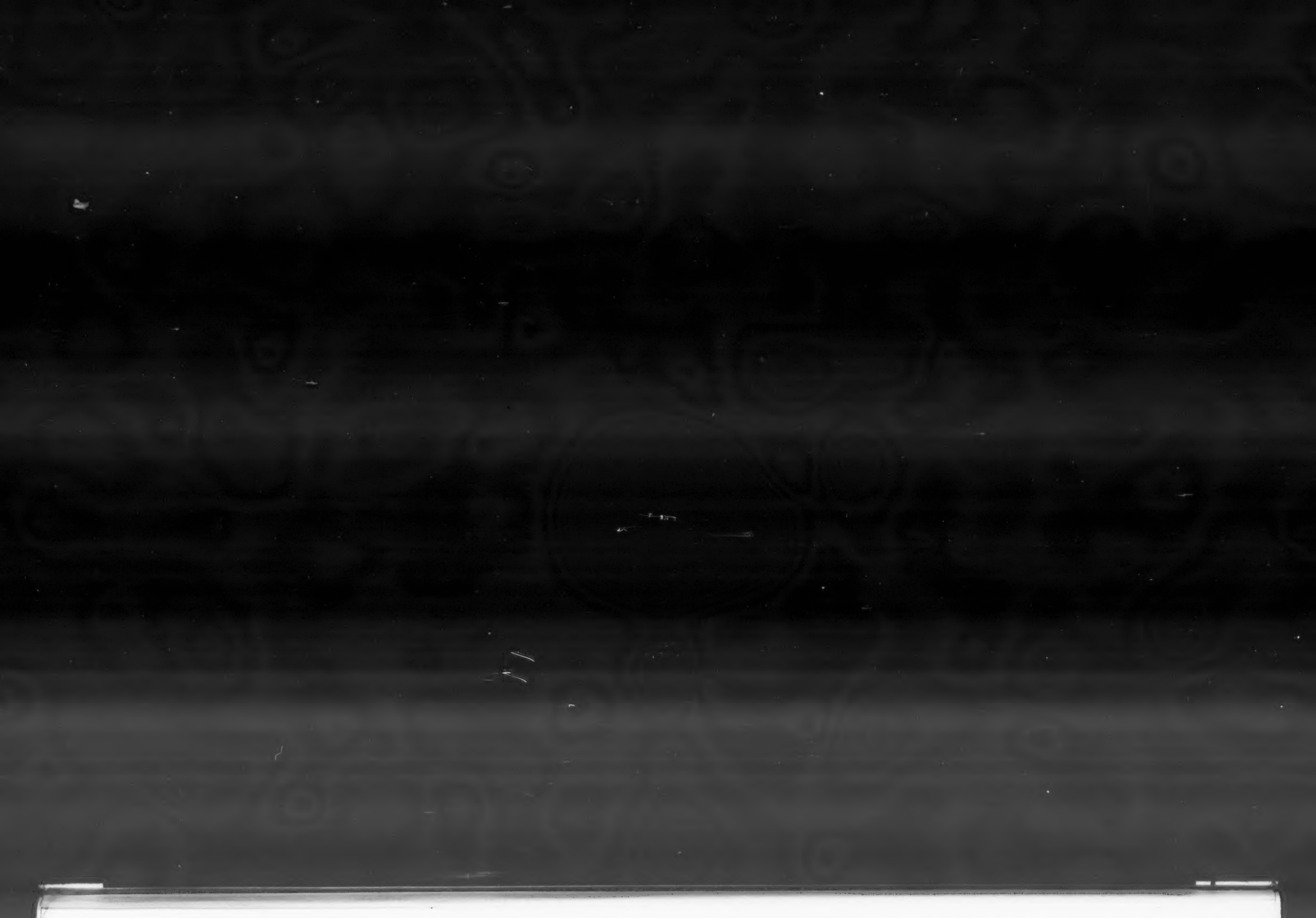
See material on the reverse side of the previous Sheet of this series (No. 372).

Copies of Building Research Station Reports Nos. 190 (Heat Losses), 208 (Light Distribution) and 236 (Heat Gains) are obtainable from The Thermolux Glass Co., Ltd.

Information from : The Thermolux Glass Company, Limited
Address : 1 Albemarle Street, Piccadilly, London, W.1
Telephone : Regent 1321-2

Orientation of glazed section of roof	Pitch of roof	Weather	Comparison of light available indoors		Heat Losses	
			Thermolux	Clear	Thermolux	Clear
North	60°	Overcast.	67	100	60	100
		Fine.	67	100	60	100
South	30°	Overcast.	85	125	60	100
		Fine.	200	Very patchy	<60*	<100*
East and West ...	30°	Overcast.	170	250	120	200
		Fine.	400	Very patchy	<120*	<200*
North (Clear) ...	(60°)	Overcast.	185		160	
and South (Thx)	(30°)	Fine.	300		<160*	

* Night losses as under overcast conditions.



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LLOYD 1/8" & 3/16" HARDBOARD • CEILING AND WALL LINING •

SIZES •

THICKNESS.	WIDTH.	LENGTH.
1/8 & 3/16 inch.	5 Feet.	2' 4' 6' 8' 10' 12' up to 16' 0" maximum

COLOUR •

The board is slightly mottled and is light in colour. This makes it a good light reflector for walls and ceilings.

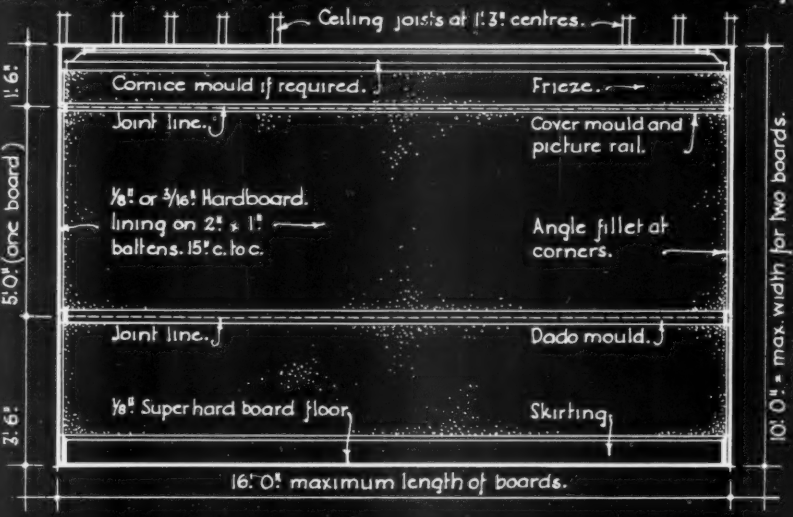
SURFACE •

The board can be decorated immediately after fixing as no drying out is necessary.

The surface is smooth, hard, & durable. It will not crack and can be finished with Wax polish, French polish, Stain, Paint or Distemper, or it may be left its natural colour.

A METHOD OF LINING THE WALLS OF A ROOM WITHOUT VERTICAL JOINTS & WITH A MINIMUM OF CUTTING.

ELEVATION OF A WALL OF SUGGESTED ROOM • Scale of feet - 1/4 inch = 1 foot.



The total height of the lining is obtained from the width of two boards.

The boards should be cut with a fine saw with the face of the board uppermost.

All nails to be galvanised & driven just below the surface, 1/2" from edge in pairs & in a straight line.

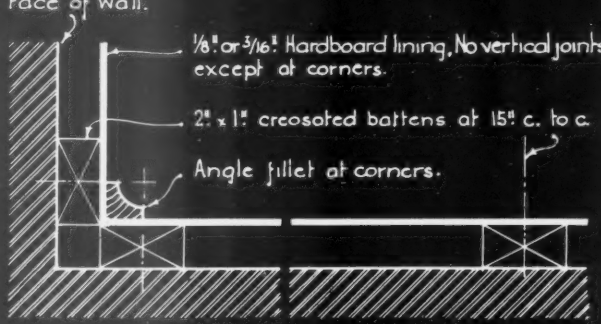
All horizontal joints require header battens.

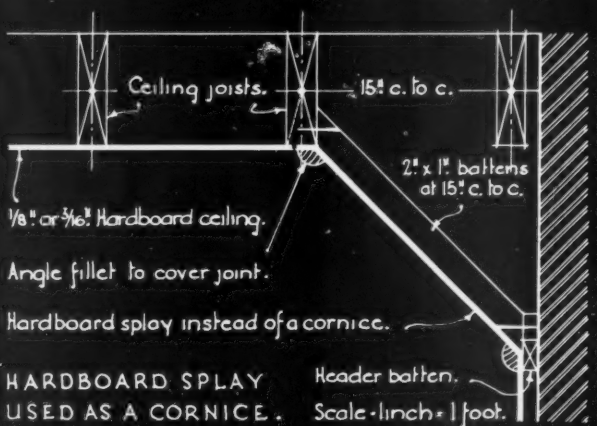
Joints in ceiling for paint or plaster finish made with 2 1/2" linen strips glued over lightly butted flush joints.

Fibre cover strips may be used to form panels on the ceiling apart from the run of the joints, & fixed by galvanised nails.

Hardboard may be used for separate panels in moulded wood framing.

1/4 FULLSIZE DETAIL OF WALL FIXING AND TREATMENT AT CORNER OF WALL •





HARDBOARD SPLAY USED AS A CORNICE. Scale - 1 inch = 1 foot.

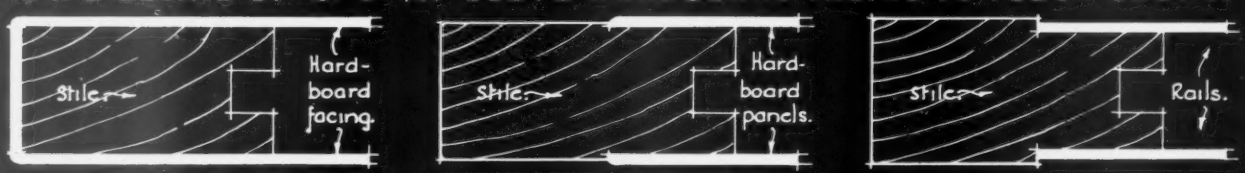
VARIOUS USES OF 1/8" OR 3/16" HARDBOARD FOR FURNITURE & INTERIOR DECORATION:

Lloyd hardboard is suitable for cabinet work, built-in furniture & fittings, shop windows, counters, sign boards, etc.

The hardboard is not rigid but is flexible in both directions and may be bent to an appreciable curve.

It is not laminated and has no grain & therefore will not split or warp. Facings, etc. are usualy fixed by glue.

1/2 F. S. DETAIL OF 1/8" & 3/16" LLOYD HARDBOARD FACING TO FLUSH DOORS:



Information from Edward Lloyd Wallboards Ltd.

INFORMATION SHEET: LLOYD HARDBOARD · 4 · WALL & CEILING LINING

SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1 • Olivia de Burgh.

Supplement to THE ARCHITECTS' JOURNAL for July 2, 1936

THE ARCHITECTS' JOURNAL
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INFORMATION SHEET

• 374 •

INSULATING BOARD

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

General :

This is the fourth of a series of Sheets dealing with the uses of Lloyd Insulation Board and Hardboards in building work.

Lloyd Hardboard :

This board is made from selected wood fibre similar to that used for ordinary insulation board, but is compressed during manufacture to give considerably greater toughness and durability. Due to its homogeneous structure, the board will not split or disintegrate.

Surface :

The surface of the material is hard, grainless and smooth and may be left in its natural condition for facing work ; if desired, however, the board may be wax or French polished, painted or stained. Decoration may be applied immediately after fixing.

Jointing :

The edges of hardboard may be butted and the joints treated in a similar manner to ordinary insulating board (see Sheet No. 302), i.e. with wood or metal cover strips, mouldings, etc. Headers should be placed across all horizontal edges and nailed on in the same way as Lloyd Insulating Board.

Uses :

Hardboard, besides its use for panelling, may be used for the covering in of furniture and shop fronts and fittings generally, both on straight and curved faces. Cutting is done with a fine saw, keeping the face of the board uppermost.

Temporary Shuttering :

When used for this purpose, the board leaves a smooth plane face to the concrete and each board may be used several times without damage or disintegration.

Previous Sheets :

Previous Sheets of this series were No. 302, No. 316, and No. 336.

Manufacturers : Edward Lloyd Wallboards, Ltd.
Address : Shell-Mex House, Strand, W.C.2.
Telephone : Temple Bar 9221.

145.

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• PAXTILE • ASBESTOS SOUND INSULATING TILES :

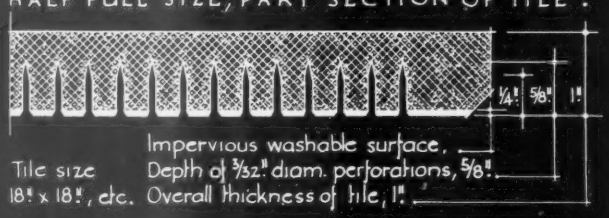
CONSTRUCTION : Paxtiles are composed of an hygienic asbestos material coated with an impervious washable surface of special elastic finish, the whole tile surface being perforated to a depth of 5/8" by 3/32" diam. holes at 3/8" centres.

PHYSICAL PROPERTIES : The tiles are rotproof, fire & vermin-proof, with the following absorption values, N.P.L. tested : 55% at 250 cycles, 75% at 500, 85% at 1,000, and, 80% at 2,000 cycles frequency per second.

SIZE & WEIGHT : Standard tile size, 18" x 18" x 1" thick with bevelled edges. Other sizes available, 36" x 18", 18" x 9", & 9" x 9". Weight of tiles, 1·5 lbs per sq. foot.

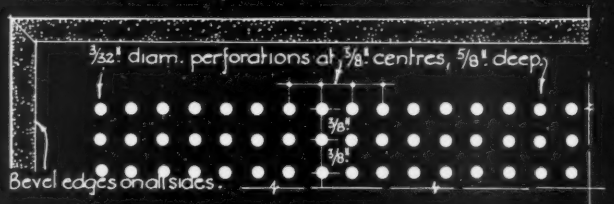
DECORATION : Tiles may be spray or brush painted without impairing efficiency, the sound absorption taking place solely within the unpainted perforations.

HALF FULL SIZE, PART SECTION OF TILE :



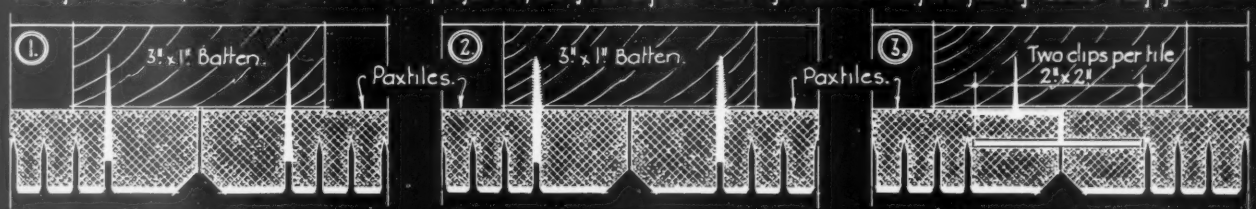
Tile size 18" x 18", etc.

HALF FULL SIZE, PART ELEVATION OF TILE :



METHODS OF ATTACHING THE TILES TO 3" x 1" STANDARD FIXING BATTENS :

NOTE • Battens are required to be parallel and level, spaced at 18" centres, in one direction only, the space between may be used for conduits, etc. The battens should preferably be given a fire resisting treatment before fixing. Scale • Half full size.



Attachment by special lost head nails through a perforation at each corner.

Attachment by wood screws with heads stopped for invisibility.

Special 20 gauge metal clip with staggered legs driven into the edge of the tile.

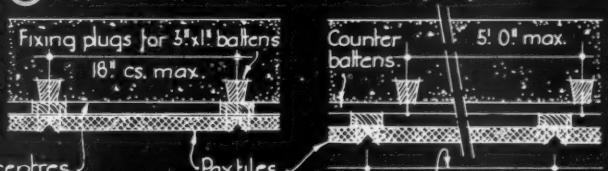
APPLICATION OF TILES TO WALLS AND CEILINGS :

(A.) Wood studs, joists, rafters, etc. plastered or unplastered.

NOTE • If 2" minimum thickness joists, etcetera, are spaced accurately at 18" cs. Paxtiles may be fixed directly thereto.

On existing wood ceilings & walls the battens are laid at right angles to the joists and nailed thereto.

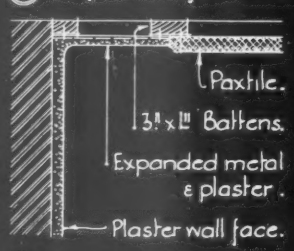
(B.) Application to concrete or masonry surfaces.



NOTE • In each of the four methods of application shown the Paxtiles may be fixed to the battens by any one of the methods 1, 2, and 3 shown above.

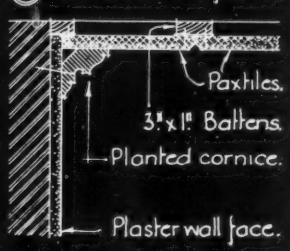
DETAILS SHOWING METHODS OF TREATMENT AT CORNICES, WALL PANELS, & FREIZES :

(1.) Marginal ceiling surround.



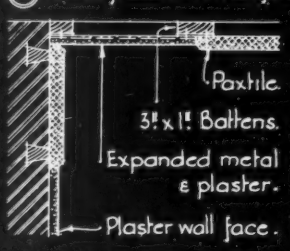
Margins may be of any width to suit the turnout of 18" tiles and may be stepped to suit irregular shaped rooms.

(2.) Planted cornice finish.



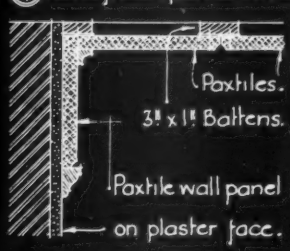
Detail shows tiles taken up to side wall, being cut as required. The cornice is fixed to the wall only.

(3.) Paxtile freize with margins.



Paxtile freize may be 18" or 36" deep using whole tiles or any multiple of 9" by the use of half tiles.

(4.) Paxtile freize & planted cornice.



The wall panel may be of any depth as noted on the left, & may be finished against a stop mould as shown.

Information from Newalls Insulation Company – branch of Turner & Newall, Ltd.

INFORMATION SHEET : SOUND INSULATING TILE UNITS.

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

INFORMATION SHEET • 375 • SOUND INSULATION AND ABSORPTION

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INFORMATION SHEET

• 375 •

SOUND INSULATION AND ABSORPTION

Product : Newalls Brand Paxtile

Description :

Paxtiles are tiles made from pure asbestos fibre having a surface coating of a special washable elastic finish, perforated with small holes to give high sound absorption qualities.

Use :

Paxtiles are designed for use in two ways—

(*a*) for lining walls or ceilings in cinemas, theatres, and auditoria, and in smaller rooms, such as board rooms, wherever acoustic control or correction is required, and

(*b*) for " quieting " noise-producing centres, such as typewriting rooms, telephone exchanges, machine rooms, etc., and for protecting rooms against external noise, e.g. rooms in hotels, flats, offices and schools where they are subject to severe traffic or other external noises.

Properties :

The tiles, being composed of asbestos, are fireproof, vermin proof, damp, and rot-proof. Since the tiles do not depend for their efficiency upon the surface porosity, but on the perforations, they can be decorated in any way and as often as required without impairing their efficiency.

Tests by the National Physical Laboratory :

The following table is extracted from the National Physical Laboratory's Report, reference S.264, February 27, 1935, on " The Measurement by the Reverberation Method of the Sound Absorption Coefficients of Newalls Acoustic Tiles."

Material as tested	Absorption coefficients (to nearest 0.05 for frequency bands in region (c.p.s.))			
	250	500	1000	2000
Newalls Acoustic Tiles, $\frac{13}{16}$ inch thick approx., perforated on the front surface with holes $\frac{1}{8}$ in. diameter, $\frac{3}{8}$ in. deep, at $\frac{3}{4}$ in. centres. The tiles were laid without fixing, on $1\frac{1}{2}$ in. by $\frac{3}{4}$ in. battens on the floor.	0·55	0·75	0·85	0·80

February 27, 1935.
S.264.

The mean sound absorption coefficients were calculated on the basis of the Sabine formula, as modified by Eyring, from instrumental measurements of the period of reverberation of the chamber before and after the introduction of the test specimen.

Name of Manufacturers : Newalls Insulation Company, branch of Turner & Newall, Ltd.

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

Telephone : Waterloo 6214

Manchester Office : 10 Parsonage Gardens

Telephone : Blackfriars 7441/2

Newcastle Office : 51 Grainger Street, Newcastle-on-Tyne

Telephone : Newcastle 26757

Glasgow Office : 70 Wellington Street, Glasgow, C.2

Telephone : Central 1364