

THE ARCHITECTS' JOURNAL & *Architectural Engineer*

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FROM AN ARCHITECT'S NOTEBOOK.

THE COLISEUM.

To see it crumbling there, an inch a year; its walls and arches overgrown with green, its corridors open to the day; the long grass growing in its porches; young trees of yesterday springing up on its rugged parapets, and bearing fruit: chance produce of the seeds dropped there by the birds who build their nests within its chinks and crannies; to see its pit of fight filled up with earth, and the peaceful cross planted in the centre; to climb into its upper halls, and look down on ruin, ruin, ruin, all about it; the triumphal arches of Constantine, Septimius Severus, and Titus, the Roman Forum, the Palace of the Caesars, the temples of the old religion, fallen down and gone; is to see the ghost of old Rome, wicked, wonderful old city, haunting the very ground on which its people trod. It is the most impressive, the most stately, the most solemn, grand, majestic, mournful sight conceivable. Never, in its bloodiest prime, can the sight of the gigantic Coliseum, full and running over with the lustiest life, have moved one heart as it must move all who look upon it now, a ruin.

CHARLES DICKENS.
"Pictures from Italy."

9 Queen Anne's Gate. Westminster.

Design for the Campanile and Cloister for the new Roman Catholic Cathedral of Dublin

Patrick Abercrombie, A.R.I.B.A., Architect



The campanile, which is to stand behind the cathedral at the head of Capel Street, is to be 500 ft. high, in the form of a modified Irish round tower, crowned with a figure of St. Patrick. The encircling arcade would contain medallion busts of the Irish Saints in the spandrels of the arches, and, below, a series of white limestone cenotaphs of famous Irishmen.

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Town Planners in Kent

THIS year's annual country meeting of the Town Planning Institute, by a fortunate circumstance, took place in Canterbury. Fortunate, because the meeting coincided with Professor Abercrombie's year of Presidency of the Institute, and followed the issue of his able report on the Regional Planning of East Kent.

The necessity of such a report is obvious to all who know and love this corner of England and have watched, with perhaps an excusable trepidation, the march of events connected with the discovery and development of the coalfields in the area.

Kent, and particularly East Kent, with the metropolitan centre of Canterbury, is crowded with the historic memories and movements of our race.

Known throughout the ages as the "Gateway of England," Canterbury, with the Cinque Ports, is indissolubly connected with the flow of classic civilization up from the Mediterranean, through the Rhone Valley, across France, and so to this country.

Whilst the barbarous Norse and Danes came from the north and the east, it was the civilizers, though in the stern gait of conquerors, the Romans, and the Normans, who came from the south.

It is not necessary to go further back than the great war to realize how at once the Channel Ports, with Richborough, an old Roman settlement, at once sprang into more than their old prominence as the starting places for the transport of our armies. Not only is this particular area of England dealt with in this report, rich in historical associations, but it includes some of the most beautiful country in this island. To those who have once surrendered themselves to the spell of the Thanet marshes, with their great mysterious churches and close-huddled villages, a cluster of comfortable and welcoming little houses of mellow tile roofs and warm brick walls, the very name of such a place as St. Nicholas-by-Wade, gives a romantic touch that the place itself does but enhance. And Kent is peculiarly rich in such villages. Neither are the larger and more important towns, such as Deal and Sandwich, any the less beautiful or significant. Sandwich, which has slumbered so peacefully during the recent centuries, was at one time the port from which Edward III sailed with his conquering armies.

To the north, Reculvers, the ancient Roman camp of Regulbium, guarded the approach of the Thames and became in fact a northern Warden of the Marsh. Beyond the mere sentimental affection that everyone who knows and has lived in this neighbourhood must feel for it, it has a national importance, or, if we include Canterbury, an almost international importance. Canterbury is not only the Holy City of Kent, but the Holy City of England and the Empire.

And, whilst the conquering armies came and went, the Kentish peasant and fisherman pursued their avocations throughout the centuries. Fishing and agriculture, with the handicrafts of weaving, shipbuilding, woodworking, etc., are the traditional industries of the region; while of late years the provision of shelter for visitors and tourists, who come in ever-increasing numbers, has added wealth to the inhabitants of some of the more favoured centres. So that to the lover of Kent, and particularly East Kent, the thought that all this richness of beauty and tradition is threatened with an industrial development on the accustomed lines causes a shudder of apprehension. A shudder, be it quickly added, that passes as one reads through Professor Abercrombie's illuminating report. For here is the nucleus of a great idea, an idea as revolutionary in its way, and perhaps fraught with a greater hope for humanity than was the foundation and development of garden cities.

The garden city movement, together with that of town-planning, and now of regional planning, owed their inception to the disastrous mistakes of Industrialism during the nineteenth century.

Professor Fleure has stated that the development of the coal-fields and the industrial areas of this country, taking place as they did in the more remote and barren districts, far away from the historic centres of culture, owed a good deal to this fact, which was responsible in no small measure for the harshness and brutality of expression which characterized such development.

This era of development was expressive of a pioneer order of energy which, admirable and almost inevitable in its way, left no room for the consideration of ideas of order and the amenities associated with our older towns and villages. All who have any intimacy with the industrial centres of the midlands and the north in their earlier and more typical phases, would offer up a heartfelt prayer that the beautiful garden-like county of Kent be spared such horrors. And it is with feelings of immense relief that one reads Professor Abercrombie's reports, which foreshadow a new order of events. For the inner meaning of this document is, that the old careless and inhuman form of development is not only wasteful of life and capital, but is stupid and unnecessary.

Here is foreshadowed an industrial development which, as we have said, is embryonic with a great hope for the future. A development which, while allowing full play to the necessity of mining and the kindred industries which are bound to accompany mining, will conserve the amenities of the region, and if intelligently realized will allow for a higher standard of living and a more advanced and pleasanter social existence than was possible under the older conditions.

It is not proposed here to go into the details of the report,

which embraces the considerations of the problems of housing, traffic distribution, and the conservation of amenities.

Fortunately the very conditions of the coal industry obtaining to-day would appear to favour a humanistic treatment of the Kentish problem. The difficulty of dealing with the by-products, the accumulation of the slag-heaps in the iron and steel districts, the poisoning and blackening of the country-side by the emission of foul smoke-clouds, are problems that all seem to be in a way of scientific solution, and if, together with the solution of these practical problems in detail, we can in Kent embody the ideals of civic betterment with respect for the historic centres and monuments of the past, we shall be in a fair way to solve the problem of a neo-technical development like that advocated by Professor Geddes in "Cities in Evolution."

The Leverhulme Collection

With the Leverhulme art collection it was indeed "Hail and farewell." By resuscitating that veteran phrase, Mr. Punch hit off a delicate situation with his customary felicity; for hardly had the general public so much as heard of the existence of these art treasures before there came the disheartening announcement that these "articles of bigotry and virtue" were to be sold in New York. Remembering Port Sunlight and the interest taken by Lord Leverhulme in the Liverpool School of Architecture, one cannot accuse him of lack of national or of local patriotism; yet it is impossible to stifle a lingering regret that, doubtless foreseeing with his native astuteness some such unfortunate—or perhaps too fortunate—contingency as that which has arisen, he did not take effective steps to prevent it. That he did not is another arrow in the quiver of those who demand a heavy export duty on all works of art leaving this now seriously displenished country.

Commerce, Art, and Traffic Congestion

Vienna and Manchester have at least one aspiration, or at least one need, in common. Each is seeking to provide itself with an underground railway. With respect to Manchester it is indeed strange that so enterprising a city should so long have denied itself the advantages of a tube railway. Vienna, one can well understand, distrusted these descents into the nether regions, preferring to mortify its æsthetic instincts with a tramway system that is sometimes hardly distinguishable from what we should regard as a street railway, which of course, in a sense, it actually is, though it dare not get up the speed which will be possible with an underground system. But the common need both of the intensely commercial city of Cottonopolis and of the eminently artistic city on the blue Danube, is the relief of traffic congestion, and on this matter they may learn much from each other and from London.

Chromatic Concrete Roads

Modern road construction becomes more and more complicated. It seems about to take on a fresh complexion. The borough engineer of Camberwell—a name auspicious for correct road-making—stated, in a paper read before the Institution of Municipal and County Engineers, that experiments were being made in laying concrete roads in different colours. What is the precise object is not perfectly clear, but one may be permitted to hazard a guess or two. Is it perchance another ingenious essay towards evolving a brighter London? Or will the various colours render the very necessary service of enabling us to identify on sight the different districts through which we happen to be passing too swiftly to read the singularly inefficient street labels, which are often quite illegible, especially when the borough council has omitted to provide them? Perhaps the Communistic boroughs will be distinguished by red flagstone sidewalks, as well as aggressively crimson roadways. Fascist boroughs would

give us a black outlook, while those of unassuming but unswerving or non-skidding loyalty to the constitution, might adopt the primary colours that so intrigue us in the Union Jack. If, however, the object is neither political nor topographical, but purely æsthetic, our personal vote is for the warm brown road which adds so much to the charm of Bournemouth, for example.

Hamilton Terrace

St. John's Wood still retains much of its Victorian unassertive suburban character; but not all. Some time ago the Harrow estate allowed the formula of dull but satisfying houses in Hamilton Terrace to be interrupted by a row of portentous red-brick mansions full of "beef and bandages." This terrace is so magnificent in its length and vista that this did not matter so much, bad as it was. Now a more subtle disease has started. Railings are being torn down and anæmic posts and chains are appearing, and there are little ill-considered garages. A general destruction of the dignity of a fine street is the consequence. The late Mr. Strang, who lived here for years, used to say that the road always reminded him of Paris; one knows what he meant. It is a noble avenue, so far undisturbed. We should like to appeal to the Harrow estate authorities, who own so much property hereabouts, and this terrace in particular, to exercise more judgment in their own interests. The permanent value of this property is bound up with such considerations; and, to put it on the lowest grounds, it would be good business to preserve the character of this terrace. Now that the new President of the R.I.B.A. has come to live in the terrace its character should be properly safeguarded.

The Neighbourhood

Northwick Terrace was a decently conceived architectural formula, and quite pleasant. One side has evidently been saved, and has been recently tidied up. The corner on the St. John's Wood Road has been pulled down. If a new building on it is to be a huge red-brick erection, this street will have lost its value. Maurice Hewlett lived here for some years. He at least would have been saddened by the change. A new synagogue has recently been built in St. John's Wood Road, and whoever is responsible is to be congratulated on the success of the design. It seems to belong to the locality. It is delightful to find a building that might have been there in the early days of St. John's Wood.

A Good Brick Going

Sound, well-burnt bricks have proved their value in English architecture and building. They neither rot nor rust like timber or iron, and once laid in good mortar are likely to endure through centuries. The supply of really lasting bricks is a matter of public importance at the present time, and a hard, non-absorbent brick that will exclude rain and resist frost, and can also be procured at a reasonable cost, is desired by many home-builders. Just the right kind of brick for general purposes was supplied until recently by a Surrey brick company at prices which permitted local builders to offer it as an alternative to Flettons. It was a wire-cut stock varying in colour from red to dark purplish grey, and was hard enough to require chisel and hammer to cut it. Being frogless, it was an admirable pavior when laid flat as well as when laid on edge or on end, and as it was also distinctly fire-resisting it was adapted for making fireplaces and hearths. Now, unfortunately, inquiries for this particular brick reveal the fact that it is no longer manufactured, just when it is most needed! The nearest approach to it in general soundness and appearance is the pressed purple facing made by the same firm, but this commands a far higher price, and, having a frog on both faces, is not so extensively useful. It is to be hoped that the company may be public-spirited enough to reintroduce the sound stock brick. Such an article at a reasonable price would help materially towards solving the housing problem.

An Alsatian Home

By B. S. TOWNROE

A TREASURE HOUSE of Alsace is situated at Sélestat, about twenty miles south of Strasbourg. This belongs to the Senator Lazare Weiller, who has modernized some historic buildings and created gardens that are unique in the east of France. Here he entertains visitors from all parts of the world.

The estate is called the Lieutenancy, no doubt owing to the fact that at one time it was occupied by François de Roze de Provanchères, a lieutenant of the king, sent to Sélestat to represent the monarch in 1634. After that date the house became the official residence of the king's representative, and in 1744 Louis XV, on his way from Strasbourg to Brisgau, stayed there for the night. Much of the ancient building has been skilfully retained, but the whole house has been modernized so as to provide every comfort for the many guests, not only from France, but from England and the United States, who visit M. Weiller.

On arrival at the station of the little town of Sélestat, visitors find an ugly water tower, open gardens, and broad boulevards—relics of the German occupation. But the town itself is full of old houses and quaint corners that have been untouched, and the streets remain so narrow that a car has to proceed cautiously to avoid accidents.

This marvellous Alsatian house, that is one of the topics of conversation throughout the whole of the Department, is tucked away at the bottom of the Rue Babil under the shadow of the cathedral. Nothing quite like it, with its spacious courts and gardens laid out in a style that combines native taste with Italian art, was ever known under the German régime, and certainly few museums, except possibly the Louvre, contain such exquisite specimens of craftsmen's work—paintings, china, carving, silver work, clocks, old furniture, carpets and wrought-iron. The very entrance gate with a grill made of iron, shaped in the form of a semi-circle, delicate and strong, flanked on

each side by openings in the garden wall, also filled with latticework in iron, makes an immediate impression of fine taste and open-minded liberality.

Before reaching the entrance gates, but within a few yards, and thus typical of the democratic spirit of France, is an Alsatian farmhouse, all the inhabitants of which, adults as well as children, appear to spend a good part of their lives watching the entry and departure of the distinguished guests, all of whose movements they can spy through this open tracery. To the right is a lodge of octagonal form designed in the traditional Alsatian style, while in front stands the house itself with a massive porch and a balcony above. But most eyes will turn to the roof, with its typical tiers of windows, and the stork's nest on top. The "cigogne" seemingly knows a good home, and year after year the same lady stork has brought up her family in the nest built on the cart-wheel considerably placed on the roof by the owner of the property, while her mate visits the marshes and brings back frogs to supply the needs of the growing family. Judging from the clacking of beaks, which commences in the early hours of the morning, and can be heard at intervals throughout the day until after 10 p.m., life is strenuous for storks, even in a land so rich as Alsace. Their nest, however, adds just the touch of native romance needed to complete the atmosphere of the Lieutenancy.

As the visitor enters the gates and looks towards the east, he will see the oldest part of the house—the right wing on to which three bedrooms open, and at the end of which there is a small outside staircase. The ground floor has been converted into a garage from which entry may be effected into a series of enormous cellars. Some of the cellars are stored with wine made from grapes grown on vineyards not far away, and labelled with a picture of the house itself. Thus guests are not only privileged to live in an Alsatian home, but they may also drink the home vintage.



THE HOUSE FROM THE NORTH-WEST.



THE HOUSE FROM THE EAST.

Passing up the stone steps through the front door, the visitor enters into the great hall with Norman pillars supporting the heavy oak beams across the ceiling. On the opposite side the windows look out to the north, and the thickness of the walls immediately attracts notice, for they are in parts the original ramparts that were built in the thirteenth century for a palace of Charlemagne. Tarade, a pupil of Vauban, in 1675 built fortifications round Sélestat and utilized some of the old defences, incorporating them in the Lieutenant's house.

In the modernization of this historical building, the windows have been made to admit more light, and the rooms so arranged that they open out into each other. The study is divided from a little salon solely by a low wrought-iron railing, and from the principal drawing-room by a magnificent specimen of Alsatian wrought-iron lattice-work. Every detail has been thought out with the utmost taste, and *objets d'art* of inestimable value abound. The study itself contains several valuable pictures, including two by Canaletto, and a portrait of M. Lazare Weiller by the well-known French artist Jean Béraud. There is also a bust of Vauban, by Caffieri, and on the low bookshelves numerous books show the catholic outlook of their owner.

The drawing-room, which leads out to the north, is notable for the large mantelpiece in the grey stone of the Vosges, surmounted by a bust of Beatus Rheanus, the founder of a university at Sélestat at the time of the Renaissance. He was one of the first humanists in Europe. Englishmen will also discover with delight on the walls original paintings by Hopner, Lawrence, Romney, and Reynolds. Just outside the door is a portrait of a group taken on the terrace of M. Weiller's house at Angoulême, when he entertained the Prince of Wales and Lord Derby, who was at that time British Ambassador in Paris.

On the other side of the great hall are two dining-rooms. The small one is used by the family when they are alone, and on the old oak dressers is arranged a remarkable collection of pottery of Metthey, while on the Italian dining table of the principal dining-room, only used on state occasions, there is set out a collection of Hanong china. Round the walls are portraits by distinguished painters.

The rooms on the first floor open out on a wide Alsatian corridor, and are all furnished with the same exquisite taste. The most perfect is a little study with Louis XVI panelling,

containing an alcove hung with antique tapestry. After the Armistice a local German attempted to take this panelling into Germany, but fortunately for France it was preserved. One of the surprises of this room can only be enjoyed at night time, for out of it leads a balcony looking down upon a Florentine garden across to another Alsatian house in the grounds, that is occupied during part of the summer by M. Weiller's married daughter and family. Standing there on a dark night our host said playfully, "Don't you wish it was moonlight, so that you could see the roses blooming?"

A lady present said that unfortunately it was impossible to dictate to the weather clock, but M. Weiller remarked, "Ah! I have a better way." With that he touched an electric switch, and hidden floodlights, skilfully concealed, illuminated all the gardens in a delicate light like that of the moon.

The grounds are as charming as the interior of the house. They have been laid out in a style that bears traces of both French and Italian influences, with pergolas, cloisters, statues, and fountains.

But beauty, although attained in almost overpowering measure, is not the sole object of the brain that has been responsible for creating since the end of the war this Alsatian paradise. On the other side of the broad boulevard that runs along the north of the house, an extensive fruit garden has been laid out on the English plan, designed to show how wall fruit should be grown. This part of the gardener's art is not generally known in Alsace, and the garden walls are purposely left open so that local townfolk can look through the ironwork and see how the gardeners are training the peaches and the nectarines and the pears. There is also on the estate a small farm, so clean and dainty as to be a model to some of the surrounding farmers, and where turkeys presented by Lord Derby live an almost ideal existence until Yuletide comes near.

Those who wander through the garden, or sit by the Florentine fountains, or walk through the pergolas rich with roses, have before them a kaleidoscope of changing views. To the west are the hills of the Vosges, to the east the Black Forest, and to the south the silhouettes of the towers of the cathedral and the quaint old roofs of the town. Thus, in a perfect setting, the fortunate wayfarer may enjoy one of the gems of Alsace.

Re-housing in the Built-up London Boroughs

By Major HARRY BARNES and W. R. DAVIDGE

IN considering this question the Unhealthy Areas Committee, whose excellent work cannot be too highly estimated, have, I think, done both more and less than justice to the proposals to use higher buildings as one means of re-housing the population of insanitary areas in the Central London Borough.

In so far as they present them as an alternative to garden cities, they do them more than justice. Higher buildings are no alternative to garden cities. In the true sense of the word there is no alternative to garden cities. Given the choice between garden-city development and any other proposal for housing humanity, no sane man would hesitate in his choice. There are no alternatives to garden cities, there are only substitutes for them. Substitutes are only accepted when the desired object cannot be obtained. The choice is not between garden city and any other form of development. Such a choice is unthinkable. It is between one substitute and another. It is not whether we are to have garden cities in the built-up London boroughs, but what kind of substitute is to take its place. If we are clear on that we shall avoid entangling ourselves in an entirely unnecessary controversy, which can only divide our ranks, and delay the consummation we all devoutly desire. Let it be generally agreed that the long view in housing is to improve and cheapen transport in every direction, railways, tubes, roads, omnibus and tram services, so that those whose occupations are in Central London may have their houses in garden cities. Further, the same view will remove those industries that need not be in London to satellite towns, ringing London round, with islands set in a green sea of fields and gardens.

These are the great aims to be pursued unflinchingly and unwaveringly. These things we must do; are we to leave other things undone? Are the unhealthy areas of London to remain untouched until the happy day when we have set a Welwyn Garden City at every point of the compass?

Let us see what this would mean? In 1911 Sir Shirley Murphy, the Medical Officer of Health to the L.C.C., scheduled 1,965 areas as being insanitary. Col. Levita, the chairman of the L.C.C. Housing Committee, in a most informative lecture on slum areas in London, delivered to the London Society in the early part of 1924 (from which I shall frequently quote), referred to a similar survey recently made, which showed that the number of insanitary and congested areas approximated 1,900 groups, containing 25,000 houses inhabited by about 195,000 persons.

The picture is painted in even darker shades by Mr. Herbert Jennings, secretary of the Unhealthy Areas Committee, in his most interesting appendix to their report. Taking twenty houses per acre as a maximum average standard, he estimates that there are ninety-two wards in London with a population of 1,654,319, of which 995,817 must be displaced if that standard is to be attained. Nearly 1,000,000 people must go out of the areas in which they are at present living. Many of them must go out of the County of London altogether, because it is calculated that their re-housing would require 9,958 acres, while in the whole of the county there are only 7,900 acres available. If the standard is to be twelve houses to the acre, 16,596 acres are required. To use his own words, "As there would be only room inside the county upon this basis of density for 474,000 out of the 995,817 dis-housed persons, it means that there is a surplus population of 521,817, which number represents over 11 per cent. of the entire population of London. More than half a million people must go out

of London altogether before the standard of twelve houses to the acre can be reached.

This is a task that requires not only space but time, as the committee wisely recognizes.

Let us see if we can form any idea of the time involved. We are told:

The local authorities of London have been engaged in clearing insanitary areas for more than 40 years. The results for this period dealing with some 28 of the worst areas are approximately:

Persons displaced	..	..	26,605
Persons provided for	..	..	22,337
Area in acres	..	..	64½
Net cost	..	..	£1,183,000

The L.C.C. has in hand the reconstruction of seven insanitary areas representing:

Persons displaced	..	..	16,500
Persons to be provided for	..	..	14,500
Area in acres	..	..	55
Estimated net cost	..	..	£1,000,000

There are also a number of small schemes in hand or under consideration by borough councils.

It is further stated that the L.C.C. and the Government together have agreed to devote the sum of £100,000 a year, which, on the basis of an annual loss of £5 per person re-housed, would deal approximately with 20,000 persons annually.

When it is seen that the average number of persons from insanitary areas re-housed during the last forty years is less than 560 per year, the prospect of re-housing the 195,000 persons seems remote enough, while it looks as if the 995,817 would have to wait till the Greek Kalends.

This view is substantiated by the present housing programme of the L.C.C. While providing for 12,600 houses per annum, it only allows for 1,500 houses to be built in the next three years, housing 2,500 persons per year, to meet the existing obligations in connection with insanitary areas, and 1,000 houses per year to abate overcrowding.

Neither figure, or both together, hold out much hope of any speedy solution of this problem.

The first of these figures deals with re-housing within central areas. What provision has been made for the 521,817 people who should go outside the county, or the 474,000 who can be housed inside? For these last the Metropolitan boroughs have built in five and a half years 4,787 houses, housing 24,000 persons, while for the former the L.C.C. have provided 9,313 houses for 47,000 persons. Taking both figures we have an average of about 2,600 houses per year, as against the L.C.C. programme of 12,600.

We can now see the prospect. Taking the lower estimate of 195,000 persons to be re-housed, for forty years the rate of re-housing persons displaced from insanitary areas has averaged 560 per year, which it is hoped to accelerate to 2,500.

How far this hope is justified is doubtful, in view of the fact that while the requirements of the County of London are estimated at 12,600 houses per year, the average for the last five and a half years has been about 2,600, and for the last two years about 1,180 houses per year. Even if it were realized, it would take nearly eighty years to provide for the 195,000, while if we think of the 985,817 it is like gazing into infinity.

It is clear that neither centrally nor on the outskirts is there any real prospect of re-housing those whose misfortune it is to live in insanitary areas in garden cities within any measurable distance of time. What is to be

done about it? Are we to say that these 1,900 groups, with their 195,000 persons, are to go on stewing in their own juice until provision is made for them outside the county? We cannot say it. To quote again: "The reconstruction of some 550 areas, containing some 45,000 people, brooks no delay." We cannot wait. We must do what can be done now. What can be done? We must face this fact of density. What are we going to do about it? If no re-housing scheme in built-up boroughs is to be accepted that gives a density of more than 100 per acre, let us be honest and admit that for a long time to come the result must be that of increasing the density in adjoining areas. People must shelter somewhere; if they are cleared out of one insanitary area they will go into another. We shall only remedy slum conditions in one area by intensifying them in others.

A well-known medical officer writes:

Under existing circumstances it is to be feared that the condition of the displaced tenants is not infrequently worsened. For not only do they move into other houses sanitariously little if any better than those from which they remove, but owing to housing shortage they aggravate the crowded conditions of these tenements, or cause overcrowding in other tenements, due to accumulation of a class of poor people for whom no additional accommodation is provided.

There are those who frankly recognize this and say:

Leave the slums alone; it is folly to touch them. Concentrate on providing new houses in unbuilt-on areas. In the course of time the movement of population from Central London to the outskirts will drain off the slums, leaving only such remnant of population as can be rehoused at the standard density within the area.

This may be a cold-blooded view, but it faces the facts. Let us test, if we can, what its acceptance would mean. The census figures help us to a conclusion. In a London borough, one of the first four in point of high density, the population has been reduced during the last thirty years by about 39,000 persons, or 11,500 families, an average of 384 families per year; 11,500 families less should have eased the housing situation, one would think. What is it now? With less than 28,000 houses there are nearly 56,000 families in the borough.

On a non-parlour basis the existing houses, if converted and equipped with adequate conveniences, would provide separate dwellings for 41,000 families, or 15,000 families less than now inhabit them. Those who put their faith in filtration must wait for many years before the housing accommodation of this borough would be adequate to its diminished population. Even then such faith must be based on the belief that none of the existing houses will be demolished and their sites used for industrial and commercial purposes. They must further expect that the rate of diminution will continue unchanged. By no means a safe reckoning. There are many factors to render it inaccurate. The necessity to live near their work, the cost of travelling, attachment to the neighbourhood, all these resist the centrifugal movement of population. This particular borough offers the strongest support to the filtrationist; we have seen how slender it is. We cannot wait for filtration to do its lingering work. If that is agreed it is common ground then that while we are pressing forward on lines inseparably connected with the garden-city movement, there is at least a minimum amount of slum clearance we must do. Some measure of what must be done in London has been given. Let us look at the conditions of the task.

There is the cost. The situation has curiously altered in this respect since the war. The cost per room of dwellings in central areas was about 25 per cent. more than in suburban areas. To-day the cost is about the same. The comparison is between five-story blocks in central areas and two-story cottages in the outskirts. If the number of stories in the central area buildings were increased, presumably the cost per room in central areas would then be

less than in the suburbs. This is of course due to the fact that the cost of building has increased more than the cost of land. To complete the comparison, the cost per room of housing in two-story cottages, on central sites, is estimated at 30 per cent. more than in five-story buildings. In other words, 130 families can be housed in the latter for the same cost as for 100 families in the former. This fact cannot be disregarded. In itself it makes housing on garden-city lines, within central areas, impracticable, and invites consideration of the further reduction in cost that increase in height may offer.

Then there is the condition of time. To quote again from the lecture referred to:

It is estimated that the larger areas require some ten years' work in addition to the time absorbed by legal formalities, which are both complicated and prolonged. It is impossible to do more generally than clear the site by sections and by decanting groups of inhabitants prepare location for tenements in succession. This method of process is not only slow, but extremely costly.

It is obvious that the smaller the proportion of those displaced who are re-housed on the site, the longer the time occupied in the completion of the scheme and the smaller the result. How difficult it is to find alternative accommodation for those displaced I have already shown. At the present moment it is impossible; it must be provided, and a part of any slum-clearance scheme is first to find a "decant" on which to house the people first displaced. It is like the vacant hole on the solitaire board; it must be there before you can play the game.

Even when the "decant" is provided, if it is not in proximity to the area, difficulties are not at an end.

Attachment to locality has to be overcome—how strong it is only those engaged in slum clearance know.

One writer says: "Each area is a little community or congeries of communities." And another: "They consist of small closely knit communities who are little likely to avail themselves of housing accommodation which will involve their separation from their kinsmen and friends."

In respect of the borough already referred to, figures exist which illustrate this. It is one of a group classed as East and North-east London, for which the L.C.C. provided Becontree. It was ascertained that out of some 2,000 of rather more than 3,000 tenants on this estate, only about 600 came from this group of boroughs, which have a combined population of over 900,000. From the particular borough in respect of which it has been computed that some 15,000 additional separate dwellings are required, it is fair to assume that not more than 300 families have found their homes at Becontree during the last four or five years.

The reason is not far to seek. It is calculated that the weekly cost of travelling, assuming a workmen's ticket and travel to the terminus in London by the cheapest means of transit available, is over 5s. per week, and that the outgoing in respect of rent, rates, and travelling to a tenant of a five-roomed house at Becontree is between 23s. and 24s. per week. Such outgoings cannot be met unless there is a continuous weekly income of £4 per week, if a normal working-class family has to be provided for. How many of the dwellers in central areas have such an income?

The reasons that keep people rooted in central areas are both sentimental and economic, and both must be reckoned with. In pre-war days, when the cost per room in central areas was greater than the cost on the outskirts, the cost of travelling was, at least in part, offset by the reduction in rent. To-day this cannot be said, and the increased cost of travelling adds to the difficulties of slum clearance.

The conditions in respect to labour and material are also of moment. Quite rightly; more importance is attached to the provision of new houses than to the replacement of old houses, and the insufficient supply of labour and material are jealously regarded by those who find them all too inadequate for normal housing schemes. Seen from this point of view there is additional argument for higher buildings, which present opportunities for the

employment of methods of construction making a minimum demand on bricklayers and plasterers and the materials they employ.

We have now some measure of the problem. It is clear that if slum conditions are not to be intensified we must for some time confine schemes to those which will re-house practically the whole of the displaced population within the insanitary area. This means that only large areas can be dealt with. Many are, by reason of size, shape, and situation, such that it is impossible to provide either for re-housing or for open spaces, and that being so they present this added disadvantage, that on their acquisition the full commercial value must be given.

The large areas dealt with will presumably be found in the ninety-two wards already referred to. On the basis of five persons per dwelling, fifty to sixty dwellings per acre must be provided where the density is from 250 to 300 per acre, if the population is to be re-housed inside the area. Such a suggestion arouses natural opposition and an instinctive reaction, but we must be honest and face the consequences of rejecting it. We may passionately rebel against conditions that do not give every family a cottage set in a garden, with the income to maintain it, and the leisure to enjoy it, but because these conditions do not exist, are we to refuse to do what we can under the conditions that do obtain? At all events, we must explore every suggestion whereby every family may at least have a separate dwelling if they cannot get a separate garden. In that spirit let us ask what other substitute there is for garden-city development in central areas. What is there to satisfy those who feel they cannot go into an area, and say to one family, We will re-house you, and to another, You must take your chance. Men who themselves in a seaworthy boat have to beat off the hands of those still struggling in the sea, so that they themselves may be saved, have no happy task, and those who undertake slum clearances where only partial provisions for re-housing are made, have one hardly less intolerable to perform. What does the proposal to put sixty dwellings to the acre involve? If they are put side by side the space between the rows at back and front could not exceed 12 ft. in width. Such a lay-out cannot, of course, be considered. What is the alternative? *To put them one above the other.* The manual on State-aided housing schemes laid down a limit of twelve dwellings to the acre. Accepting that limitation at the ground level, to get sixty dwellings to the acre we must put five houses one above the other. If each have two stories there will be ten stories in all, two being in the roof. If each story be 8 ft. 6 in. high, our height will be 73 ft. at the eaves, and 91 ft. to the roof, a height well within the London Building Act. Such a development on a 10-acre site will leave about $8\frac{1}{2}$ acres open space, or 85 per cent. of the total area. In the whole of the ninety-two wards before referred to, the open spaces and recreation grounds are not more than 3.9 per cent., while in the County of London as a whole open spaces do not exceed 22 per cent. But not only is there a greater percentage of open space provided, but where a large area is dealt with the aggregation of open space is capable of much pleasurable use and enjoyment.

The present arrangement of an insanitary area of some 10 acres in one of the built-up London boroughs is shown in this issue, together with a suggested lay-out to provide about sixty dwellings to the acre. At present there are in this area about 340 two-storied houses. Of these, about 140 each provide a separate dwelling for a separate family, the remaining 200 being occupied by about 400 families, mostly deprived of the privacy and separation of conveniences that family life demands.

The proposed lay-out would give to each of these 540 families a separate dwelling, while providing an additional fifty or sixty dwellings to form the "decant" for another insanitary area. The plans speak for themselves.

What is the alternative? Nobody dreams of self-contained two-story dwellings twenty to the acre!

The practice of the London County Council led them to

the conclusion that the five-story building, with the fourth and fifth stories arranged together in the form of two-story cottages superimposed on those below, were the best for their purpose. The visit of Mr. Topham Forrest to America appears to have modified this view, with his resultant proposal for a nine-story block in Ossulston Street.

The whole question, then, seems to resolve itself to this: Are we to take five stories as the limit of height when re-housing in insanitary areas, or where the site is large enough to allow it, may we increase that height? There is no particular sanctity attached to the number five in this respect, and the cardinal point to remember is that once you adopt a class of building in which dwellings have to be entered otherwise than from the ground level, it is, as far as the type of dwelling is concerned, immaterial whether it is entered from the second or the ninth floor. The plan of the house can be the same on the higher as on the lower.

It seems clear that there is a relation between the heights that are possible for buildings and the size of the area that is being re-planned, due to the altitude of the sun. There is also the question of the physical exertion needed to reach the higher floors. The coupling of the fourth and fifth stories in the five-story blocks is no doubt due to the fact that tenants will not readily climb higher than the third floor, and small wonder. When we think of tired men and women at the end of a long day confronted with the ordeal of climbing six flights of stairs to reach their homes, one can understand that the limit of human endurance has been reached. If dwellings are to go higher than the third floor, lifts must be provided. For my part, I should want them at the first floor. I should grumble at the third flight and groan at the fourth. When lifts are provided, all floors are on one level, and it matters little on which one dwells. The introduction of lifts, however, adds expense; and if it is to be kept to a minimum it must be spread over as many dwellings as possible. This consideration invites an increase in the number of stories, as each additional story lowers the amount debited against each dwelling. What is then to limit the number of stories? The London Building Act will not permit a greater height than 80 ft. at the eaves. Let that be the limit.

Here, then, between the manual for the Preparation of State-aided Housing Schemes, with its limit of twelve houses to the acre, the London Building Act, with its limit of 80 ft. to the eaves, and the altitude of the sun, we have our three dimensions. Such dimensions are in themselves restrictions, and within and under them those who are anxious to further the wide and sound views for which the garden-city movement stands, while at the same time giving such relief to the inhabitants of insanitary areas in the cities as these abnormal times will allow, may safely work.

Elsewhere in these pages will be found a description of the two-story dwelling units to which the L.C.C. has pointed the way. These meet in almost every possible way the objections as regards privacy and conveniences which have been raised against the block dwellings hitherto erected. These two-story dwellings are so related to each other as to lend themselves to the conveniences of central heating and hot-water supply in a way not possible to detached buildings.

There are no virtues without defects, no advantages without discount, but at least this can be said, that where insanitary areas of sufficient size are to be found, the best return for the time and money that must be spent, and the materials and labour that must be employed on them, will be obtained by some such scheme as is adumbrated in these pages and illustrated in this issue, while if to some of the dwellers in these homes is denied the pleasure of a separate garden, they may look out on wide spaces, reach and enjoy them with little exertion, and share in a communal life not without its attractions.

We have to house all sorts of people, under all sorts of conditions, and if the scheme outlined meets a special need, in special times, in special places, it need not be feared that its adoption will stem the full tide of housing reform on which the great idea of the garden city is moving to its bourne.



THE STEPNEY HOUSING SCHEME: ELEVATION TO BRENTON STREET.

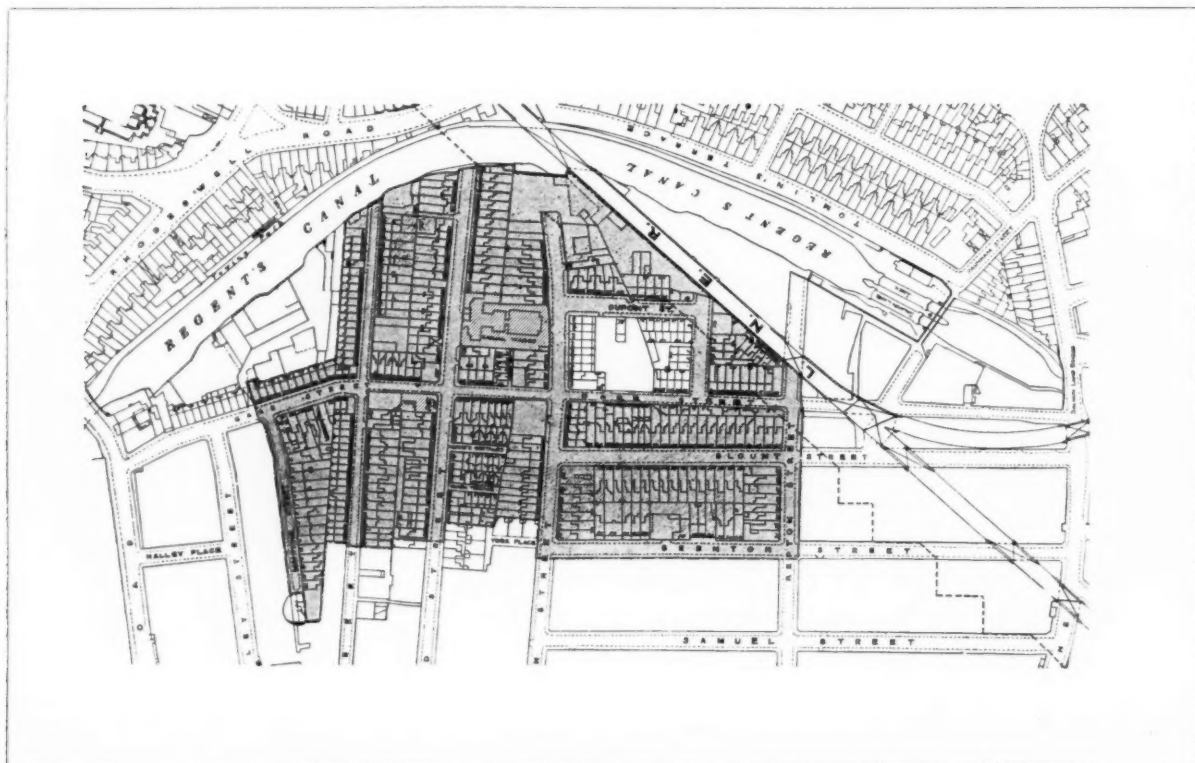
The Housing Problem in Stepney

By J. D. SOMPER, Mayor of Stepney

AS, under the Housing Act of 1923, power had been newly given to Metropolitan Boroughs to deal themselves with insanitary areas within their own confines, without any of the former limitations as to the numbers of houses represented as unhealthy, I conceived the hope of initiating, during my term of office as Mayor of Stepney, housing proposals in which effect should be given to the following general considerations—i.e., the occupational and economic needs of the inhabitants of the Borough; the general insufficiency of the output of brick-built houses and the consequent necessity of adopting some alternative method of construction to avoid deflection from existing housing schemes of men and materials; the conjoint need not only for more dwellings, but also for fit houses on the sites of existing unfit houses; the necessity for a minimum displacement of existing occupants during any process of reconstruction, with a maximum of substituted accommodation upon the sites of any such houses as may be replaced for unfitness; and, finally, the paramount necessity for a speedy provision of new houses, indicative of the desirability of "mass" production.

Before referring to the proposals which the Housing Committee of the Council, under the energetic chairmanship of Councillor J. H. Maynard, J.P., have now under con-

sideration, I will briefly summarize certain official statistics disclosed by the census returns of 1921, as evidence of the magnitude and difficulty of the task confronting us in Stepney: Area of Borough, 1,767 acres, including 74 acres covered with water; population (1921), 249,657, reduced from 279,804 in 1911; average density of population, 141 persons per acre of land and water, as compared with 60 persons per acre for the County of London as a whole; population in private families, 237,964; total number of private families, 55,832, of which 45,928 live in four rooms or less; number of persons living more than two to a room, and so, technically, in overcrowded conditions, 68,921, or 29 per cent. of the private family population; number of families living in conditions regarded, technically, as overcrowded, 10,877, or 19.4 per cent. of the total number of private families, of which 10,709 live in four rooms or less; total number of inhabited rooms in the borough, 164,670. Of the total male population following specified occupations, numbering 78,992, 18,067, or 22.9 per cent. are transport workers; and of the total male and female population following specified occupations, numbering 116,902, 30,881, or 26.4 per cent., are makers of textile goods, or articles of dress. A large proportion of both these classes of workers must of necessity live near their places of employment, or of the places where they dispose of their work.



THE STEPNEY HOUSING SCHEME: AREA INVOLVED

Upon a rough estimate, after making full allowances for all factors tending to reduce the pressure of population in the borough, not less than 1,500 new houses would seem to be immediately needed, irrespective of the reconstruction of existing unfit and outworn tenements.

There are not, in Stepney, more than about 4 acres of land immediately available, at any reasonable price, which can be used for new houses without displacing existing tenants.

In March last, at the request of the Housing Committee of the Council, I was privileged to head a deputation to the Minister of Health (Mr. Neville Chamberlain), and to lay before him some of the statistics given above. Mr. Chamberlain would vastly prefer, as I would, to see the garden suburb ideal of twelve to twenty houses to the acre realized throughout the country; but I think he recognized that the exigencies of the Stepney case justified, and indeed necessitated, some departure from the normal principles which ordinarily govern housing policy.

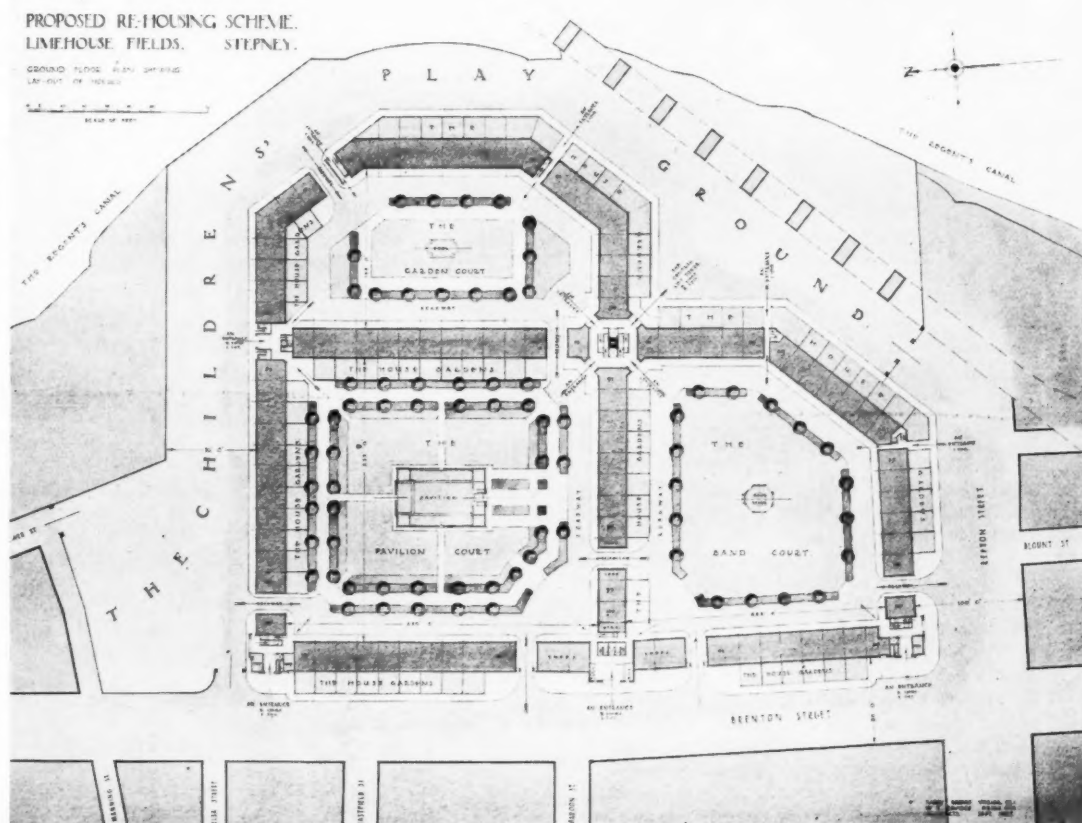
An unhealthy area, known as the Limehouse Fields area, has since been represented to us by our medical officer of health (Dr. D. L. Thomas); and an improvement scheme for it is at present *sub judice*. If the scheme be confirmed there will, with certain adjacent land, be an area of about 10 acres available for development. On and in the immediate vicinity of this area it is proposed to re-house the whole of the displaced occupants, numbering some 551 families, comprising 2,475 persons, who are now crowded into 347 cottages, nearly all of which are of the two-storied type to be seen in many parts of East London. On the propriety of this quite exceptional re-housing commitment there is but one opinion in the Council, my friends of the Labour party, who, for reasons best known to themselves, are bitterly opposing the proposed methods of carrying out the commitment, being at one, in this particular, with the majority party in the Council.

In view of this difference of opinion, I should perhaps make it clear that in what follows I am expressing a purely personal opinion, and, the whole question being still undecided, nothing which I may say has the official sanction or authority of the Council.

In common with many others who have the welfare of Stepney at heart, I am anxious to see the adoption of a considered and statesmanlike policy of housing betterment followed consistently from year to year, irrespective of any possible fluctuations of political parties. Indeed, the issues are too big to be made the subject of warring political factions. Furthermore, I am convinced that, if possible, provision should be made for some free surplus of houses, which may serve to give to the Council for disposal, either in connection with their own schemes, or to assist owners of houses who may on their own initiative desire to improve and develop their property, that essentially necessary balance-in-hand of houses which must precede any process of housing rehabilitation and expansion. Unless and until that balance is provided, our hands are tied, and we must look on impotently at the appalling spectacle of congestion presented in many parts of the borough.

Two questions, however, arise upon neither of which can I express more than a layman's opinion, particularly in a technical journal of this character. First, whether a density of from fifty-five to sixty or more houses per acre can be achieved in circumstances of sanitary efficiency; secondly, how can that accommodation be best and most economically provided?

On the first question I must confess to having had grave doubts until I saw and had explained to me the lay-out plan prepared by Messrs. Barnes and Davidge. I am now satisfied that, by way of exception due to the peculiar urgency of the case, and particularly having regard to the existing open spaces in the vicinity of the Limehouse Fields area, this high density would be fully justified

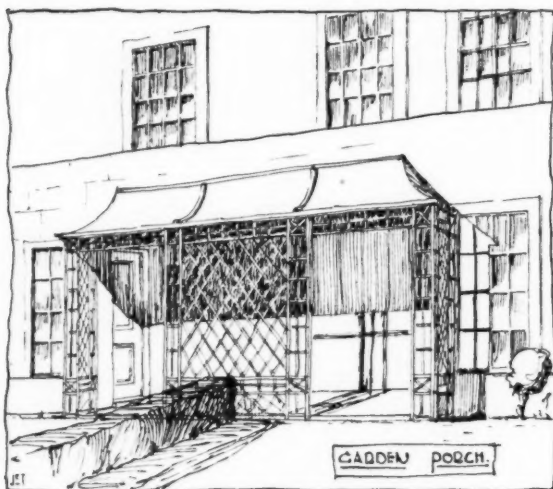


STEPNEY HOUSING SCHEME: LAY-OUT HARRY BARNES, V.P.R.I.B.A., F.S.I., AND W. R. DAVIDGE, F.R.I.B.A., F.S.I., ARCHITECTS.

were that lay-out to be adopted. The requisite access of sunlight and the free circulation of air must, however, be secured, and to attempt to crowd together this large number of dwellings in conventional blocks of flats of three or four stories in height, appears to me to be tantamount to a perpetuation of conditions scarcely distinguishable from those we are about to dispel.

As some system of multiple dwellings seems inevitable, it would seem, further, that that system is most worthy of adoption which reduces to a minimum the disadvantages ordinarily incidental to dwellings in flats, and which, by securing accessibility, privacy, full and free circulation of air, quietude, safety from risk of fire, and adequate internal convenience, most nearly approaches the normal type of subsidy house which we are accustomed to see on garden-suburb estates. If, in addition, amenities in the way of gardens—both individual and communal—playgrounds, drying-grounds, centralized laundries, electric lighting and cooking, and perchance fowl-runs, can be secured, by so much will the scheme be improved. The sketch plans and elevations prepared by Messrs. Barnes and Davidge, illustrated in this issue of *THE ARCHITECTS' JOURNAL*, will sufficiently serve to exemplify how far these desiderata are attained by them.

Whether the blocks of houses shall be six, eight, or ten



A GARDEN PORCH.

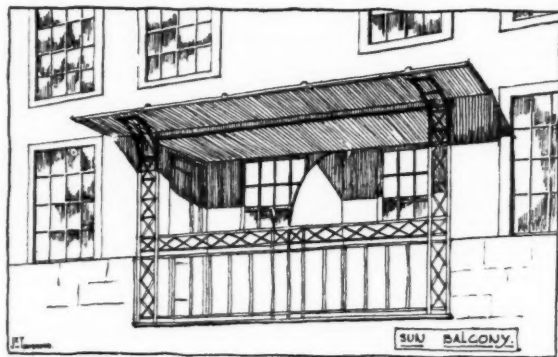
stories in height seems to be largely dependent, first, on the extent to which accommodation for displaced tenants can be found elsewhere in the vicinity; and, secondly, on the financial practicability of serving by lifts buildings of less than ten stories in height.

If, as I should hope, some 150 dwellings can be secured elsewhere than on the Limehouse Fields area, I should feel strongly in favour of a maximum height not exceeding eight stories (i.e. buildings of not more than six stories, with two stories in the roof). But this is always subject to the dwellings being served by lifts; and, if the addition of two more stories is necessary to make practicable the provision of lifts, I should feel compelled seriously to reconsider my objection to the higher type of building. Personally, I should infinitely prefer living on a ninth or tenth story served by lifts, rather than in a fourth or fifth story flat dwelling without any lift, approached only by stairs.

I have already referred to the necessity of reducing to a minimum the initial displacement of existing tenants; of a minimum deflection of skilled building labour and building materials used for brick-built houses; and of the urgent necessity of a speedy provision of additional houses.

All these needs would seem to have been admirably provided for in the lay-out of Messrs. Barnes and Davidge.

If once the principle be admitted of attempting to house within the municipal confines of Stepney in healthy con-



A SUN BALCONY.

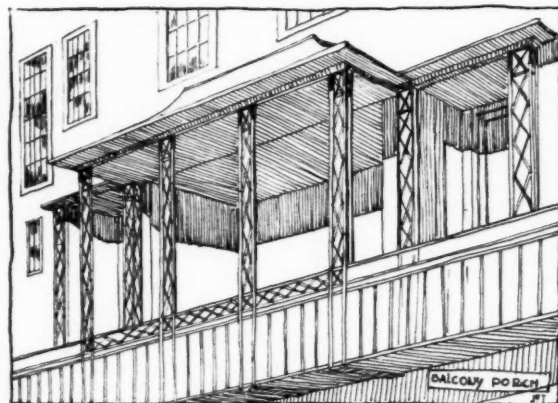
ditions the totality, or anything approaching the totality, of the existing inhabitants who are in overcrowded and unfit conditions, no other course than that which is now being contemplated by the Housing Committee seems possible; and certainly no considered and practicable proposal to the contrary has, so far as my knowledge extends, yet been advanced.

The urgency of the case necessitates an effort of a wholly exceptional character; and, in my view, whether the utilization of the Limehouse Fields area be limited solely to the re-housing of existing tenants, or whether an effort be made to formulate a scheme for securing some small surplus of available working-class houses, the carrying into effect of a scheme on the lines of that propounded by Messrs. Barnes and Davidge will be necessitated. If the scheme be carried out in its entirety the initial step in a progressive betterment of the housing conditions of the Borough will have been achieved.

The only alternatives would seem to be either to dispossess a large proportion of existing inhabitants now living in unhealthy conditions, and to drive them out of the Borough—or, to remain quiescent and do nothing, which latter is unthinkable.

On questions of cost of buildings of the character proposed relatively to the more conventional types of dwellings in flats, I am in no respect qualified to speak. I nevertheless fully recognize that a patient and searching investigation of economic possibilities must be entered upon before we can claim to have solved our housing problem by the means now under review.

I believe, however, that we are on the right lines, and that the proposals of Messrs. Barnes and Davidge, which had their genesis in my great personal anxiety for housing progress in Stepney and in a report presented to us early in 1925 by our Town Clerk (Mr. V. B. Bateson), whose services I desire to acknowledge, will prove to have enabled Stepney to show the way of housing regeneration to other housing authorities similarly situated.



A BALCONY PORCH.



PROPOSED RE-HOUSING SCHEME, LIMEHOUSE FIELDS, STEPNEY.
HARRY BARNES, V.P.R.I.B.A., F.S.I., AND W R. DAVIDGE, F.R.I.B.A., F.S.I., ARCHITECTS.

The Scheme Described

The Scheme which is illustrated in this issue shows a proposal for re-housing the population who are displaced from the Limehouse Fields in the Borough of Stepney.

The proposal to treat the area as an insanitary area has aroused much interest and been the subject of much comment. The lay-out shown herein was approved by the Housing Committee of the Borough of Stepney for the purposes of the inquiry, and is at present the subject of consideration by the Council.

The main consideration that has governed its preparation has been the necessity of re-housing the displaced population, and, in addition, providing a number of dwellings to serve as a "decant" for another insanitary area.

The problem resolved itself into the provision of the largest number of dwellings with the maximum open space, taking into account the London Building Act and the altitude of the sun. The solution of this problem, after prolonged investigation, was found only to be obtained by a building of 10 stories in height.

proximate respectively to 2 acres, 1½ acres, and 1 acre in area. The whole covers a larger area than Hampton Court Palace, and is probably the largest combination of dwellings in contemplation in this or any other country.

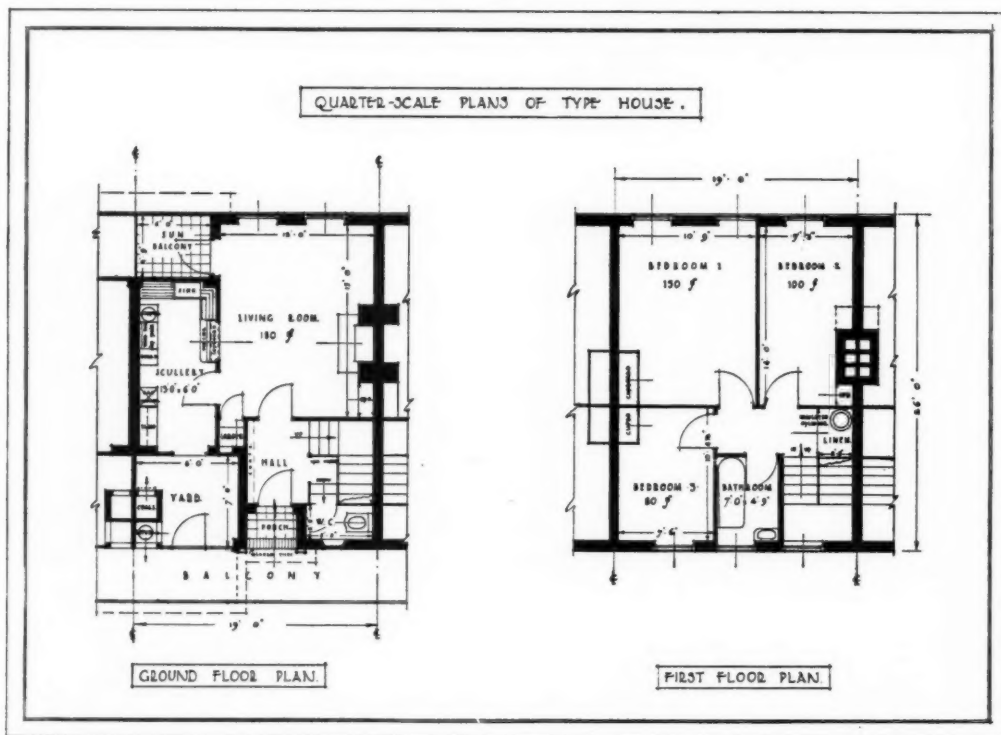
The elevations are directed to produce within the limits of economy, which must be rigidly observed, the best features of the domestic work of the seventeenth and eighteenth centuries.

The building is proposed to be constructed with steel framing and concrete filling, offering an unrivalled opportunity of rapid and sound construction, making the least possible call upon either builder or plasterer.

Special attention is to be paid to the colour scheme of the elevation, the general idea being to treat the lower storey as a base in darker tones; the intermediate stories being white, with an Italian tiled roof. The windows and ironwork to be in a shade of green.

The designs are the work of Major Harry Barnes, V.-P.R.I.B.A., F.S.I., and Mr. W. R. Davidge, F.R.I.B.A., F.S.I.

These plans show one of the suggested arrangements of



The area is shown as one space, in which is placed the building. Special attention is directed to the focal point at which the various portions meet. Here is proposed to be fixed central lifts capable of serving the whole population of the building in a very short period. This provision is supplemented by lifts at the other junction points of the building. The building itself comprises a number of super-imposed self-contained houses of two stories each, plans of which are given above. This combination of self-contained dwellings with central services is the main idea of the buildings, and will be seen to lend itself to a grouping that permits each dwelling to be placed so as to give the fullest possible access to light and air.

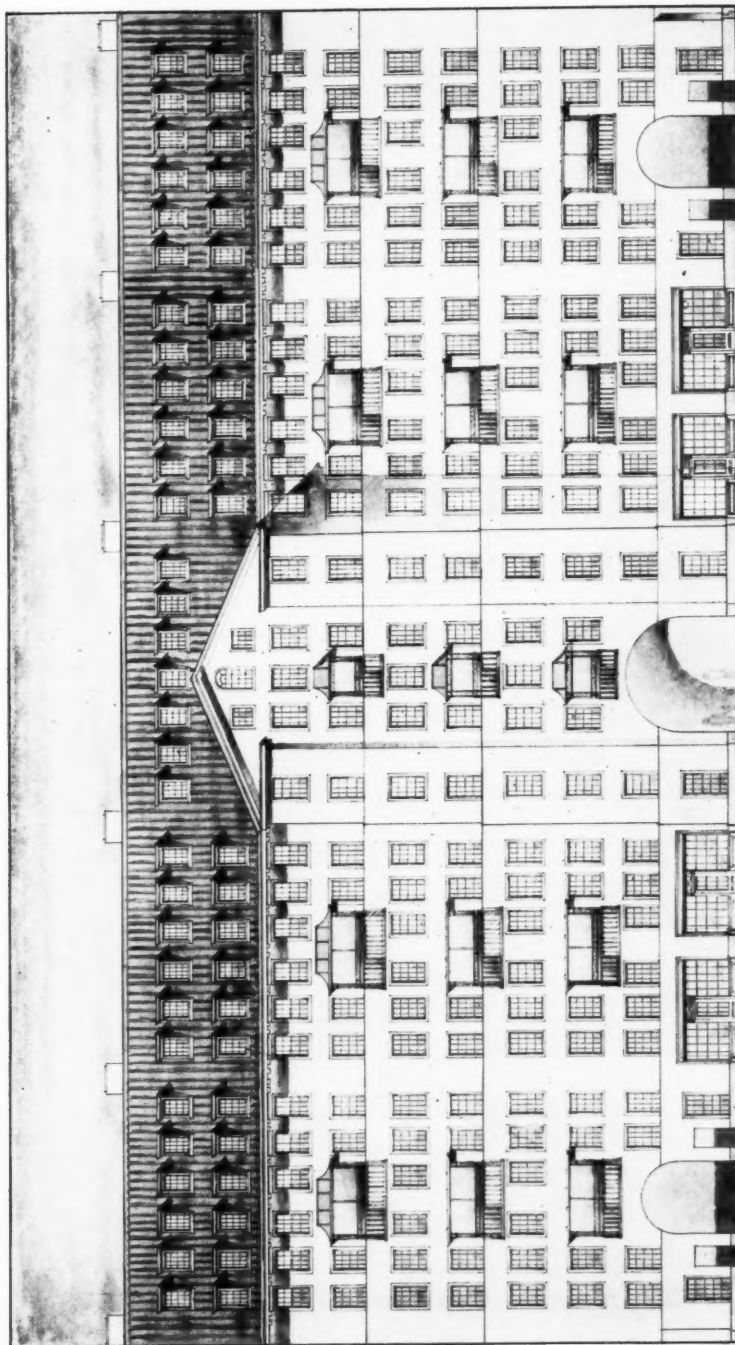
Each of the dwellings has a sunny aspect, and through ventilation and communication are possible throughout the whole building.

The plan lends itself admirably to the centralization of heating and lighting and other services, while the dwellings on the lowest and highest floors are provided with separate gardens on the ground and roof respectively. Its magnitude may be estimated by the fact that the three courts ap-

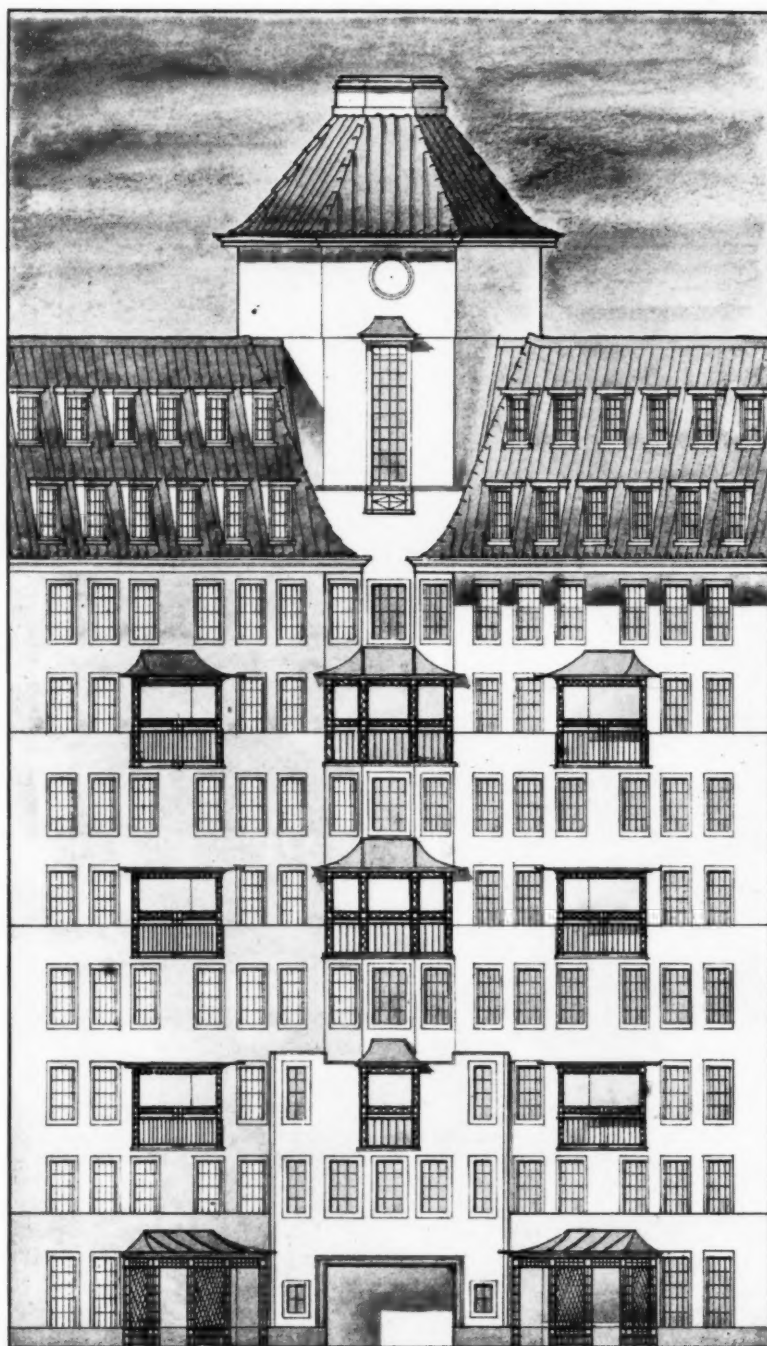
proximate respectively to 2 acres, 1½ acres, and 1 acre in area. The whole covers a larger area than Hampton Court Palace, and is probably the largest combination of dwellings in contemplation in this or any other country.

Considerable care has been taken in the designing and arrangement of the working kitchen, its length giving every opportunity for the arrangement of sinks, washing trough, gas cooker, and copper, with the necessary draining and scrubbing boards, cupboards and dressers. A large linen cupboard, heated by hot water, is provided on the first floor, where clothes can be dried off if necessary.

It will be seen that the bedrooms enjoy equal privacy to those in the normal house, as does the living-room. Other arrangements of this type are possible, and some variation will be introduced. The area of the rooms conforms to a good housing standard, and the entrance and stairs are not cramped in size. Sketches showing the entrances on the ground and upper floor levels and of the sun balconies appear on page 512.

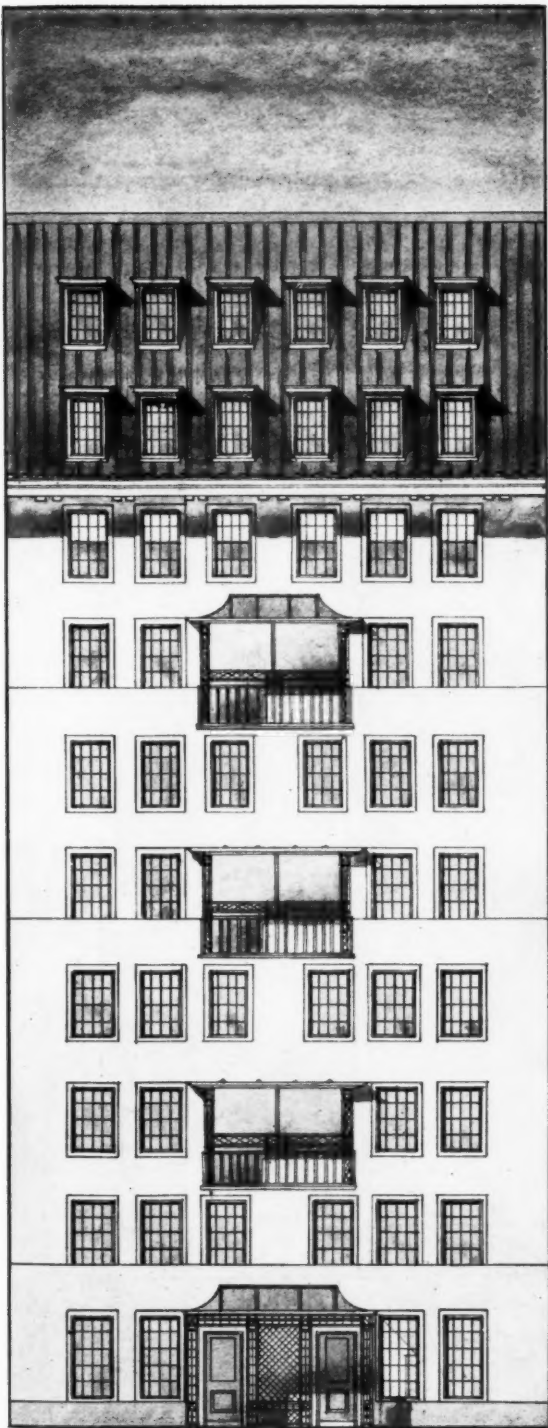


PROPOSED RE-HOUSING SCHEME, LIMEHOUSE FIELDS, STEPNEY: ELEVATION TO BRENTON STREET (CENTRE)
HARRY BARNES, V-P.R.I.B.A., F.S.I., AND W. R. DAVIDGE, F.R.I.B.A., F.S.I., ARCHITECTS.

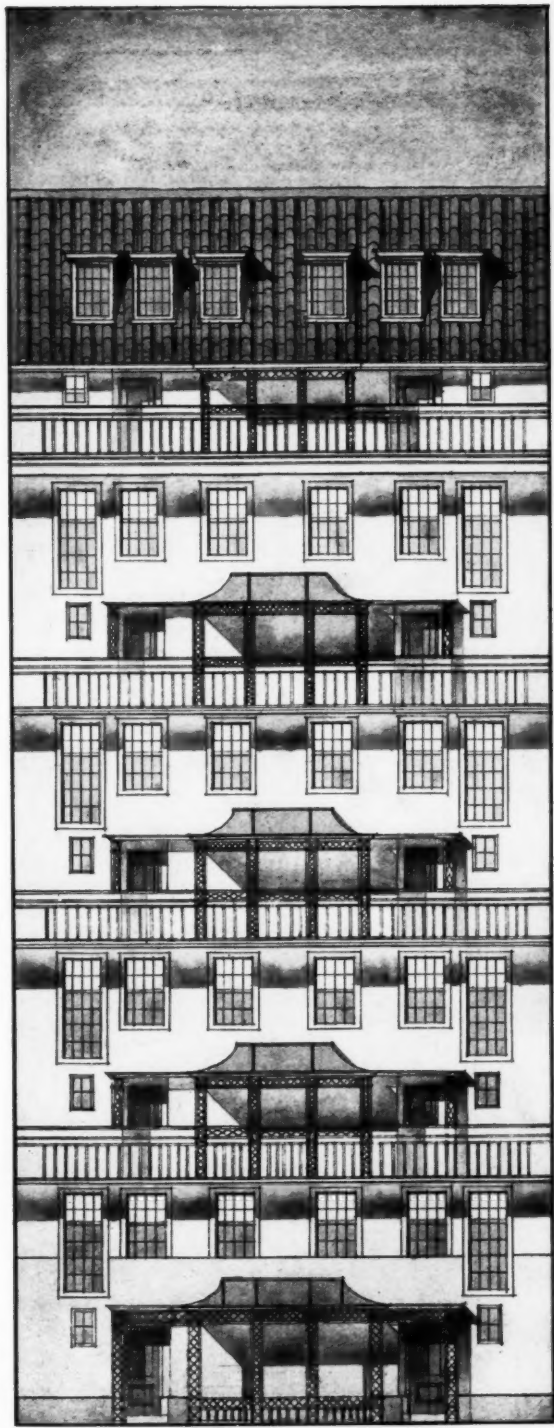


PROPOSED RE-HOUSING SCHEME, LIMEHOUSE FIELDS, STEPNEY:
THE CENTRAL TOWER.

HARRY BARNES, V.-P.R.I.B.A., F.S.I., AND W. R. DAVIDGE, F.R.I.B.A., F.S.I., ARCHITECTS.



TYPE ELEVATION—FRONT.



TYPE ELEVATION—BACK.

PROPOSED RE-HOUSING SCHEME, LIMEHOUSE FIELDS, STEPNEY.
HARRY BARNES, V.P.R.I.B.A., F.S.I., AND W. R. DAVIDGE, F.R.I.B.A., F.S.I., ARCHITECTS

Branch Bank and Block of Shops, Birmingham

HAROLD SCOTT, F.R.I.B.A., Architect

THIS block of property, just completed, is situated at the Erdington tram and 'bus terminus, on the main Birmingham Road to Lichfield, where an extensive road-widening improvement has just taken place.

As will be seen from the plans, they comprise large shops with basements and private entrance from roadway at the rear. The living accommodation consists of two reception rooms, kitchen, scullery, etc., three bedrooms, and bathroom.

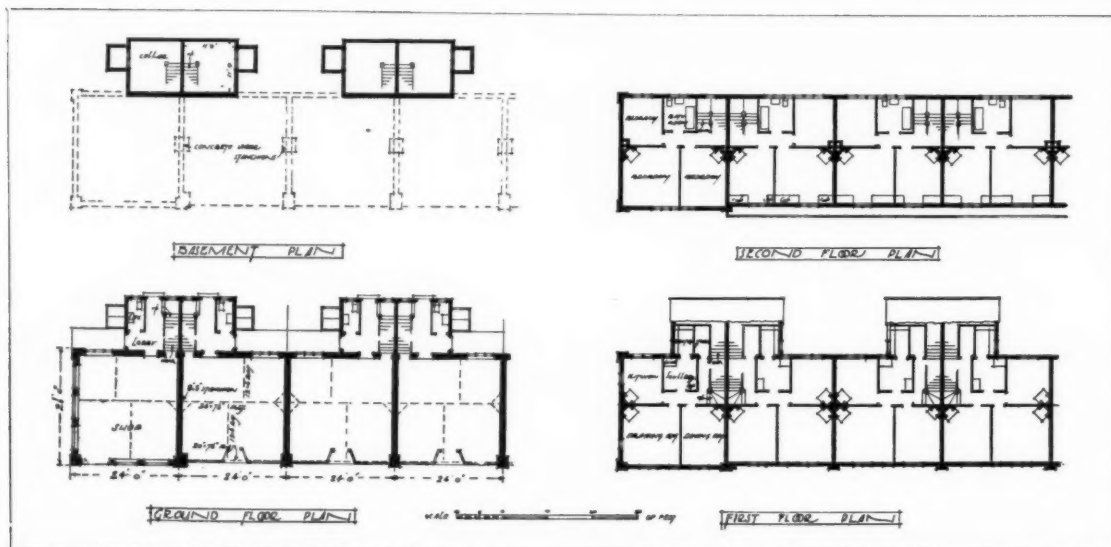
The elevations have been carried out with Titford and

multi-coloured sand stock facings, and mottled Hollington stone, and hand-made roofing tiles.

The general contractors were Messrs. T. Elvins and Sons, and sub-contracts were carried out as follows: Wilfred Robbins, Ltd., West Bromwich (steelwork); The Griffin Foundry Co., Ltd., Birmingham, and Ward and Croft, Ltd., Birmingham (fireplaces); Sutton Coldfield Electric Supply Co. (electrical work); Ramsay & Co., Ltd., Birmingham (door and window fittings); Rowe Bros., Birmingham (sanitary fittings); J. H. Walker, Ltd., West Bromwich (glazing); Fenning & Co., Hammersmith (marble work); The Acme Wood Block Flooring Co. (oak block flooring).



GENERAL VIEW OF BANK AND SHOPS.

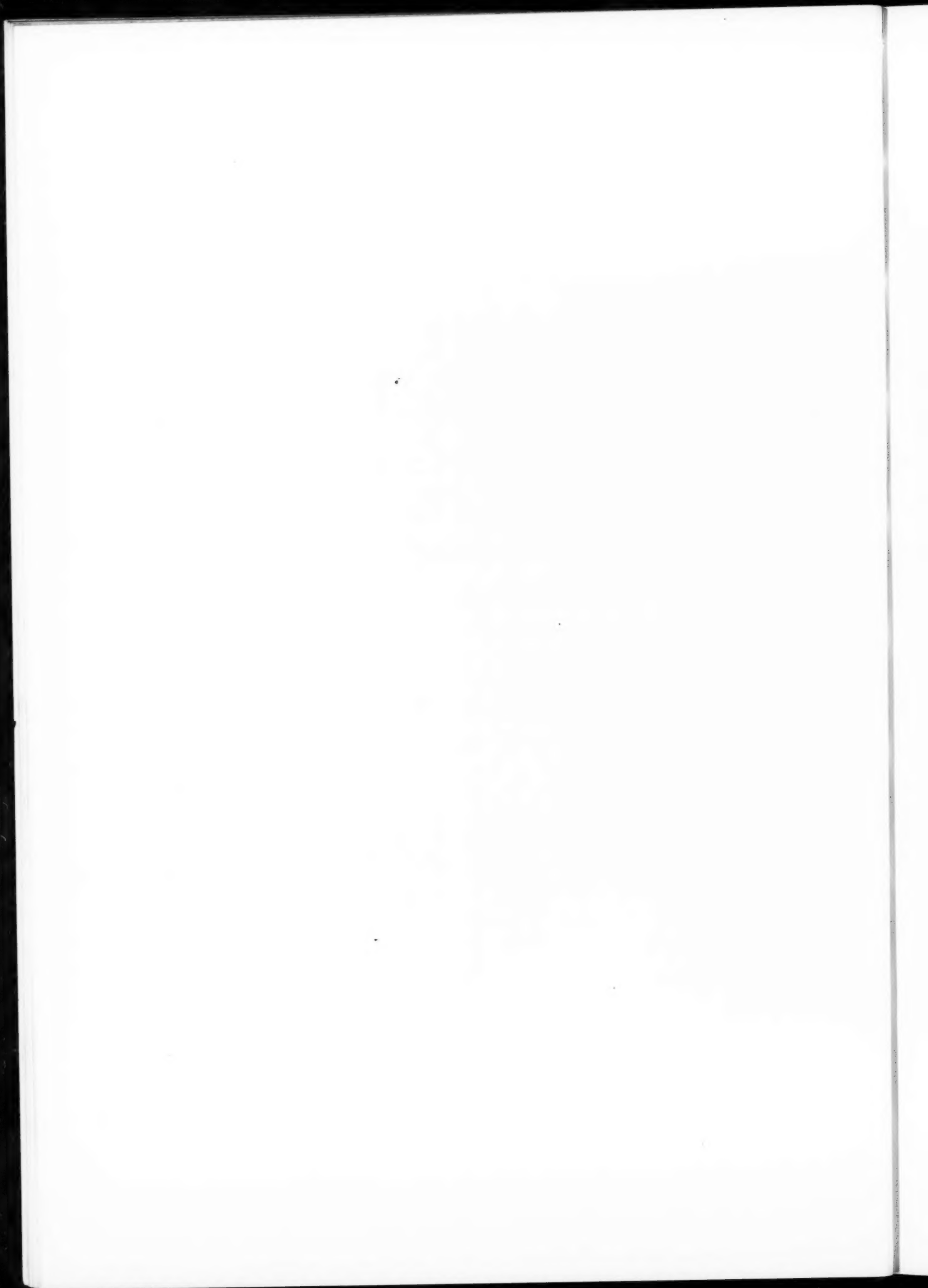


Branch Bank for the Midland Bank Limited, Broadfields,
Chester Road, Birmingham

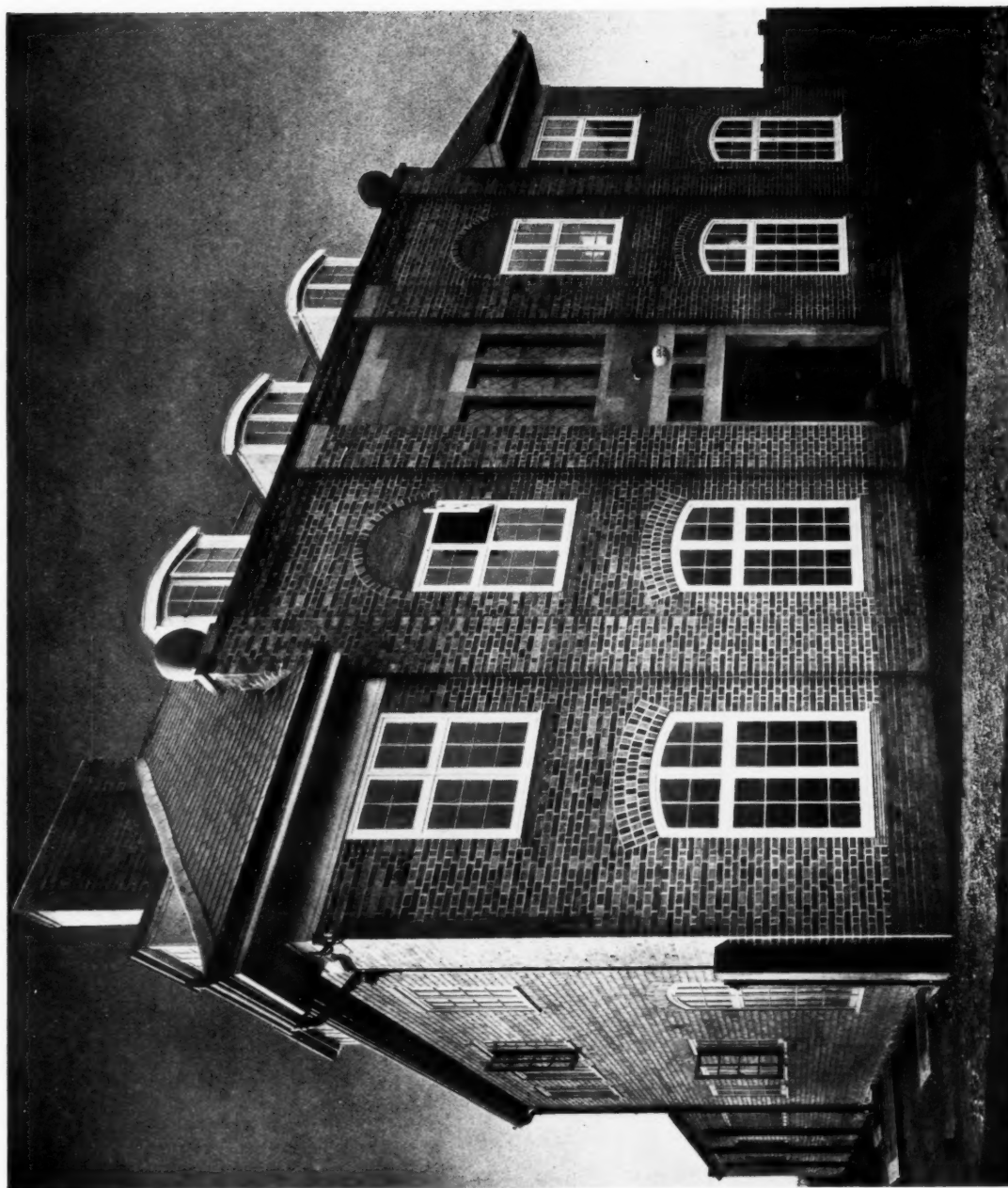
Harold Scott, F.R.I.B.A., Architect



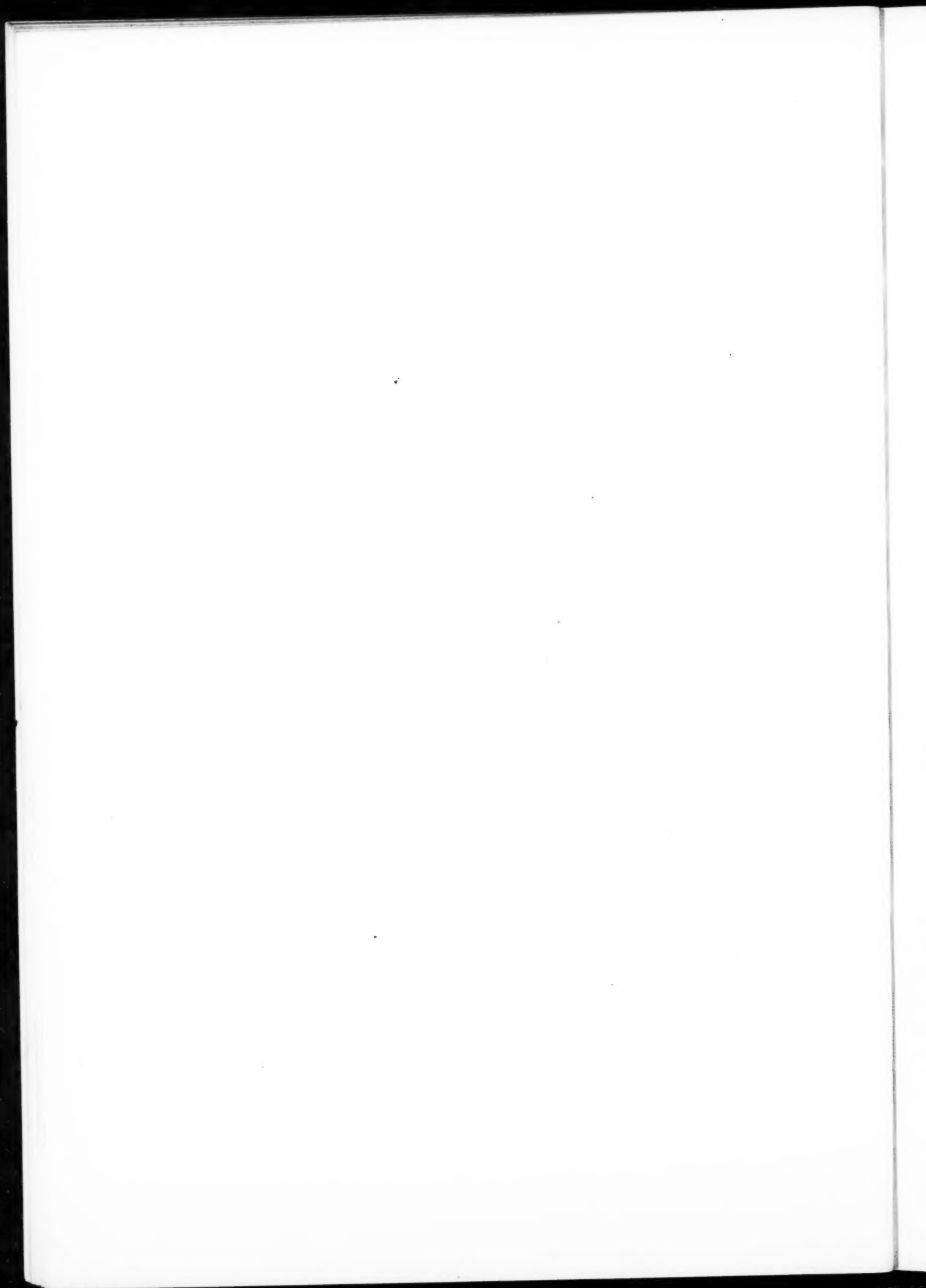
The elevations have been carried out with Titford and multi-coloured sand stock facings, and mottled Hollington stone and hand-made roofing tiles.



Small Heath Amateur Gardeners' Club, Small Heath, Birmingham
Harold Scott, F.R.I.B.A., Architect



The main elevation is carried out with Titford facing bricks and mottled Hollington stone and grey-green slates.



Small Heath Amateur Gardeners' Club, Small Heath, Birmingham

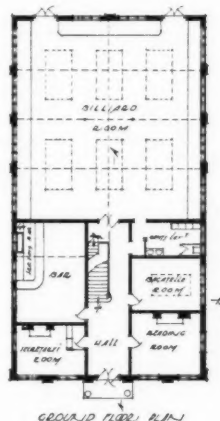
HAROLD SCOTT, F.R.I.B.A., Architect

THE premises illustrated on page 521 have just been built in Hobmoor Road, Small Heath, to replace the old premises formerly used by the club, which consisted of an old house.

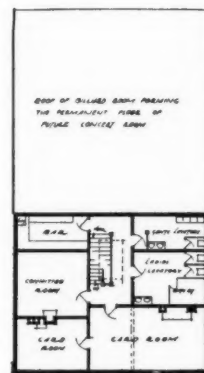
The new building, as will be seen from the plans, consists of large billiard room, bagatelle room, cardrooms, bar, reading-rooms, excellent lavatory accommodation for ladies and gentlemen, secretary's room, committee room, etc., and accommodation on top floor for resident caretaker. It is proposed later to add a concert room over the billiard room.

The main elevation is carried out with Titford facing bricks, and mottled Hollington stone and grey-green slates.

The general contractors were Messrs. T. Elvins and Sons, Birmingham, and sub-contracts were carried out as follows: Wade & Co., Birmingham (steelwork); Butler and Dickinson, Erdington, Birmingham (electrical work); Midland Heating Co., Birmingham (heating); Binks & Co., Birmingham (sanitary fittings).



GROUND FLOOR PLAN



FIRST FLOOR PLAN

Book Reviews

All About Oxford.

"Business first and pleasure afterwards," I seem to remember as a slogan applied to indolent adolescence; it is capable of some adaptation, to fit the needs of the book reviewer, into "criticism first and praise afterwards." Let us therefore proceed with the horrid task. First, what is one to think of a publisher who prints on his wrapper "with illustrations in colour and monotone by A. B. Knapp-Fisher, F.R.I.B.A., and from photographs"? Mr. Rice-Oxley, although no stylist, as his sentence, "none of these roads to Oxford are very ancient," shows, and having, one is led to surmise from his remarks about Walter Pater, little use for stylists, nevertheless assuredly should make a clearer statement. Next the index; if it is unfair to judge the merits of a book by its index, nevertheless it is permitted to judge thereby its usefulness as a reference book. Mr. Rice-Oxley's index is lamentably inefficient. Being an architect, the first thing I did on unpacking the book was to look up the names of various architects in the index, among them Cockerell and Basevi. To my surprise and disappointment I found neither of them. Yet later I came across the name of Cockerell, although not of Soane's favourite pupil, in connection with the Ashmolean. I also looked for a reference to Uccello's delectable Stag Hunt without success. The name was not in the index, so I looked up the Ashmolean and was referred to pages 72-76, yet on page 82, still under the heading Ashmolean, I found what I sought, and found, moreover, that Mr. Rice-Oxley shares my own enthusiasm for this picture, and I warmed to him. Nevertheless, I cannot help feeling that the purpose of the book is in no little degree invalidated by its bad index, for it is a book of reference, and a very delightful book of reference, too; crammed full of information, erudition, anecdote, and good-humour.

One is apt to think of Oxford as essentially a city of old buildings, yet the amount of university building activity which has taken place within the last fifty years or so is immense: Waterhouse and Mr. Warren at Balliol; Sir

Thomas Jackson at Brasenose, Trinity, Hertford, and Corpus; Sir Gilbert Scott at New; Mr. Champneys at Oriel and Merton; then there are, of course, the colleges, such as Keble, Manchester, and Mansfield, which are comparatively modern; this is but a little of the work which dates from since the middle of the last century, and its unobtrusiveness is not the least of its merits. Fortunately, there is now, more than ever hope that Oxford will preserve its beauty, since it is acquiring powers under its town-planning scheme which will enable it not only to control all building activity, but also to curb the depressing operations of the selfish advertiser, so that it seems likely that Oxford is about to adopt the rôle of pioneer in a campaign against the prevailing pestilence of hoardings and signs that walketh by day and by night. In connection with the town-planning scheme, however, it is to be hoped that the opportunity will not be lost, now that the area to the north of Folly Bridge is to be cleared, of keeping permanently open the view across Christchurch meadow of Corpus, Merton, and Magdalen. This will indeed be a view worthy to be added to Mr. Rice-Oxley's list.

Of the many anecdotes with which the book is filled, I like particularly that of George Washington's great-grandfather, Laurence Washington, whose buttery bill, for seventeen and tenpence, after being outstanding for over three centuries, was discharged in 1924 by a party of American lawyers. And again, Thomas Brown's famous epigram:

I do not like thee, Dr. Fell;
The reason why I cannot tell,
But only this I know full well—
I do not like thee, Dr. Fell—

being an impromptu translation at the request of Dr. Fell of Martial's:

Non amo te, Satidi, nec possum dicere quare;
Hoc tantum possum dicere, non amo te.

Those who think they know their Oxford, and those who

desire to know her, will find infinite delight and instruction in Mr. Rice-Oxley's book, for he literally leaves no stone unturned, and every stone in Oxford is worth the turning.

H. J. B.

"Oxford Renowned." By L. Rice-Oxley. Illustrated by A. B. Knapp-Fisher, F.R.I.B.A. London: Messrs. Methuen & Co., Ltd. 28s. net.

A Great Administrator.

Julius Frontinus, the author of an established Roman text-book on surveying, spent some years round about A.D. 74 in Britain as provincial governor. He was then a middle-aged man, an efficient soldier, and an admirable engineer; and after gaining a victory over one of the worst of the Welsh tribes, he constructed a highway, still visible, through the conquered country. When turned sixty he was appointed war commissioner at Rome, a post in which his virtues, which were many, displayed themselves to better advantage than they had ever been able to do till then. The office had long been a sinecure; the results of years of carelessness and dishonesty were to be seen in every direction. Frontinus was, if nothing else, scrupulous and incorruptible, and he soon laid down for himself a programme of action which would gradually enable him to remove every trace of mismanagement from the public water service.

A record of his observations and his achievements is given in his *De Aquis*, an English translation of which has just been published, together with one of his *Stratagemata*, in the well-known Loeb Classical Library. The version first appeared in America in 1899, incorporated in a scholarly monograph of considerable dimensions. Superficially, Frontinus is a bore; at closer acquaintance his pages become intensely exciting. He had a passion for accuracy and efficiency, and his analysis of the various defects and misdemeanours that disgraced the water supply will stand for ever as a model of what a public servant's report should be. He began by discovering that the records of the intake measurements had been faked to coincide, more or less, with the consumption figures. What was done with the rest of the water? "A large number of landed proprietors, past whose fields the aqueducts run, tap the conduits, whence it comes that the public water-courses are actually brought to a standstill by private citizens, just to water their gardens." Moreover, our author took to measuring all the pipes in current use, when he found that the larger intake pipes were made of greater capacity than the official measurement by which they were known, while the smaller delivery pipes erred on the other side of the nominal dimension. "Everything embraced under the head of mensuration," he declares, "ought to be fixed, unchanged, and constant." Yes, even when the subject of the mensuration is as inconstant as water.

Frontinus certainly made great improvements. "Lands which had been irrigated unlawfully from the public supply," he tells us, "were confiscated." The fine for polluting public water was £85, a substantial amount. The purity of the water, indeed, was another subject of grave concern. After dealing with the "puncturers," and clearing away cart-loads of illicit lead piping, he suddenly found "even Marcia, so charming in its brilliancy and coldness, serving baths, fullers, and even purposes too vile to mention." The two Anio aqueducts, drawn from rivers and consequently liable to a slight muddiness, were good enough for such uses as this, and our author next sees to it that the choicer supply is reserved for drinking. A number of Acts were passed. To begin with, Frontinus, though keenly attentive, was inclined to leniency: "those who sought the Emperor's pardon, after due warning received, may thank me for the favour granted. But for the future I hope that the execution of the law may not be necessary, since it will be advisable for me to maintain the honour of my office even at the risk of giving offence." Such are the closing words of his report, and it is impossible not to visualize their salutary effect.

"Frontinus: The Stratagems and the Aqueducts of Rome." Edited by Mary B. McElwain. The Loeb Classical Library. Heinemann. Price 10s.

The Army and Navy Club War Memorial

The Army and Navy Club War Memorial is of bronze, and represents a Greek hero sheathing his sword after victory.

As the memorial is to stand in the hall of the club, Mr. Basil Gotto, its sculptor, felt that it should be decorative in treatment. He felt, moreover, that the victorious completion of an undertaking would express the sentiment of the members, rather than grief for the fallen, or mere flamboyant "victory"—sense of loss being only typified by the heads of the sacrificial rams at the corners. The panel which carries the club crest is fashioned to open, and within is a reading stand, which travels forward on rails, and which will hold a manuscript book containing the record of the names of all members of the club who have fallen in war since the club's foundation.

Mr. Gotto was assisted by Mr. Alfred Yeates, F.R.I.B.A., in the architectural details of the pedestal.

The book is the work of Mr. Grailly Hewitt.



Photo: H. A. Leonard.

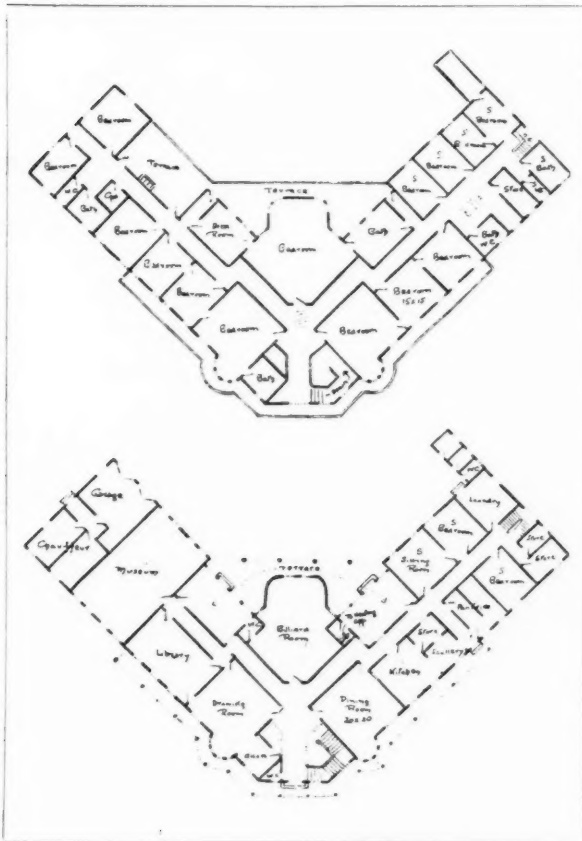
THE ARMY AND NAVY CLUB WAR MEMORIAL.

Mr. Douglas Fairbanks's New House

We have received from a correspondent the following letter from a friend:

"I am down here in Los Angeles, standing by after finishing off Douglas Fairbanks's new house just above Long Beach. From outside it looks like something out of Arabian Nights, or a Dago rail depôt, but inside it is about the best planned house I've struck. The sketches enclosed will reveal this. The great Doug. I never saw, but a secretary manage-it-all commission-on-what-you-save live wire buzzed around all the time. He said he designed it, with Doug.'s assistance! The shape of the block is designed to corral the sea breezes and blow the fog out of every room. It works, too. We had radiators and lengths of pipe blowing about like straws sometimes. But we got it finished at last, and now the place can be a crematorium or a refrigerator at will.

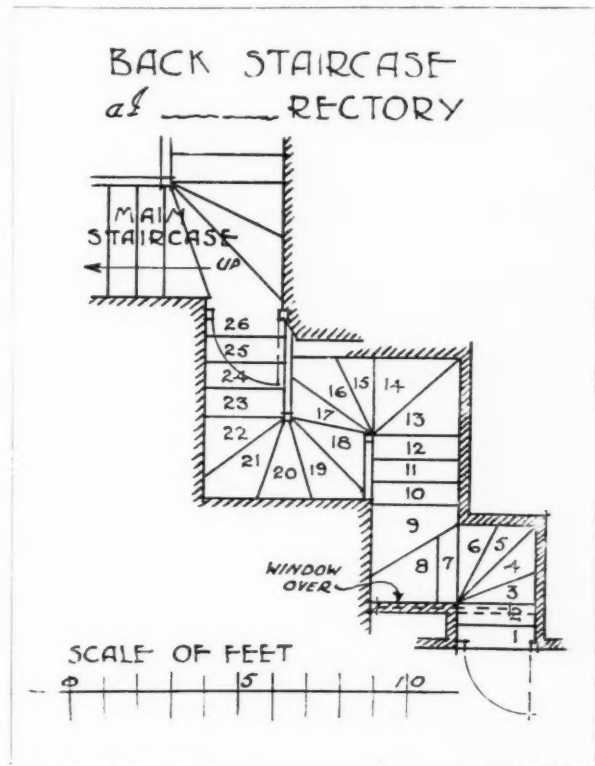
"It stands in a glorious position, overlooking blue sea and orange groves, and is fitted up like a palace. Every bathroom is tiled to ceiling, shower, needle, and every sort of gadget. The lower rooms are 15 ft. high, every bit of woodwork oak, parquet flooring throughout; and tile designs on the terraces that would do credit to any artist in mosaic. Doug.'s own suite, the bedroom over the billiard-room, dressing, bathrooms, and the terrace, were designed to give him room to throw himself about when plotting a film. But enough about Fairbanks; you will be able to read all about his 'little seaside hut' in the papers as soon as the ceremonial opening is over. And don't forget you know the lad who did the heating! The house is said to have cost about one hundred thousand dollars."



PLANS OF MR. DOUGLAS FAIRBANKS'S HOUSE IN LOS ANGELES

Correspondence A Freak Staircase

SIR,—In surveying old houses one occasionally finds an architectural gem, and I venture to think the back staircase shown on the accompanying plan is one of the first water.



Commencing in the kitchen quarters on the ground floor, it has no connection with the first floor, but after contorting itself through the roof of an outbuilding it finally debouches on the upper part of the main staircase to the second floor.

The lower part is well lit, but the top is pitch-dark, and when one adds that the average height of riser is nearly 10 in., it is not difficult to understand why there is a servant question.

ALFRED G. PARKER.

Unproductive Capital

SIR,—I thoroughly enjoyed Mr. Osbert Burdett's leader in your issue of September 23, but I scent a fallacy in his economics. Works of art are unproductive capital, not because they are not easily realizable (even this statement is surely incorrect), but because they do not produce.

The capital invested in a house protected by the Rents Restriction Act is, for the most part, not easily realized, but it is productive because (or shall we say, if) the tenant pays rent.

No; unproductive capital is quite simply capital which is not being employed to produce more wealth, and a work of art is not so employed.

From the point of view of an investment the banker might equally well frame a thousand sovereigns and hang them on his wall as hang there an Old Master, since the value of sovereigns, no less than works of art, fluctuates; but, being a man of taste and culture, he prefers to gaze upon his Sargent, his Manet, or his Titian. In other words, he has a run for his money!

H. J. BIRNSTINGL.

Medal for Liverpool Woman Graduate



MISS FRANCES SILCOCK.

MISS FRANCES THELMA SILCOCK, B.Arch., of the Liverpool University School of Architecture, has been awarded the medal given annually by the Royal Institute of British Architects for the best work done by a student of any recognized school of architecture in Great Britain or the colonies

during the last two years of the five years' course for qualification.

Miss Silcock, who is the daughter of Mr. and Mrs. N. Silcock, The Cross, Huyton, graduated last July with first-class honours in design. Her success in the present competition entitles her to be considered the leading student of her year in the Empire. She is also among the first half-dozen women in the country to qualify for membership of the Institute.

The medal was awarded on an exhibition of work now being held in the R.I.B.A. premises. Work has been submitted by candidates from Aberdeen, Edinburgh, Glasgow, Leeds, London, Cambridge, Toronto, and McGill Universities—in fact, from practically all the schools. Students passing their final examination in a school of architecture are thereby exempted from the final examination of the Institute, but they must submit two designs for this exhibition, on which the medal is awarded.

Miss Silcock's designs were of buildings for a Faculty of Architecture and a summer school for a political party respectively.

Miss Silcock received a five years' secondary education at St. Edmund's College, Liverpool, before entering Liverpool University, where in 1923 she won the Lever prize and the Holt travelling scholarship in architecture. One of the youngest students of her year, she is now twenty-two. Since graduating she has been working as a qualified assistant to Mr. Herbert J. Rowse. She intends shortly to start practice on her own account in partnership with another old Liverpool student, Mr. W. B. Edwards, who practises in Flint and Manchester, and is a lecturer on architecture in Manchester University.

This has been a notable year for the Liverpool School of Architecture, previous awards gained by students including the Rome scholarship and the Jarvis studentship.

(We hope to reproduce Miss Silcock's drawings in our next issue.)

The Tomb of Itmad-ud-Daulah, Agra

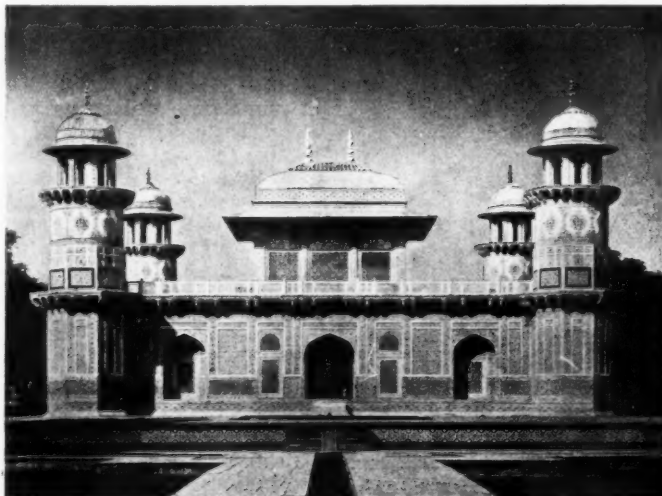
AT Agra stands the tomb of Itmad-ud-Daulah. This was erected by Nurjahan, wife of Jahangir, the fourth Mogul emperor, in memory of her father, who died in 1621. It was completed in 1628. Comparing it with other tombs of the period this is a smaller monument; for it commemorates a man of lower grade, but from its beauty of design it ranks higher than many of the others. Speaking of this tomb, of Golgumbaz at Bijapur, and of the Taj, there is a close relation evident in their design. Although these buildings show much Persian inspiration the form of their domes is truly Indian, plainly based upon the older Dravidian and Buddhist types, the ground plan being after

the old Hindu *Panch ratna* model, that is one central dome with four smaller cupolas. Like Sheikh Salim Chisti's tomb at Fatehpursikri, it is covered in white marble with

inlaid mosaic of coloured stones; the chief decorative motif being the cypress, Persian water vessels, and flowers, all being conventionalized. This edifice shows transition from the almost Hindu style of Akbar to the more Persian one of Shahjahan. The roof of the pavilion, which would have been a dome in a tomb truly Saracenic exhibits traces of the Hindu character.

This building is situated in extensive gardens on the left bank of the Jamna, the river and the whole demesne adding a charm to the monument.

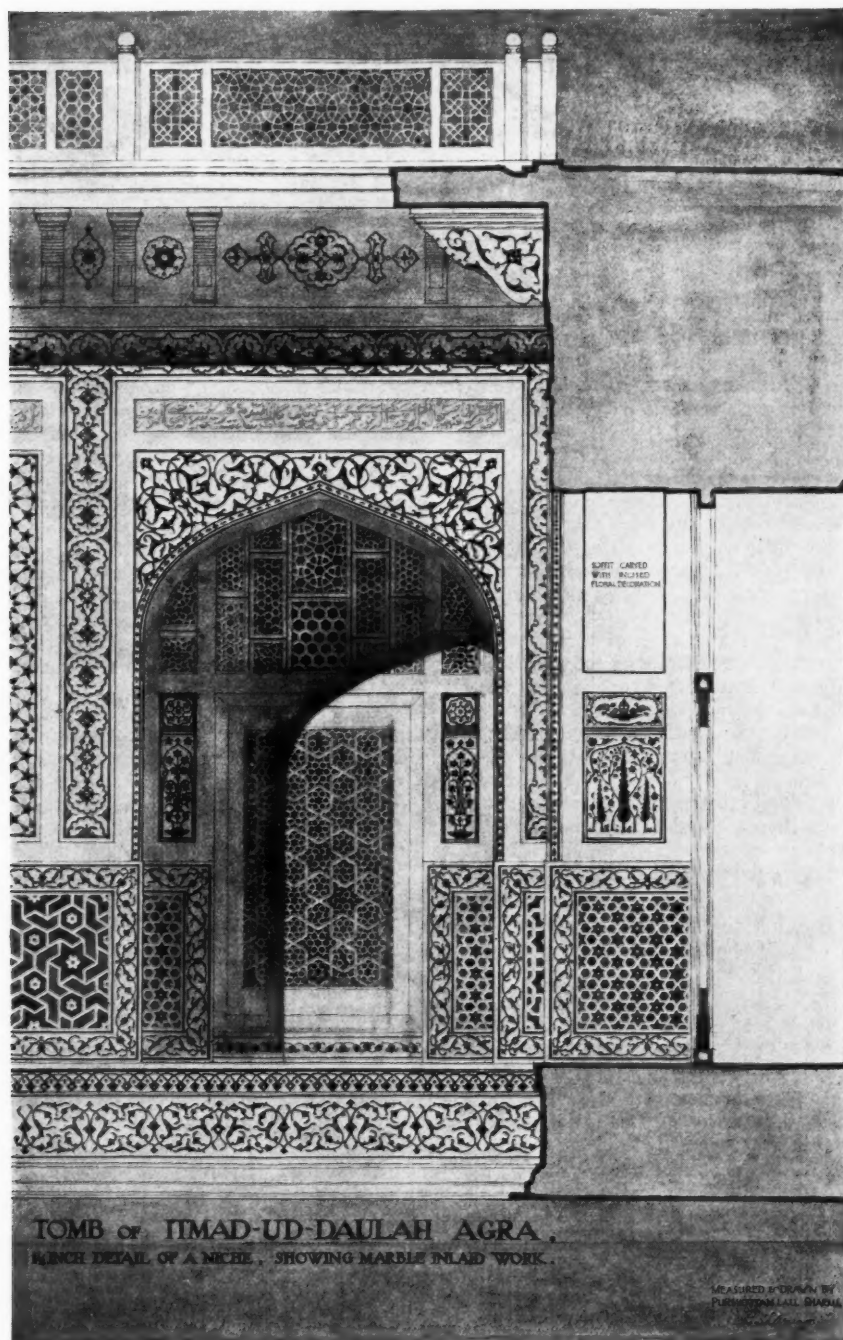
P. L. SHARMA.



ITMAD-UD-DAULAH'S TOMB.

Measured Drawings. 105.—Tomb of Itmad-ud-Daulah, Agra

Measured and Drawn by Purshottam Lall Sharma





THE NEW TERRACE WALL AND STEPS AT ASTON PARK (THE CURVED WINGED WALLS ARE HIDDEN BY THE HEDGES).

Birmingham Civic Society: Aims and Achievements

FROM the annual report, for 1924-5, of the Birmingham Civic Society, it is evident that the Society has been faithful to its avowed aim "to keep always in mind the idea of a regenerate city." During the year under notice, it has been resolute in promoting various means of fulfilling this purpose.

The report opens with a short account of the presentation of the Society's Gold Medal to Alderman George Cadbury, jun., in recognition of his outstanding services to the social, intellectual, and aesthetic life of the city. It is recorded of the recipient that for many years he has worked for the betterment of social conditions in Birmingham. He founded, and was first chairman of, the Civic Society in 1917. With Mr. Edward Cadbury and other members of the Cadbury family he gave 179 acres of the Lickey Hills to the city in 1907, 1921 and 1924, and in 1925 handed over the Chadwick estate of 414 acres to the National Trust.

With respect to the aforementioned Lickey Hills, the Society was consulted by the Lord Mayor of Birmingham as to its views on a suggestion to erect an outlook tower on Beacon Hill as a memorial to the donor of the Hills to the city. The Society's preliminary report on the subject contained the suggestion that this memorial might be associated with adequate control of developments affecting the character of the approach from Birmingham to the Hills.

Much activity has been shown with reference to the city parks. As an instance, the new park at Yardley, of the

entrance to which we are enabled to show an illustration, may be cited as a good example of a park planned in sympathy with existing surroundings. The old church and grammar school form a group of unusual interest and charm; and when the school buildings and gardens came into the possession of the city—although at that time the original park plan had been partly executed—the fact that these buildings had already been brought into relation with the original lay-out, made the necessary adjustment possible with but little alteration. The old grammar school has not yet been allocated to park use, and for the time being has been placed at the disposal of the Vicar of St. Edbergh's for committee rooms, club rooms, library and other parochial purposes.

Naturally, Aston Park and the Art Gallery have received considerable attention from the Society. It is mentioned in the report that the first portion of the new gardens at Aston Hall to be constructed was that in the east forecourt, and the central avenue extending to the east boundary. The avenue has been converted from gravel to grass; and when the accompanying view was taken, the focal point at its eastern extremity was about to be developed, with the great Warwick vase from the south portico of the Hall as a central feature. At the point where the avenue reaches the forecourt, the new stone terrace and steps designed and given by the Civic Society have been completed.

The box garden in the forecourt is remarkably successful



ENTRANCE TO YARDLEY PARK, SHOWING THE RELATION OF THE ENTRANCE TO ST. EDBERGH'S CHURCH AND THE OLD GRAMMAR SCHOOL.

in its first effect—but it will readily be understood that the precise cutting and shaping of the fully established plants is essential to perfection in topiary work of this character. Several important accessories not yet in place will add sensibly to the general effect. Attention is drawn to the unusual dimensions of the centre bed, and to the fact that only flowers known in the 17th century are to be planted there. As the new garden develops, the need for a change in the present arrangement and use of the hall itself has become apparent; and in a letter to the chairman of the Art Gallery Committee indicating the views of the Council of the Society on the matter, one of the suggestions refers to the possibility of gradually making certain adjustments in the interior arrangement of Aston Hall in order to bring it as near as possible to the condition of a furnished mansion of the period. A meeting of representatives of the Art Gallery

Committee, the Parks Committee, and the Civic Society has been arranged for the further consideration of the suggestions in the Society's letter.

Other activities of the year were: The practical interest taken by the Society in getting photographs in the city parks, which are being prepared for the new guides, taken from the most desirable points of view; suggestions and offers of help to the committee of the British Industries Fair, with the consequent invitation by that committee to the chairman and hon. sec. of the society to join the Fair Management Committee; successful efforts to prevent demolition of the Old Crown Inn, Deritend, probably the oldest house in the city, and a finely vigorous example of half-timbered work. This does not pretend to be a complete record of the Society's achievements for the year, but it will serve to show the variety and interest of the work done.

Friends' Meeting House, Wallingford

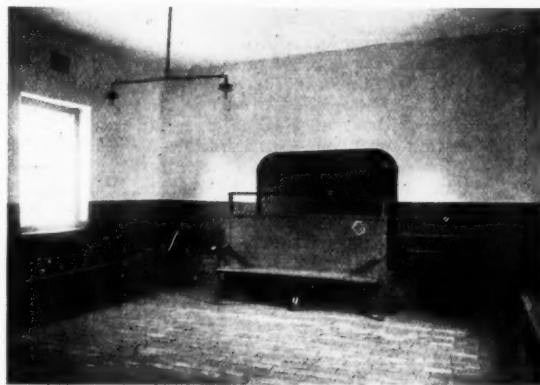
WILLCOCKS and GREENAWAY, Architects

THIS interesting little original early eighteenth-century building had recently fallen into a bad state of repair. It was suggested that it was not worth preserving, and might be allowed to go to ruin.

Alternatively, an estimate was obtained from a builder for removing the existing roof and substituting for it a low-pitched roof covered with asbestos tiles, etc.

Fortunately, however, before this course was adopted, a member, Mr. C. B. Willcocks, F.R.I.B.A., was consulted with regard to the building.

On examination he found that the oak timbers of the original roof were in excellent preservation, only the ends of a few of the rafters, etc., and the tile battens being defective, whilst the walls were cracked, and the plaster, etc., required repair. The building has now been put into good order by Messrs. Boshers and Sons, Ltd., of Cholsey.



THE INTERIOR.



FRIENDS' MEETING HOUSE, WALLINGFORD. WILLCOCKS AND GREENAWAY, ARCHITECTS.

Enquiries Answered

Enquiries from readers on points of architectural, constructional, and legal interest, etc., are cordially invited. They will be dealt with by a staff of experts, whose services are specially retained for this purpose. If desired, answers will be sent direct through the post. In no case is any charge made for this service. Whenever diagrams accompany an enquiry, they must be clearly drawn and lettered and inked in.

CALCULATING REVERBERATION.

"H. A. C." writes: "Will you kindly say what is the method of calculating the probable reverberation period, and favour me with criticism as to how acoustic properties might be improved?"

—Reverberations can be calculated as shown in the "R.I.B.A. Journal," third series, vol. xxx, no. 19, "The Acoustics of the Auditorium," by Mr. G. A. Sutherland, or in Professor Watson's "Acoustics of Buildings." Proposals for improving the acoustic properties should be based on the advice of an expert upon the plans and section in question. H. B.

DAMAGES FOR NON-COMPLETION OF BUILDING WORK.

"L.R.I.B.A." writes: "If a contractor fails to complete the works he has undertaken to perform in a stipulated time, and the penalty has been fixed at a certain sum per week as liquidated and ascertained damages, what constitutes the damage?"

"Has the client for whom the building is to be erected (in this case the erection of a house) a right to enforce the penalty, although he or she cannot show that they were put to any expense or damage owing to the builder's neglect in not finishing within a certain date, or does the clause carry with it damages in any case, even if they cannot prove personal damages?"

"Any assistance or explanation of damages for non-completion of a contract within a certain time, with the penalty of a sum per week for non-completion if beyond a said date which may be laid down in the contract, will be of great help to me."

—If a contractor should fail to complete, by an agreed time, works which he has undertaken to perform, the penalty, i.e. the sum agreed beforehand as liquidated and ascertained damages, may be enforced by the client without further proof. Read carefully Creswell's "Law Relating to Building and Building Contracts," particularly Chapter X. S.

A DAMP FLAT.

"A. D." writes: "Please advise me how to get rid of damp in a flat. The rooms beneath are large, airy, and dry, and the roof is water-tight. As soon as damp weather comes everything in the flat gets damp, even the bed-clothes. It occurs to me that sea-sand might have been used in the plaster work, and that I might have to replaster the wall. The walls are discoloured. The building is of brick, and has a slate roof. It is not situated near trees, nor on a low-lying site."

—Some other cause would seem to be at work besides the hygroscopic action of the sea-sand if the whole interior of the flat is affected with dampness. Sea-salt in the plaster is sometimes suspected as a contributory cause of moisture, but the effects are usually slight or negligible. In seaside districts the sea-sand is freely used, and the suggestion that it leads to a damp interior is ridiculed by local builders. Experiment with a small portion of the plaster would reveal whether it contains any large quantity of salt. An analyst's services are not required, for a little powdered plaster shaken up in a bottle of water will produce a liquid which will taste salt if there is any free salt present.

Rainwater driven by a strong wind against a brick or stone wall will often produce damp in a building, and if this is the case, replastering the interior would not be effective. Tile or slate hanging on the exterior, or waterproofed rendering in cement and sand, might cure the trouble. The soakage of water into the tops of walls must also be prevented by the use of adequate copings, damp-courses, and flashings. Where the damp is so general and so diffused as to affect the bedclothes without becoming conspicuous upon the walls, attention to the airing of the room by thorough ventilation would be beneficial. The contrast between the state of the top flat and the one below may be entirely due to the different habits of the occupants, for warmth will bring out the moisture into the atmosphere of the room and a draught from open window to chimney will carry it away. W. H.

HARD TENNIS COURT.

"T. G. I." (Neath) writes: "It is my intention to make a hard tennis court. I shall be glad if, to assist me, you will supply particulars as to the construction. Will you please also give me the name of contractors who specialize in this kind of work?"

—There are various kinds of hard tennis courts, and the construction will depend upon the type selected. One of the best patent courts is that laid by the En-tout-Cas Co., Ltd., of Syston, near Leicester, which requires a foundation of $4\frac{1}{2}$ in. of ashes (or 6 in. on heavy clay), levelled, and well rolled with a horse roller.

Protecting drains of agricultural pipes should be laid at the foot of any bank sloping down to the courts; but otherwise, if the site is reasonably dry, no further drains are required.

Another first-class patent court is laid by Messrs. W. H. Gaze and Sons, Ltd., of 19-23 High Street, Kingston-on-Thames. The foundation and drainage for this court would be as above.

A tar-macadam court, such as laid by Messrs. William Wood and Sons, Ltd., of Taplow, Bucks, would have a 4 in. clinker foundation as above, and upon this would be laid the tar-macadam in two grades, to a consolidated thickness of 2 in.; the coarse grade at the bottom being laid $1\frac{1}{2}$ in. thick, and varying from $1\frac{1}{2}$ in. material at the bottom, and finishing with $\frac{3}{4}$ in. material to a depth of $\frac{1}{2}$ in., and the whole surface dusted with grey or white fine spar grit.

A good hard court may also be formed of 4 in. clinker foundation, as described, finished with a 2 in. consolidated thickness of crushed Westmorland slate in two grades of somewhat finer gauge than used in tar-macadam courts. This type of court requires a coating of "Glutrine" fixative on top.

Another method of forming a hard court is by the use of 4 in. concrete mixed with Portland cement and reinforced by one of the numerous wire-mesh reinforcements, and then floated over with Portland cement coloured with red oxide, and finished hard and smooth. A red-coloured cement can be obtained, but is very expensive.

The tar-macadam and the concrete courts should be laid with a slight fall, working from the centre across the width, allowing for $1\frac{1}{2}$ in. fall in every 10 ft.

The clinker or ash foundation under the various toppings should have around the edges a kerb of brick-on-edge in cement, which will hold the foundation solid at the edges during rolling, and also prevent vegetation from encroaching.

The ideal size for one court is 120 ft. by 60 ft., as this allows 21 ft. at each end for runs back, and 12 ft. at each side for side play. A court of these dimensions is known as "championship" size.

There are several methods of permanently lining the courts. The non-slip lead marking-tape is, perhaps, the best, except for cement or tar-macadam courts, where the lines should be painted. White marble slips and white limestone are also much in use for this purpose, while white cement suitable for the purpose can now be obtained.

The cost will depend upon local conditions, and on the number of courts made at one time and place; but the patent topping of an "En-Tout-Cas" court, or a court laid by Messrs. Gaze, would approximate £120. A tar-macadam topping would be rather more, while a crushed slate topping would approximate £80.

The firms mentioned above are of very high repute, and they would no doubt be pleased to submit a definite tender and arrange for their work to be inspected, and for a trial game by appointment with them.

Hard-court construction is a work for specialists, and the enquirer would be well advised to avoid amateurs.

M. S. A.

The Week's News

Housing at Ilford and Lambeth.

The Corporation of London have now spent £572,867 on their housing schemes at Ilford and Lambeth.

New Electrical Sub-station, Surbiton.

A new sub-station for the supply of electricity is being constructed in Lambert Road, Surbiton Hill.

Housing at Lewisham.

Lewisham contemplates buying 40 acres near Grove Park, Bromley, Kent, for a housing estate.

Eight Hundred Houses for Guildford.

Guildford has approved a lay-out plan for 800 houses on a 90-acres estate.

Housing at Kidderminster.

Kidderminster is to help 300 workmen to build their own houses.

St. Sepulchre's, Holborn.

For the restoration of the spire of St. Sepulchre's Church, Holborn, £2,000 will be required.

Experimental Houses.

For demonstration purposes Willesden Council are to build four concrete houses.

Cast-iron Houses.

Cast-iron houses are being manufactured in an ironworks near Sheffield at the rate of ten a week, on mass production methods.

Doncaster's £300,000 Infirmary.

Messrs. Arnold and Sons have started work on the foundations of the first block of buildings connected with the Doncaster new infirmary, under contract.

Archibald Dawnay Scholarships.

The Three R.I.B.A. Archibald Dawnay Scholarships for Construction, competed for each year by students in the various Architectural Schools in Great Britain, have this year all been won by students of the Architectural Association.

Abolition of German Import Licences.

The Board of Trade announce that as from October 1 the requirement of import licences is withdrawn for all commercial goods imported into Germany, except those (a small number) of which a list is published in the Board of Trade Journal.

£200,000 for Building New Churches.

Owing to the increasing population in South London, the Bishop of Southwark has issued an appeal to his diocese to raise in the next few years £100,000 for the building of new churches.

Manchester Town Planning.

The Manchester Town Planning Committee have decided to ask the City Council for authority to prepare "a comprehensive civic survey of existing and prospective conditions in the city area."

Dissolution of Partnership.

The partnership subsisting between George Arthur Boswell, F.R.I.B.A., and Leonard Rome Guthrie, F.R.I.B.A., at 37 Bruton Street, London, W., has been dissolved by mutual consent as from August 31, 1925.

New Mosque Near Wimbledon.

Excavations for the building of their first London mosque have been begun at Southfields by the Ahmadiyya Moslems. The mosque will be erected in an orchard attached to the house where the sect has hitherto worshipped.

Engineering Practice Started.

Mr. C. Plenderleith, M.I.Struct.E., Consulting Engineer, informs us that he has started on his own account as a Consulting Engineer for the design of Steel and Reinforced Concrete Structures, and will be glad to receive trade catalogues at Moorgate Station Chambers, Moorfields, London, E.C.2.

The Department of Scientific and Industrial Research.

Dr. George Christopher Clayton, C.B.E., M.P., and Professor Henry Cort Harold Carpenter, F.R.S., have been appointed, by Order of Council dated September 16, 1925, to be members of the advisory council to the committee of the Privy Council for Scientific and Industrial Research.

New Beet Sugar Factory in Scotland.

A beet sugar factory is to be erected at Prestonhall Farm, near Cupar, Fife, by the Anglo-Scottish Beet Sugar Corporation. The erection of the factory is to commence immediately. Cupar Town Council has purchased fifty Weir steel houses for the accommodation of workers, of whom four hundred will be employed.

New Church at Putney Park.

The Bishop of Kingston will lay the foundation-stone of the new extension to St. Margaret's Church, Putney Park, on Thursday, at 3 p.m. The plans have been prepared by Mr. W. A. Forsyth, consulting architect to Salisbury and Southwark Cathedrals, and the work is being carried out by Messrs. Minter & Co., at a cost of nearly £11,000.

Scottish Housing Conference.

At a meeting of Scottish local authorities held at Edinburgh in July it was resolved to set up a conference on the housing difficulty. The various municipalities have now nominated their representatives, and the first meeting of the conference will take place in Edinburgh on October 13. It is expected that Sir John Gilmour and Captain Elliot will attend during the opening proceedings.

Changes of Address.

The address of Alfred J. Taylor, F.R.I.B.A., F.I.Arb., Past President Society of Architects, is now changed from 18 New Bond Street, Bath, to 4 and 5 Bridge Street, Bath.

Mr. H. C. Hughes has moved his office to No. 1 Tunwell's Court, Trumpington Street, Cambridge (opposite the Fitzwilliam Museum). The telephone number, as before, is Cambridge 184.

Warwick Priory for America: to be Transported Stone by Stone.

The remaining portion of Warwick Priory has been sold to an American, and will be taken down stone by stone and transported to the United States. This portion includes the Saxon wing, the sixteenth-century portion, and the Georgian wing. Of these the sixteenth-century part with the stone front is the most interesting. It will be reconstructed on its arrival in America.

Messrs. Green and Abbott, Ltd.

Messrs. Green and Abbott, Ltd., 123 Wigmore Street, W.1, desire to inform architects and surveyors that they have appointed Mr. F. Mills (who has had great experience in the designing and superintending of all periods of English decorations) manager of their decorating department. For some years before the war he was with Messrs. Lenygon and Morant, Ltd., Old Burlington Street; afterwards with Messrs. Thornton Smith, Ltd., Soho Square; and Messrs. Osborne, Ltd., Grafton Street.

The Salonica International Fair.

The opening date of the Salonica International Fair has been definitely fixed for May 15, 1926.

1. The Fair will be kept open from May 15 to 31, 1926.
2. Applications by prospective participants are being accepted up to January 15 next at the offices of the Fair, No. 11 Papakiriaz Street, Salonica.
3. The time for the laying-out of the exhibits is fixed from May 8 to 14 inclusive.
4. The clearing up will start on June 1 and terminate on the fifteenth of the same month.

Demonstrations of Quick Building.

A special feature of the Cologne Fair is the introduction of special groups, and this year two such groups are presented, one devoted to the building trade and the other to a display of measuring instruments of all kinds. In the former group modern methods of building construction are demonstrated, and it is remarkable with what speed building construction

can be carried out in concrete, etc., by the most modern methods. In addition to all the larger municipalities of Rhineland, the authorities of Rotterdam and Amsterdam have interesting exhibits in this section.

Cologne Autumn Fair.

The present fair is on a similar scale to that held in the spring of this year, though the exhibits are better arranged, and some of the departments, notably that of the motoring industry, have been accorded more extensive premises. Very few British firms are represented, but the organizers hope to obtain the co-operation of leading British manufacturers for the spring fair next year. Textile industries and the building trades are well represented, and a method of concrete house construction which involves spraying concrete on to a wire framework has caused some comment. It is said that by this process drying takes a much shorter time.

Moving a Town.

The removal of a single building is by no means an unusual feat, in America at any rate. The removal of a whole town, however, is another matter. This achievement has just been accomplished at Lavoye, in Wyoming, where the post office, bank, market, hotels, shops, and private residences of a community of 4,000 persons have been transferred to a site six miles away. The migration was due to a court order which decided that these buildings had been erected in violation of the sub-surface rights of certain oil speculators who possessed Government leases giving them authority to drill for oil. Little of the old Lavoye is missing in the new Lavoye, but the town plan is different in some respects.

"World's Tallest Hotel" Scheme.

Plans for the erection of the world's tallest hotel on Fifth Avenue, between 57th and 58th Streets, are reported to be nearing completion. This fifty-six-story hotel, with its residential apartments, costing \$25,000,000 (£5,000,000), will reach to the height of 610 ft., culminating in a brick tower decorated with limestone in the Italian Renaissance style. It is designed to dominate all the buildings in the vicinity, while the apartments of residents occupying all floors above the twelfth will have a wide view over the Central Park. The building will replace the beautiful Cornelius Vanderbilt château, which was built in 1893, but is now a white elephant, since the load of land taxation has become too heavy even for a millionaire's family.

A Great Engineer.

Mr. Basil Mott's appointment as chief engineer of the new Mersey tunnel shows that in Liverpool they believe in long experience. Mr. Mott is a great tunnel engineer. He was associated with the late J. H. Greathead—who gave his name to the Greathead shield as an important method of tunnel construction—in the building of the City and South London Railway, which was the pioneer of the prodigious system of tubes in London to-day. Another engineer of the past with whom Mr. Mott was associated was the late Sir Benjamin Baker, the joint engineer of the Forth Bridge. With him Mr. Mott was responsible for the second of London's tube railways, the Central London, which was known for a long time as the "Twopenny Tube," although one never hears the name nowadays.

Concrete Shuttering.

The committee which was recently appointed to consider new forms of concrete shuttering submitted in connection with the Government competition will present its report at an early date. There have been 201 entries, and the models of certain types of shuttering have been examined by officials of the Ministry of Health, who have made a careful selection. The competition was held with the object of directing the attention of inventors to the importance of devising new methods to accelerate and cheapen the production of concrete houses. It is expected that the results of the competition when announced will show that no great advance has been made on methods already known. One of these which was examined last month by the chief officials of the Ministry of Health is at a garden city where concrete houses are being built practically at the rate of one per day.

Housing at Wembley.

The Ministry of Health have invited representatives of fifty local authorities to inspect the exhibit of housing methods and building materials at Wembley. Mr. Raymond Unwin was to deliver an address on "New Methods of Construction," and Sir Kingsley Wood to welcome the visitors

on behalf of the Ministry. The exhibit is due to a suggestion by the Ministry that their policy of facilitating the exhibition of new types of houses in various localities for the guidance of housing authorities up and down the country should be supplemented by a central exhibit where all types could be seen and compared side by side. The houses seen at Wembley are the result of a competition organized by the Ministry of Health, in association with the building section of the Department of Scientific and Industrial Research.

Housing Progress in Scotland.

The following figures show the progress that has been made in State-aided housing schemes in Scotland to August 31, 1925:

	Completed.	Under Construction.
1919 Act	24,941	591
Private subsidy schemes	2,324	—
Slum clearance schemes	1,623	3,302
1923 Act	3,842	6,207
1924 Act (local authority scheme)	238	2,587
	32,968	12,687

Of the total number of houses completed and under construction under the 1923 Act, 3,140 are by the local authorities and 6,009 by private enterprise.

The Closing of Wembley.

"The closing of Wembley," said Mr. Ben Tillett recently, "would be a national calamity, and to let the Exhibition fall into the hands of speculators and junk dealers would be a crime. Next summer," added Mr. Tillett, "it should be reopened, if possible, on lines that may be approved by experience, but with the same outlook and objects as at present. Gradually it should wipe out its financial deficits. It would, of course, have to be popularized. All through the summer people should be able to visit Wembley seven days a week. Wembley is more necessary now than ever it was, and it should be preserved as a national memorial. It has become part of our daily life, and it has already overcome its initial difficulties. Some buildings could still be carried on, representing, as they do, an epitome of the Empire. The Exhibition is a determined thing, a thing that has grown and become an institution which should not be allowed to perish."

Concrete Buildings: Resistance to Earthquake Shock.

The damage occasioned in Santa Barbara, California, as the result of the earthquake in June last, has been examined by a committee of engineers, and Mr. Henry D. Dwell, a member of the committee, records that well-designed concrete buildings successfully withstood the earthquake and remained undamaged. According to his report, the greatest damage was experienced by buildings of poor design and construction, and this included reinforced concrete-frame buildings where only a light frame, poorly designed, was used. Here the effect of the bending of columns was particularly noticeable, and was marked by the crushing of the concrete at the top of the first-floor columns. In many cases the steel rods were buckled, and the reinforcement was exposed. Reinforced concrete frames without solid reinforced concrete walls and without adequate bracing against lateral forces are not suited to resist earthquakes, while reinforced concrete of good quality, properly designed, came through the shock without showing more than minor damage.

Jackdaws and Wells Cathedral.

Sir Charles Nicholson, the ecclesiastical architect, in a report on the structural condition of Wells Cathedral, specially refers to the damage caused to statues by jackdaws nesting behind them. Many of these statues are in a perilous condition. The west front is one of the finest specimens of ecclesiastical architecture in this country. No other cathedral possesses so many statues assembled together in one façade. Sir Charles, in his report, states: "I feel convinced that some of the Wells statues are as fine as anything at Chartres, while they are certainly more nearly in their original condition than the greater number of those French masterpieces, with which they may without presumption be compared." From 1869 to 1874 an immense programme of restoration was carried out under Sir Gilbert Scott, which saved the cathedral from imminent destruction. In the present emergency an appeal for funds is being made in the locality. There has been so far a good response from the county of Somerset, and it is hoped that a general appeal to the nation will be unnecessary.

Cork-and-Steel Houses

Houses with a steel framework and an insulation core of cork covered with cement concrete applied under pressure by a cement gun, are shortly to be built for the Air Ministry. A contract has been placed with the Dorman Long Housing Company for the erection of forty houses designed for the accommodation of married airmen at one of the larger aerodromes near London.

The steel used in the framework that forms the backbone of the house is the standard product of Dorman Long & Co., manufactured at their steel plant at Middlesbrough. The steel for a parlour house weighs about two tons, and the framework for a block of two parlour houses can be erected by four men in one day. The architects of the Air Ministry have designed their houses to suit their special requirements, for the system does not restrict the architect or local authority to a standardized design. There is the same freedom as in brick construction.

The house itself is a concrete house of special design. The insulation core is composed of cork boards, such as have been used for the past twenty years for the insulation of cold-storage buildings and in the construction of powder magazines on board ship. This board, composed of granulated cork compressed in moulds and baked, is enclosed in the solid concrete of the wall. The cement concrete is applied under pressure by a cement gun—a method that has been developed to a high degree in recent years in the United States.

Houses erected on this system have been completed this year at Betteshanger, near Deal, in Kent. These have been carefully inspected by the officials of the Ministry of Health, by experts of the Government Building Research Board, and by representatives of the Office of Works, the Air Ministry, the London County Council, and other public bodies. The use of cork is a novelty in cottage construction.

The Admiralty Building's Bicentenary

The Admiralty building in Whitehall (notes the "Times") has just attained its bicentenary. An Order in Council dated March 25, 1723, approved of the scheme of building a new Admiralty Office "and range of buildings belonging to the same," and the work took some two and a half years. It was on Thursday, September 30, 1723, or 200 years ago, that the first board meeting in the new building was held.

The beautiful screen in front of the building was restored in 1923 according to the original design of Robert Adam, the architect of the Adelphi and several other fine London buildings. From 1759 to 1827, the colonnade had an arched entrance in the centre, of handsome appearance, but in the régime of the Duke of Clarence (William IV) as Lord High Admiral, columns on either side were removed to make room for openings in the colonnade, and the central arch was closed. The reason was that the latter was not wide enough to permit of the entry and exit of carriages on State occasions. Nowadays, of course, there is another entrance on the Horse Guards' Parade side.

The Admiralty building is on the site of Buckingham's old home of Wallingford House. The architect was Thomas Ripley, a protégé of Sir Robert Walpole, who had employed him to build or improve Houghton Hall and Wolterton House, Norfolk. Ripley's design was much criticized by Pope and Horace Walpole, and never shared in anything like such popularity as was accorded to the Adam screen of some 35 years later. It was a difficult task, however, not only to fill the long, narrow site of Wallingford House, but also to make due provision for the requirements of the different members of the board, who at that time had official residences within the building. The members in 1725 were: Admirals James Earl of Berkeley, Sir John Jennings, Kt., Sir John Norris, Kt., and Sir Charles Wager, Kt., John Cokburne, Esq., William Chetwynd, Esq., Sir George Oxenden, Bart., and the diligent Josiah Burchett, who held the post of Secretary from 1694 to 1741.

To-day, of course, Ripley's handiwork forms but a small part of the modern Admiralty building. It is, indeed, only one side of the quadrangle of which the other three sides and the Admiralty Arch have been added since 1891. It was in the captains' waiting-room on the left of the entrance hall of the old building that Nelson's body lay in state on the night before the burial in St. Paul's. The apartment in the building in which the meeting of the Commissioners was held two centuries ago is that which was in use during the Great War, and it is still the board room of the Admiralty at the present time.

Demonstration Steel Houses Inspected

Sir Charles Ruthen, the Director-General of Housing, accompanied by an official of the Ministry of Health, visited the pair of demonstration steel houses of the Atholl type that are being built on the Downham estate of the London County Council. A visit was first paid to the workshops in the Isle of Dogs, where the steel parts of some of the houses that will be erected in various centres of the United Kingdom have been assembled. A specimen house built under cover there was carefully inspected. Unlike the "Weir" type, which has a wooden frame, the house devised by the Duke of Atholl has steel plates three-sixteenths of an inch thick as its structure. To these are secured the necessary scantling for the support of the inner lining. On the inner surface of the steel sheets there is a coating of granulated cork to dispose of any moisture. The roof is tiled. The Atholl type is offered both as bungalows and two-story houses.

Demonstration houses of this type are being, or are about to be, erected at Eastbourne, Rochdale, Plymouth, Swansea, Cardiff, Birmingham, Manchester, Ipswich, Leeds, Stockton-on-Tees, Bristol, Portsmouth, Halifax, Newcastle-on-Tyne, Northampton, Huddersfield, Norwich, Derby, Oldham, Reading, Salisbury, and Wrexham, under the conditions laid down by Mr. Neville Chamberlain. The cost is £450 each house, and similar houses in blocks of pairs can be supplied at the same prices.

Later in the day Sir Charles Ruthen proceeded to Downham to the site where eventually, it is hoped, there will be erected demonstration houses of the Telford, Wild, and Burney types. At present the only pair, almost completed, are those of the Duke of Atholl. After an inspection the Director-General of Housing stated: "I think that this is a very presentable house. It is obviously a steel house, and makes no pretence to be a brick house. As a supplementary method in order to add to the total output of dwellings the steel house of the Atholl type is certainly worthy of consideration."

The consulting architects are Mr. A. Lloyd Thomas, M.I.E.E., and Mr. Douglas Wood, F.R.I.B.A., who were both formerly Housing Commissioners of the Ministry of Health, and are responsible for various housing schemes. The annual cost of painting the steel walls of the Atholl house is estimated to be not more than 12s. a year. In order to facilitate negotiations, the Duke of Atholl has appointed the Housing Corporation of Great Britain, of which Lord Asquith is chairman and Lord Denbigh a director, to deal with the erection of these houses in England and Wales.

New Design for Tube Stations

An interesting step has been taken, writes the London correspondent of "The Manchester Guardian," by the Underground Railways which may in time make a great difference to the look of the streets. In building the new stations on the extension of the City and South London line to Morden, an entirely new design has been adopted for the entrances. The existing Tube stations are, of course, usually built in liver- or blood-coloured faience. The effect is cheerful, but hardly one of architectural distinction. The new entrances, which have been designed by Mr. Charles Holden, are to be built in Portland stone. The use of stone is not quite unknown in Tube architecture, for the Edgware station, on the extended Hampstead Railway, has an interesting entrance in the form of a columned portico with shops.

The first station to be built on the new lines is Nightingale Lane, and it is probable that the design may be used when stations on the old lines inside London are reconstructed, so that Tube stations in Portland stone may become familiar in the street scene of the future.

The chief feature of the design is a large window over the entrances in the centre, lighting the booking hall. On either side of this will be broad surfaces of plain stone. Over the entrances runs a projecting canopy, from which they will be flood-lighted.

Between the entrances will be wall space for the prominent display of the excellent Underground posters, and notably of a map of the whole system, which is the first need of the traveller. The maps and posters will relieve the severity of the façade with colour. The idea has been to produce a design which is simple and dignified, and which can be easily adapted to the peculiarity of the sites. It does seem to be time that something was done to break away from the "ceramic" style of the decoration of Tube stations.

Competition News

Manchester Town Hall Extension Scheme.

At a meeting of the Manchester Town Hall Extension Committee it was decided to ask the president of the British Society of Architects to nominate assessors for the plans competition for the best utilization of the extension site between Lloyd Street and Peter Street.

List of Competitions Open

Date of Delivery.	COMPETITION.																								
Oct. 15	<p>Workers' homes for the Moscow Soviet of Workers, Peasants, and Red-Army Deputies. The aim of the competition is to devise types of houses with dwellings for working-class families living in individual households, under the living and climatic conditions of the province of Moscow. The types of houses required are as follows: (a) A two-storied house containing 4-8 dwellings situated on one floor, i.e. the whole of each dwelling located on one floor; (b) a house of the ordinary block type with no less than three dwellings, each located on two floors; (c) a three or four-storied fireproof house with central heating; not less than three entrances to the dwellings from the staircase-platform on each floor. For the relatively best projects the following prizes will be awarded on each type of house separately:</p> <table><tr><th></th><th>(a)</th><th>(b)</th><th>(c)</th></tr><tr><td>First</td><td>Roubles 2,000</td><td>2,000</td><td>2,500</td></tr><tr><td>Second</td><td>" 1,500</td><td>1,500</td><td>2,000</td></tr><tr><td>Third</td><td>" 750</td><td>750</td><td>1,000</td></tr><tr><td>Fourth</td><td>" 500</td><td>500</td><td>750</td></tr><tr><td>Fifth</td><td>" 400</td><td>400</td><td>500</td></tr></table> <p>It is not obligatory for contestants to cover all three types. The prize-projects shall become the property of the Moscow Soviet. The Moscow Soviet reserves the right of acquiring the unprized projects at the price of 200 roubles per project. Apply The U.S.S.R. Society of Cultural Relations with Foreign Countries, 150 Southampton Row, London, W.C.1.</p>		(a)	(b)	(c)	First	Roubles 2,000	2,000	2,500	Second	" 1,500	1,500	2,000	Third	" 750	750	1,000	Fourth	" 500	500	750	Fifth	" 400	400	500
	(a)	(b)	(c)																						
First	Roubles 2,000	2,000	2,500																						
Second	" 1,500	1,500	2,000																						
Third	" 750	750	1,000																						
Fourth	" 500	500	750																						
Fifth	" 400	400	500																						
Nov. 9	Proposed Fire and Police Station at Marlborough Crescent, Newcastle-upon-Tyne. Premiums: £500, £300, and £100. Assessor, Mr. Percy S. Worthington, D.Litt., M.A., F.R.I.B.A.																								
Dec. 31	The Argentine Government offer prizes of 10,000, 5,000, 4,000, 3,000, and 2,000 Argentine gold pesos for the best architectural designs for a National Institute for the Blind. Apply Enquiry Room, Department of Overseas Trade, 35 Old Queen Street, Westminster, S.W.1.																								
Jan. 1, 1926	New buildings for Liverpool College on a site at Mossley Hill. Assessor, Sir Giles Gilbert Scott, R.A. Premiums, £500, £300, and £200. Conditions and plan of site can be obtained from Mr. J. H. Lintern, secretary, Liverpool College, Sefton Park Road, Liverpool, on payment of a deposit of £2 2s.																								
June 30, 1926.	Competitive designs are invited by the Ministry of Wafks for the rebuilding of the Mosque of Amrou. Prizes of £2,500, £1,000, and £500 are offered for approved projects. Those wishing to submit designs should apply before June 30, 1926, to H.E. the Under-Secretary of State to the Ministry of Wafks, Cairo (cables "Wafks Cairo"), who will forward details, conditions, etc. The final date for acceptance of proposals is January 1, 1927.																								

Coming Event

October 7.

Liverpool Architectural Society.—Opening address by the president, E. Bertram Kirby, Esq., O.B.E., F.R.I.B.A.

R.I.B.A. Examinations

R.I.B.A. Intermediate Examination, November, 1925.

The centres for this examination will be London and Leeds. At both centres the examination will be held from November 20 to 24, 1925, inclusive.

At the London centre the oral examination will be held on November 26; at the Leeds centre on November 25.

The following are the dates for the forthcoming R.I.B.A. examinations:—

Intermediate Examination.—November 20, 21, 23, 24, and 26, 1925 (last day for receiving applications, October 17, 1925). May 28, 29, 31, June 1 and 3, 1926 (last day for receiving applications, April 23, 1926).

Final and Special Examinations.—December 2, 3, 4, 5, 7, 8, and 10, 1925 (last day for receiving applications, October 30, 1925). July 7, 8, 9, 10, 12, 13, and 15, 1926 (last day for receiving applications, June 4, 1926).

Examination for the R.I.B.A. Diploma in Town Planning.—June 30, July 1, 2, and 5, 1926 (last day for receiving applications, March 1, 1926).

Obituary

Mr. James Jerman, F.R.I.B.A.

The death occurred on September 22, at his residence, Coomroye, Topsham Road, of Mr. James Jerman, F.R.I.B.A., Exeter's best known architect, a highly respected former member of the Corporation, and one of the oldest Freemasons in the city. For nearly half a century Mr. Jerman played a prominent part in the public affairs of Exeter, and, apart from the architecture of the city, he has left his mark upon the municipal, educational, and religious sides of its corporate life. He was architect to the Exeter School Board, later acting in a consultative capacity to the Exeter Education Committee. Exeter School, Maynard's School, and the Modern School for Girls, Pennsylvania Road, were other examples of his work, and he was extremely proud of the last-named. He was also the architect for the extension of St. Luke's Diocesan Training College for teachers, and for the extension of the college chapel. A prominent member of the Devon and Exeter Architectural Society, he was also a director of the Provident Permanent Building Society, and treasurer of the Diocesan Archaeological Society, and a member of the governing body of the Royal Albert Memorial. The services he gave to the memorial were of great value, especially in the selection of works of art under the Kent Kingdon bequest. A Past Master of St. John the Baptist Lodge, P.P. Grand Superintendent of Works and P.P. Grand Warden, he was made Assistant Grand Director of Ceremonies of the Grand Lodge of England in 1922, in which year he was also appointed Grand Standard Bearer in Supreme Grand Chapter. Mr. Jerman was a great lover of Dartmoor, and spent much of his time at his house on the moor, Bray Tor, Bridestowe. For some time his health had been enfeebled, but he was able to get about almost up to the end. He was seventy-seven years of age.

New Inventions

Patent Applications.

- 23154.—Best, R. M.—Garages. September 17.
- 22968.—Davies, J.—Building walls. September 15.
- 22885.—Dehn, F. B.—Building construction. September 14.
- 22979.—Goodyear, C.W.—Flooring. September 15.
- 23075.—Laurie, A. P.—Production of partition walls and ceilings. September 16.

Specifications Published.

- 216892.—Rott, L.—Fire and burglar proof doors and door-jambes or the like, of reinforced concrete.
- 217605.—Seailles (née Calogeropoulos), S.—Process for the obtainment of polished surface in cement.
- 239375.—Petty, J. P.—Production of hollow bodies of concrete or the like.
- 239414.—Du-Plat-Taylor, F. M. G.—Methods of jointing and bedding building-blocks.
- 239435.—Preston, R.—Casting of concrete buildings *in situ*.

Abstract Published.

- 237804.—Samson, K., 37 Danckelmannstrasse, Charlottenberg, Berlin.—Fireproof compositions.

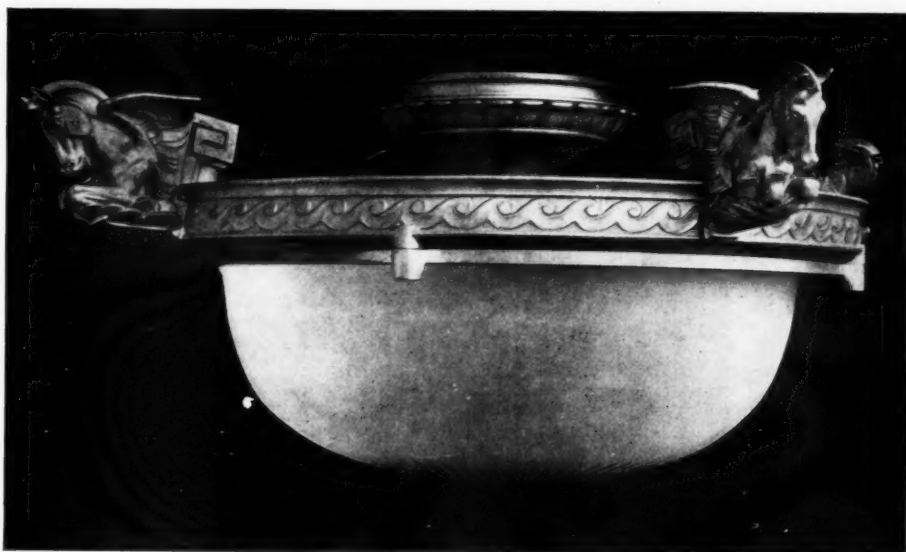
The above particulars are specially prepared by Messrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, London, W.C.2, from whom readers of the JOURNAL may obtain all information free on matters relating to patents, trade marks, and designs. Messrs. Rayner & Co. will obtain printed copies of the published specifications and abstract only, and forward on post free for the price of 1/6 each.

London Brick Bonus

The directors of the London Brick Company and Forders, Ltd., announce that they have resolved to capitalize £70,000 of the undivided profits, to be applied as a bonus to the ordinary shareholders, and issued to them or their nominees in the form of fully paid-up ordinary shares in proportion to their holdings.

This will be the fourth bonus issue made during the past five years. The last was in March, 1925, when £89,418 of the undivided profits was capitalized, leaving to be carried forward £37,350, after paying a dividend of 15 per cent. for the year 1924.

At December 31, 1924, the issued ordinary capital totalled £440,582, and this was increased to £530,000 by the bonus issue in March last.



DINING SALOON, ORIENT LINE, R.M.S. "ORAMA," 20,000 TONS.

A. N. PRENTICE, F.R.I.B.A., Architect.

One of the Electric light fittings on the "Orama" designed by Walter Gilbert, Art Adviser to Harcourts, Ltd., the firm owned by Metropolitan-Vickers Electrical Co., Ltd., to carry out Architects' requirements in this direction.

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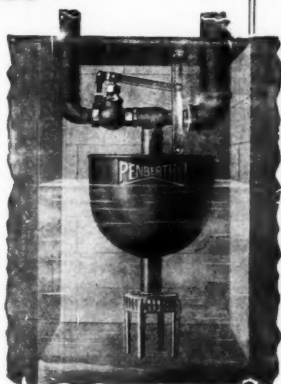
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