Wednesday, March 25, 1925 Vol. LXI. No. 1577.

THE ARCHITECTS' JOURNAL & Architectural Engineer

With which is incorporated "The Builders' Journal."

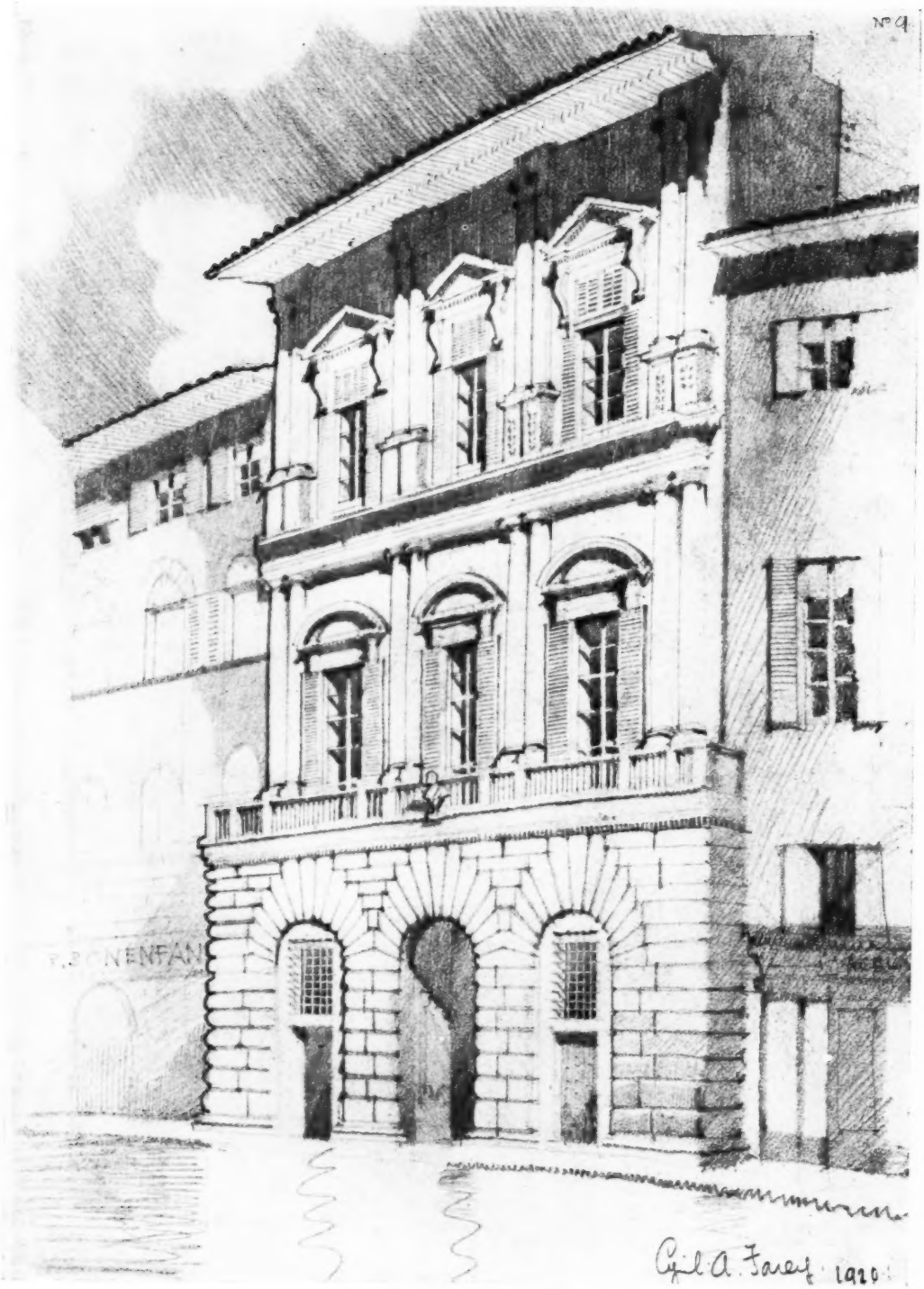
FROM AN ARCHITECT'S NOTEBOOK.

The works of Pericles were the more marvelled at seeing that they were achieved in but a little time though they were designed for the ages. Each building at the moment of its completion had the stability of age, while in fullness of growth it was as though modern and newly created; thus a freshness still blooms upon it, keeping it in appearance unsullied by time, as if some ever-fresh breeze and unaging spirit were in its very substance.

PLUTARCH.
"Life of Pericles."

9 Queen Anne's Gate, Westminster.

The Palazzo Uguccioni



(From a pencil sketch by Cyril A. Farey.)

THE

ARCHITECTS' JOURNAL

9 Queen Anne's Gate, Westminster.

Wednesday, March 25, 1925. Volume LXI. No. 1577

Unity at Last

Our wars are done, our battles at an end,
Conquest nor overthrow delights nor grieves,
Let us lie down again, as friend with friend,
Under the leaves.

WE take the opportunity of congratulating the architectural profession upon the successful termination of the very protracted negotiations between the R.I.B.A. and the Society of Architects. We have consistently maintained that the amalgamation of these two bodies would be to the good of the profession as a whole, and therefore to the good of the nation. At the present time there is more than ever need for a united body of architects whose opinions the community will respect, and to whose voice they will listen. Never was there more need than now for a firm stand to be made against iconoclasm and vulgarity. The nation is threatened with the loss of its most beautiful bridge; it is threatened with the utter spoilation of the countryside with factory-made houses. The day is not far distant, it would seem, when houses will be bought over the counter or through the post. If such a state of affairs is permitted to continue, from being the most lovely country in the world, England will deteriorate into the most ugly; vulgarity and commercialism will hold undisputed sway.

The moment is, therefore, a vital one for the architectural profession, and if it can speak as an harmonious and united body, its utterances must carry more weight. The cause of registration, too, is now brought within the realms of possibility. Although this matter is fraught with immense difficulty we are not without hope that a Bill, protecting both the public and the profession, will find its way to the statute book. The Registration Committee is now sitting, and we wish its activities every success.

The actual accomplishment of the amalgamation must have come about so quietly as to surprise many who read the discreet paragraph that has appeared in the columns of the architectural Press, stating that official intimation has been received from the Privy Council Office that the King has been pleased to approve the grant of the supplemental charter prayed for by the R.I.B.A. We can think of many long-striven-for ends whose attainment has come about in the same simple, quiet, and unostentatious manner. Those who were in France on November 11, 1918, may recollect the utter simplicity of the announcement which came through to all units in the early hours of that morning: "Hostilities will be stopped on the whole front at 11 o'clock on November 11." Great events are often born with little ceremony. Yet no sooner is the object achieved than a vast and steady activity begins, the preparations for which have long been completed. With the signing of the armistice the immense machinery for dealing with demobilization slid into motion. With the achievement of unification the machinery for carrying into effect the transference of the members of the Society of Architects to their appropriate classes of the R.I.B.A. at once began. At the time of writing, 181 Fellows, 626 Licentiates, 196 students, 68 probationers, and 5 honorary Associates have been admitted. Such an operation, simple as it sounds, entails an immense amount of secretarial work, all of which is being expeditiously accomplished by the staff of the R.I.B.A. When this work of transference is accomplished, there will but remain the winding-up of the Society of Architects, which body will then cease to exist. This event we are given to understand, may be expected to take place within the next few months.

Meanwhile, in June come the annual elections, which will then for the first time be conducted under the new charter, as a result of which the composition of the new Council will undergo expansion and change; the coming election should therefore be of particular interest.

As we have said the amalgamation "prayed for" is now an accomplished fact. We cannot help feeling, however, that presently the event should be marked in some befitting manner, and that it should be the occasion of some kind of public ceremony: dinner, reception, conversazione, or what not, so that the significance of the event may be emphasized and appreciated. We are not aware, but it may be that the bodies concerned have already determined upon some such procedure; should they not have done so, we trust they will give the matter their consideration. These are days, too, of publicity, of which the architectural profession gets all too little. A public dinner, therefore, at which some member of the royal family, or some eminent statesman were the guest of honour, would, we think, not only be a fitting celebration of so important an event in the history of the profession, but would also benefit the profession in many unforeseen ways.

With the winding up of the Society of Architects a body which has done a great deal of good work will cease to exist. There certainly was a period when the R.I.B.A. seemed to fail to keep abreast of the times, and fell into a peaceful slumber, far removed from the bustle of the world. These conditions have, fortunately for the profession, completely changed, and the R.I.B.A. is now alert and alive to its responsibilities.

If a country gets the government it deserves, as is so frequently, and with no little justification stated, so, too, a professional organization gets the council it deserves.

It therefore remains with the members of the Institute to see that they are continually abreast with the times, taking their part in all the manifold activities of the day. There is no gainsaying the fact, the general public does not sufficiently look to the architectural profession for guidance in matters about which it is competent to advise. Architects are suspect. They are artists, and art is a luxury. The public has yet to learn that architects are also practical men, and that art is not a luxury, it is a vital necessity, without which no nation can maintain its place in the world. We hope that the united profession may succeed in teaching this important lesson. We wish it every success as it enters upon a new phase in its career.

Lord Curzon

The death of Lord Curzon will be widely regretted, but nowhere more keenly than in the architectural profession. Lord Curzon was the best type of amateur and patron of the arts—perhaps the last surviving representative of the great eighteenth-century tradition. He not only patronized the arts, but took a keenly discerning interest in them. Nor was his interest merely that of the great patrician, it was a broad, democratic interest, entirely free from the taint of the "superior purzon." Architecture had no greater lover nor more zealous protector. Lord Curzon, though leading a busy and at times heavily responsible public life, was always ready to devote hours of precious time to matters of architectural moment. Any building of architectural worth threatened with spoliation or extinction found in him a ready, forceful, and eloquent advocate. He was a great lover of London, and was a vice-president of the London Society, at whose inaugural meeting at the Mansion House in 1913 he made a memorable speech. He was president of the London Survey Committee, which publishes, in collaboration with the London County Council, those extremely valuable surveys of London. One of his most recent actions was to write to "The Times" a magnificent appeal for the preservation of Waterloo Bridge, while his masterly speech at the opening of last year's exhibition of the Architecture Club at Grosvenor House will be in the memory of all who heard it or read it subsequently in the Press. Architecture has suffered a severe loss by his death.

Mr. Todd's Action

We are not surprised that Mr. John Todd, the City District Surveyor, has resigned his appointment. It is the logical sequel to the suspension by the City Corporation of the "dangerous structure notice" which he lately served upon the Dean and Chapter of St. Paul's. Mr. Todd's proposed measures for the preservation of the cathedral may have been of far too drastic, as well as immoderately expensive, a nature, but that his diagnosis of the structural disease from which the building is suffering was, generally speaking, correct, none except the uninitiated have sought to deny. A heavy responsibility now rests upon the City Corporation, no less than upon the Commission, which has definitely committed itself to a policy of tinkering that, in the opinion of experts in structural mechanics, can only aggravate the disease which it is intended to cure. It is a pity that Mr. Todd has had to immolate himself on the altar of public duty; but he is to be warmly commended for his action, which is that of a man having the courage of his convictions. It is doubtful whether his sacrifice of self will be of any avail. Only the threatened collapse of the building seems likely to move the Commission to abandon its present ineffective policy—and then perhaps it will be too late.

Architects and Bridges

Colonel Ashley's circular to local authorities on the subject of the architectural treatment of road bridges has, we are glad to note, received a good deal of attention in the general Press. In "The Evening Standard" last week there were some uncommonly acute observations on the subject, while "The Daily Mail" devoted a leaderette to it. The former newspaper rightly attributed the decline of road bridges to the application, in the nineteenth century, of steel to bridge-building, and placed the responsibility for this declension upon our friends the engineers, who, of course, can do nothing but admit the impeachment. It was a bad day for bridges when their design passed from the hands of architects into those of engineers. Rennie, of course, was an exceptional man, combining the best qualities of both callings. To-day his type does not exist. The local surveyor, who often designs not only road bridges, but important buildings as well, has not had the training necessary for the effective discharge of such important functions. He is what our countrymen commonly regard as a practical man, who is "not going to have any æsthetic nonsense," though usually he cannot resist the temptation to smother his ugly constructions with perfectly abominable detail. He ought not to be allowed to occupy himself with things for which, both by training and temperament, he is entirely unsuited. The design of bridges is work for architects, and we hope that Colonel Ashley's circular will result in the widespread requisition of their services.

The Marylebone Manner

Madame Tussaud's, unhappily burned down last week, was not a particularly fine building architecturally, but it was by far the best of the older buildings to be found in the Marylebone Road, which is *not* distinguished for its architecture. The neighbourhood is largely made up of those unfortunate red-brick and terra-cotta buildings, of which there are so many appalling acreages on the outskirts of Central London. Here, in Marylebone Road, you find the thing at its worst. Everywhere are gigantic blocks of spiky-gabled flats of a sickly yellowy colour most unpleasant to look upon. Marylebone Railway Station, though of comparatively recent erection, carries on the bad tradition, and is surely the most timid terminus in all London. Madame Tussaud's had many of the bad qualities of what one might call the Marylebone Manner, but at least there was some attempt at architectural composition about its elevations. Now it is gone there is little of architectural interest to be found in the neighbourhood, except the eighteenth-century work and, of course, Sir Edwin Cooper's handsome Marylebone Town Hall. Whether Madame Tussaud's will be rebuilt on the same site is doubtful. The locality is a very popular residential one, and it is more than likely that the site will be wanted for one of those giant blocks of flats—let us hope of a better architectural character than those which already exist. Marylebone Road is not an amusement centre, and it is possible that the proprietors of Tussaud's will take advantage of the opportunity now provided of removal to a more appropriate locale.

The Westminster Waxworks

The untimely end of the waxworks of Marylebone Road may perhaps revive popular interest in the waxworks of Westminster Abbey. These oddly-housed relics are found in a chamber above Abbot Islip's Chapel. They represent the figures of certain monarchs and others, and date from the days when it was the custom to display in the funeral procession, and afterwards on the tomb, or under a hearse or platform, an effigy of the deceased personage. The earliest of these wax figures is one representing Queen Elizabeth. It is not, however, the original, but a restoration made in 1760. Among the later figures are those of Charles II, William and Mary, Queen Anne, Nelson, and William Pitt. These, however, belong to a period when the ceroplastic art had fallen on evil days, and it is whispered that they were only included to increase the attraction of the Abbey to sightseers "for the benefit of clergy." However that may be, they are interesting enough for their costume, and on that account alone are worth a visit.

The Sociological Basis of Architecture*

By STANLEY C. RAMSEY, F.R.I.B.A.

QUITE recently I heard one of the most distinguished of our younger poets open an address with the remark that at the present time "All art was hag-ridden with theory." So far from disputing his dictum, I would like to add that not only is all art at the moment being tested with the fire of applied theory, but that in a period of uncertainty, such as the present, it must inevitably and rightly be so. It is almost risking a platitude to say that without a theory one can accomplish nothing—a theory either held tacitly or consciously, probably the more effective as it is instinctive rather than adoptive. Without a theory of navigation, anything but the simplest voyages would be impossible.

If you take a simple section of almost any coast from west to east, or from one side of a mountain range to the flat land beyond, we discover that certain people inhabit certain parts according to the existence or occupation afforded by the different terrain. Thus, on the steep western or sea side, we have the miner, who, in early times before the days of deep shafts, worked on the side of the hills or mountains nearest to the deposits. Further up the hillside, where the coniferous forests commence, we find the woodman. Next, where the forest opens on to the grass uplands, we have the hunter, and then continuing down the flatter slopes we discover, first, on the grassy uplands, the shepherds, then, where the grass gives place to the richer alluvial lower grounds, the peasant or farmer —the poor farmer on the upper slopes and the rich farmer in the plains. Then, where the river widens into the delta, we find the last of our primitive types—the fisherman. Thus, starting from left to right on our valley section, differing in details in any particular place selected, we have the miner, woodman, hunter, shepherd, peasant, and fisherman—our six elemental or primitive types who form in their manifold occupations and developments the basis of our modern civilization. From these types, and from the country which they inhabit, we can discuss the first and most important of Leplay's formulæ: Place—work—folk. That is, the place determines the work, and the place and work determine the folk or people.

Leplay was a French mining engineer who eventually held an important position in the École Polytechnique, Paris, where he was professor of mining engineering. He was born in 1806, and died in 1882. In his spare time he made a study of the lives of various working families in different parts of Europe. He made comprehensive notes on some three hundred European families, and published the result of his labour in a monumental series of six volumes entitled "Les Ouvriers Européen." From these volumes is derived the theory of the valley section and the six elemental types, which may be said to form the basis of all modern sociology.

Perhaps the best method of explaining Leplay's theory is to relate a story of Goethe, the German poet. Goethe was examining a tree in the botanical gardens of Padua, and was struck by the fact that the peculiar structure of this particular tree was manifested in all parts, i.e., in its roots, its trunk, leaves, and flowers. Applying this theory to the theory of human development and organization, Leplay discovered that the same traits are manifested throughout any particular section of society. Or, to be more explicit, that if a society, as ours was from the close of the Middle Ages up to the beginning of the nineteenth century, be based on agriculture, then the whole of that society would be dominated by the peasant in his elemental and more complex types. That there would be a corresponding relationship between the most simple land worker and the king, or head of the state, in such a society. If Leplay's deductions are correct, and I submit that they are, then there is a similarity of outlook and character between the most humble coal miner or steel-worker and the greatest railway magnate or coal lord.

A student of architecture, especially in this country, is apt to be bewildered by the seeming continuity of design up to the end of the eighteenth century, and the seeming lack of continuity during the nineteenth, but as I shall hope to show such breaks in tradition have always occurred with the changes in vocation.

Passing over the influence of the Romans and Saxons, I will commence with the Normans, whom I am going to describe as the "Hunters." Now, taking them as the hunter, or warrior type—and when I am speaking of types in connection with historical periods I mean the dominating type at that particular period—we find that throughout the whole of the Norman civilization importance is given to the soldier. His attitude towards all building is that of the soldier to the fortress; and this we find true, not only of the buildings of war, but of the buildings of peace.

It is commonly said that Norman church architecture was built on particular lines because of the necessity of defence; and although this is to a certain extent true, I do not believe it is entirely true, but that it is rather the attitude of mind which, continually thinking in terms of fortresses, can only build according to those terms. Therefore, throughout the whole of Norman architecture we find enormous strength, small apertures, every line and stone of which expresses this principle of defence.

Passing from the Norman to the mediæval, or Gothic, period, which may be said to have commenced with the murder of Thomas à Becket and the submission of the king to the Church, from this time the Church grew far more powerful and was, in fact, the dominating factor, and this period I propose to call the "Shepherd" period. The shepherds are not essentially a building people; they think in terms of life and growth, and their riches are due to the expansion of their flocks. So behind all the wonderful beauty of the Gothic churches and cathedrals is the unfolding of the forest glade—it is essentially the architecture of the grove and the sheepfold. The cloisters and the college quod are the more permanent expressions in stone of this simple idea, whilst throughout all the periods of Gothic we feel the influence of the forest with its branching aisles, until with its final phase, i.e., the perpendicular, we get a feeling as if the building were really petrified wood. Their ideas of building were dynamic, and not static, as that of the Norman—they thought in terms of groin and panel, rather than in the terms of simple arch and column. There is even in the finest of the Gothic buildings beneath its wonderful poise a certain insecurity—a fragility of structure.

If I am allowed to take Henry VIII as a figure which represents a new epoch, the closing of the shepherd period and the beginning of the peasant, then we really come to the Renaissance, or, as I should prefer to call it, the "Peasant" period. When we think of peasant civilization we have to think of the farm, the unit of centralized authority from which the farmer exercised his domination over all his lands, and we find that from the period of Henry VIII, and the corresponding period of Francis I in France, the whole efforts of the kings of both countries, as being the most representative of the people, was towards this centralization of authority. It was the basic idea of peasant civilization, and this is why it seems to me that the revival of Roman architecture and Roman methods of

* Extracts from a paper read before the Liverpool Architectural Society.

building, which we call the "Renaissance," was so welcomed by the peasant mind of that time. Because it must be remembered that the Romans were essentially a nation of peasants or agriculturists. From now onwards brick, the material of the peasant, becomes of increasing importance, until well on in the Renaissance we find brick the chief building material, so that even our most magnificent buildings of this period are for the most part brick buildings with stone facings.

London, so great a part of which was developed during the agricultural, or "Peasant," period, is essentially a city of brick. But we come of a sailor people ; therefore the idea of transported material and transported ideas of building are always observed as a controlling factor in our architecture. The mining, or industrial, period commenced well in the middle of the eighteenth century, but it was not really until the miners were strong enough to repeal the Corn Laws that they can be said to have become the dominant type. The early mining or industrial development took place with such rapidity that the miner with his remoteness and aloofness from the traditional and permanent ideas of the peasant involved us, for the better part of a hundred years, in what may be called a "Mining Camp" civilization. We architects all know too painfully well the chief characteristics of the buildings of the nineteenth century.

The buildings of the industrial period may be called the buildings of the "Pit Prop" style, and if this were the whole of the picture, it would be a sorry and a dismal outlook; but inherent in the miner in his old vocational pursuits is another quality—the quality of excellence—and I think it might be argued that the miner is not only responsible for the worst of our buildings, but also for the best. Even during the worst of the industrial period when we used those hard-faced pink bricks that have desolated whole countrysides, this may have been nothing but a thwarted instinct towards excellence. It is indicative that in the rebuilding of Oxford Street it is interesting to note that the brick and stucco buildings of the late Georgian or formalistic peasant period are now being superseded by the steel frame and stonework of the miner.

Almost contemporaneously with the occurrence of the miner as the dominant type, and his continued warfare with the peasant during the earlier part of the nineteenth century—a warfare the reactions of which are still felt in the borderland between cities and rural districts—there was witnessed another emergence, that of the shepherds, who, freed from the restraint of the dominating peasant with his formalistic motions, expressed himself in the "Tractarian Movements" and in the rapid growth of Nonconformity. It is interesting particularly to compare the development of church art during this period; freed from the peasant influence, the shepherd naturally turned to his fundamental ideas and expressed himself in the traditional buildings of his own period.

The Gothic revival that started so hopefully, and which is still a great and important influence, was gradually and surely mechanized by the miner. As I have said, equally with the development, or the increasing importance of the miner, was the increasing importance of the sailor; and it is possibly due to this fact that towards the end of the nineteenth century, when we became dissatisfied with our architectural achievements, that the sailor, as an importer of ideas, led us into those innumerable essays in foreign styles characteristic of the closing years of that period. So that from the murky confusion of the nineteenth century we gradually see certain clear vocational ideas emerging. Towards the end of this century, when the more intelligent miners became dissatisfied with their architectural achievements, there was a return to a more simple, and more traditional, method of peasant building.

We now come to the twentieth century, the period of organization. A close examination of the architectural movements of the last twenty-five years reveals certain clearly defined ideas, which I am going to be bold enough to try and relate to the different vocational types.

In the very beginning of this period we find what was then described as l'art nouveau, a Continental importation which had a very mild reaction in this country. It was for the most part an unrelated expression of emotionalism, owing its inception to the industrial movements in Germany and France, and in a vague and shadowy way indicating what men dimly felt to be the inauguration of a new era. It had no intellectual or traditional force behind it, with the consequence that it was all flower and no roots—a bright, brief bourgeoning, followed by as quick a decay. It may, perchance, in its dying have shed the seeds of an intellectual archaism, which we shall more closely examine when we come to consider what we may call "Modernism."

In domestic architecture we see two methods of expression, apparently contradictory, but in reality the result of the same inspiration. The one method was a return to the Tudor or Elizabethan method of building, the other the Renaissance or Georgian, and, although for the most part these streams are diverse and distinct, there is also observable, as it were, a merging or developing, so that we might say the Tudor, or half-timbered cottage, was expressive of the early years and the Late Georgian house of the later years of the first quarter of the twentieth century. We find that what we have really been doing during the last twenty-five years is to make a practical and imitative investigation of peasant methods of building, our peasant, or agricultural period, lasting, as I have said, from Henry VIII to George III, the "Farmer" king. One of the most beneficial and helpful of the results of this peasant revival was the origination of garden cities, which had in them the germinating idea of town planning.

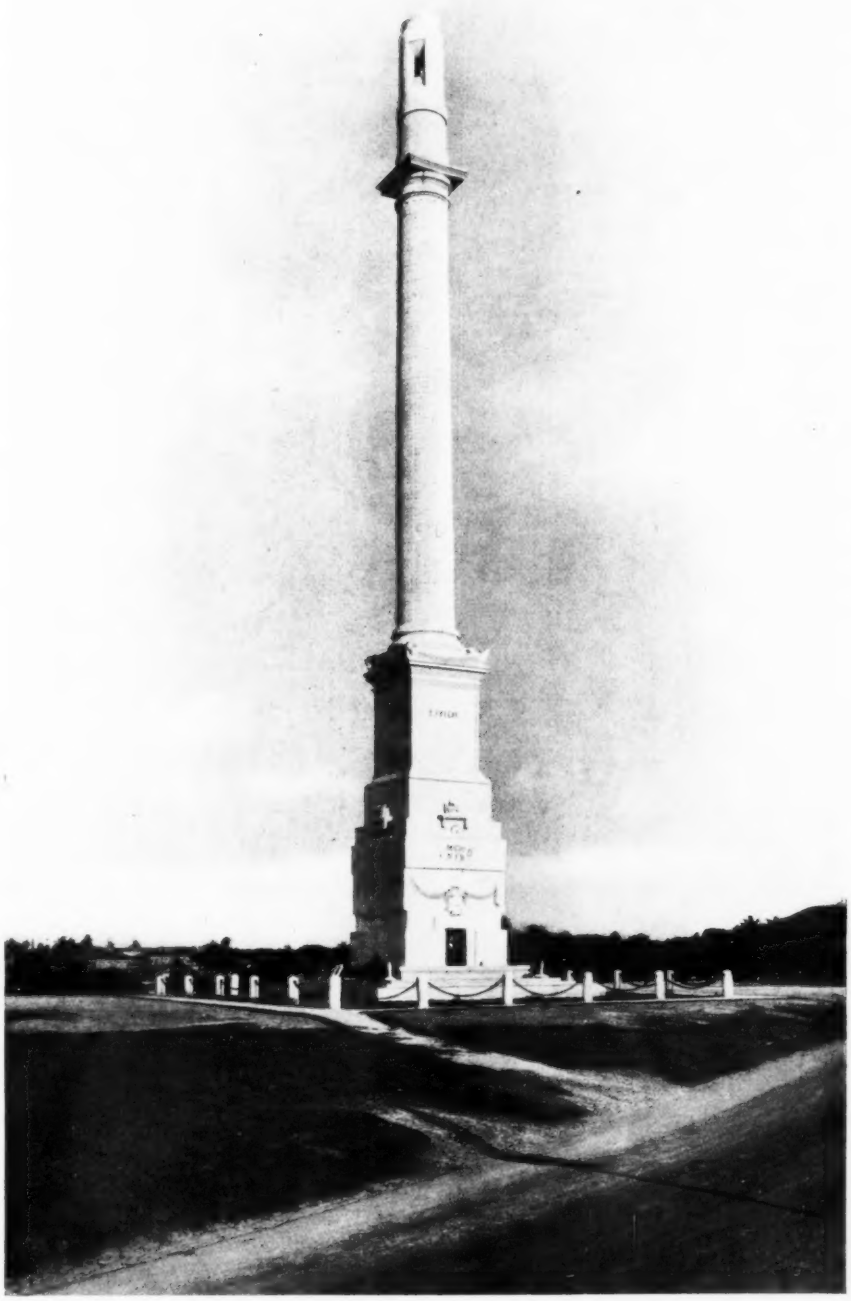
One feature of modern architectural development that has bewildered most of us at various times is the marked divergence between the design of our domestic and our public buildings—a divergence, I think, largely due to the difference between two vocational types, viz., the difference between the peasant and the sailor. For, if in our twentieth-century domestic building we have relied on peasant inspiration, I think we must largely ascribe our public buildings to sailor inspiration. If this deduction is correct then we shall expect to find such influences radiating from our chief ports, and this is in effect what happened, our two chief centres of inspiration being London and Liverpool. Starting with London with its many continental relations, we have, first, the reaction to French architecture as typified by the buildings of the 1900 exhibition in Paris, followed by a phase of Gallic Neo-Grec, which in its turn gave way to a pure Louis XVI revival, as exemplified in the buildings of the Ritz, the "Morning Post," and various blocks of flats, designed by Mr. Verity. These buildings gave us a valuable lesson in continental scale and style, and by the word "style," I am not referring to any particular period, but rather to a definite expression of urban values. But whilst we, in London, deteriorated in our efforts, and in the new Regent Street, reverted to our mining-camp method of approximation, Liverpool sought inspiration in America, and to my mind more truly indicated what was best in our mining civilization, in pursuit of the excellence of the stone and steel fabrications of our friends across the Atlantic.

It is a little early yet to say what "Modernism" is, or is not, but this I am sure of, and that is, that it is far too important a movement to dismiss with a contemptuous imprecation, or a mere shrug of the shoulders. It seems to me that modernism in this country is the result of various converging forces not yet altogether harmonized. There is first the modern critical mind seeking inspiration and guidance in French logic, analysis, and planning, whilst neglecting French sentiment. There is a definite and well-defined desire to express logically new materials and new methods of construction, though here, I think, we are a little half-hearted.

Thus we have peasant logic and sailor inspiration waiting to be unified by some relation to tradition, the sum of which, if it is to be successful and to have any permanence, must express our advanced mining civilization.

War Memorials. 50.—Ceylon War Memorial, Colombo

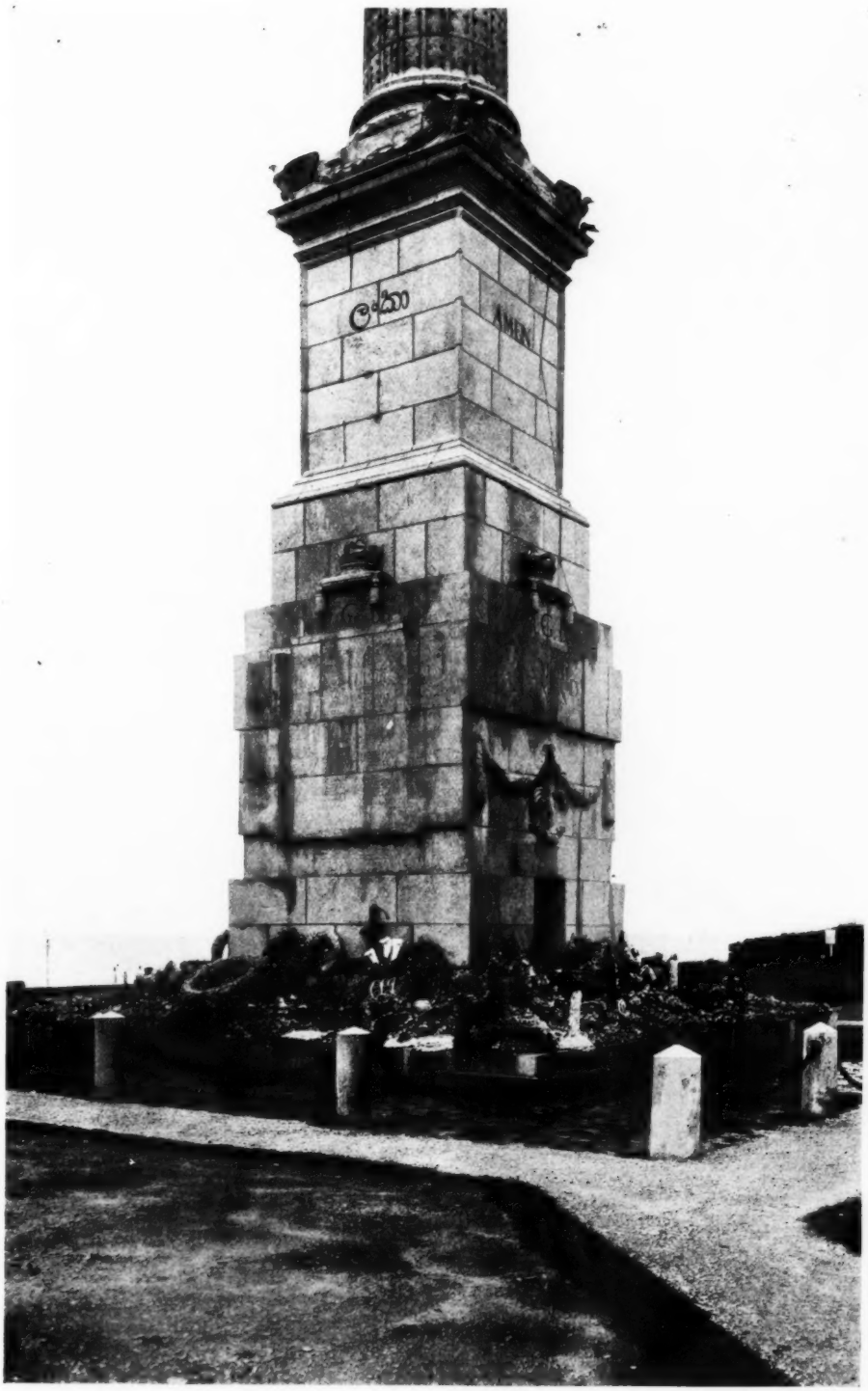
Sir Edwin L. Lutyens, R.A., Architect



Erected in granite, this memorial is 119 feet 5 inches high, the pedestal being 42 feet 1 inch. The column itself, with its capital and base, is 58 feet 4 inches, and the surmounting feature, containing the cinerary urn, 19 feet. The door in the pedestal is bronze.

War Memorials. 51.—Ceylon War Memorial, Colombo: A Detail of the Base

Sir Edwin L. Lutyens, R.A., Architect



Some particulars of the memorial are given on the preceding plate.

The Corporate Spirit in Architecture

Mr. Frederick R. Hiorns at the R.I.B.A.

"IT has been well said of Plato that, though his writings embody with such completeness the philosophy of the Beautiful, there is little in the way of direct reference to the fine arts, to poetry, or any of those things that we now comprehend under the term æsthetics. The explanation of what appears, superficially, a somewhat curious condition is a relatively simple one. It is that the Greeks were so fully in possession of the beautiful in both theory and practice that the objects of its practical expression were taken for granted in writing and in speech—that the process by which that people had become possessed of attractive surroundings to the elimination of the unpleasant, the unsuitable, or the ugly was so natural to them—so obvious and so ordinary—that it had ceased in Plato's time to be a matter to speculate upon." With such an introductory comment Mr. Frederick Hiorns prefaced his paper on "The Corporate Spirit in Architecture," read before a meeting of the R.I.B.A., held on Monday evening of last week, a paper which, he conceded, would furnish nothing but what his hearers already knew in respect of a few points that its title might suitably be considered to cover.

These points were, briefly—due consideration for the general aspect of towns and homogeneity in the character of their buildings; respect for all good work or examples of craftsmanship of our own former periods; simplicity and sincerity in present-day building expression; and the right encouragement and provision of opportunity for the work of living craftsmen, as distinct from the products of "Commercial Art."

In considering (as he had briefly done) the classical conception of the building and other useful arts, said Mr. Hiorns, we are forced to notice the essentially different point of view of the mechanical-industrial age of the last hundred years.

MR. FREDERICK R. HIORNS, F.R.I.B.A.

If we turn from this to conditions in the modern town, we need no emphasis of an all too obvious change. If we place responsibility upon the latter half of the nineteenth century for the horrors we see in the shape of street or town architecture, to what can we assign the reason? We may surmise that the conflict and confusion, the lack of unity or harmony in our streets is due to the fact that with the rise of commercial life in the last century, and its concentration on inhuman machine-made production, building—including what we call the industrial arts—lost connection with native traditions; that, in its place, was put an unintelligent imitation—the attempt to reproduce ornamental features characteristic of the art of other times and countries as a sort of surface treatment removed more or less entirely from the reasons, purpose, or use that originally brought them into being. We see, accordingly, artificial faces to buildings, reproducing stock architectural ornaments, and conveying impressions that they in nowise arise from the practical necessities of the case; that instead the designer started off with a pre-conceived notion to do a Gothic—Queen Anne—Egyptian—Louis Quatorze—or Moorish façade (quite commonly *merely* a façade), and did so regardless of the merits of the problem that faced him. Paper architecture and draughtsmen's tricks had, in fact, taken the place of natural building, and their blighting effects on the older conception of a sincere creative art survives in the spurious and unnatural features that still disguise the structures of to-day.

It comes to this, that all our advance in education and our mechanical advantages will never, if the corporate spirit is lacking in developing the amenities of towns, bring what we do up to the truer standard of values that we recognize in the work of past ages. The ills that we see, and that continue, will not be cured except as the result of a common desire for order and fitness and a readiness to make concessions when necessary for the general good. The condition is a spiritual one—a question of the right point of view.

I suppose we must conclude that though individuals, here and there, may have some interest in what may be called the spiritual aspect of material things, the great mass of us have not—that to the majority our cities, in the Platonic sense, make no appeal, and such concern as is shown for them hardly reaches beyond the condition of personal advantage. Were such a spirit universal little unity or order would be possible in communal life or beauty in cities. The exercise of a discriminating public interest in such questions as the fate of the City churches, Whitgift Hospital, Regent Street, St. Paul's Cathedral, and Waterloo Bridge is very desirable if we are to maintain our position as civilized, thinking beings.

There is the further and very important question of properly safeguarding the good work of past ages. Though exercise of the communal sense requires that we should treat such things with scrupulous care, the last hundred years are full of instances of irreparable vandalism in the destruction of buildings; of features essential to their right appreciation; and of splendid examples of craftsmanship. Sad to say, some of the most notorious instances of disregard of works of the past have occurred in Italy, the country most generally associated with artistic distinction.

In Rome we might point to the spoiling of the Piazza of San Giovanni Laterano by mean modern buildings—to the

destruction of the cloister of Ara Coeli and the tower of San Paolo upon the Capitol in the interests of a modern statue—to the clearance of a large area in one of the most historic quarters of the city so that a site might be provided for the recent Victor Emmanuel monument—to the sweeping away of countless historic houses and gardens of priceless value for both their beauty and associations. The same sort of process has taken place in recent years in the modernizing of Florence—where so much of the city dating from the age of Dante has gone—of Perugia, Ravenna, and even Venice, where Molmenti, the statesman and writer, has, among others, lamented the ruin of the island of Saint Elena by the offices, sheds, and warehouses erected upon it, "loss of the view of San Giorgio, of the bridge of San Lio, the hideous new wing added to the brown marbles of the Palazzo Tiepolo, the iron warehouse fronting and affronting the Ca d'Oro, the indecent alterations and additions to that jewel of Pietro Lombardo, the Palazzo Corner-Spinelli . . . destruction of mediæval bridges, of innumerable nooks and corners, historical and beautiful; old wells, old fountains, old shrines, fragments of sculpture and fresco, solemn convent walls, graceful church spires and monastic belfries, parapets, arches, doorways, spiral staircases winding up to hand-forged iron balconies, lamps of metal-work as fine as lace—all these to innumerable extent have been effaced, pulled down, built over or sold." This severe indictment of the loss of a sense of values that nineteenth-century "progress," so-called, and industrial crazes have led us into, I have quoted at some length from Molmenti because the cases of Venice and other Italian cities apply in varying degrees to most of the older towns of Europe, including many in our own country. It may therefore not be unsuitable to add to Mr. Trystan Edwards's general plea for good manners in architecture a suggestion that the proper care of old buildings is a necessity in an architecturally polite state, and that it must be equally a question of honour with us to have no part in their destruction. In this connection we ought to readily acknowledge the debt we owe to the Society for the Protection of Ancient Buildings for its valuable work through a period of nearly half a century, and its practical advocacy of sound methods of conservation as against discredited nineteenth-century "restoration" methods.

Ruskin claimed that "there were two duties respecting national architecture whose importance it was impossible to overrate: the first to render the architecture of the day historical; and the second to preserve, as the most precious of inheritances, that of past ages."

Such, then, is the general case I have ventured to present to you—that old buildings should be preserved both for themselves and the example they put before us of how to do things well; that our own work should be sound, simple, and sincere in its expression of plan and purpose; that it should embody and acknowledge the best craftsmanship at our command, having in mind that only by such will the old intuitive sense for the practical and artistic use of material be restored—coupled with consideration always, as I think naturally follows, of such claims as environment and homogeneity of character in cities have upon us.

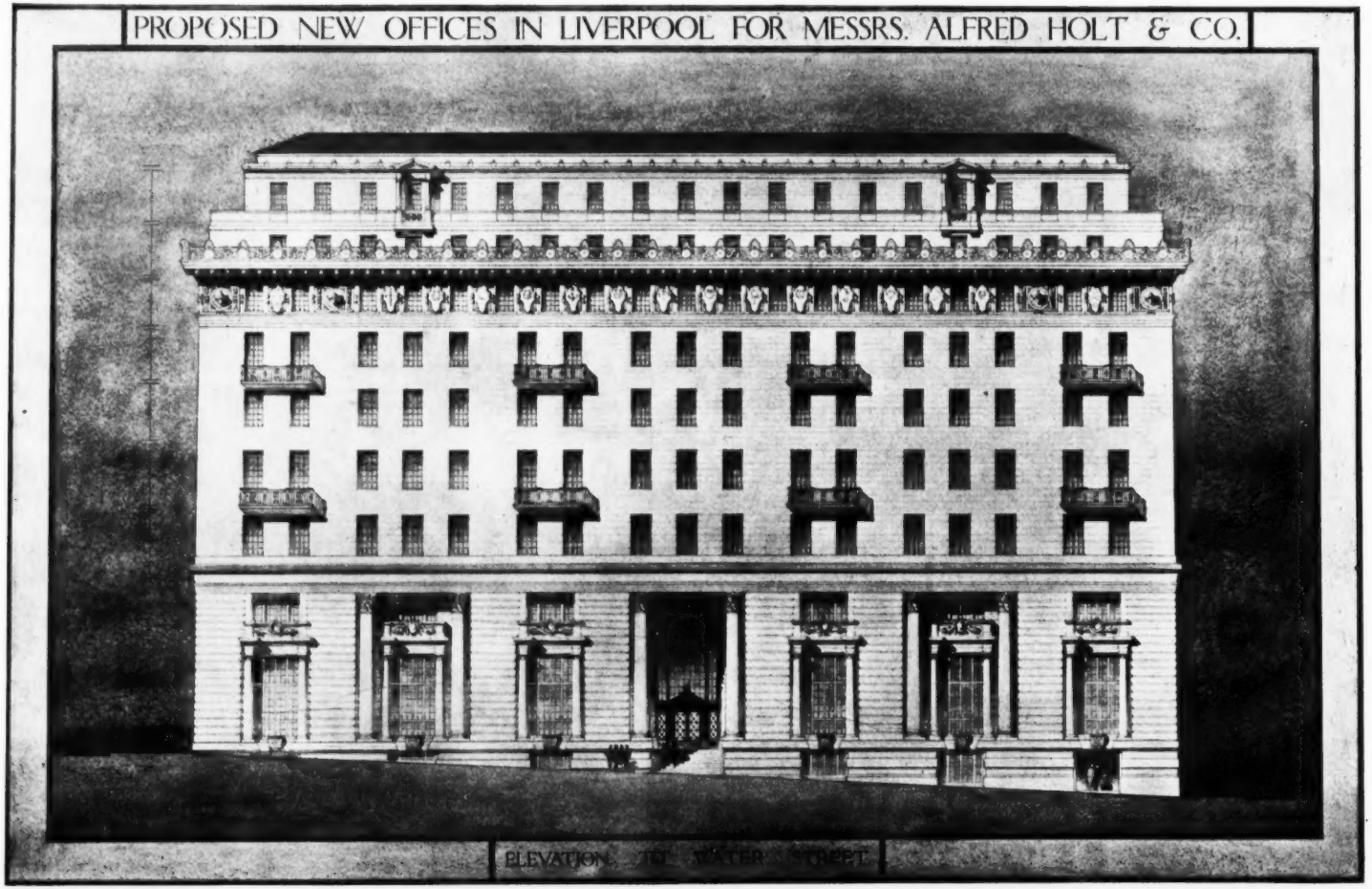
Along such lines, and by means that give recognition to order, regularity, unity, and beauty in cities, can the corporate spirit in architecture—using that term in its widest sense—be expressed. If, therefore, architecture is, in any real sense, the mistress art, would it not seem natural that this Institute—now so strong numerically, and, in that sense, so influential—by co-operating in a closer and more definite way than at present with those whose aim is allied to its Charter purpose—such bodies as the Art Workers' Guild, the Society for the Protection of Ancient Buildings, the Arts and Crafts Society, the Civic Arts Associations in London and elsewhere, the Town Planning Institute, Royal Society of British Sculptors, the London Society, Scapa Society, Society of Mural Decorators and Painters in Tempera, Society of Master Glass-painters, and so on; with all, indeed, who collectively or individually are encouraging and assisting what is best in either the more detailed aspects of building or its ultimate general mass effect—do a great deal towards ends that are obviously to be desired if the comprehensive corporate conception of the building art is to be restored. A common policy towards a common end is required if that aim is to be achieved. "Great building," it has been truly said, "is not the realization of the design of an individual, but the produce of a crowd of workers, conscious of a common aim and co-operating for its achievement." Or, as Professor Lethaby, to whom we owe so much for right views on the craft of building, puts it, "If ever we are to have a time of architecture again it must be founded on a love for the city, a worship of home and nation. No planting down of a few costly buildings, ruling some straight streets, provision of fountains, or setting up of a number of stone and bronze dolls is enough without the enthusiasm for corporate life and common ceremonial. Every noble city has been a crystallization of the contentment, pride, and order of the community." Or, as he expresses it in another place, "To build cities and live in them properly is the great business of large associations of men. The outward and the make must always be exact pictures of the mind of the makers. Not only is this so at any given stage, but it is so all the more in a going concern, for the outward is always reacting again on the inward, so that the concrete becomes a mould for the spiritual. Man builds towns so that the towns shall build his sons. As the old Greek said, 'The city teaches the man.'" Could anything be more true or more important to us than this? Epictetus surely had such a condition in mind when he said that "if Reason should rule in cities it is better certainly for great souls to inhabit small houses than for mean slaves to lurk in magnificent mansions, just as the Eubæns and Spartans did not build or repair their walls with stones only, but with discipline and zeal for good works, the visible ornaments alike of cities and of rulers—so that, flourishing and peaceful, they made the Republic by uniting together not logs and stones, but living souls."

Professor W. R. Lethaby, who moved a vote of thanks to the lecturer, said, that architecture was a part of the corporate spirit no one would doubt. Not only was it a product of the community, but the very essence of any expression which went beyond that of mechanical service was community expression, and the lecturer would, he thought, agree in saying that what they meant by architecture—what they really cared about—was not grandeur and cost and "style," or anything "outward," but the spirit shining through community expression. Of course, there was a sense in which what they had in Oxford Street and Whitechapel was as representative as exactly as Athens, Florence, Amiens, or Wells were representative. Their vast Parthenons and cathedrals reared in London to attract shopping women, and the steel huts that they are endeavouring to build in the country to hold working men, were the external crystallization of their national mind—the modern anarchy was a perfectly expressive style. If art were an outward thing, they might go on repeating the semblance of masterpieces for ever. They had forty literary men in London who could turn out imitation Shakespeare to perfection; they had twenty sculptors who could do sham Michaelangelo, and they had at least six architects who could do Gothic or Wren designs. Such work, however grand and clever, was worthless as art, for it lacked the breadth of life which was the corporate spirit—Folk Expression. Such grandeur and whims were stillborn. The root principle in art was this: the root must be planted in the ground. On entertaining such thoughts they might be likely to suppose that theirs was an unpoetic or inartistic age, and that they could not help it; but he was convinced that in some degree they might.

Mr. Gilbert Bayes, Mr. Frank Jasper Salway, Mr. Halsey Ricardo, Mr. Laurence Turner, and Mr. Trystan Edwards also took part in the discussion.

Architectural Designs. 24.—An Elevation for a Shipping Office

W. Curtis Green, A.R.A., Architect



This design was submitted in the limited competition held some time ago for new shipping offices at Liverpool for Messrs. Alfred Holt & Co.

The Good-humoured Exhibition

SITUATED as it is in the very heart of Paris, the forthcoming Exhibition of Decorative and Industrial Art is already receiving the attention both of the Parisian public and the French press. Unlike Wembley, where progress was perforce concealed behind hoardings, the Paris pavilions can be seen in daily metamorphosis, and many an object lesson in rapid construction is open to anyone who has the spare time to stand and gape.

It is too early to form a trustworthy impression of the ensemble, as many of the buildings are still in skeleton form, and very little of the colour on which the ultimate effect will largely depend has yet been applied. One thing is certain, however, and that is the fantasy in which the majority of the designers have indulged. Architects and decorators have been frankly amusing themselves, and if anyone takes the exhibition buildings too seriously and expects to find a ponderous thesis for a new architecture, he is almost certain to be disappointed. Novelty there is in plenty, but it is nearly all light-hearted. There is a message behind these novel forms, but it is a message delivered with a smile and a wink. The French, and especially the Parisian, puts on the complete garment of whatever character he is assuming, whether it is that of business man, lover, gourmet, or exhibition architect; exhibition architecture is to be produced—it is the programme—and the solution is what one expects from an ultra logical people, namely, architecture saturated with the light-hearted exhibition spirit.

Already there is controversy in the press, and two gentlemen have fought a duel because one of them publicly cast aspersions on the design of a certain pavilion! The Grand Palais has been referred to in a popular evening paper as a Rococo shed, and its ornate architectural exterior has been classed as vulgar and *vieux jeu*, while the Italian pavilion, a very carefully studied design in permanent materials, has been hauled over the coals for being merely a Renaissance reproduction.

This pavilion is probably the most expensive one in the exhibition. It is built of reinforced concrete and faced with brick and imitation stone, and has a grand air; its height and solidity are almost aggressive in their challenge to its more penurious lath and plaster neighbours, but its modern character is questionable. It is worth noting that the entire expense of this pavilion is reported to have been borne by Italian business firms—a remarkable example of national pride and enterprise.

The Belgian pavilion across the way appears at present somewhat fussy and overladen. Japan is national and modest, and Spain is disappointing, but the Russian Soviets appear to be living up to their reputation. Everything on their pavilion is topsy-turvy—the windows, the staircase, the roof, nothing is normal, and everything askew. This building is certain to be a great attraction, and fulfils one's hitherto unsatisfied curiosity to see what a cubist painting of a shed actually looks like in three dimensions.

Undoubtedly the finest complete architectural effect at present visible is the scheme for the decoration of the great nave of the Grand Palais, the work of Monsieur Letrosne. Within the huge glass hall is built a giant gallery, with the space under the dome occupied by a huge square court, which forms the focus of the design. On the short axis lies the main entrance to the Grand Palais, with opposite to it a magnificent and almost Babylonian straight flight of stairs to the Conference Room on the first floor. This great flight is more than a staircase; it is as if the whole floor were taken up in one great ascending and diminishing sweep. The scheme is one of real imaginative power, on a scale to which, in England, we are scarcely accustomed.

The whole general treatment of the interior of the Grand Palais, as far as can at present be judged, will be one of great magnificence—and of great expense.

From the Invalides side of the river can be seen the lantern of the British pavilion, which forms a landmark through the distinct character of its treatment. The main bulk of the exhibition halls proper are on the Invalides esplanade, and the general scheme is punctuated by tall towers of uniform character. These towers are of fine scale, but one notes with sorrow modifications which are not an improvement on their design as originally portrayed.

Apart from the merits of the designs themselves, the workmanship and building methods of the French arouse considerable interest, and the present is the moment to study them most profitably. There remains an outstanding impression of their fondness for breeze and terra-cotta blocks, but, above all, of their extraordinary skill in plaster work and carpentry. The French carpenter has the skill and imagination of the true artist; but the best French plasterers have the spark of genius.

H. R.

"Truth" on St. Paul's*

THE announcement that St. Paul's Cathedral east of the nave is to be closed, it may be for years, can hardly be taken to imply that the ecclesiastical authorities and their advisers consider the building in a dangerous condition. If it were, nobody ought to be allowed inside it—or near it. Hitherto it has not been suggested, in all that has been written on this subject in "Truth" during the last two months, that St. Paul's was in as precarious a state as that. But since publishing Mr. William Harvey's letter last week I have read his article in THE ARCHITECTS' JOURNAL of February 25, and have had the further advantage of a personal talk with him; and after doing this I would not take the responsibility of saying that there is no cause for serious alarm. At any rate, the state of the arguments ought to be more widely understood than it is. Mr. Harvey entirely agrees with Mr. Todd, the City Surveyor, that St. Paul's is at the present time in a dangerous condition, and this opinion ought not to be excluded by those responsible for the safety of the public until it has been properly examined and disproved.

As many readers will ask at this point what Mr. Harvey's opinion is worth in the face of the advice of a Commission composed of architects and engineers of great eminence, let me repeat again that Mr. Harvey is on this particular question a professional authority second to none. He has travelled widely to make a special study of the process of decay in old arched and vaulted buildings. He has added to this practical study of modern methods of arresting decay. He served for some time in the Historic Buildings Branch of the Office of Works, and he took a personal part in the measures for preserving the crumbling ruins of Tintern Abbey. He has made a minute survey of St. Paul's Cathedral, as his first two articles in THE ARCHITECTS' JOURNAL clearly showed. The editor of that journal introduced his articles with language implying that they ought to carry great weight. It is a blind policy to dismiss such a man's views as if he were a mere cranky busybody gratuitously interfering with other people's business. After all, the truth about St. Paul's is everybody's business—yours and mine among the rest.

It should be understood, then, by everybody concerned that Mr. Harvey dissents on almost every point from the

* Quoted from "Truth" for March 11.

conclusions and the representations of the final report of the official advisers of the Dean and Chapter. In his letter published last week, while conceding that the Commission has watched the building "meticulously," he contended that, through inexperience of "this kind of analysis," they have concentrated their attention on those parts of it where the least degree of movement is to be expected, overlooking more vital parts where the process of decay is more observable; that they have failed to perceive the significance of such movement as they have detected; that by the time they find really disquieting evidence in the particular region which they have been studying, it will be too late to apply the measures that are now called for; and so forth. In THE ARCHITECTS' JOURNAL of February 25 he had examined the last report in more detail, and criticized more frankly both the method of observation employed and the remedial measures recommended. He does not—nor does anyone else, so far as I know—dispute the authority of the Commissioners in their own professional lines. His position is that the processes by which buildings of this type fall to pieces are obscure and complicated, and that only by close observation of them in ancient buildings generally is it possible to detect and analyse them properly in any special case like that of St. Paul's. This is a logical and intelligible position. You would not give much for the opinion of a dentist on the state of your teeth if he had never made any special study of decaying teeth, the causes of the decay, and the means of arresting it. Nor would it affect your valuation of his opinion that he was a past-master in the art of making new teeth. That seems to be very much the position of the eminent architects and engineers who are advising the Dean and Chapter, and, through them, the subscribers to the St. Paul's Fund and the public at large. If they are right, it must be by intuition rather than by practical acquaintance with the peculiar problems which St. Paul's presents.

Let it not be supposed that Mr. Harvey stands alone in the view he takes either of the condition of the church or the conclusions and proposals of the Commissioners. On the contrary, there is a considerable opinion to much the same effect in both the architectural and the engineering professions, and several eminent men have given expression to it. However, the Preservation Committee last week adopted the report of the official experts, and intimated at the same time that they do not propose to ask for advice from other sources. It remains to be seen what the special Committee of the Corporation of London proposes to do.

I am predisposed myself to fight shy of alarmists; but after what Mr. Harvey stated in "Truth" last week about the classic cases of Chichester Cathedral spire and the Campanile of St. Mark—both of which collapsed in an instant, the former while under expert observation, and the latter after strong expert warning—I withdraw all that has been said in "Truth" as to there being no ground for immediate alarm in the case of St. Paul's. The alarmist has a case which ought to be heard and disproved, if it can be disproved. Besides the observations and arguments of Mr. William Harvey, it is probable that the Historic Buildings Branch of the Office of Works could throw light on the point at issue from its own experiences and researches if the opportunity were given. The City Committee has an obvious duty to seek enlightenment wherever it can be found without regard to any consideration but the safety of the public. If St. Paul's fell down unexpectedly, not only would London and England suffer an irreparable artistic loss, but the catastrophe might easily involve an appalling loss of life. Such a risk cannot be allowed to exist. Those who would be responsible if the catastrophe occurred are bound to satisfy themselves either that it does not exist, or to see that it is removed. And it is better for everybody that this should be done before another quarter of a million is spent on measures which are not certain to eliminate all danger, though they may necessitate the partial closing of the Cathedral for the next five or six years.

"The Heath," Leighton Buzzard

A. L. ABBOTT, Architect

THIS house was originally built in 1864. The walls were of local iron-stone, backed with brick, with white brick quoins and string courses and stone heads to the windows. The house was, in fact, a very bad example of Victorian domestic work, and it was entirely burnt out in 1921, only the walls remaining. Mr. W. A. Lailey Rowland bought it, together with the delightful surrounding ground, and instructed Mr. Abbott to reconstruct it, using a considerable amount of old oak which he had obtained.

The staircase, the majority of the oak flooring, and nearly all the oak, of which there was some forty tons, used in the house for reconstruction was obtained from Sutton Scarsdale Hall, Chesterfield, and the panelling was made from old oak beams.

The original height of the rooms on the ground floor was 14 ft., and 12 ft. on the first floor, and these were reduced to 9 ft. and 8 ft. 6 in. respectively. The greater part of the house was reduced in height to the eaves by about 8 ft. to 10 ft. The iron-stone obtained from this pulling down was used for the reconstructions, other old stone being used for quoins and string courses, where the white brickwork was cut out.

The whole of the house is centrally heated from the heating chamber in the basement, and the radiators are all concealed behind grillage in the panelling. A supply of hot water to the lavatory basins, baths, etc., is obtained from an independent boiler in the scullery.

An electric light plant has been installed in the stable buildings and the main brought over to the house. There is also an electric pump for the pumping a supply of water from the well to the roof.

The general contractors were Messrs. Lavington (1916), Ltd., and the sub-contractors were as follows: Martin Van Straaten & Co. (wall tiles and glazed bricks); Young & Co., Croydon (roofing tiles); Henry Hope and Sons, Ltd. (stained glass and leaded lights and heating apparatus); A. Goslett & Co., Ltd. (sanitary ware and fittings); Cashmore, Bowman & Co., Ltd. (down pipes and r.w. heads); Sidney Elmes (plaster work); Comyn, Ching & Co., Ltd. (door furniture—locks, electric bell plates, etc.); Locke and Soanes (electric light fixtures, electric lighting plant, wiring and electric pump).

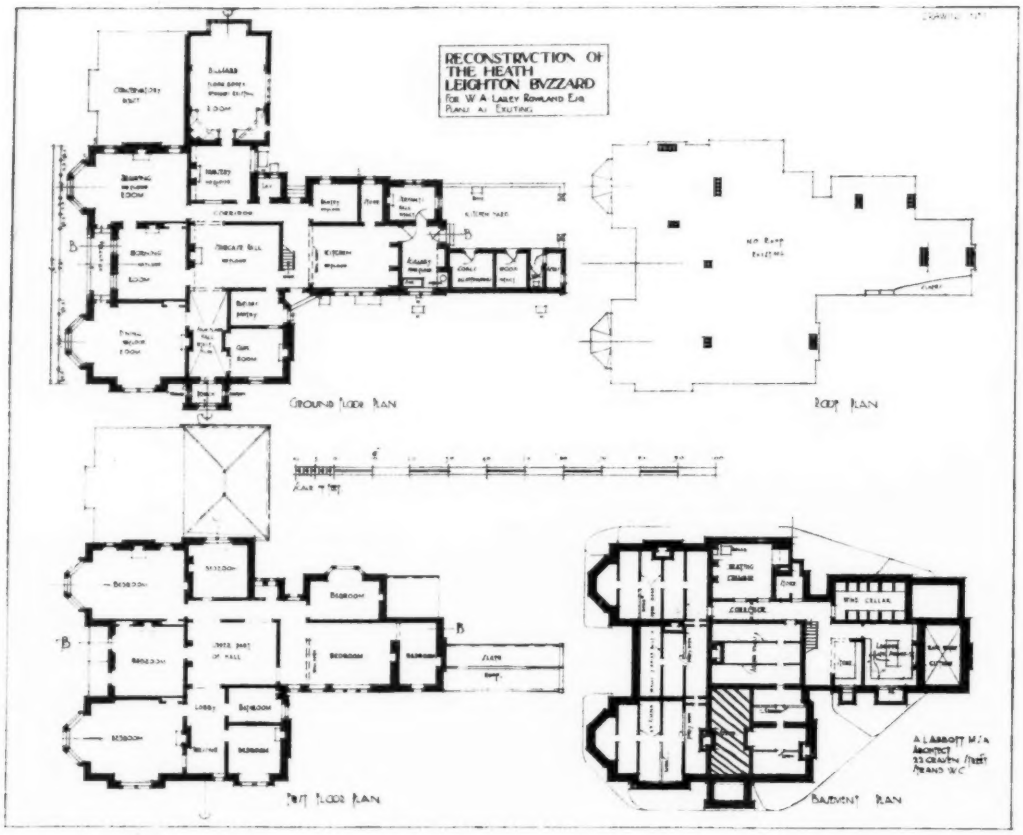
THE HOUSE BEFORE REMODELLING.

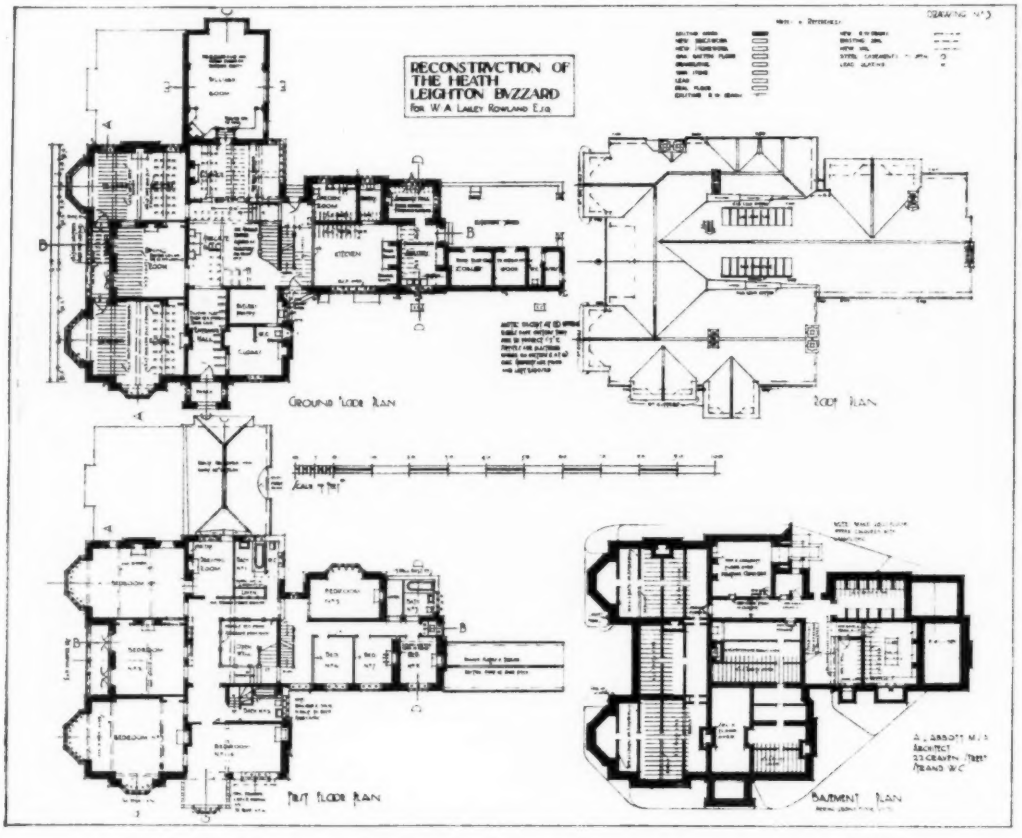
THE ENTRANCE FRONT.

THE GARDEN FRONT.

RECONSTRUCTION OF "THE HEATH," LEIGHTON BUZZARD.

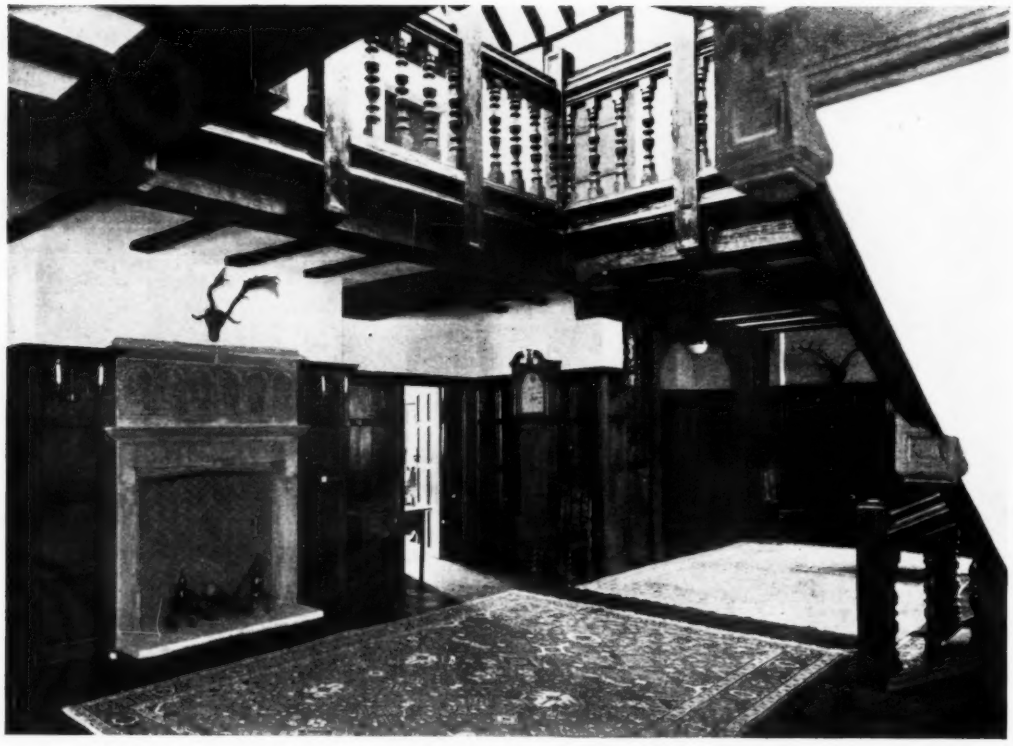
A. L. ABBOTT, ARCHITECT





"THE HEATH," LEIGHTON BUZZARD: PLANS BEFORE (TOP) AND AFTER RECONSTRUCTION.
A. L. ABBOTT, ARCHITECT.

"THE HEATH," LEIGHTON BUZZARD: A DETAIL OF THE ENTRANCE FRONT. A. L. ABBOTT, ARCHITECT.



TWO VIEWS IN THE STAIRCASE HALL.

RECONSTRUCTION OF "THE HEATH," LEIGHTON BUZZARD.

A. L. ABBOTT, ARCHITECT.

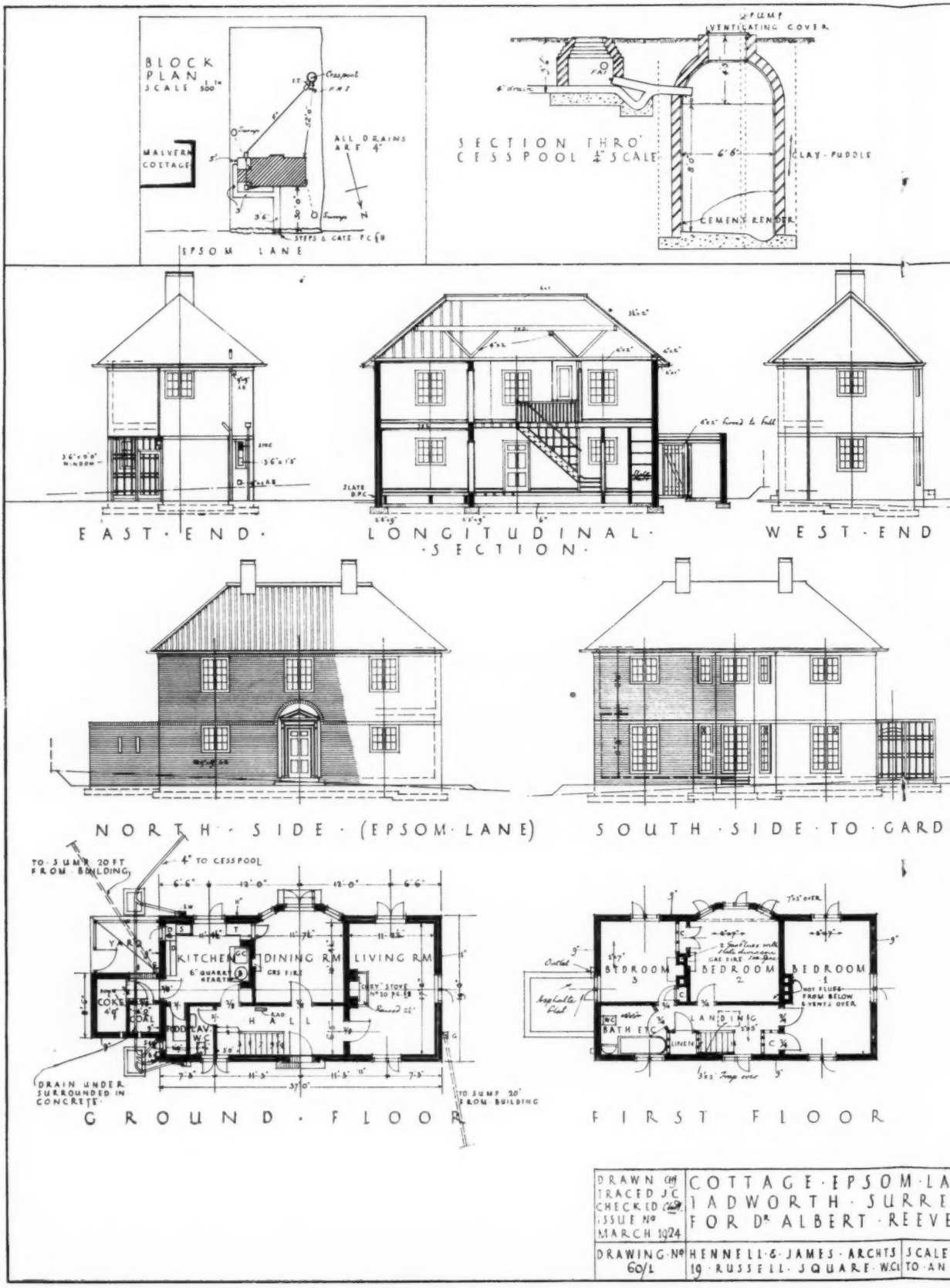
THE DINING-ROOM.

THE DRAWING-ROOM.

RECONSTRUCTION OF "THE HEATH," LEIGHTON BUZZARD. A. L. ABBOTT, ARCHITECT.

Architects' Working Drawings. 97.—A

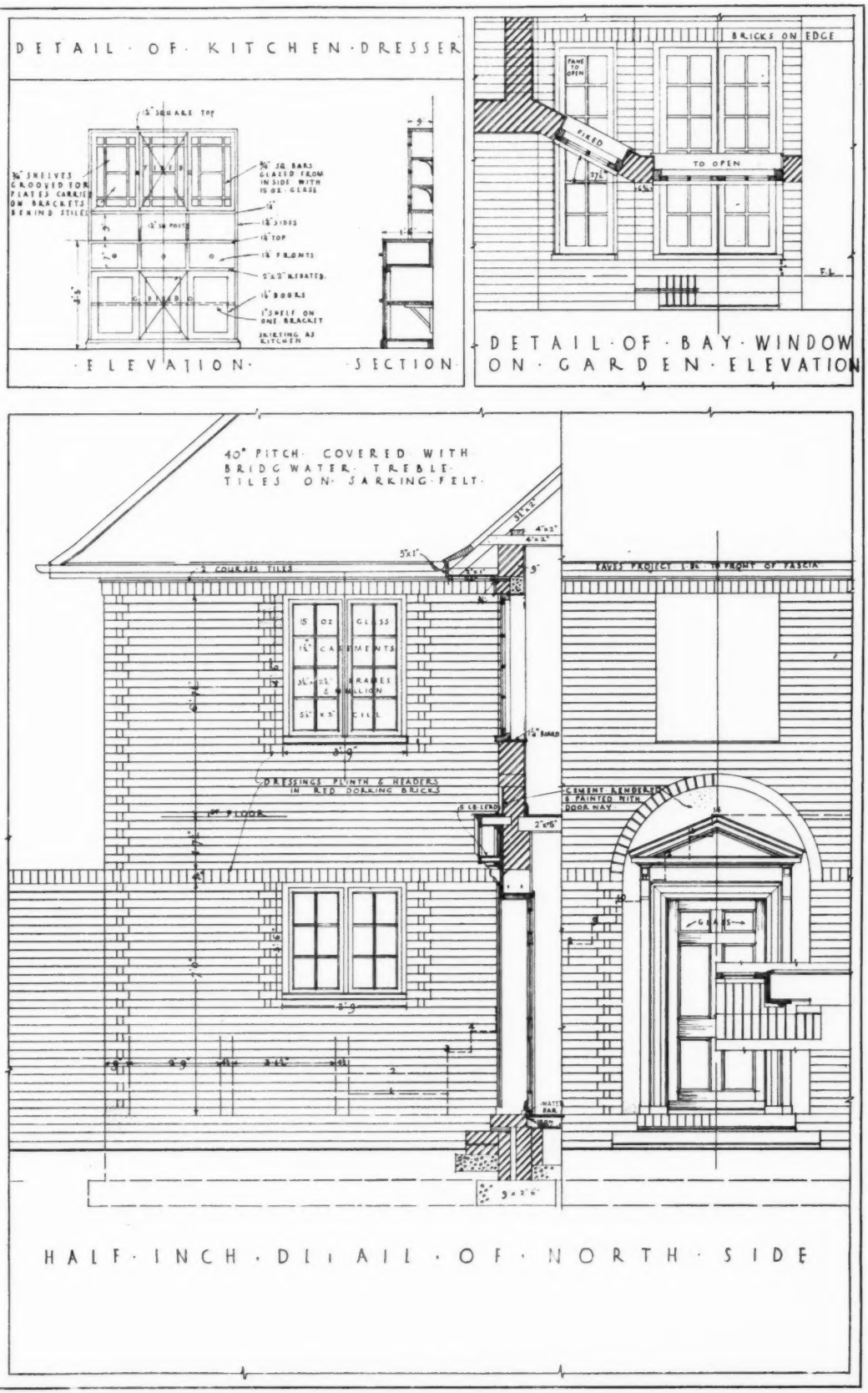
Hennell and James, A



This sheet of details for a three-bedroom country cottage is almost comprehensive, and, primed with such a drawing, the builder
therefore be followed and the statemer

97.—A Cottage at Tadworth, Surrey

nd James, Architects



the builder would need very few others to erect the cottage. The sheet has, of course, been reduced, and the dimensions should the statements as to scales ignored.

Correspondence

Competitions

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—To the uninitiated the leading article in your issue for March 18 might give the impression that the competition system in this country is, indeed, in a bad way, and that the R.I.B.A. has been unmindful of its duty to its members. To those who—like myself—have taken an interest in the subject, it would appear that the author of the article has suddenly awakened from a long sleep, during which period he has perforce not kept touch with the march of events.

"Symptoms of dissatisfaction and complaint amongst unsuccessful competitors" are as old as the competition system itself, and I doubt not will prevail so long as competitions last. Wherever keen competition exists there is invariably a measure of dissatisfaction when labour has not been rewarded. To "grouse" is an indication of robust health in the Britisher. However, let us consider the suggested causes and their remedies.

Your contributor expresses a doubt as to "whether architectural competitions as at present conducted secure the best design for certain classes of buildings." I would not be so optimistic as to answer "Yes" in absolutely every case, but I have no hesitation in saying "Yes" in the vast majority of cases; and, further, I venture the opinion that the best designs evolved through the medium of competitions are generally better than would be obtained by the same architects in any other way.

That during recent years there has been an increase in the tendency to apply scientific knowledge to the planning of buildings, and that in many cases specialized knowledge is necessary, is true enough. Every well-trained architect has acquired such specialized knowledge to a reasonable degree, which can only be developed by practice. I, however, incline to the view that the degree of specialized knowledge has often been overstated and overrated by those who consider there is some hidden mystery in the successful design of a hospital, museum, railway station, theatre, and like buildings. Surely it is not suggested that the average well-trained and qualified architect is incapable—as and when occasion arises—of making such research and successfully to apply his knowledge to the design of such buildings.

Your advocacy of extensive research by promoters and architects prior to embarking upon the design stage of a "highly specialized building" has been more or less in operation for a very long time, and is generally apparent in the conditions and particulars published in architectural competitions. The degree of such research will depend largely upon the keenness of the parties concerned, and their determination to get the best and most up-to-date building possible. Your suggestion for "a two months' tour in Europe—or elsewhere—for both the architect and promoters" in search of all the best available data relating to the project under review is excellent, but to press the idea generally in this country would, I fear, be looked upon as somewhat extravagant. The ideal is, however, worth keeping in mind, and might ultimately be reached by easy and gradual advocacy and application.

That the number of drawings and the detail required upon them should be reduced to a minimum, consistent with the desirability of conveying intelligently to the promoters the author's intention—don't let us forget the promoters' point of view—is a view the R.I.B.A. has held and successfully advanced for many years. Pressure is still being brought to bear in this direction.

Complaints that the conditions of competitions have been violated are more frequent than upon investigation is found to be warranted. A comparatively recent apology by certain complainants might still be fresh in the memory. All such complaints are considered and are reported upon in detail.

The R.I.B.A. makes it clear that it is the duty of every assessor to set aside a design which violates "conditions"—which should be as few as possible—as distinct from "suggestions" contained in instructions to competitors.

I don't agree that "the period during which questions may be asked should be no longer than is reasonably required to enable competitors to study the conditions and regulations." Sufficient time must be given to enable competitors to work out sketch designs in order properly to find out just what questions competitors need to ask. It is, of course, usual to circulate all competitors with answers as quickly as possible after the expiration of the period during which questions may be asked.

In short, it will be seen that all the practical reforms advocated in your article have for some time since been advocated and urged by the R.I.B.A., with, I think, a fair measure of success. Reforms in this old country of ours can only be brought about slowly and by degrees, with infinite tact and persuasion, and should always be pursued along the constructive lines of promoting and not destroying the competition system.

In conclusion, might I remind you that not long since the regulations for architectural competitions were under review and revision by a joint committee of the R.I.B.A. and the Society of Architects, who, during their labours, invited—through the various societies—the views of the entire profession upon the subject. The views thereby elicited are in the main embodied in the present conditions, which were approved by the general bodies of the R.I.B.A. and the society about two or three months ago.

HERBERT A. WELCH.

London.

"A Fable"

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—Mr. Willox is quite right, Sjvmmnu's scheme is "a palliative which would be better than the ordinary 'subsidy.'" It aims at bringing down the price of small houses without at the same time decreasing wages to correspond. Either rent or purchase by instalments being considered as price.

Purchasers (and this term includes renters) of houses, under existing conditions, are paying not only for all the wages distributed in the process of building, "whether on or off the job," but also for depreciation of plant and works necessary to the building process, and builders' and others' overhead charges, things which the purchaser never owns, although he pays for them. Therefore, no matter what wages are paid they can never cover the price of the house.

Mass production of houses will not remedy affairs, for if houses could be produced for twopence apiece the purchasing power distributed to the wage-earners of the building industry would only amount to perhaps three halfpence.

It seems, then, that in order to bring house purchase within the reach of the wage-earner, national credits must be given to cover all costs over and above wages (or purchasing power) distributed. The "subsidy" is an attempt to do this, but on the other hand, its effect is to reduce the purchasing power of the taxpayers, and so of the wage-earners.

It is conceivable and practicable that national credits should be so issued. A bank "creates" money, and has the monopoly of so doing, and it is reasonable that the nation should do the same thing, provided that it can control the

Modern Domestic Architecture. 115.—North Munstead, near Godalming

Harold Falkner, Architect

North Munstead was originally a small Manor House. At some subsequent time it had been converted into three cottages, so that the present repairs and additions are in the nature of a reversion to something of its former state. Plans of the house are reproduced on page 491.

price at which goods (houses) are sold to the individual. The late war proved that both these things can be done, but in that case it was at a terrible cost, because the monetary system was incomplete, and produced a vast mountain of debt.

And so with housing since 1919; the nation is now the owner of an enormous mass of underlet property, which has been built on the "debt" system, and will continue as a millstone around the neck of future generations.

One very interesting theory as to how this state of things can be remedied is that of Major Douglas, who explains very clearly the defects in the existing monetary system in his well-known book "Social Credit." This theory is not, by the way, what is commonly known as socialism.

There seems to be just now a movement in progress to procure a "change of heart" on the part of building operatives and employers. This is right up to the point whence the defects of our system of credit can be surveyed, but beyond that, or failing arrival at that point, it is merely beating the air.

It is certain that the existing monetary system is out of date; at this stage of civilization it succeeds in nothing but in piling up debt for future generations, whatever it may or may not have done in the past industrial era. It requires amending and amplifying, and then, out of our vast hidden wealth, we can have all the houses and other things we want.

ARTHUR WELFORD.

London.

The Augmentation of Labour in the Building Industry

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—The proposals for the augmentation of labour in the building industry have attracted a great deal of attention in the Press, and it is with a view to correcting possible misapprehensions that we address this letter to you.

While it is doubtless true that many building crafts are short of labour as a result of the neglect of apprenticeship, this does not apply equally to all the crafts concerned.

In our own craft (painting and decorating) there has been, from 1919 onwards, a comprehensive education scheme, jointly financed and controlled by operatives and employers, through their national organizations. Joint Education Committees have been set up in all parts of the country, and these have done much to set up standards, and to increase the educational facilities available, by the provision of a uniform form of indenture, and in other ways to stimulate enthusiasm, and generally to improve the outlook for the young craftsman.

Another factor not to be overlooked is that the painting trade has not yet solved the problem of unemployment with which the slack winter season confronts it. This question of winter unemployment has been the bugbear of the painting trade for generations, but it was never worse than it is to-day, and for a variety of reasons. It would be the height of folly, under these circumstances, to add to the difficulties of the problem by introducing to the trade a new class of semi-trained men.

The Industrial Joint Council for the Painting Trade in Great Britain, having these circumstances in mind, has carefully considered the proposals of the Building Industry Committee, and has unanimously resolved:—

"That in the opinion of this Council the ordinary method of admitting apprentices to the painting trade, through the painting trade apprenticeship scheme, should be recognized by the Ministry of Health as adequate for the painting trade, without recourse to the adult apprenticeship system proposed as part of the Government plan for the augmentation of labour."

This expression of opinion implies no hostility to the official scheme for increasing the supply of labour in those branches of the building industry where a serious shortage exists, and where apprenticeship has been allowed largely to lapse during recent years.

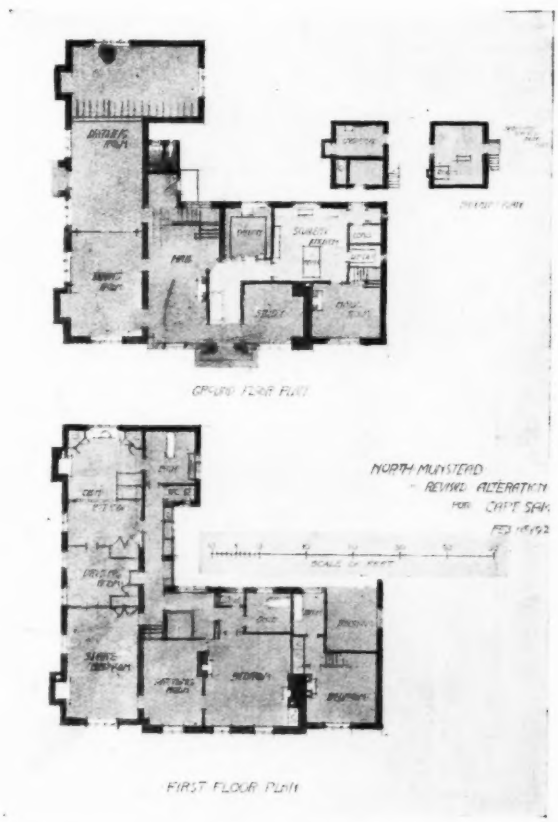
The painting trade representatives believe that their own scheme, now fully operative, is competent to supply more than sufficient skilled painting labour for the country's needs, and they regard with apprehension any proposal which would involve unnecessary cost, the introduction of more men than there is likely to be work for, and inevitable injury to the scheme for which they are responsible, and upon which they have expended so much time, money, and thought.

WILL MELLOR,
Employers' Secretary.
J. A. GIBSON,
Operatives' Secretary.
National Painters' and Decorators' Joint Council.

A Converted Manor House near Godalming

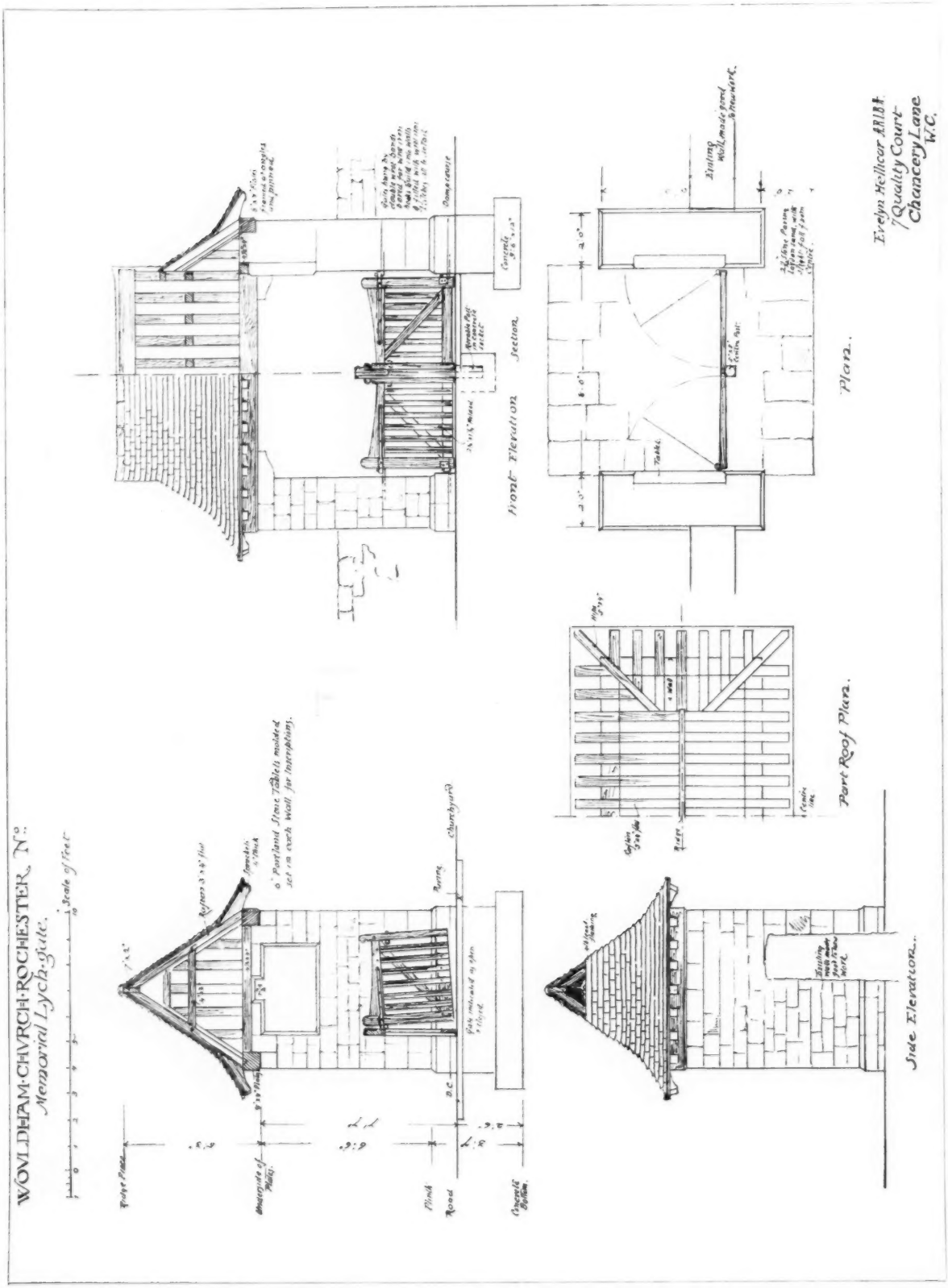
Harold Falkner, Architect

This was a repairs and additions job. The property, originally a small manor house, North Munstead, had been divided into three cottages and decorated with Victorian trimmings. The architect stripped the trimmings, took out the deal, and patched the original oak as far as possible, and extended as per plan with the old material from a barn and a little local stone and 2 in. brick in the chimneys. The contractors were Messrs. Crosby & Co., Farnham, and electric lighting was installed by Messrs. Williams, of Farnham, and heating by Messrs. Clarke, Hunt, London.



PLANS OF NORTH MUNSTEAD, NEAR GODALMING, AS REMODELLED.

(*See page* 489.)



THE MEMORIAL LYCH GATE, WOULDHAM CHURCH, ROCHESTER: A WORKING DRAWING. EVELYN HELLICAR, A.R.I.B.A., ARCHITECT.

Foundation Problems—3

By BURNARD GEEN, M.Inst.C.E.

IT may generally be taken for granted that if a site is troublesome and requires piling, it will pay in the long run to put down trial borings, as in most cases a contractor will tender lower on known facts than on unknown facts.

The presence of permanent water below ground is a factor vitally affecting costs, and if the existence of water is suspected it should always be thoroughly proved or disproved.

The various types of foundations may be split up into two main divisions :—

1. Foundations in situations where the natural soil is sufficiently good to carry the weight of the intended structure.

2. Foundations in situations where an artificial bearing must be made on account of softness, looseness, or general bad qualities of the soil.

Each of these main divisions may again be split up into two sub-divisions to cover the case of foundations constructed in the dry and foundations constructed where water is present.

As all materials are to some extent elastic, there will always be two settlements in any structure, that in the structure itself, and that due to compression of the soil upon which it rests.

The amount of this settlement in most cases is of small importance, provided it is uniform, and to obtain uniformity of settlement is the real aim in designing and building foundations.

Uniformity of settlement implies that there is no settlement of any one point of the structure in relation to any other part.

To obtain this uniformity of settlement is not an easy matter as it is rarely that the whole of any site is precisely of the same character; and for that reason it is necessary to exercise judgment in varying soil pressure to suit varying natures of subsoil.

This is a point too often lost sight of, and the mistake is often made of seeing a site and deciding upon a general ground pressure for the whole area, even though the subsoil varies in character, and even though the facts would be best met by varying the ground pressure on different parts of the site.

Time spent in determining the precise facts relating to the subsoil is always well spent in connection with preliminary work on the design of a structure, as the real facts may often materially modify the design of the structure itself.

Furthermore, it is always better to know the worst at the commencement of a scheme and so avoid the risk of serious extras on a contract at a later date.

As it is impossible in a few brief articles to touch upon more than a few of the cases of foundation requirements which may occur in constructional work, the articles are confined to discussion of the more general cases which are likely to occur in the average architect's practice.

Generally speaking, in this country it is not necessary to place the underside of the foundation of a structure lower than 3 ft. below the surface of the ground to ensure it being unaffected by frost, unless the soil be clay or similar material with a high water content, in which case a greater dimension should be allowed.

The foregoing dimension may not be sufficient in some cases to make the desired pressure safe, the permissible pressure increasing with the depth in most good material.

It is necessary to start the footings at a depth where the pressure will not cause the ground to spread and rise upwards around the footing. For example, if—

W = total load in lbs.

w = weight in lbs. of cub. ft. of soil in which footing rests.

a = area of base in square feet.

θ = angle of repose of soil.

d = minimum depth of footing in feet below ground level.

then $d = \frac{W}{wa}\left(\frac{1-\sin\theta}{1+\sin\theta}\right)^2$

Thus if a footing is to be laid on sandy soil (which is contained and cannot spread, and is free from water), suppose a load of 10 tons has to be carried per foot run of wall, with a pressure of 2 tons per square foot, with a footing 5 ft. wide. Angle of repose of sand—30 deg.

$$d = \frac{10\times 2240}{120\times 5}\times\frac{1}{9} = 4{\cdot}15 \text{ ft.}$$

The most simple form of footing consists of a brick wall sitting upon a concrete base.

A good axiom to be observed is that additional strength in any structure which can be obtained without additional cost should always be obtained, even though it does not appear to be required.

A common fault in the arrangement of such a footing is for the brick courses to be arranged thus upon the concrete bed. Fig. 5.

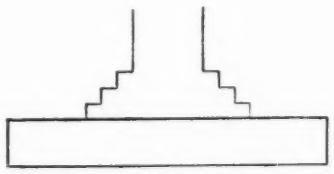


FIG. 5.

There are two objections to this : one being that the brick footing courses would fail by tension due to bending at a less load than would crush the bricks or concrete; and the other being that the concrete would fail by tension due to bending before developing sufficient pressure on the ground to cause the concrete to crush. Such a footing would be as efficient if revised as Fig. 6.

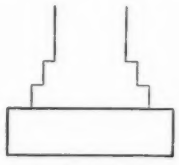


FIG. 6.

If, however, to reduce soil pressure, it were desired to maintain the full width of concrete first assumed, the footing should be arranged as Fig. 7.

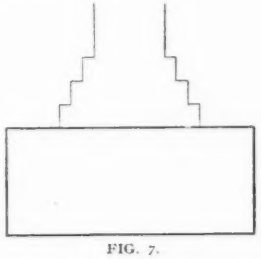


FIG. 7.

It is seen that as the spread of the concrete beyond the brick footing courses is increased, the depth of the concrete must be increased, and the depth of the footing courses must increase with any increase in spread beyond the main wall thickness.

When the width of concrete base is considerable, and the

depth of the concrete is appreciable, it will generally be cheaper to obtain the same effect by substituting a thinner reinforced concrete base for the mass concrete. Fig. 8.

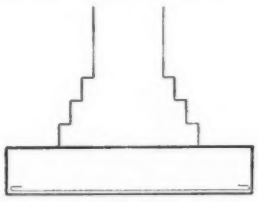


FIG. 8.

By this means the saving in quantity of concrete will generally offset the slight additional cost of the reduced quantity of superior concrete and also the cost of the steel required; and the excavation will be considerably reduced.

Very great difference of opinion exists as to what is a safe pressure for soil of any particular character, and text-books are rarely of any appreciable help in the matter.

This is due to the fact that the figures given are not sufficiently described.

Such information should always at least have reference to the locality, should give a precise description of the soil in question, and the depth at which the pressure was found to be safe; and according as the amount of accurate information was increased so would its value as a useful guide increase. Merely to say that clay will carry anything from, say, 1 ton to 3 tons per square foot, is worse than useless.

To work upon the lower figure might lead to undue cost, and to work upon the higher figure might be highly dangerous. Unless, therefore, one's powers of observation are sufficiently trained, and one's knowledge of particular circumstances is sufficient to render it unnecessary, it is generally safer to make a loading test over an extended period at the time that trial holes are made.

An examination of the building regulations of forty leading American cities and bodies in the U.S.A. will show the extraordinary confusion which can arise, and will show how utterly worthless stated bearing pressures are unless the information upon which such figures are based is full and complete.

In these building regulations clay is sub-divided into no less than twenty different kinds, and no less than ten different safe bearing pressures are given, varying between 6 tons and 1 ton per square foot. Clay is there variously described as: dry; firm; dry, thick beds; firm, dry; firm, wet; good, solid, natural; hard; hard, dry; hard, blue; hard, yellow; medium stiff; moderately dry; moderately dry, thick beds; ordinary; pure; pure, dry, compressed; soft; soft, confined; soft, wet; wet.

In these same regulations sand is sub-divided into no less than twenty-four different kinds, and no less than nine different safe bearing pressures are given, varying between 8 tons and 2 tons per square foot. Sand is variously described as: clean, dry; coarse; coarse, dry or wet; coarse, firm; coarse, very firm; coarse, thick beds; coarse, well cemented; coarse, well packed; compact; compact, well cemented; dry; fine; fine, dry; fine, dry, thick beds; fine, clean, dry; fine, firm, dry; fine, wet; fine, wet, confined; firm, pure; firm, deep excavations; moderately compact; ordinary; soft; wet.

A little reflection will show that the number of adjectives and subdivisions could have been considerably extended without materially improving the value of the so-called "information."

The information available with regard to bearing pressures of soil in this country are less completely recorded than in America, but it is doubtful whether this in itself is any disadvantage, for the reason set out above, that tabulated lists of bearing pressures are rarely, if ever, sufficiently complete or fully explained to make them worth the paper they are written on.

Unless one's knowledge of a particular district in which a particular site is situated is such as to tell one, generally speaking, what pressures would be safe pressures, putting down trial pits or soundings, or borings, or all of them, and carrying out actual test loads are essential both in the interests of economy and safety.

Furthermore, not only should one determine the extreme safe pressure by test loads, but judgment must even then be exercised in determining the pressures to adopt, as it is quite clear that for a light and low building a higher pressure could be adopted than in the case of a heavy, tall building, for the reason that a slight yielding of the soil in the latter case might have very far-reaching effects in destroying the balance of pressures and causing further subsidence.

Generally speaking, some settlement occurs before the completion of the structure, and some further settlement occurs continuing for some time after its completion.

Further settlement after reaching a state of rest may be caused by other work near by influencing the soil, especially pumping.

When an excavation is commenced, the distribution of the grains in the soil is disturbed, and the pressure on the earth at foundation level is reduced, thereby loosening it.

This reduction of pressure permits certain soils to increase in volume, and they then become less compact than before the excavation was commenced.

Any application of new weight will then tend to compress the soil again, and if the amount of the load is sufficient, may compress it beyond the degree to which it was originally compressed.

This will again account for further reduction of volume and for a further degree of settlement.

If loading continues beyond the yield point of the soil in compression, then displacement of the soil takes place, either due to crushing the grains or movement of the grains from their original position, either of which means destroying equilibrium.

These movements can be generally illustrated by a fairly regular form of compression curve, provided that there is not an excess of water to create a more or less viscous condition of the soil.

The curve will show a relatively large compression immediately after the application of the load, followed by a reduction in the rate of subsidence, and then a regular compression until such time as final breakdown occurs.

[The previous articles in this series appeared in our issues for February 25th and March 11th.]

Birmingham War Memorial

Considerable progress has been made recently with the work of building the Birmingham civic war memorial. The foundation-stone was, it may be recalled, laid in June of 1923 by H.R.H. the Prince of Wales.

The dome of the war memorial, which has been erected on a site at the corner of Broad Street and Easy Row, has been completed. The cost of the building is approximately £24,000.

The main entrance, which is octagonal, faces Broad Street, and consists of a simple Doric portico with pediment over. The main building is treated in a bold Roman Doric manner, a low dome, pierced by a single light at the crown, covering the buildings. The interior is fashioned on bold and simple lines. The inner dome, however, has rich square coffers between the ribs, which spring from the angles of the octagon.

The base of the structure is of Cornish granite, with Portland stone used for the building proper and the external dome. The main entrance doors and the windows are of bronze, and the paving of the hall will be of marble in various shades.

The foundation-stone bears on a sunk metal plate the following inscription:

"To the Immortal Memory of the Heroic Dead. This Stone was laid by H.R.H. the Prince of Wales, June 12, 1923."

Book Review

Architectural Polychromy in Theory and Practice.

"Polychromy," * by Leon V. Solon, is a book admirable in its reasoned clarity and extremely valuable in the information which it affords. The field which it covers is perhaps less wide than the title would suggest, for the author has restricted himself almost entirely to the architectural polychromy of the Greeks, with passing reference to colour as applied to mediæval work.

The reason for this limitation is clearly stated—namely, that the Greeks had a definite system of polychromy evolved and matured by their high critical faculty, one which was based upon definite knowledge of those phenomena in colour which are detrimental to the highest expression of architectural form. In Gothic architectural polychromy the same knowledge is evidenced, but here the individual nature of the architect's expression does not permit the same simplicity of deduction in the theory of colour application as is possible with Greek forms, which latter are more susceptible of conveying lessons applicable to modern-day architectural colour treatments.

Mr. Solon believes that with definite knowledge and applied theory, as opposed to the erratic and variable factor of personal intuitions, it should be possible to meet and overcome the difficulties of successful polychromy, and this by using the Greek system as a basis.

In support of this theory he analyses clearly and with convincing logic the objects of polychromy, the radical difference between mere painting on buildings and the close alliance between form and colour of the Greeks—the support, in fact, of architectural forms by colour-treatment.

The neglect of polychromy by Renaissance architects is, he contends, the result not of an absence of appreciation of colour, but of a genuine conviction. The Renaissance was a period of the rediscovery of organized architectural proportions, in which effects of precision in form were finely studied and stated in terms of light and shade; there was sought and developed in Renaissance work a truly "sculptural technique" in shadow projection, and colour, considered as an element the use of which actually results in the visual effect of altering form, would be considered as a competitive element to be consciously avoided.

The bulk of Mr. Solon's book is devoted to an explanation of colour as an optical sensation and the application of certain known properties of colour to architecture, using Greek polychromy as an illustration. He explains the "radiant energy" of pigment (the reflex activity of light in colour), and the consequent varying degrees of visibility of different colours. He shows how this data should be applied to colour emphasis in architectural design, by colour location and elaboration maintained in accord with the structural architectural values of a building.

In a chapter devoted to æsthetic objectives there is an admirable analysis of the elemental physical relationships between painting, sculpture, and architecture. "The predominant natural force which controls architectural calculation is *gravitation* . . . a state of *statical* force prevails in the structural combination. This apparent condition . . . is a major objective in architectural design: all features, either structural or ornamental, which might reach detrimentally to that condition are intuitively dismissed from consideration. If the Greek architects recognized this condition . . . we should find that structural and decorative activities were directed with the purpose of impressing the imagination of the observer with the fact." Polychromy, as a minor artistic activity, becomes a contributory to these major architectural aims, and it is in showing how simply and effectively the Greeks handled their colour that Mr. Solon points the way to practical application of colour in our buildings of to-day.

Complete polychromy, the painter's vision of a coloured city, is considered and dismissed on clearly stated grounds. Mr. Solon logically argues what most of us feel, that the major objective of architectural form can never be subordinated to the minor objective of utilizing building as a medium for painter's effects.

The ornateness of colour-treatment applied to "supported" or semi-decorative forms, the logic of its non-application to structural parts, and detail principles of colour harmonization, are all fully dealt with and illustrated by colour-plates of unusual excellence. The production of Mr. Solon's book generally, both in text and illustration, is of unusually fine quality.

"Polychromy" is a book which is full of sound suggestion to any architect interested in colour-decoration. Its precision and logic bring it into the category of invaluable works of reference. It is written with that absence of redundance or abstruseness which reveals much care and self-criticism. One regrets only its comparative brevity; it is to be hoped that there may soon appear a companion volume on Mediæval Polychromy from the same pen.

HOWARD ROBERTSON.

* "Polychromy," by Leon V. Solon. With an Introduction by Ralph Adams Cram. "The Architectural Record," New York, 1924.

Law Reports

Covenants to Repair

Hall v. *Harper.*

King's Bench Division. Before Mr. Justice Mackinnon.

This case raised an interesting point as to liability under a covenant to repair, the plaintiff claiming damages for alleged breach of covenant to repair premises at Cope Place, Kensington.

Mr. E. W. Chance, for the plaintiff, in outlining the case said, by a deed of September, 1836, one, Hume, let to John Scott for a term of eighty-seven years, which would end at midsummer, 1923. The plaintiff at a recent date became assignee of the reversion of Hume, subject to the lease. Subsequently there were various intermediate dispositions of the property. In the course of dealings between various parties in regard to the property there was an underlease of July, 1901, from one, Harman, to Udall for a term ending just before midsummer, 1923. Defendant's interest in the premises arose under an assignment of June 24, 1918, whereby he became assignee, and the tenant's interest under the underlease of July, 1901, which, like the original lease of 1836, contained covenants to repair the premises.

Mr. A. E. Woodgate, for the defendant, argued that the action was altogether misconceived, and cited cases in support of his contention that there was no priority of contract between the head lessor and the under lessee. He also submitted that the head lessor's right of action for breach of covenant in his lease was against his lessee, who in turn might have a similar cause of action against his lessee under the underlease, but that the head lessor could not sue the under lessee direct.

His lordship thought the action was misconceived. The true legal position was that the plaintiff could not sue the defendant for a breach of covenant in the 1836 deed because the defendant was not an assignee or in any other way a party to the deed. The action as between these parties was misconceived, and there would be judgment for the defendant, with costs.

Theft of Books: False Representations by Telephone

Having ourselves been victimized, we publish the following report as an expression of our appreciation of the action of "The Times" Book Club in prosecuting the man Parkinson.

At the Marylebone Police Court, Frank Parkinson, seventy-one, an accountant, living at Torriano Avenue, Camden Town, was charged on remand with obtaining eleven books, valued at £9 7s., from "The Times" Book Club, 42 Wigmore Street, W., by falsely representing over the telephone that he was an old customer. A further charge was then brought of obtaining ten books, valued at £7 10s., by fraud from Jones Evans, Limited, of Queen Street, City, and according to Detective Rees six other charges of a similar character might have been entered against him.

Mr. C. V. Hill, prosecuting, said that Parkinson had telephoned to various booksellers, representing himself as an old customer and asking for books to be sent to his address. Immediately he got them he sold them to other booksellers at half their value.

The defendant pleaded "Guilty," and admitted that he had been previously convicted. He said he was unable to get work because of his age and ill-health.

Mr. Hay Halkett sentenced him to six months' imprisonment without hard labour.

Parliamentary Notes

Replying to Mr. Montague, Mr. Chamberlain said that the question of any increases in the price of bricks or other building materials would be investigated by the Prices of Building Materials Committee.

Mr. N. Chamberlain informed Sir A. Sinclair that the following table showed the housing position for England and Wales as regarded State-assisted schemes :—

State-Assisted Schemes.	Number of houses under construction.		
	February 1, 1924.	November 1, 1924.	March 1, 1925.
England (excluding Monmouth) ..	21,068	51,469	51,478
Wales and Monmouth	1,492	3,348	3,108
Totals	22,560	54,817	54,586

Statistics as to houses built by private enterprise without State assistance are obtained half-yearly, and the following table shows the number of houses under construction on April 1 and October 1, 1924 :—

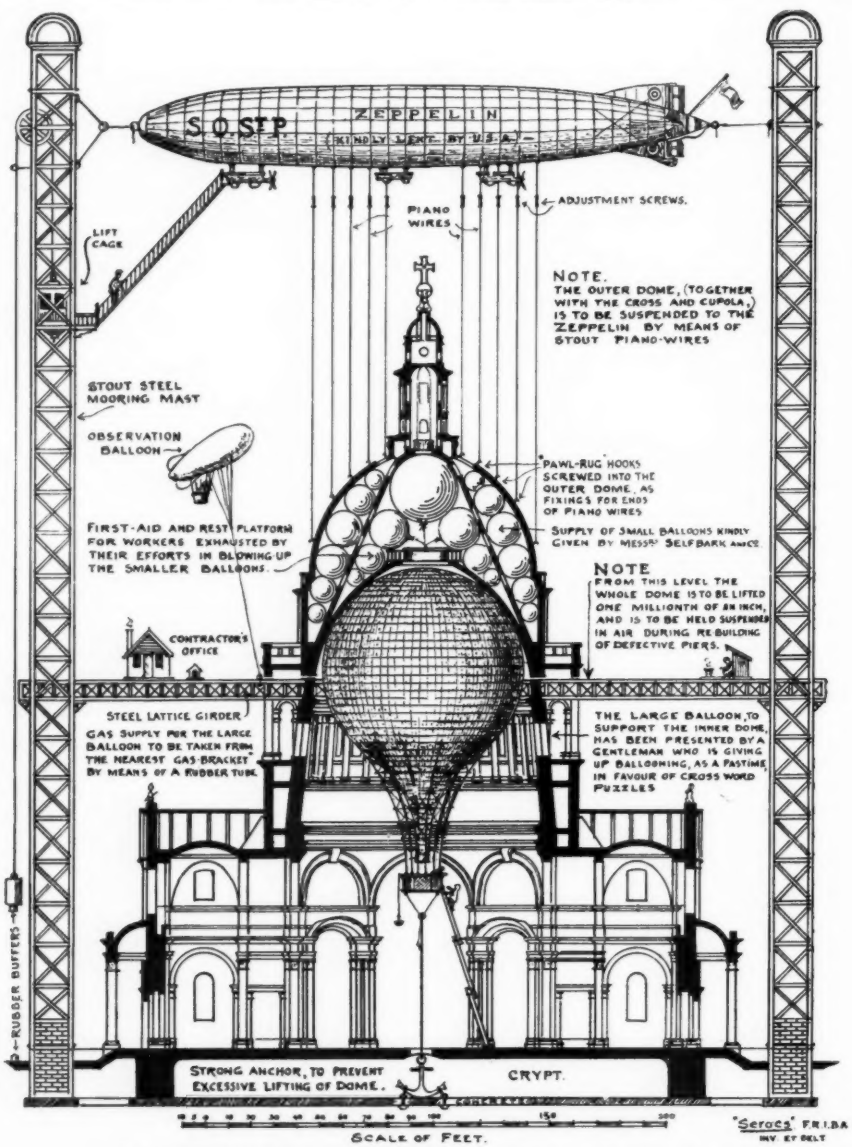
	Number of houses under construction.	
	April 1, 1924.	October 1, 1924.
England (excluding Monmouth)	35,629	34,675
Wales and Monmouth	2,324	2,543
Totals	37,953	37,218

Mr. N. Chamberlain informed Mr. Hurd that the following table showed the progress of housing in rural districts since 1919 :—

HOUSING PROGRESS IN RURAL DISTRICTS.

State-aided Schemes—Position at January 31, 1925.

State-aided Schemes.	Number of houses authorized.	Number of houses under construction.	Number of houses completed.	Number of Local Authorities concerned.
Housing, Town Planning, etc., Act, 1919—				
By local authorities ..	34,438	143	34,279	444
By public utility societies	1,631	—	1,631	—
Housing (Additional Powers) Act, 1919	16,029	—	16,029	—
Housing, etc., Act, 1923—				
By local authorities ..	5,332	1,494	1,534	499
By private enterprise ..	36,033	8,994	12,358	
By Section 3 Schemes (public utility societies, etc.)	4,750	795	1,735	—
Housing (Financial Provisions) Act, 1924—				
By local authorities ..	2,451	668	167	56 (of which 25 are included in 499 above)
By private enterprise ..	77	4	—	
By societies, etc., similar schemes under Section 3 of 1923 Act	210	—	—	—
Totals	100,951	12,098	67,733	—



A CORRESPONDENT'S SCHEME FOR THE REPAIR OF ST. PAUL'S.

Societies and Institutions

R.I.B.A. New Members.

The following members were elected at the last general meeting of the R.I.B.A. :—

As Fellows (6).

Barker, R. T.
Beswick, W.
Dannatt, P. B., F.S.I.
Parkin, W. G.
Slater, J. A., M.A.Cantab.
Wilson, J. G.

As Associates (15).

Barnsley, G. R.
Best, Major H., R.E.(ret.), F.S.I.
Cummings, C. L.
Elijah, S. A.
Enthoven, R. E.
Fairhurst, P. G.
Hines, E. G.
Langcake, W.
Mills, J. C. R.
Mason, Hilda F.
Miller, J. H., B.Arch. Liverpool.
Pakington, Honble. H. A.
Phillips, L. B.
Steele, H. R.
Townsend, Joyce F.

As Hon. Associate (1).

Steggall, J. E. A., M.A.Cantab., F.R.S.E.

Non-Ferrous Metals Research.

The research work of the British Non-Ferrous Metals Research Association, of 71 Temple Row, Birmingham, is described in a report just issued. Some twenty-five investigations have been put in hand at the National Physical Laboratory, Research Department, Woolwich, the universities, and in the works. Brief and clear descriptions are given of the aims, progress, and practical applications of the individual researches, which cover a wide field. Further sections show how successful the Association has been in securing the co-operation of leaders in the industry with the foremost scientific metallurgists, and give some indication of the rapidly accumulating results of the work. It is clear that much of the work described can only be undertaken by the co-operative effort of the industry, and it is hoped that more will share in the obligations and privileges of carrying it out in steadily increasing measure.

European and Moorish Art.

Sir Banister Fletcher, F.R.I.B.A., in delivering a lecture on Spanish mediæval architecture at the Central School of Arts and Crafts, London, said that in sunburnt Spain climate played a very determining part in producing small windows and darkened interiors. Spreading, traceried windows of glowing coloured glass were elsewhere the great glory of Gothic architecture; in Spain this intricate tracery was transferred to the surface of the solid walls and vaulting. This supplied a marked instance of the influence of Nature on art. Spanish Gothic followed in some respects that of France, owing to its geographical position, as might be seen in the interiors of the cathedrals of Burges and Toledo. Spain was, however, susceptible to divers other influences, and had also Moorish infusions from the south, due to the long occupation of the Moors in Spain. This influence resulted in a complexity and intricacy of ornament and even vaulting, owing to the geometrical skill in design of the Mohammedans.

Liverpool Architectural Society.

The annual dinner of the Liverpool Architectural Society was held under the chairmanship of Mr. E. Bertram Kirby, the President.

Mr. J. Alfred Gotch, P.R.I.B.A., proposing the "Liverpool Architectural Society," said that was the oldest of all the societies allied to the Royal Institute, and with the others exerted a powerful and beneficent influence upon the parent body.

Mr. E. Bertram Kirby referred to Liverpool Cathedral as representing the most momentous achievement in art of any description which this country had produced for at least two centuries.

Professor C. H. Reilly, toasting "Our City," said that no man now built to himself alone. The exteriors belonged to the town, and it was for the town and its representatives to value and control them. On paper Liverpool had gone further in this direction than any other city. It had a larger Corporate estate, and it now had its special Act of Parliament controlling the exterior appearance of every building. Could we honestly say that the town had yet realized its advantages in this respect? When he first came here, twenty years ago, the Corporation, on the estate it had recently bought from the Dock Board at the Pier-head, was in a position to control the shape and size of their great buildings down there. We were painfully aware now of the irregular outline of those three buildings—the long and short of it, the fat and thin of it, the great dome tucked away in one corner with the Liver towers and birds blotting it out as we entered the port. Let them not think for a moment, however, that Liverpool was the only city that erred consciously or unconsciously in these ways, but, like London and Birmingham, this city should have its Fine Arts Commission to enable it to take longer and larger views.

The Berkshire Society of Architects.

At the fifth annual meeting of the Reading Society of Architects (the Berkshire Branch of the Berks, Bucks, and Oxon Architectural Association) the following members were elected to form the Executive Committee for 1925 : Chairman, Mr. H. Hutt, F.R.I.B.A.; vice-chairman, Mr. H. Whiteman Rising, F.R.I.B.A.; hon. treasurer, Mr. W. R. Morris, Licentiate, R.I.B.A.; hon. librarian, Mr. H. Whiteman Rising, F.R.I.B.A.; hon. secretaries, Messrs. C.B. Willcocks, F.R.I.B.A., and W. J. Freeman, A.R.I.B.A.; hon. auditors, Messrs. A. S. Cox, M.S.A., and E. P. Morgan, Licentiate R.I.B.A.; members, Messrs. W. Roland Howell, F.R.I.B.A.; W. Galt Millar, F.S.I.; E. Ravenscroft, Licentiate R.I.B.A.; and H. W. Rogerson, M.S.A.

The following were elected to serve as representatives of the Society on the Council of the Berks, Bucks, and Oxon Architectural Association: Messrs. E. P. Warren, F.R.I.B.A.; W. Roland Howell, F.R.I.B.A.; H. Whiteman Rising, F.R.I.B.A.; F. H. Floyd, F.R.I.B.A.; J. T. Saunders, F.R.I.B.A.; C. B. Willcocks, F.R.I.B.A.; F. G. Sainsbury, M.S.A.

Mr. H. Hutt was nominated for election as vice-president of the Berks, Bucks, and Oxon Architectural Association.

The Institution of Structural Engineers' Annual Dinner.

The annual dinner of the Institution of Structural Engineers was held at the Criterion Restaurant, Piccadilly, under the chairmanship of Major James Petrie, O.B.E., the President.

Among those present were Sir Frank Baines, C.B.E., M.V.O. (Director of Works, H.M.O.W.), and Sir Henry Tanner, C.B., I.S.O. (Past President; Chairman, Royal Sanitary Institute); Messrs. A. J. Taylor (President, Society of Architects), G. Caddell (Hon. Secretary, Lancashire and Cheshire Branch), E. Fiander Etchells (Past President), C. McArthur Butler (Secretary, Society of Architects), J. Croad (President, National Federation of Building Trade Employers), F. Thorne (President, London Master Builders' Association), and H. Greville Montgomery.

The toast of "His Majesty's Ministers" was proposed by Mr. H. J. Deane, vice-president.

Viscount Peel, P.C., G.B.E., in responding, referred to the question of the safety of the dome of St. Paul's. He said there were those who thought the columns ought to be grouted, and on the other side people said the columns ought to be rebuilt. How could they judge between the experts, and who was there to tell the right course to follow? They were faced with the same difficulty in the matter of Waterloo Bridge. Some said it could be restored, others said there was nothing to do but take it down stone by stone, and build another and uglier bridge, which nevertheless would support several lines of tramways on its ampler proportions. Between utility and beauty there seemed to be a vast chasm, and what was required was a body of expert opinion which would say when we ought to accept beauty and when beauty ought to give way and accept the dictates of utility. Speaking as the political head of the Office of Works, he said they were striving to avoid anything commonplace and vulgar in the new buildings now in course of erection, and in the work of reconstruction they were trying to set a higher standard of beauty.

The toast of "The Learned Professions" was proposed by Sir Charles Ruthen, O.B.E. (Director-General of Housing), and acknowledged by Mr. Travers Humphreys.

Mr. F. E. Wentworth Shields, proposing "Our Guests," appealed to those architects who were not already members of the Institution of Structural Engineers to join their ranks.

Major I. H. Beith (Ian Hay), in responding to the toast, pointed out that doubtless many of those present a short time ago were serving in a different body of engineers—the Royal Engineers, to whom, as an infantry officer, he was proud to take off his Glengarry. Whether you were a novelist or a structural engineer, he said, you had to be very careful about construction if you were to achieve success.

Mr. D. H. Leveson-Gower, the chairman of the M.C.C. Selection Committee, also responded.

Responding to the toast of "The President," which was proposed by the Rev. F. H. Gillingham, Major Petrie said that

he was supported by a splendid Council, and pointed out that in Sir Charles Ruthen and Mr. H. J. Deane they had two vice-presidents who would add dignity to the Institution. He also paid a high tribute to the secretary (Captain Kiddy). The membership of the Institution had shown a wonderful increase, and he predicted that the work the Institution had done in the past was nothing to what it would do in the future.

A dance and a cabaret performance followed on the roof garden.

Modern Varnishes and Varnishing.

Mr. Arthur Seymour Jennings, F.I.B.D., in reading a paper before the Incorporated Institute of British Decorators on the above subject, said that it had been asserted that more progress had been made in connection with the production of painters' materials during the last twenty-five to thirty years than was previously made in as many centuries. It could hardly be said that this correctly applied to the production of varnishes, nor to their application, yet several important and interesting improvements had been effected. To some decorators varnishes might appear to be of little importance, and varnishing a subject which might be safely left to the actual operative. A closer examination, however, would show that from a purely decorative point of view these materials deserved the most careful consideration, as, for example, in the finish of choice specimens of fine hard woods, where the application of suitable varnish brought out and accentuated the natural beauty of the woods in a striking manner, while in other cases the use of glossy and dull surfaces in juxtaposition, the use of hand-polished work with its delicate and refined finish, might play an important part in a dignified scheme of permanent decoration. It must not be forgotten, too, that the conditions of application, such as freedom from dust, and a correct and uniform temperature, could only be provided by the master decorator, while the actual selection of the particular grade of varnishes most suitable for the work in hand was his duty also. This was a point which was often overlooked, sufficient discrimination not being exercised in ordering the exact kind of varnish best fitted for the particular work in hand. It should be remembered that more than one hundred different varieties of varnishes were made to-day for as many different purposes, and to obtain the best results it was essential that a wise judgment be used. It might be observed that some painters had a bad habit of mixing different grades of varnish together, in the expectation that an improvement would be thereby effected. This was a mistake. If it could be done the manufacturers, who were well acquainted with the constituents of the varnish, would do it themselves, probably while the varnishes were hot. He then dealt with filtering varnish, tung oil varnishes, the application of varnishes, finishing hardwood, rubbing down varnish, hand-polished work, spraying varnish, cellulose varnishes, and the painting of steel houses.

The South Wales Institute of Architects.

The annual dinner of the South Wales Institute of Architects was held at Cardiff. Mr. Percy Thomas, O.B.E., F.R.I.B.A. (President), presided.

The toast of "The R.I.B.A. and Allied Societies" was proposed by the President, who welcomed Mr. J. Alfred Gotch, M.A., F.S.A., P.R.I.B.A., and Mr. Arthur J. Hope, F.R.I.B.A., President of the Manchester Society of Architects. Referring to the amalgamation of the Society of Architects and the R.I.B.A., Mr. Thomas said the influence and prestige of the Royal Institute was greater than it had ever been before. It represented not only all the practising architects in this country, but, alone amongst professional societies, it represented the architects of the whole of the British Empire. The services of the Society were sought by civic bodies and local authorities in Britain and in many parts of the Empire.

He referred to two resolutions passed at recent meetings, which showed how well the Institute looked after its members and how conscious it was of the duty it owed to the general public. The first resolution was sent to all public authorities to the effect that the Institute considered that designs for public buildings should be either the subject of competition or, at any rate, they should be designed by qualified authorities. The second resolution was in connection with housing. The members agreed to accept a still further reduced scale of charges for this particular class of work with the object of assisting in some way the solving of the present difficulty.

Responding to the toast, Mr. Gotch, referring to the amalgamation of the Society of Architects with the R.I.B.A., said it was a decision of far-reaching importance, and of beneficent consequences. Architects now presented to the world at large a united front, and there was now no question of conflicting interests or conflicting opinions. One of the most regular attenders at their meetings was the President of the South Wales Institute (Mr. Percy Thomas), and he congratulated the Society upon having Mr. Thomas as President for three years. It was a signal honour and well deserved, for no president of any allied society carried more weight in the discussions of the Council.

Mr. Arthur J. Hope, F.R.I.B.A., also responded to the toast.

The toast of "Our Guests" was proposed by Mr. C. F. Ward, F.R.I.B.A., and responded to by the Lord Mayor of Cardiff and Mr. J. E. Turner.

The health of the secretary of the Royal Institute (Mr. Ian MacAlister) was proposed by the President, and Mr. Gotch supported. Mr. MacAlister, in reply, paid a deep tribute to the work of Mr. Percy Thomas on the Council of the Institute.

List of Competitions Open

Date of Delivery.	COMPETITION.
1925 Mar. 28	Competitive designs are invited from qualified architects, being British subjects, for proposed New Railway Offices to be erected in Nairobi, Kenya Colony. Assessor, Mr. William Dunn, F.R.I.B.A. Premiums £200 and £100. Designs must be received at the Offices of the General Manager, Uganda Railway, Nairobi, Kenya Colony, not later than March 28, 1925.
*Mar. 31	Bethune War Memorial. Assessor, Sir Aston Webb, P.R.A.
April 7	Swimming Baths, &c., Stockbridge. To be erected at a cost no exceeding £8,000. Premiums, £25, £15, and £10.
*May 1	The United Grand Lodge of England invite designs for rebuilding the Freemasons' Hall in Great Queen Street, Kingsway, London.
*May 15	Technical College for the Middlesbrough Education Committee. Assessor, Mr. Percy Thomas, F.R.I.B.A. Premiums £200, £100, and £50.
May 31	The best and most economical system of shuttering or equivalent suitable for use in connection with poured or *in situ* cottages. First prize £250; £250 may be awarded in additional prizes. Methods which are already in use or for which patent rights had been applied for before January 1 will not be considered. Apply Mr. H. H. George, Ministry of Health, Whitehall, S.W.1, not later than May 24.
June 11	National Commemorative War Monument, to cost one hundred thousand dollars, for the Government of Canada. Apply Office of the Secretary, Department of Public Works, Hunter Buildings, Ottawa. A few copies of the conditions, together with declaration forms, can be obtained from the R.I.B.A.
*June 30	Lay-out of open spaces and fortifications between Valletta and Floriana and those encircling Floriana. Premiums £1,000 and £500. An indemnity of £100 will be awarded to three other designs showing conspicuous merit. Assessors, Mr. E. P. Warren, F.S.A., and Professor Patrick Abercrombie, A.R.I.B.A.
July 1	An extension building adjacent to the Shirehouse, Norwich, for the Norfolk County Council. Premiums £150, £100, and £50. Assessor, Mr. Godfrey Pinkerton, F.R.I.B.A., on the whole of the designs submitted, and to make the award. Apply Mr. H. C. Davies, Clerk of the Council, The Shirehouse, Norwich.
Sept. 1	High bridge over Copenhagen Harbour. Three prizes to the value of Kroner 35,000. Apply City Engineer's Office, Town Hall, Copenhagen. Deposit of Kroner 100 (returnable).
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.
No date	New Secondary School in Perth Road, Dundee. For the Education Authority. The Competition is limited to architects in practice in Scotland and carrying on business on their own account. Application for the conditions of the competition and instructions had to be made to Mr. John E. Williams, Executive Officer, Education Offices, Dundee, not later than February 18. Mr. J. A. Carfrae, Licentiate R.I.B.A., is the Assessor.
No date	Proposed Presbyterian Church at Cheam, Surrey. In the first instance rough sketches only will be required and therefrom the committee will select the architects to be paid for the preparation of more finished drawings. Apply Mr. George Tweddle, Jr., Secretary to the Building Committee, "Southdown," Burdon Road, Cheam, Surrey.

* Date of application passed.

Competition News

The Cheam and Pontlottyn Church Competitions.

The following notice has been issued by the R.I.B.A.: "The Competitions Committee desire to call the attention of Members and Licentiates to the fact that the conditions of the Cheam Church competition are not in accordance with the regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime Members and Licentiates are advised to take no part in the competition." A similar notice has been issued by the Royal Institute in connection with competition for the proposed rebuilding of the Bethel English Baptist Church, Pontlottyn.

The Week's News

A New Library for York.

The York City Council have received the sanction of the Ministry of Health to proceed with the erection of a library.

More Houses for Bradford.

The Bradford Corporation are to build sixty-four houses on the Bierley housing estate.

Burton's New High School for Girls.

The Burton-on-Trent Town Council have approved a scheme, to cost £50,000, for the erection of a new Girls' High School.

Stamford Housing.

The Stamford Town Council have resolved to build 100 additional houses of the non-parlour type.

Fifty Houses for Surbiton.

The Surbiton Urban District Council have decided to erect fifty houses.

Clopton Bridge a National Monument.

The Stratford Town Council have decided to schedule Clopton Bridge as a national monument.

Nurses' Home for Greenwich.

The Greenwich Board of Guardians are to build a £56,000 home for nurses.

A New Children's Hospital for Kensington.

The Goldsmiths Company have given £100 towards the erection of a new children's hospital at North Kensington.

Housing at Leven.

The Leven Town Council are to erect an additional fifty-two houses.

Road Reconstruction at Hendon.

It is proposed to reconstruct the roadway at Burroughs, Hendon, at a cost of £17,500.

More Houses for Thorne.

Plans for 250 houses for the Hatfield Main Colliery at Thorne have been passed by the Rural District Council. It is hoped to erect 1,800 houses within four years.

More Houses for Leeds.

The Leeds Corporation Improvements Committee have decided to apply for permission to erect a further 500 houses on the various Corporation housing sites.

Memorial Buildings for Dudley.

The Dudley Town Council have decided to proceed with the erection of the Brooke Robinson Memorial Buildings and War Memorial. The estimated cost is £55,000.

South Shields Housing Scheme.

The South Shields Corporation have resolved to build 566 houses on the eastern portion of the Cleadon estate. With contingencies, roads, etc., the total estimated cost is £327,560.

Big Housing Scheme for Walsall.

The Walsall Corporation have approved the building of 1,600 houses under the 1924 Act. This will increase the outlay for housing purposes to over a million pounds.

More Houses for Risca.

The Risca Urban District Council have decided to sell the Ty Ysaf site in Risca for £12,000 to a building firm. Three hundred houses will be erected.

Bolton-on-Dearne Housing.

Application is being made by the Bolton-on-Dearne Urban District Council for permission to borrow £36,000 for building seventy-four houses in Barnborough Lane.

A New Elementary School for Healey.

The estimated cost of a new elementary school to be erected at Healey (Batley) to accommodate 300 boys is £14,000. The Education Committee have approved of the plans.

Proposed Winter Garden for Hythe.

The Hythe Town Council have elected a committee to report on a scheme for the erection of a winter garden on the sea front.

Two Housing Schemes for Huddersfield.

The Huddersfield Corporation are to carry out two housing schemes. They comprise the erection of thirty-four houses on the Grove Place estate, and seventeen on the Deighton Road estate.

A New Hospital for Malton.

The Malton Hospital Board have decided, subject to satisfactory building contracts, to commence the building of a new hospital at Malton this spring. The total cost is estimated at about £16,000.

Southend Town Hall Scheme.

The Southend Corporation have decided to consult Professor S. D. Adshead to report as to the suitability of the site at Victoria Circus, where the High School for Boys is situated, for the purposes of a town hall and public offices.

Building Developments in Rotherham.

In the Rotherham rural district it is anticipated that a scheme for a further hundred houses will be commenced as soon as the present contract expires. In addition, the Wath Urban District Council have prepared a housing scheme for that area.

The Paris International Exhibition.

The Paris International Exhibition of Modern Decorative and Industrial Art is to be opened towards the end of next month. The greater portion of the British exhibits will be housed in the Grand Palais, where the French authorities have allotted this country floor space to the extent of 33,000 sq. ft.

Leicester's 1,000-Acre Building Site.

Confirmation of the order for the compulsory acquisition of the Winstanley Estate by the Leicester Corporation for housing purposes has been received. The estate is approximately 1,000 acres in extent. It will be practicable to build 10,000 houses on this site.

A New Synagogue for London.

The present liberal Jewish Synagogue for North-west London is to be replaced by a new building, at an estimated cost of £46,000. Holding 4,000 persons, it will, it is claimed, be the largest synagogue in Great Britain. The hall adjoining it will hold 400 people.

New Schools for Seaham Harbour and Birtley.

A new Roman Catholic school to accommodate 300 children is to be built at Seaham Harbour, and a similar school, to accommodate 250 infants, is to be built at Birtley. Messrs. Stienlet and Maxwell, of Newcastle, are the architects for both schemes.

Manchester Garden City Proposal.

The Manchester Housing Committee have decided to support a scheme to establish a garden city which would ultimately provide accommodation for 200,000 people. The site proposed is the Wythenshawe estate, the ancestral home of the Tattons on the Cheshire side of Manchester.

Belfast Housing Schemes.

The Belfast Corporation have applied for sanction to a further loan of £500,000 for housing, this being the second loan of £500,000 for sanction of which the Corporation have applied. 1,514 houses have been completed under the housing scheme, and it is proposed to increase this number to 3,063 houses.

R.I.B.A. Final Examination : Testimonies of Study.

A selection of approved testimonies of study submitted by applicants for admission to the R.I.B.A. final examination will be on exhibition in the R.I.B.A. Galleries until Saturday, March 28, inclusive, between the hours of 10 a.m. and 5 p.m. (Saturdays, 10 a.m. to 1 p.m.). The attention of students is specially drawn to this exhibition.

Labour's L.C.C. Aldermen.

The London Labour Party have decided that of the three aldermen they are entitled to nominate on the London County Council two shall be experts in housing matters. One will be Mr. R. Coppock, general secretary of the National Federation of Building Trades Operatives, and the other Mr. Ewart G. Culpin, the architect and town-planning expert, who has for many years been a member of the Labour Party.

Richmond Bridge.

The Richmond Town Council have forwarded recommendations to the Ministry of Transport for the improvement of Richmond Bridge. They suggest that the bridge should be widened on the up-stream side, and that the existing stone parapets and facings of the piers should be reinstated on the new front of the bridge, so that its present artistic appearance should be maintained.

Skegness Foreshore Development.

The projected foreshore development scheme of the Skegness Urban District Council will involve an expenditure of £30,000. The scheme provides for an orchestra pavilion, grand stands, dancing-room, and bathing and paddling pools. The main elevation will front the Grand Parade for a length of 200 ft., with a depth of 60 ft. The colonnades and cantilever shelters will accommodate over 2,000 persons.

Housing Progress in Scotland.

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

	Completed.	Under Construction.
1919 Act	23,601	1,858
Private subsidy schemes	2,324	—
Slum clearance schemes	962	2,571
1923 Act	1,612	5,490
1924 Act (local authority scheme)	—	690
	28,499	10,609

Of the total number of houses completed and under construction under the 1923 Act, 2,277 are by the local authorities, and 4,825 by private enterprise.

Obituary

Mr. W. H. Hattrell.

We regret to record the death of Mr. Walter Herbert Hattrell, of Coventry, architect. He was fifty-three years of age, and received his early training in Coventry, where he practised for many years. He designed a number of important buildings, including the Rudge-Whitworth factory and the Hippodrome, and also prepared plans for the conversion of the old Corn Exchange into the Empire Theatre. He was also concerned in the development of various estates in Coventry and London.

Mr. H. Moss, A.R.I.B.A.

We regret to record the death of Mr. Harry Moss. He was born at Moss Side, Manchester, and was elected an A.R.I.B.A. in 1906. Mr. Moss served his articles with Mr. Fred Dixon, of Manchester and Oldham. During his pupilage several prizes were won by him, notably the Manchester Society of Architects' prize for measured drawings and "The Building News" prize for sketches made on the Continent. After remaining with Mr. Dixon some years as assistant he obtained an engagement with Messrs. Bradshaw, Gass and Hope, in whose office he took an active part in the design of some important buildings. From Bolton Mr. Moss went to Bradford, where he acted for several years as chief assistant to the City Architect. Later he was appointed housing architect to the Pontardawe District Council, Swansea, where he designed and carried out several extensive housing schemes.

Mr. C. W. Courtenay.

We regret to record the death of Mr. Christopher White Courtenay, J.P., who died at the age of fifty-six. He had conducted a stonemason's business at Swan Wharf, Putney Bridge, for many years. For some years up to the time of his death Mr. Courtenay was President of the London Association of Master Stonemasons.

Trade and Craft

Change of Address.

The Technical Advertising Service, specialists in all technological publicity, have taken larger offices at Fitzalan House, Arundel Street, London, W.C.2. Telephone : City 2468.

The Wigan War Memorial.

The contract for making and erecting the Wigan War Memorial (Sir Giles Gilbert Scott, R.A., F.R.I.B.A., architect) has been entrusted to Mr. Edward O. Griffith, of Liverpool, sculptor.

The Scottish Branch of the B.R.C.

The address of the branch office in Scotland of the British Reinforced Concrete Engineering Co., Ltd., is now 144 St. Vincent Street, Glasgow, C.2. Telephone number : Central 2726.

The Empire Gas Exhibit.

The pronounced success of the gas exhibit at Wembley last year has encouraged the gas industry to demonstrate this year in even more attractive and compelling fashion the manifold uses and advantages of gas. In the forthcoming exhibition characteristic tableaux illustrating the 1,001 uses for gas throughout the Empire will reveal to the public the notable progress that gas has made and the wide scope of its service, both in the Homeland and in the varied activities of the scattered populations of the Commonwealth of Nations. The Empire Gas Exhibit will be held, as it was last year, in the surroundings specially designed for it by Mr. H. Austen Hall, F.R.I.B.A., in the centre of the Palace of Industry.

"SX" Board at the Manchester Exhibition.

The stand of the Thames Board Mills, manufacturers of "SX" board, at the Manchester Building Exhibition, was divided into four sections, each one of which was decorated according to an artist's design. The sections represented panelling and decoration for a hall, dining-room, drawing-room, and bedroom respectively. Interesting features of the exhibit were the painted panels in two of the "rooms." The artist had painted direct on to the "SX" board, and this method of decoration was suggestive of attractive possibilities. It was of considerable interest to architects and others interested in mural decoration. In one of the "rooms" a method of fixing which practically eliminated panelling was introduced. By this method the board is arranged lengthwise, and the wall is divided into the familiar components by dado rail and picture rail, vertical elements being absent except in the angles. The stand was visited by a large number of architects and builders.

The Glazing of Buildings.

"Chance's Old English Crown Glass" and "More Daylight" are the titles of two booklets which have been issued by Messrs. Chance Brothers & Co., Ltd., of the Glass Works, Smethwick, near Birmingham. In the former the firm announce that they have resumed the manufacture of "genuine old English" crown glass, which was suspended on the outbreak of war in 1914. Up to that time it had been carried on without interruption by the same process as was in vogue in mediæval times. Genuine old English crown is claimed to be the only kind of window glass which retains the peculiarly soft and brilliant natural surface of glass, unaffected by the process of manufacture. Illustrations are given of the glass in actual use to indicate the variety of glazing for which it is eminently suitable. The "Crown Bullion" or "Bull's Eye"—the centre of the crown table—can also be supplied to produce antique effects. In the other booklet the firm explain the manner in which their "maximum daylight glass" solves the lighting problem encountered in buildings situate in narrow streets, or in lower rooms and basements surrounded by light-precluding structures. The glass directs the daylight into the rooms instead of allowing it to fall upon the floor immediately below the window. Illustrations in the booklet show that the glass has a definite and different pattern on each surface, On the side facing the outside are lenses which collect the light, while on the inside are prisms which distribute it horizontally and at other angles. Illustrations are also given to show the manner in which light received from different directions is distributed by the glass.