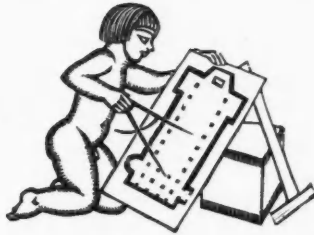


THE ARCHITECTS'



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CHRISTIAN BARMAN, *Editor*

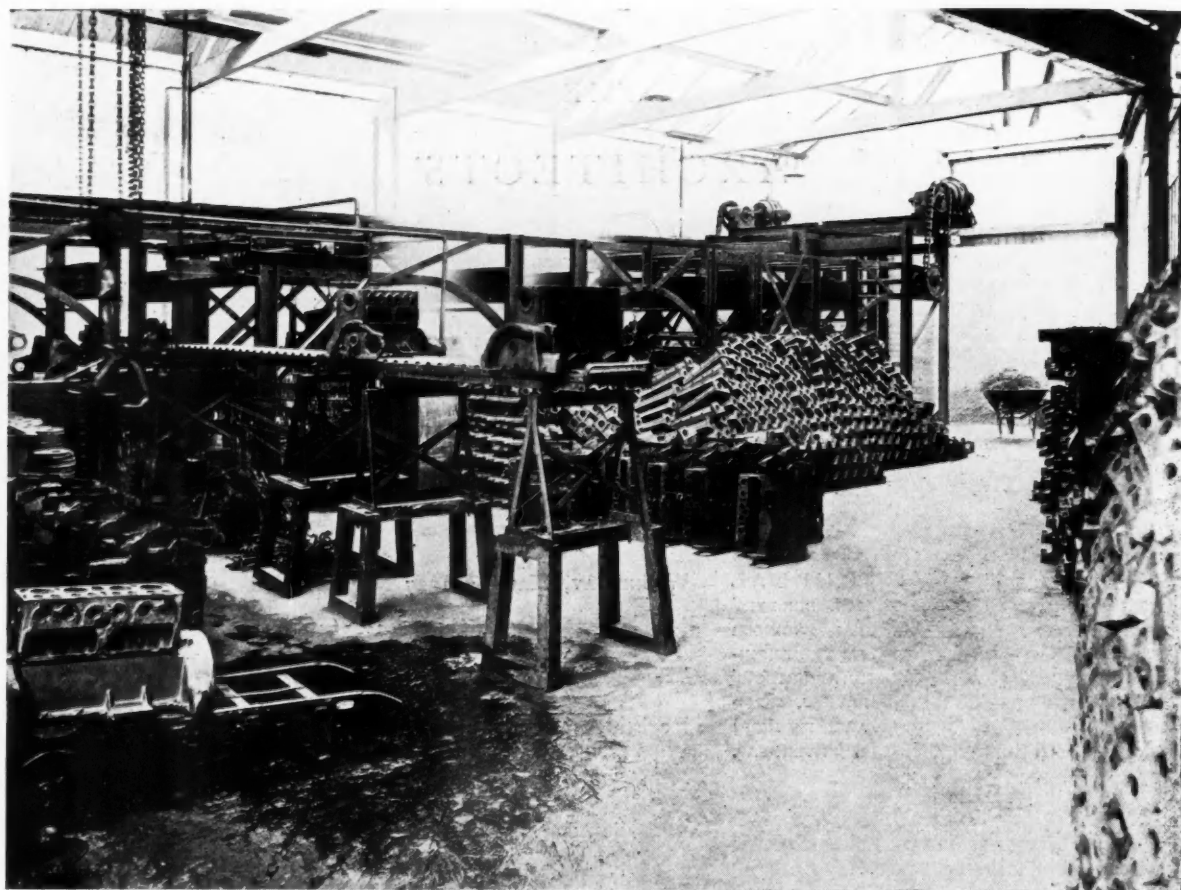
The Editor will be glad to receive MS. articles, and also illustrations of current architecture in this country and abroad, with a view to publication. Though every care will be taken, the Editor cannot hold himself responsible for material sent him.

WEDNESDAY, MAY 18, 1927

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Morris is a name to conjure with in the manufacturing world. Morris stands for a bold and successful English effort to compete with American motor mass production. Every thoroughfare has its quota of Morris cars. They stand up well to their work. They are surprisingly fast for their horse-power and are good hill-climbers. They must be made from high-grade materials to wear as they do. All motorists look upon the foregoing statements as accepted axioms of motordom. It is with pardonable pride, therefore, that I publish the illustrations on this page. The larger one shows a bit of the plating shop in one of the many Morris factories—the works of Morris Commercial Motors, Ltd., at Smethwick—Mr. Lloyd F. Ward, A.R.I.B.A., architect. The smaller one illustrates part of the oil stores in the same factory. Liquid “Colemanoid” was added to the gauging water used to hydrate the concrete mix for the floor toppings shown in both illustrations. The “Colemanoid” was supplied by my Midland agents,

Messrs. Goodman & Co., of Gravelly Hill, Birmingham. That a Morris factory was equipped with “Colemanoid” floors which have been found to be dustless, oilproof and resistant to acid attack and wear and tear, is an indication of the undeniable efficiency of the product. Write to me at Regent House, Regent Street, London, W. 1, for “Dustless Floor Specifications.” They were utilized (and “Colemanoid” was employed to the satisfaction of all concerned) for certain sections of the floor area in another of the Morris Factories—Morris Engines, Limited, at Coventry. (Once used—used again.)



Frederic Coleman



[A working detail of this entrance
appears on the following page]

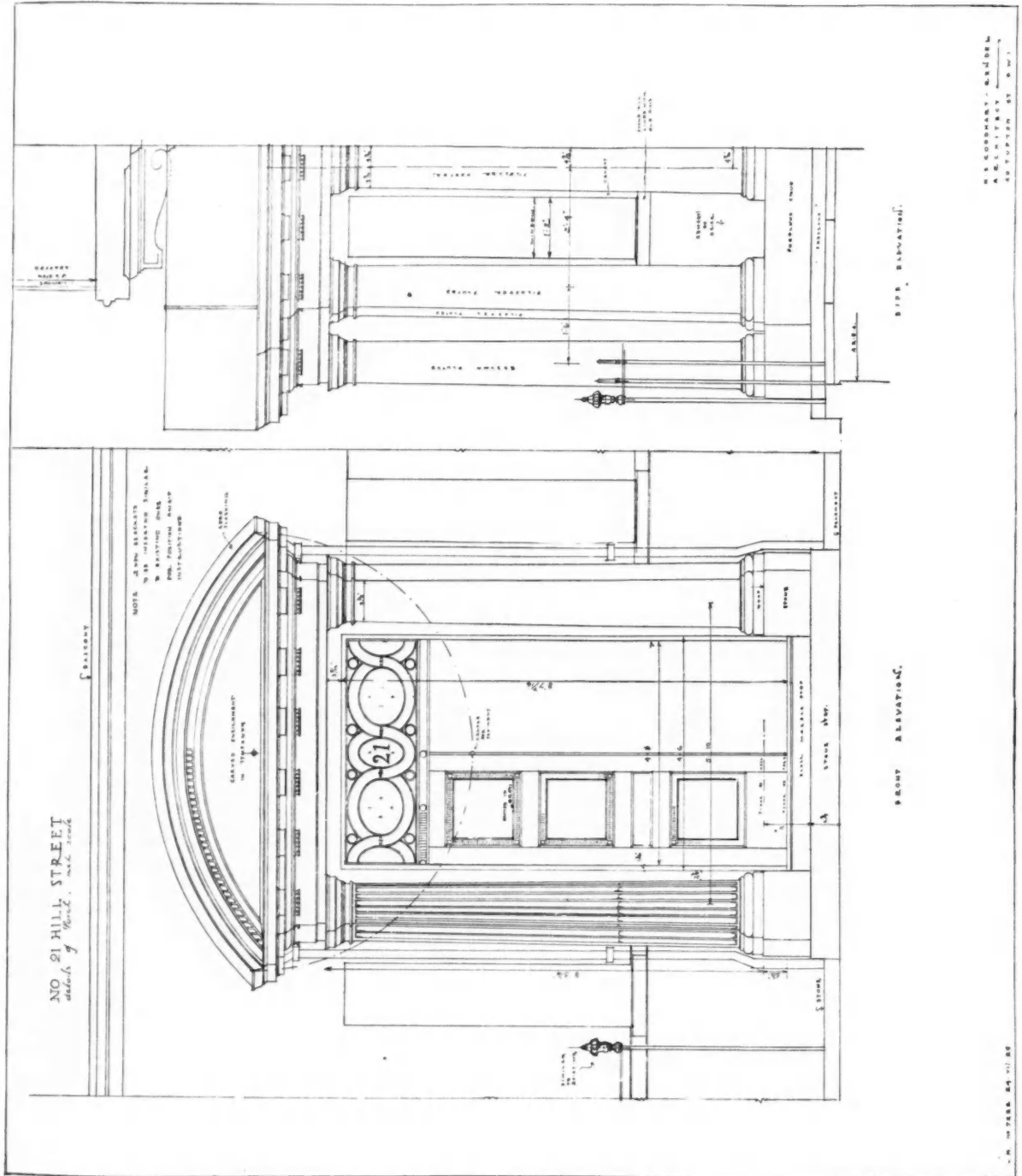
THE FRONT ENTRANCE, 21 HILL
STREET, BERKELEY SQUARE

BY H. S. GOODHART-RENDEL

THE WEEK'S DETAIL

[BY H. S. GOODHART-RENDEL]

Twenty-one Hill Street is an Early Georgian house that has been altered at different times. In Mid-Victorian days a large and coarse Doric porch, glazed in, was applied to the front, and a balcony with a heavy cast-iron railing put in front of the drawing-room windows. This balcony was interrupted by the old porch but has now been completed pending a hoped-for substitution for it of lighter balconies, one to each window. The new porch projects sufficiently to accommodate the double doors that modern comfort requires and to shelter anyone standing waiting to be admitted. It had to be made narrow so that little windows into the hall itself could be pierced on either side of it high enough to contain a fanlight and low enough to fit under the balcony. The material is wood, since there was no ornamental stonework in the rest of the house and a stone porch of any degree of richness might have seemed incongruous. The proportions of the order employed have been carefully studied in order to differentiate it from the same order carried out in stone. The greatest richness in detail is concentrated on the soffit of the cornice, which is the part best seen by anyone walking down the street. The carving in the pediment was intended to frame the coat of arms, the emblazoning of which has had to be abandoned. The handles and knockers were designed for the place and are mounted on black marble plates inlaid into the black enamel door, so that the cleaning of the metalwork may not injure the paint. The doorway was executed by Messrs. Gaze of Kingston, the carving in the pediment by Mr. Edmond Burton, the fanlights by Messrs. Thomas Elsley and Son. M. Paul Turpin had the door furniture made from drawings by the architect.



A photograph of this detail is given on the preceding page.



Wednesday, May 18, 1927

REGISTRATION BEFORE THE HOUSE

THE debate on the Architects' Registration Bill revealed a general desire to promote its main objects, if a way could be found whereby the rights of local authorities, Government departments, professional bodies, and private citizens could be preserved.

In this spirit the House accepted the principle of registration and gave the Bill a second reading without a division. The main objects of the Bill are well known. They are, first, to put the imprimatur of Parliament on that fine system of architectural education which during the last quarter of a century has grown up under the ægis of the Royal Institute of British Architects, by giving to the Board of Architectural Education a statutory recognition, widening its representative character, and by making it the recognized gateway into the profession of architecture, a place and influence not otherwise to be obtained.

No profession will be more open. In the past and, indeed, up to the generous provision of maintenance scholarships out of the funds of the Institute, there were real financial difficulties, not more, indeed, not so many as in the case of other professions, but still real difficulties in the way of students of small means who desired to become architects. For them the scheme of education provided under the Bill, linked up as it is with the general education of the country, will make an open road enabling a boy from an elementary school, without the burden of fees or maintenance, or the payment of premiums, to complete a training that will qualify him as an architect.

This, then, is the first object of the Bill—to ensure an adequate number of qualified practitioners for the architectural requirements of the country.

The second, and only less important, is to devise means by which the public can distinguish between the trained and untrained practitioner.

The word "architect" is found to be of so generic a content, so embedded in common practice and policy, and at present so impossible of exact definition, as to make it impracticable to abruptly withdraw it from common use.

The local authorities are unanimous in their opposition to that course. Housing legislation and administration have inextricably entangled the word in the discharge by their officials of their functions. Sister professional bodies, such as the Institute of Civil Engineers, could find no satisfactory safeguard for their members that would secure them in the unrestricted pursuit of their profession short of complete exemption from the Bill. One of the most powerful influences in the Labour Party, that of the co-operative movement, was directed against the proposal for reasons the full force of which can only be realized by reading the very temperate and reasoned speech of Mr.

Alexander in moving the rejection of the Bill. Allied to this was to be found in the ranks of the Labour Party a vague and ill-defined, but none the less real, apprehension that the proposal would close certain avenues of advancement now open to the student without means. No concession could have been made to these views by way of exemption that would not have to be extended to private firms, and every such concession widening the area of exemption, brought the application of the proposal within a narrowing compass. All this opposition, springing from interests more or less entitled to protection, found itself substantially reinforced by an opposition arising out of no private interest, and, indeed, springing from sound supporters of the two objects of the Bill. This opposition based itself on a view than which none commends itself more to the House of Commons, that to make the use of the term "architect" a cause of offence was to create a new crime, and to add unnecessarily to the restrictions that are increasingly imposed on life by the growing complexity of society.

It was contended that what we have described as the second object of the Bill, namely, to distinguish between the trained and untrained practitioner, could, without interfering with all of the interests that have been mentioned, be as effectively done by adding the term "registered" to the title "architect," and making it an offence for the untrained practitioner to describe himself as a "registered architect."

This proposal, originating from private members, was endorsed by the Government speaking through the Home Secretary, and that endorsement made its acceptance the condition upon which the Bill would be allowed to pass.

This expression of the Government's view undoubtedly threw upon the promoters of the Bill the gravest responsibility. They had either to conform to the condition and adopt the term "registered architect," or withdraw the Bill, and after considering the position from all its angles, taking into account all the sentimental objections to the condition, but also giving proper weight to the real and substantial advantages that must increasingly ensure to the profession by the administration of the Bill, we congratulate the Council of the Royal Institute of British Architects on its statesmanlike vision in seeing clearly what it is now possible to achieve, and its wisdom in taking occasion by the hand and setting the bounds of architectural opportunity wider yet, by conforming to the condition that has been laid down.

Its decision may be challenged, but we are sure it will be endorsed by the vast majority of its members.

NEWS AND TOPICS

LONDON UNIVERSITY'S SITE—HOSPITAL PLANNING ABROAD
—MODERN ARCHITECTURE IN SOUTH WALES—MR.
BERNARD SHAW ON WATERLOO BRIDGE.

So classical Bloomsbury has it, after all! Just when the choice of a site for London University seemed to be postponed to the Greek Kalends, there alights on the scene a benevolent fairy godmother of Rockefeller munificence. Last Wednesday, Lord Eustace Percy startled London with the sudden announcement that at last the choice of a site for the university had been agreed upon. Such wellnigh incredible news must have recalled to many of the vast assembly of the graduates at the Albert Hall a chant of their early days, when the selection of a site was a hope deferred even unto heart-sickness. The burden of their dirge was something like this: "Don't scream, sit tight: the Senate has decided that there ought to be a site." There seems to be much more certitude about the present position, which encourages assurance that the choice of site is now final and irrevocable. If that is really the happy ending to the tedious story—and I must confess to a feeling that after such protracted dalliance the news seems almost too good to be true—the scheme should be consummated by securing, with as little delay as possible, competitive designs for a building that shall be worthy not merely of "li'l ole London town," but of the capital of a vast empire. And the design must not ignore the proud fact that London University has, during its comparatively short existence, acquired a wealth of cosmopolitan traditions. More than ever it will now become the centre of attraction not only for the children of the Empire, but also for those who owe allegiance to a foreign flag. And the design and planning of the building, no less than the polity of the institution, may be expected to offer graceful recognition of the special requirements of our American cousins, the munificence of whose compatriots has rendered possible the realization of a project that had so long languished. I am wondering whether, with the ultimate further influx of students from all parts of the world, the Bloomsbury site of approximately eleven acres, ample enough for a local college, is sufficiently large to hold a world-university. For the prospects of indefinite expansion are so dazzling that, like Bunyan in his dream, I have "wondered whereto these things might grow."

* * *

Sir William Beveridge speaking at the Graduation Dinner made a great deal of the value of fine architecture in the centre of the Metropolis. He spoke of new materials and of steel and stone, and hinted that the new buildings would have to harmonize with the new School of Hygiene, designed by Mr. Morley Horder, that is now rising to the west of the site. It would indeed be a happy solution both for the future of the vacant land at Bloomsbury and of the Foundling Hospital site, if London University erects buildings that will be architecturally so fine that they will be studied in the year 2300 A.D. with the same reverence that we pay to some of the ancient colleges at Oxford and Cambridge.

* * *

Mr. Lionel G. Pearson, junior partner in the firm of Adams, Holden, and Pearson, the great hospital men, read a paper at the R.I.B.A. on Monday night on "Recent Developments in Hospital Planning Abroad"—a paper which was an outcome of many months' travel in Holland,

Denmark, and Sweden, and the Eastern States of America. Mr. Pearson had found that the European hospitals were all more on the lines adopted in this country—that is to say, the horizontal type of planning was the favourite—but in America there was a strong tendency to adopt the vertical building, and it was to America Mr. Pearson seemed to have devoted the greater part of his time. It was in that country he realized what an important part hospital "consultants" played, acting as they did as liaison between the architectural and medical professions.

From Mr. Pearson's paper I noted down the following points about American hospitals: The operating block has an operating theatre with floor and walls of pale grey or pale green. The entrance is made as attractive as possible, and the waiting room is furnished like a hotel lounge, and frequently repeated on a smaller scale on the ward floors. The anæsthetic room is frequently furnished like an ordinary room to avoid the "operation atmosphere." The plumbing of American hospitals is on rather different lines from what we consider correct in this country. The pipes are almost always buried in the wall or ceiling, which adds greatly to the smartness and cleanliness of the sanitary rooms—which shows great confidence in modern methods of plumbing, though one suspects that some time there may be trouble ahead. The large ward of 25 or 30 beds seems to be a thing of the past, and smaller units are the rule—16 beds fairly frequent, but 12 beds usually preferred. The number of rooms allocated to private and semi-private use is the most marked feature of the present-day planning, though naturally less marked in Europe than in America. The individual sanitation which accompanies it in the latter country is perhaps rather overdone. In comparing the vertical and horizontal systems of planning, there are points in favour of both, but on the question of extension (which is of primary importance to hospitals), there is little doubt the horizontal system is easier to handle. The question of architectural interest and beauty is now recognized to be just as important for hospitals as it is for banks, churches, and private residences.

* * *

The South Wales Institute of Architects has just held, at the City Hall, Cardiff, its first Exhibition of Photographs of Modern Architecture. Those photographs reveal, severally and collectively, a high standard of architectural aim and achievement, whether manifested in castle or in cottage, in church or Masonic temple, in picture-house or playhouse, in garden suburb or in garden village. Quite obviously, these men with the intensely Welsh tang to their names are equally at home either when working in the Grand Manner or making music in a minor key. I venture to congratulate them on their many and various architectural performances in Barry, Cardiff, Newport, Swansea, or elsewhere. I will not "name names," lest peradventure I might seem to propose invidious selection. It seems really to me that every name in the neatly printed catalogue stands for high endeavour; and who shall suggest any order of rank and precedence in such a peerage? It was the merit of the exhibition, as the Lord Mayor of Cardiff said when he opened it, that it was truly representative of what architects in South Wales are doing to produce buildings effective in service, pleasing in appearance, and in harmony with their surroundings. Such exhibitions are of immense value in convincing the public of something they are slow to understand—namely, the ability of architects to combine beauty with utility.

Sir Ebenezer Howard, the veteran founder of Letchworth and Welwyn, has been elected an honorary member of the Leningrad Architects' Society. This is said to be a recognition of the twenty-fifth anniversary of the publication of his book *Garden Cities of To-morrow*. It is also no doubt due to the fact that several of the supporters of the Garden Cities movement have been taking much interest in Soviet architecture.

* * *

I should not myself choose the sacred hour of digestive ecstasy which follows the mighty midday meal known in our Midland towns, in violence to fact, as "lunch," to address an audience of replete and distended manufacturers on the glories of Gothic architecture; and I imagine that Mr. J. R. Wigfield who performed this feat with members of the Rotherham Rotary Club last week did not so choose, but that he seized his chance of getting in a timely word where it was most needed. The affections, if not the intelligence, are enhanced by food, and I hope that Rotarian bliss was not, on that occasion, so deep as to repel the enthusiasm of the speaker, but rather that it warmed appreciation. The deformation of the country by bad or spurious architecture can only be checked by awakening the national consciousness of beauty and truth in building, and that consciousness is to a remarkable degree in the care of Rotarians, in the sense that the kind of authority which members of the organization wield is a popular and a powerful authority. Among them are many who claim to "mould public opinion." I do not observe, however, that this moulding influence has so far exerted itself to a better appreciation of the art of building. When Mr. Guy Dawber lately addressed an audience in a provincial city on domestic architecture, and illustrated his lecture with slides contrasting good designs with those that were tasteless and ignorant, he was dumbfounded at being plainly told by his audience that it preferred the second group of examples to the former. At this moment, too, in another city where a large programme of church building is marking the institution of a new Bishopric, the influences in sympathy with the Rotarian group—that is with those citizens eminent in commerce and who by wealth and local authority engage public opinion—are pressing for the church building scheme to be organized on thorough business principles and the Almighty to be offered a sound commercial proposition. The demand is that the churches should be standardized and built of concrete.

* * *

The town of Penrith is approaching its Waterloo: its inhabitants are awakening to a bridge-controversy comparable to that which lately engaged Londoners. Many will have noticed the old stone single-span bridge which crosses the river at the lower end of the little town. It is deemed by local authority to be showing signs of failure and to be unworthy of repair; moreover, it does not afford the level crossing beloved of speeding motorists. The fact of the matter is that masonry bridge arches are a difficult engineering problem, and one which is becoming recondite in ordinary engineering practice; and when stresses are displaced by distortion and the stability of skewbacks and abutments is involved, the job of renovation is one which a busy municipal engineer might well wish to avoid. In addition to this, the engineer, as a rule, not only has no perception of beauty himself, but no respect

for the sense of it in others. His training, and the bias of mind which led him to adopt engineering, make him oblivious to all qualities which cannot by some means be measured, and to all values which are not practical. For him, music means tunes; poetry, rhymes; sculpture and painting, the exact representation of recognizable scenes and objects; literature, the recording of facts and ideas in writing; craftsmanship, nothing whatever. Is it to be wondered at that he is more lost to beauty than is even industry—the mother that bore him. A steel girder with concrete abutments is a simple matter; it is cheap and can be expeditiously erected, and if the people of Penrith do not keep a sharp look-out they will one day find their bridge gone and a rubbishy record of twentieth-century insensibility, vulgarity and incompetence set in its place.

* * *

It is never too late to record a characteristic *mot* of Mr. Bernard Shaw, even if the subject is as stale as Waterloo Bridge. A year ago on a private occasion Mr. Shaw touched on this subject to an audience which secured to him that position of being in a minority of one, which alone perfectly sustains the moral and artistic equilibrium of the great man. Rennie, Mr. Shaw told his audience, was an engineer at a time when England was being canalized; and he became expert at building bridges over canals. The day came when he was required to bridge a piece of water twice the width of any canal and he solved this problem in the only way which his experience as an engineer enabled him to do: he joined two canal bridges together end to end. When he was confronted with the task of throwing a bridge across the Thames, his experience of bridge-building stood him in good stead. He erected a string of canal bridges from one bank to the other and the job was done.

ASTRAGAL

ARRANGEMENTS

MONDAY, MAY 23

At the Royal Institute of British Architects. 8.0 p.m. Arthur J. Davis, on The Moorish Architecture of Northern Africa. (Illustrated by Lantern Slides.)

The Architectural Association at the Art Workers' Guild. 3.0 p.m. Opening, by His Excellency Count Preben Ahlefeldt-Laurvig (Danish Minister in London), of the Exhibition of Modern Danish Architecture. (The Exhibition will be open daily from 10.0 a.m. till 6.0 p.m. till June 24.)

At the Architectural Association. 7.30 p.m. General Meeting. Election of Officers and Council for Session 1927-1928. Sir Francis Newbolt, K.C., on Architects and the Law.

FRIDAY, MAY 27

At the Architectural Association. Dinner in honour of the Danish architects visiting this country.

The Architectural Association. (At the Galleries of the Royal Institute of British Architects.) 9.0 p.m. until 3.0 a.m. Costume Ball in honour of the Danish visitors. (Tickets, price 7s. 6d., from the Secretary.)

MONDAY, MAY 30

At the Royal Institute of British Architects. 8.0 p.m. General Meeting. Thomas Hastings, on Devonshire House Buildings.

THE CRAFTSMAN AND THE CRAFT

[BY GEORGE HICKS]

THE building craftsman asks from the building industry the opportunities of living a full, sensible, normal, human life, and life in the modern sense. It is true to say that in these days all workers are discontented. They feel that they are being cheated out of life. The environment in which they live constantly reminds them of that. On the one hand they are generally compelled to dwell, overcrowded, in small and bad houses; they are compelled to fare, none too well, on the cheapest foodstuffs; and they are compelled to earn their uncertain living under conditions which are to them hard, exhausting, and monotonous. While, on the other hand, they see other folk dwelling in good and roomy houses, faring well on the best of foodstuffs, obtaining a certain comfortable living under much pleasanter conditions, and possessing ample leisure in which to enjoy sport, the arts, travel, and all that goes to make a modern cultured existence. They go for a bus ride and they see others in shining motor-cars. They read in the daily Press scrappy articles on the wonders of science, the extraordinary progress that is being made in the productive forces, and the tremendous advances made in the technique of industry. In that same Press, also, they read announcements of the fabulous wealth accumulated by others. They see pictures of gorgeous social functions. The radio has stimulated in them a taste for the finer music, and there is a latent discontent in many because they cannot go to the expensive concerts they hear about. They go to a cinema, and before their eyes the marvels of the world are unravelled, scenes from which linger in their memories as they return to their little houses in the mean streets. Occasionally they hear the throb of an aeroplane overhead, and their imaginations are stirred, and they wonder what it is like to be up there in the sky. They have never been in an aeroplane; in their wildest dreams they could not afford a flight. They feel that above them—almost as far above them as that aeroplane—a life is being lived by others, a joyous, comfortable, free, plentiful, and adventurous life, in which they are wrongfully debarred from sharing. Why, the very advertisement hoardings shout this at them at every turn with their pictures of luxurious travel and costly, magnificent things. To make the workers contented, even as contented as they were in Victorian times, it would be necessary to take away from their lives the cinema, the radio, and the modern Press—

[This is the seventh of a series of articles on the future of the building trades. The articles will be contributed by a distinguished group of architects, builders, politicians, and business men, all of whom have considerable experience of various sides of the subject. The first article, by the Rt. Hon. J. Ramsay MacDonald, M.P., appeared on January 5; the second, by Major Harry Barnes, on January 19; the third, by Mr. Harlan Thomas, on February 2; the fourth, by Mr. Edward J. Strange, J.P., on March 9; the fifth, by the Rt. Hon. William Graham, M.P., on April 6; and the sixth, by Mr. J. E. Drower, on April 20.—Ed., A.J.]

those potent agencies of unrest—and to segregate them as a working caste apart from common public life. What normal, sensible person, possessed of a sense of appreciation, would not be discontented if he were a workman?

There is a tendency to treat the worker as a curious specimen of the *genus homo*. Even in the articles which have preceded this, one has noticed a trace of this attitude of mind. Many writers appear to imagine that the worker—the bricklayer, mason, or plasterer, or whatever the craftsman may be—is something different from themselves. He is put under the microscope, as it were, and long and analytical dissertations are made, in the abstract objective sense, in regard to his merits, his failings, and his desires. I want to say that the workers are not fools: that they are possessed of our common human faculties, that they are no better and no worse than other folk, and no more possessed of envy, greediness, or lack of human sensibility than other folk. No class possesses a monopoly of intelligence, and it would be as well if people, when speaking or writing about the workers, rid themselves of the superiority complex. I want to say, further, that the prolific spread of the cheap classics—such books as those contained in *Everyman's Library*—has given a finer and a keener edge to the understanding of a large stratum of workers such as never existed, even before the war. There is a central kernel, as it were, in the working class which is really highly educated, which is very much alive in the modern sense, and which knows what it wants and is determined upon getting it.



Mr. George Hicks.

It is in the light of these circumstances—a realization of the prevailing discontent and the higher intellectual development of the workers—that the best approach can be made to the consideration of those factors which have led to the decline in the number of apprentices for the various crafts in the building industry. The wisest thing to do, in my opinion, by anyone proposing to discuss this matter is to put himself

in the position, mentally, of the bricklayer, mason, plasterer, or whatever the craftsman may be. Take the bricklayer. Let him ask himself how he would fit into the average bricklayer's life. If it appeals to him, then surely it must appeal to others.

The bricklayer usually rises in the morning about 6 or 6.30 a.m. The seasonal changes do not make much difference in this respect, though he may have a longer working-day in the summer. He hurriedly scrambles down his breakfast, for he has to be on the job before the buzzer blows at eight o'clock. Between his home and his work, particularly if his home is in one of the dormitory districts of our great industrial centres, there is usually from forty minutes to one hour's travelling by train or tram. He hurries to catch either the one or the other, experiencing all the delays and petty annoyances of such travelling. The workmen's trains and trams are almost always overcrowded and straphanging is the rule. It used to be the practice, when the bricklayer arrived on the job to work before eight, to have a short time, half-an-hour at the most, for breakfast. He works from eight to twelve, has one hour for dinner, and then works from one till five. Thus he nominally works eight hours a day, though his

working time, if we take the necessary time spent in travelling into consideration, is actually more frequently ten and ten and a-half hours a day. On Saturdays, of course, he "knocks off" at dinner time.

The work the bricklayer does is hard work—hard in the physical sense. It entails a good average physical strain. It is necessary to "catch 'em young" to make good bricklayers, if only to develop the strength of arm, and the strength and pliability of wrist which is so essential. The conditions under which his work is carried on demand that the bricklayer should possess strong, robust health. The work is highly skilled work also. It is not merely a matter of building a straight wall, although no small amount of skill is required to get a wall built upright, straight, and level. The bricklayer may be engaged in setting bricks at the foundations of a house, or he may be fixing chimney pots. He may be laying blue Staffordshire bricks, which, in bad weather, require very great attention and considerable skill in keeping plumb and level. He may be employed on gauged brickwork or gauged arches which require each brick to be shaped perfectly, to radiate to a given centre, and the joints to be no thicker than a sixpence. He may be having to fix boilers, ranges, stoves, or do domestic drainage and inspection chambers to same; manholes, building interceptors, and to make connections to the main sewer. He may be doing the glazed tiling along the walls of stations or underground railways, etc.; he may have to fix sills and lintels, or, in many parts of the country, roof tiling and slating. I want to emphasize that the man who does this work must be physically fit and very clever and capable with his hands and brain.

The bricklayer gives his life to the building industry—his apprenticeship training is based on the conception that he is going to devote his life to the building industry. He acquires proficiency and skill to that end; he absorbs all the intricate details of his craft to that end. This giving of his time and attention to learning the craft of bricklaying prohibits him from acquiring skill and proficiency in other trades or industries, or in other ways of obtaining a livelihood. He is irrevocably committed, as it were, to the building industry, and he expects to obtain a decent and comfortable living from the industry.

Does he get it? What is the position of the bricklayer? He is casually employed. His employment can be terminated by one hour's notice. There is never any sense of security or permanence about his work. He is liable to be "stood off" at any time, and for all manner of reasons. He is, like all casual workers, the plaything of chance; like a cork on the tumultuous seas of uncertainty. He never really knows, with the break of day, whether he is going to get in a full day's work or not. His chances of work and wages—his chances, that is, of obtaining the wherewithal to live even in the meagre way he does live—are dependent on so many things. He does his work in the open, and is subject to all the inclemencies of the weather. If it rains he is either "stood off" or he gets wet through. To get wet through on a sporting adventure is one thing, and to get wet through and be confined to one small area working in clothes that are wringing wet is another. If it snows, freezes, or comes over foggy, though he has spent time and money in getting to the job he is most frequently prevented from working. If there have been delays or lack of proper management in the assembling of materials, once again he is "stood off" and most often hangs around the job like a veritable outcast. While employed he experiences many real hardships. The

continuous handling of bricks, particularly if they be wet, frequently results in sore and bleeding fingers. Then the messing arrangements on building jobs are invariably bad. To eat one's meals amidst building materials and dirt and filth of all kinds, is a far, far different thing from dining at the Trocadero, or even at a cheap popular restaurant.

And what is the background of the bricklayer's life? He has a wife and family to support. He has a home to maintain. Few men can realize who have not had the actual experience what the casual nature of the work, and the ever-recurring lost time, mean to the bricklayer and his family. There is no guaranteed standard of living. Everything is uncertain. Some weeks there may be plenty of food in the home; other weeks he and his family have to crimp and scrape to get along. Some weeks he may take full wages; other weeks he may take hardly anything. Always before him is the prospect of only working a few hours, a day, two days, three days, a week, as the circumstances determine. It is an almost impossible position to be in. The right adjustment of the family budget is rendered impossible. When clothes are urgently needed, or the children require boots, or some little provision is insistently demanded on account of the sickness of the wife or little ones, it is a hopeless job trying to count on possibilities of getting the means. No settled provision can be made for the future. Even what to other people are holidays, are to him lean days of unemployment.

It is in these facts, and in their human reactions, that the causes for the decline in building craftsmen can be found. No father with a strong, upstanding, intelligent son knowing those facts would be filled with the desire to make that son a bricklayer. The building crafts are not sufficiently attractive in the economic sense; they do not offer the same chances of a happy, contented, dignified human existence as many other trades and callings. It is the little, basic, elementary things which count most in life. A bricklayer, tired from the day's work, riding in a tramcar in his work-soiled clothes and muddy boots feels less comfortable, less dignified, than the clerk whose body is not tired and whose clothes are free from stain. An intelligent, discriminating understanding of the bricklayer's position, and his importance as craftsman to the building industry, would long ago, so one would have thought, have caused the employers to have established compensatory conditions for the hardships peculiar to the calling, and by such compensations have firmly bound such valuable workmen to the industry and made the craft eagerly sought after by lads coming into industrial life. As with bricklaying, so with masonry, so with plastering, so with joinery and the other crafts. Those who seek a solution to the problems resulting from the lack of craftsmen in the building industry would do well to make a close and sympathetic study of the craft, and seek to remedy the defects appertaining thereto, and to study, also, in the same manner, the living and working conditions of the craftsmen.

The building industry is one of the basic, essential industries. It is fundamentally a communal industry. People must have houses to dwell in, and buildings in which to carry on trade and commerce and to house the arts. The service the building workers perform is a highly important and imperatively necessary social service. The community cannot do without its builders. And one would think that its first care would be to guarantee those builders a certain living in decency and comfort. Sooner or later it will have to face the fact of having to establish such a guarantee. The employers in the building industry do

very well: they make substantial profits, and they have reaped all the benefits that have accrued from the progress of technique and the advances made in the productive forces in relation to the industry. And one would think that their first care, now, would be to assist in securing for the building workers a certain living in decency and comfort. If they do not do that, if they fail to take thorough cognizance of the position which is rapidly developing in regard to the shortage of craftsmen, and to produce the only real means of attracting men to the industry, and keeping them there, they will be killing the goose which lays their own golden eggs. To call me an agitator, or to dub me a Bolshevik, for stating the truth of the position, will not alter the facts or solve the problems. *The building craftsman asks from the building industry the opportunities of living a full, sensible, normal, human life.* And all seriously concerned with the future of the building industry should do the utmost that lies in their power to provide such opportunities.

MY FIRST JOB

i: H. S. GOODHART-RENDEL

[BY M. L. A.]

To all true architects the question of education provides an inexhaustible fund of material for discussion. Although the champions of the schools are now in a majority, their opponents still hold to their views and wrangle with creditable fortitude; and it would be an irreparable loss to the profession if this prolific subject of controversy were definitely resolved. Mr. Goodhart-Rendel is a cogent argument for both sides, since, in fact, he conforms to the theories of neither.

When he was sixteen his mother proposed to build two estate cottages at Shalford in Surrey, and he was allowed to design them. He had had absolutely no training either in design or in draughtsmanship, but he had conceived a great interest in the study of the architectural styles, and circumstances had enabled him to devote much of his time to books on the subject. His mind was quite open, and his likes and dislikes were the dictates of childish whims; nobody had instilled into him the fads and fashions of the day, and in his love of Sir John Soane as an architect he stood alone, because at that time nobody had heard of him except as the architect of the Bank of England. So Mr. Goodhart-Rendel blindly followed his own instincts and built cottages in the charming Regency manner, with mansard roofs and trellis porches, and thus, in 1904, was using what other men never adopted until some seven years later.

Whenever Mr. Goodhart-Rendel was in town for a day he used to visit an architect in New Square, where he would talk to the draughtsmen and hinder the work in the office generally; but, beyond conversations with an architectural neighbour at home on Sundays, this was all the experience which he had of practical work, and even this came to an end when he was finally sent up to Cambridge.

In the meanwhile an uncle wrote to him from London sending plans of a large block of offices which was to be erected in Calcutta by the firm of which he was a director. (The building was originally to have been called Gillander House, but the name was subsequently altered to Clive Buildings.) The drawings had been prepared, in the usual Indian way, by a local firm of contractors, and were sent to Mr. Goodhart-Rendel merely to obtain interesting

criticism. The latter wrote back stating his views peculiarly fully, and illustrating his remarks with sketches; and in due course he had word that the board of directors was pleased with his ideas, and wished him to proceed with the scheme. He accordingly made the necessary drawings and sent them to his clients, leaving most of the structural details to the builder who had originally sent in the design. By this time the directors had come to the conclusion that they knew nothing whatever about design, and that as far as they were concerned the elevations might be good or bad. On the other hand, the designs had been done by a very young man, so they decided that they were probably bad, and called in expert advice. The expert approved of the scheme in the main, but it was decided that a few architects should be asked to send in competitive designs. They were given a statement of the number of floors required, and Mr. Goodhart-Rendel's frontage line, the basis of which was the treatment of an obtuse angle on the site. This had been designed (with a little faking) to form a single façade, and most of the schemes sent in failed to produce the desired effect, so that Mr. Goodhart-Rendel's design won the first premium. Finding that they were irrevocably saddled with a young man as their architect the clients resigned themselves to their fate, after calling in a consulting engineer and deciding that there should be more windows on the elevations.

The first real misfortune occurred when the stanchion plan was altered to effect an economy in steel. The result was that steel stanchions appeared in various places opposite windows—much to the disappointment of the architect.

Mr. Goodhart-Rendel is strangely patient, because in spite of these troubles his quarrel lies not so much with the directors as with the Indian labour, of which he speaks feelingly. Such were the conditions then prevailing that not a particle of Indian marble was used, because it was found to be cheaper and more practicable to quarry it all at Carrara and transport it to Calcutta. Samples were sent to this country, and at least two of them were monoliths about 12 ft. high, which, together with a great deal of fretwork, should have made the cost prohibitive. All the architect's details were used except the timber window-frames designed for the façade; somebody took it upon himself to alter these, against the will of Mr. Goodhart-Rendel, and promised, thereby, to lose all the scale of the elevations, but fortunately the windows were so deeply recessed that the size and proportions of the glazing were barely noticeable.

On the completion of Clive Buildings it seemed clear that Mr. Goodhart-Rendel was well fitted to become an architect, and a prominent member of the profession was asked his views upon the desirability of an office training. He made the reply (more, perhaps, through strong disapproval of the pupilage system than from any particular appreciation of Mr. Goodhart-Rendel's capabilities) that the latter had probably already learnt, from bitter experience, all that an office would teach him, and that he had better learn the rest on the blood of his clients.

The work which he did during the period directly following this, Mr. Goodhart-Rendel now does his best to suppress; but he will, half-apologetically, show pictures of it. It is most amazing to see these designs dated 1906, which one would unhesitatingly regard as of the period immediately preceding the war, and one cannot help wondering whether both the pupilage and the school systems may have their serious defects after all.

A MODERN NURSING HOME

[BY V. M. CHRISTY]

SEVERAL outstanding points distinguish the latest and most up-to-date of London nursing homes, which has been recently opened in Devonshire Street. It has been described as a "one-woman show," and the personality of Miss Elizabeth Fulcher herself is not only a vital part of the life and working of the home, but is evident in many a detail seen in a tour of the house. Another distinguishing point is the beauty and dignity of the whole building inside and out, in structure and in decorative detail. Upon this the architect, Mr. James J. S. Naylor, F.R.I.B.A., is to be congratulated, as well as upon the successful plan adopted. It was here the case of demolishing the house previously occupying the site, and thereafter erecting a completely new edifice designed for its present purpose. The result is interesting and pleasing, as well as eminently practical, a supremely vital factor where a building of this kind is concerned.

The first essential in designing a place for the treatment of the various ills that flesh is heir to, and for the performance of surgical operations, must be such qualities of planning and construction as make for smooth and quiet efficiency in working, as well as for hygienic surroundings. At the same time, the very title "nursing home" implies the existence of another set of qualities suggesting to patients and their friends the comfort and privacy of a well-

appointed private residence, rather than a hospital. The second of these essentials must, of course, stand subordinate to the first, but in the nursing home under consideration the two sets of qualities are very skilfully mingled, so that both exist without detriment or hindrance to the other.

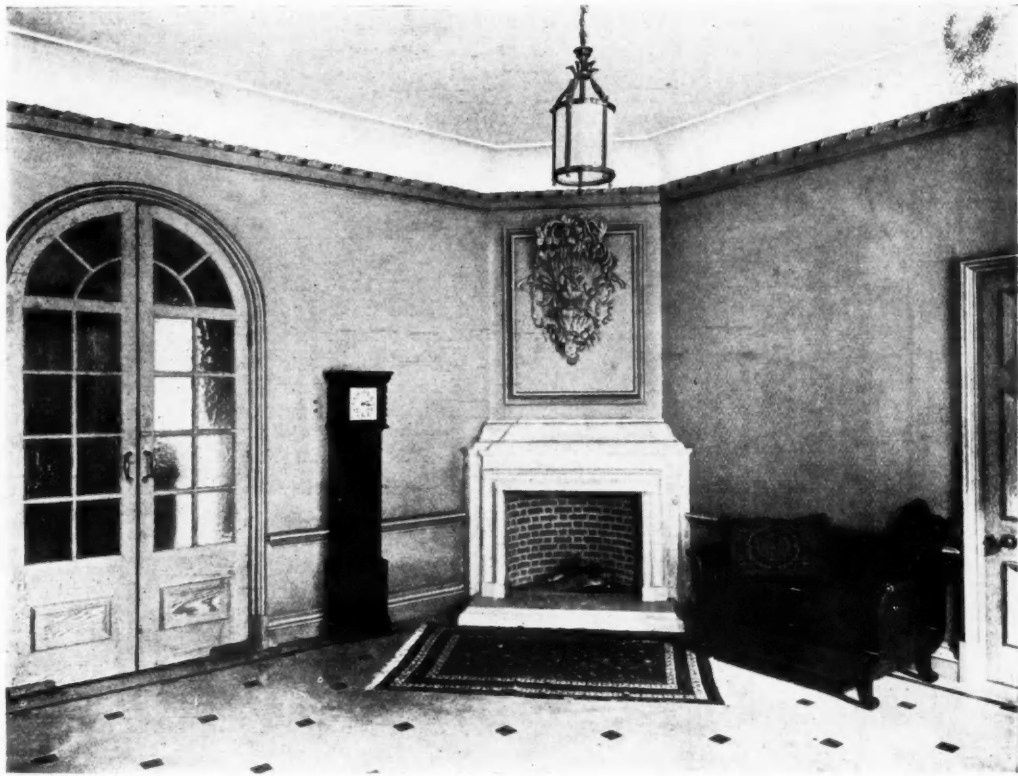
Discussion of the building itself may most suitably begin with its exterior. The facing-bricks are narrow red Dutch bricks, of a pleasing texture and colour, while English smooth-faced bricks appear on quoins and in the niches. String courses and keystones are of French stone, as are also the porch and the side doorway. In the porch the Ionic capitals are a stone adaptation of a design found in some seventeenth-century wood capitals, and the acanthus enrichment above them gives an unusual but attractive finish. The simple iron railings are punctuated by terminal posts surmounted by interesting little vase heads, and the dainty filigree of the pseudo-balcony enclosures at the first floor adds a delicate piece of interest to the plain façade. These apparent balconies which are rather hanging baskets for plants, are so contrived as to obstruct none of the window space, and yet remain satisfactorily proportioned to the fenestration. The fact that a degree of monotony is often effective in a building such as this is conceded by the similarity of the windows, while the requisite variety is afforded by the



The Elizabeth Fulcher Nursing Home, Devonshire Street, London. By James J. S. Naylor.

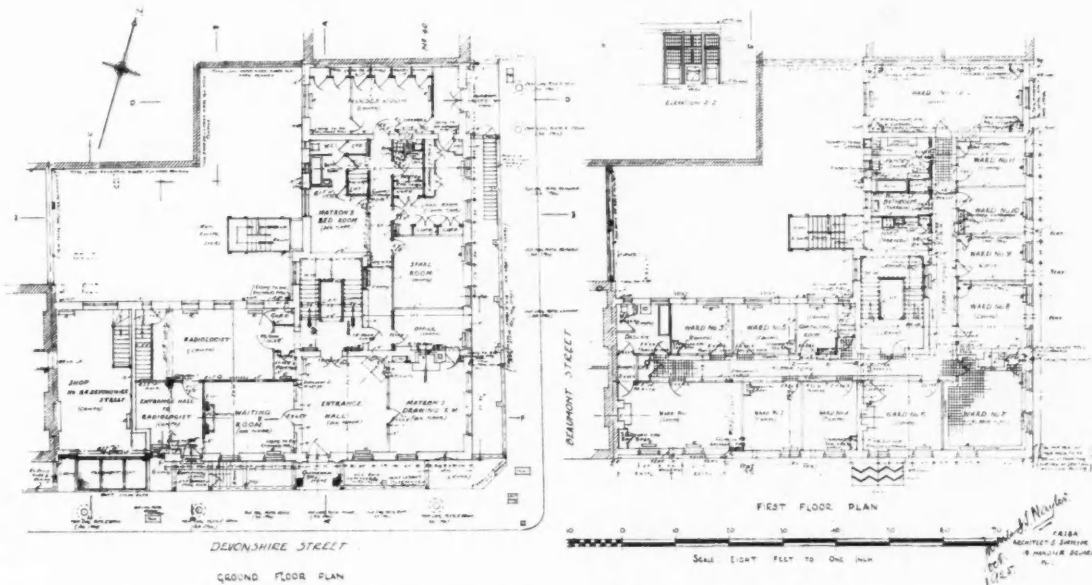


*The Elizabeth Fulcher
Nursing Home, Devonshire
Street, London. By
James J. S. Naylor.
Above, a detail of the
Devonshire Street front.
Below, the main entrance.*

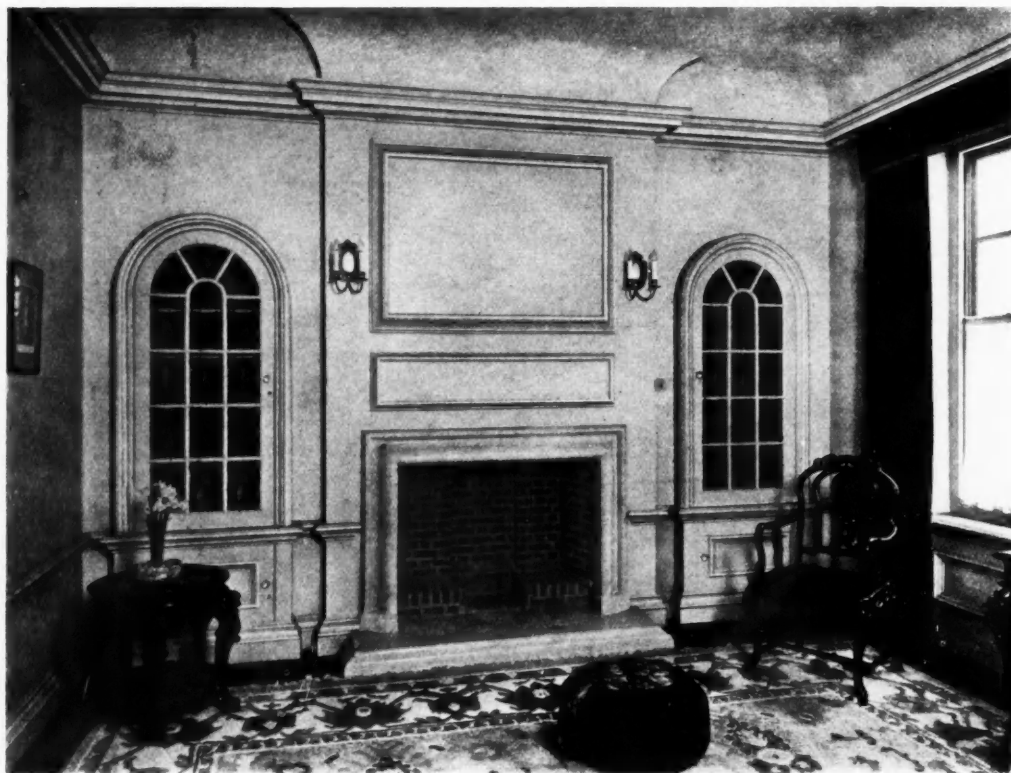


shutters at the uppermost range of windows, which are set back from the wall face. In many buildings some point in the special requirements of the purpose for which the interior is destined produces an obstacle to straightforward design in elevation. The treatment of such obstacles gives special opportunity for the architect to exercise his ingenuity. In the present instance, the obstacle lay in the fact that the operating theatres were to be placed at the top of the build-

ing, and that the daylight admitted to these rooms must for preference come from the north. In the hands of the architect this has resulted in the unusual but not unpleasant attic treatment which surmounts the more normal portion of the block. The two sides of the blank wall are allowed to make their own contribution to the general mass, with the slightest possible relief afforded by the light stone coping and the brick plinth. The expedient of using tiles



The Elizabeth Fulcher Nursing Home, Devonshire Street, London. By James J. S. Naylor. Above, the entrance hall. Below, the ground- and first-floor plans.



The Elizabeth Fulcher Nursing Home, Devonshire Street, London. By James J. S. Naylor. The waiting-room fireplace.

on the intervening roof has the desirable effect of providing a hint of softening, which the range of balusters against the asphalt flat completes. The whole exterior shows a satisfactory regard for its neighbours in this semi-domestic medical quarter, yet, by its very simplicity and directness, emphasized by that crowning mass, it suggests a certain modernity and scientific efficiency which are products of a later age than are the familiar tall brick houses near by.

On entering, through the porch, in which is suspended a Florence Nightingale lamp, the visitor is immediately struck by the reposeful character of the lounge-like entrance hall. The pervading spirit here, as in the waiting-room entered through the door on the right, is that of the dignity, comfort, and security of a "Georgian" town house. The waiting-room, with its elegant glazed cupboards, its bold mouldings, and the electric candle sconces, might be better described as a small drawing-room than by its own official title.

Through the glazed door from the entrance hall the staircase and lift are reached, leading from the ground floor, on which are the matron's suite of rooms and the nurses' quarters, as well as the office, to the three nursing floors. These are all planned alike, and are each completely and independently equipped both for nursing and service, as well as having a small consulting-room for the doctors, and the necessary complement of sink room, with hot rails, bathroom, pantry, and cupboards for drugs and linen, etc. Besides a service lift there is a linen chute from each floor to the sorting-room. On each floor, too, there is a special "bathroom suite," consisting of a larger room

than the others with its own private bathroom and small lobby.

It may be mentioned that the baths throughout are so set that the jointless flooring is turned up to meet the side of the bath, so that there is no sharp angle, and the question of suitable means of enclosing the bath is obviated.

The colour-effects throughout are simple, bright, and good.

The passages on the nursing floors are floored with rubber tiling to ensure quiet, and most of the floors elsewhere are of compo to facilitate cleaning.

In the topmost floor, devoted to the operating theatres and their necessary concomitants, one is able to see some of the latest applications of science to their planning, fitting, and equipment. The terrazzo flooring of theatres and sterilizing-room shows no joint with the walling, and the vitrolite backing to the sinks is also set with due regard for speedy and complete cleansing. Taps, handles, and door furnishings here are striking, as being chromium-plated, and therefore rustless, stainless, bright, and effective.

An item of great importance and interest in the theatres is the use of a French scalytique lamp, which, in addition to its high power, is so contrived as to cast no inconvenient shadow. The up-to-date sterilizing-room is situated between the two principal operating theatres and communicating direct with each; moreover, the sterilizing plant is duplicated, so that both theatres can be in use simultaneously. There is also another smaller theatre for nasal, throat, and other minor operations, as well as a doctors' room and theatre porters' room,



The Elizabeth Fulcher Nursing Home, Devonshire Street, London. By James J. S. Naylor. Above, an operating theatre. Below, a detail of the carving in lime wood above the fireplace in the entrance hall. By James Walker, designer and craftsman.

on this upper floor. Flush panelled cupboards similar to that in the sterilizing-room are fitted where required on all the floors. For much of the woodwork Columbia pine is successfully used. The decorative effect of the figure on the unpolished doors is seen in the illustration of the entrance hall. Descending to the well-lit basement one remarks the convenient arrangement of kitchen and scullery in one good-sized apartment, into which a lift can discharge crockery to be washed at one side, and convey food to the service pantries on the nursing or staff floors at the other. Near the kitchen is accommodation for the servants as well as various store-rooms, and the heating, lighting, and lift arrangements.

In the basement, also, but approached by a separate stair, is the dark-room for the use of the radiologist, while,



entered from the hall, is the radiology-room itself, equipped with the latest of plant, for X-ray, sunlight treatment, etc. Even a brief tour of the nursing home is sufficient to convince the visitor that in medical and surgical equipment, and in design internally and externally, this is one of the finest, as it is the latest, of nursing homes in London.

Mention must be made of two interesting features in the entrance hall. One is a striking piece of carving in lime wood above the fireplace, representing Florence Nightingale's lamp and an ancient symbol of life, surmounted and wreathed by flowers and fruit. The other is the "craftsmen's stone" set in the wall near the door, recording the names of the principal craftsmen employed in this interesting and well-executed piece of modern building work.

DRAUGHTSMEN OF TODAY

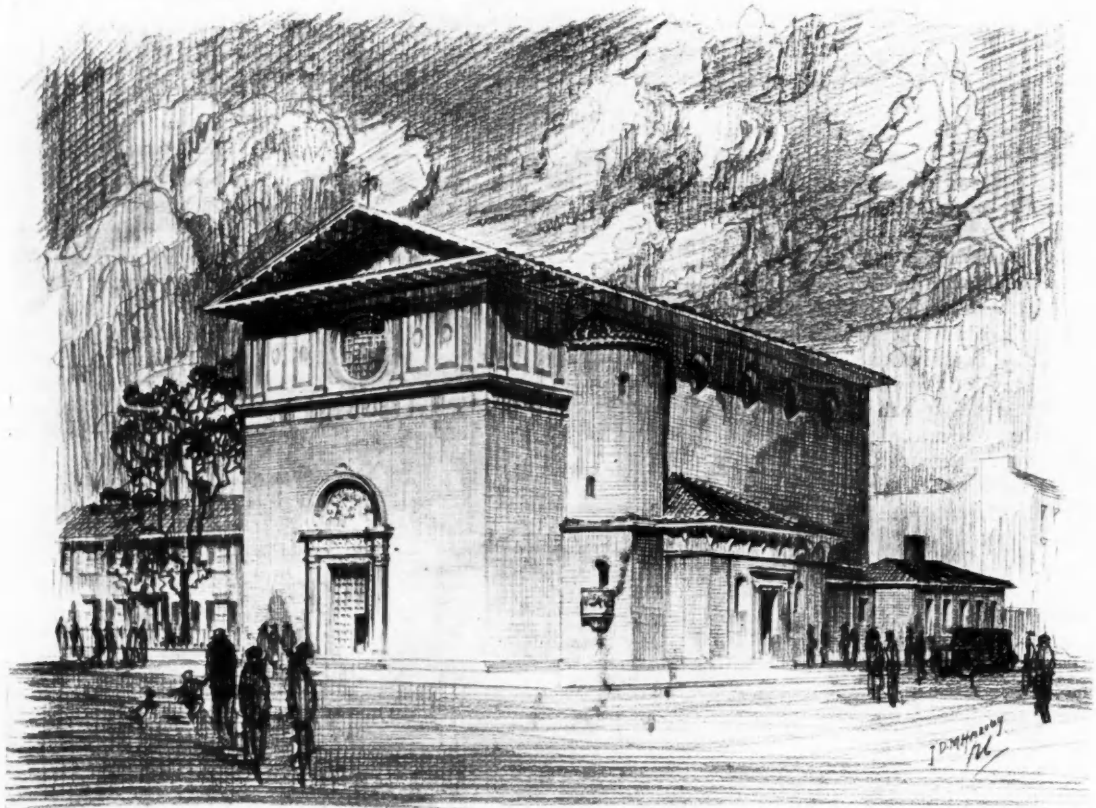
vi: J. D. M. HARVEY

[BY ALISTER G. MACDONALD]

DRAUGHTSMANSHIP can, in just the same way as the prettily-coloured carpet in the steel house, detract the eye from a multitude of sins. The architect commits his sins, unhappily, just as frequently as anybody else, so that only too often does a perspective artist unwittingly, perhaps, act as confessor and absolver through the medium of a pretty picture. The building is given lip-stick to its windows and powder to its walls. Its roof is dyed and even the sky is transformed so that the presentation is entirely theatrical. The perspective artist is thus apt to become the lip-stick artist if the design upon which he has to work has no individuality of its own. As the human face has to be made up to withstand the otherwise deadening effects of the spot light, so has the insipid design to be made up if the draughtsman wishes for another job from a particular architect. This stick draughtsmanship, though not real work, is easy and exciting to do, and a slump in vigorous architecture produces a race of pretty draughtsmen. The technique of this particular style can be developed until amazing effects are produced which require considerable practice to perfect. As a form of decorative art these carefully executed examples of multi-coloured washes and pleasingly-shadowed buildings have

their place in the scheme of things, but they should not occupy such an important place as they seem to do just now. It is a pity that the art of the coloured print is not more developed instead.

The real danger comes when this pretty style is fashionable and invades the domain of sober architectural design, which has dignity and restraint of its own. Its charm is found in the use of materials and the delicate balancing of the parts which the purely stick artist tends to suffocate and drown under his colour washes. Technique is required to transform a good or even a bad building into just a pretty picture, but this ability only produces what one might call a "slick" draughtsman. An architectural draughtsman must have other than purely decorative ability. He must also have feeling for the beautiful lines and shapes of the building, and must note particularly the materials used and the setting of the building. Instead of a flat silhouette or pattern, his draughtsmanship should present to us a sketch in which one may nearly see an entire building standing out from the paper. This supposes that the building is worth seeing, and therefore means that the quality of draughtsmanship is affected by the quality of contemporary architectural design.



Proposed Church at Kennington. By Adshead and Ramsey. From a crayon drawing by J. D. M. Harvey.

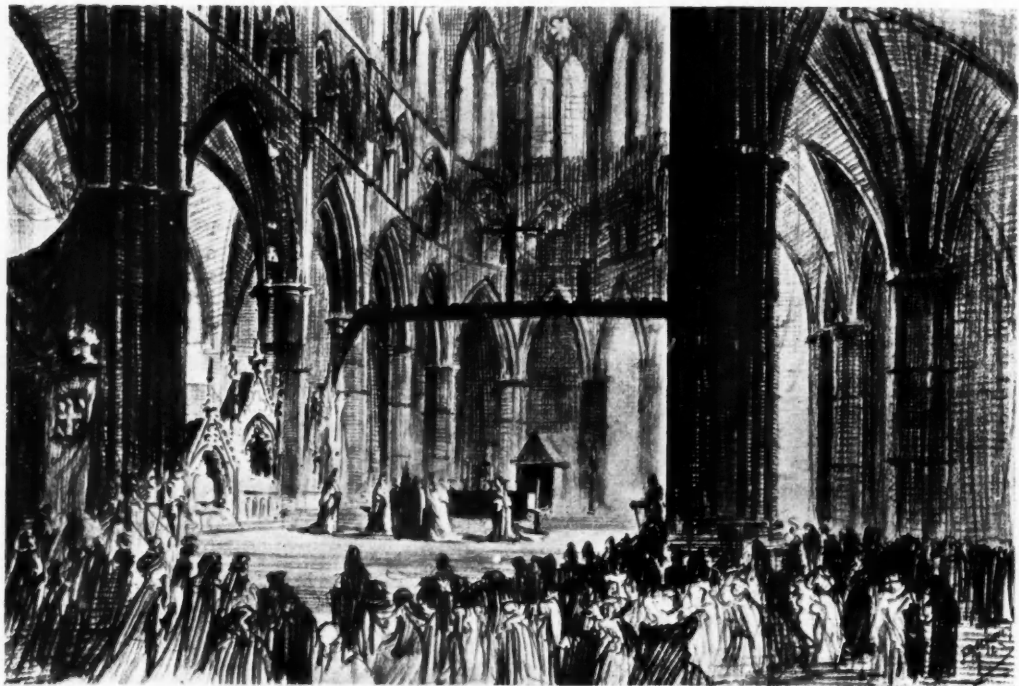
J. D. M. Harvey is fortunate in that he has all the skill necessary to deal decently both with the well-designed and with the indifferent pieces of architecture given to him. His technical manners are so good that anybody's design feels at ease on his drawing-board. Furthermore, he brings out clearly the expression of the character of those buildings whose use of materials and general construction is not masked but rather marked by decoration as finely set as a jewel. His sketch of Adshad and Ramsey's proposed church at Kennington has caught the simplicity of the design and the contrasted richness of the front door. Harvey's pencil, one feels, has been under complete control here. The less important portions of the design are slightly coarsely filled in so that the drawing has contour and is not merely a silhouette picture. The pencil lines under the overhanging eaves seem to glow with reflected light.

Another example of the pencil control so necessary to good draughtsmanship is his sketch of the north front of Westminster Abbey. It must be remembered that there is no direct sunlight on this façade to give those shadows, real or imaginary, so eagerly sought after by ordinary draughtsmen. Shadows are even more necessary to show the contrasts in Gothic work. There are no direct shadows on this façade, and yet Harvey's pencil has never swerved from presenting the true lines here. One sees the morning sun shining behind the building, and all the delicate Gothic detail is distinguishable in the reflected light. This is a very happy picture, which at the same time suggests the dirty colour to which the stonework has weathered.

Quite different in every way is the slight sketch of an Entrance Portico. Even though this may be called a scribble, the technique



*A building in the city. By O. P. Milne.
From a sketch by J. D. M. Harvey.*



Westminster Abbey. A vista of the apse at the coronation of Henry V. From a sketch by J. D. M. Harvey.
[From Westminster Abbey. By H. F. Westlake, M.V.O.]

is still under control, and has somehow indicated that the material is marble, and that marble is a good material for entrances to a building of dignity. There is no detail to make a conflicting interest, and the picture as an advertisement for a marble firm is therefore complete.

The sober treatment both of the elevation to the Westminster Bank and to the office building in Moorgate is a welcome contrast and relief to the theatrical treatment of those drawings described earlier in this article. It seems that Harvey, the draughtsman, not only uses coloured paints and graded pencils, but remembers when using them the rough scaffolds and the dusty masons and the buckets of mortar and, perhaps, the swearing, all of

which form part of the travail of the building which he is drawing.

The pretty pen-and-ink and wash-rendered First Sketch of an Architect's Design shows all the lightness of the detail, and yet conveys the solid feeling of the building, and is therefore truthful, because the drawing shows the architect really what his building would look like. The Coronation of Henry V and the White Road are two delightful examples of Harvey's imaginative skill, and also show his versatility. Without claiming that Harvey is a draughtsman descended to us from the drawing office of Olympus, one can say that he is one of the small group of perspective artists whose pencils are friends and not merely flatterers.

THE BEARING POWER OF SOILS

[BY PROFESSOR HENRY ADAMS]

THIS is a question constantly arising in architectural practice, and is one of the greatest difficulties facing the practitioner when he has to deal with heavy loads such as towers, tall chimney shafts, high buildings, etc. The surface soil in London and its neighbourhood may present all varieties from recently made ground and vegetable earth to light clays interspersed with thin beds of gravel. In favoured spots, such as Chislehurst, a good gravel subsoil is found, but taking London generally there will be found an average of 30 ft. of mixed soils overlying the London clay, which is a dense blue clay 180 ft. to 200 ft. thick. Exceptionally heavy structures should go down to the blue clay and even penetrate it for a short distance. It will then bear as much as 5 tons to the square foot, which is the pressure put upon it by the pillars of Charing Cross railway bridge.

As a general approximate statement it may be said that founda-

tions on ordinary soil should not be less than 2 ft. 6 in. below the surface. Rankine gave a formula in which he endeavoured to allow for the different circumstances that affect the supporting power. This was $W = wd \left(\frac{1 + \sin \theta}{1 - \sin \theta} \right)^2$ or conversely

$d = \frac{W}{w} \left(\frac{1 - \sin \theta}{1 + \sin \theta} \right)^2$ where W = maximum load in lb. per sq. ft. on base of foundation, w = weight of a cubic foot of the soil in lb., d = depth of foundation below immediately surrounding surface in ft., θ = angle of repose of soil. This still leaves the designer with the difficulty of determining (a) the weight of the soil, and (b) its angle of repose. The following tables may be of some assistance, but there remains the final trouble of settling under which denomination the soil to be built on should come.

(a) Average weight of soils in lb. per cub. ft.

Chalk	145-160	Sand, dry	90-100
Gravelly clay	130	Sand, damp	110-120
Clay, dry	120	Compact earth	100-112
Gravel and shingle	112-130	Top soil and vege-	
Marl	100-115	table earth	90
Mud	100-108	Peat, wet	65
Sandy loam	90-105	Peat, dry	33

(b) Angle of repose, or natural slope of earth, in degrees

Chalk	55	Rubble	45
Compact earth	50	Shingle	39
Loamy earth	40	Garden mould	30
Gravel (average)	40-45	Vegetable earth	30
Gravel, sandy	26	Sand, dry	30
Clay, well drained	45	Sand, wet	15
Clay, dry	30	Peat, firm	45
Clay, wet	15	Peat, loose	15

The angle of repose is not the slope which a heap of soil will take when thrown up, but the angle at which it will stand permanently after long exposure to the weather. The latter is, roughly speaking, half the former.

The safe loads on various soils irrespective of the depth of the foundation is sometimes given as follows, and many architects work by this in preference to Rankine's formula:

(c) Safe loads on various soils

	Tons per sq. ft.
Compact bed rock, granite	30
" " " limestone	25
" " " sandstone	18
Solid chalk	3-4
Good solid gravel	5
" " " overlying chalk	7
" " " overlying clay	3
Compact dry sand in natural beds	2-4
Gravel and sand with possible water percolation	1 1/2
Clay in thick beds moderately dry	2
but London clay in deep foundations may be loaded to	5
Moist clay and sand prevented from spreading	1 1/2
Loam and soft clay	3-1
Compact earth, vegetable soil removed	1 1/2-2
Made ground	1/2-1
Light alluvial soil	1/2
Bog, marsh, silt, peat, etc.	1/4

Rankine also gives special figures for the loads on clay—wet, dry, and well drained. The writer would, however, suggest that better results would be obtained by allowing the following loads: (A) for clay subject to weather variations $W = \left(\frac{d}{5}\right)^2$, or $d = 5\sqrt{W}$, and for dry clay not subject to weather variations (otherwise deep clay) $W = 2\sqrt{d}$, or $d = \left(\frac{W}{2}\right)^2$. In these formulæ W will be in tons per sq. ft.

Before leaving this part of the subject it may be useful to state a simple rule for an ordinary good foundation, viz. the load in tons per foot super squared gives the depth of the foundation from the surface in feet.

Whenever possible the nature of the soil should be determined by sinking a pit, or boring below the proposed level of foundation. The objects being (a) to determine at what level firm soil may be reached; (b) the level of subsoil water if any. Suppose it be required to carry a load of 2 tons per foot super on a gravelly clay weighing 130 lb. per cub. ft. with a natural slope of 35 deg.

Then $d = \frac{W}{w} \left(\frac{1 - \sin \theta}{1 + \sin \theta} \right)^2 = \frac{2240 \times 2}{130} (.073) = 2.5$ ft., or by the

later formula $d = \left(\frac{W}{2}\right)^2 = \left(\frac{2}{2}\right)^2 = 1$ ft., but if the clay predominates or the site is exposed to the weather the depth would become $d = 5\sqrt{W} = 5 \times \sqrt{2} = 5 \times 1.414 = 7.07$ ft.

RUSHED SCHEMES

[BY C. G. RADNEDGE]

IF any architect, quantity surveyor, or contractor in active business were asked what they considered the worst side of present-day building, without a doubt the answer would be "rushed jobs." Practically 80 per cent. of work that passes through an architect's office at the present is, or becomes, a time-limit affair; I have said becomes, because in a certain number of cases the architect himself is to blame for the needless haste and rush that are thrust upon the quantity surveyor and the builder respectively in preparing the quantities and getting in a tender. In the majority of cases this is caused through the architect in the first place, when receiving his instructions, either promising his client an impossible time for the preparation of his scheme and the getting in of an estimate, or, knowing that a job has to be rushed, spending the major portion of the time in the preparation of the drawings and specifications.

If a client wishes a scheme put in hand quickly, the architect should not bind himself to an impossible time limit. No doubt many readers will say, "Yes, tell a client this and he will go elsewhere," but my experience in this respect is quite the reverse; it does not take a great deal of common sense for the most untechnical client to grasp the fact that architecture, quantity surveying, and estimating do not come under the same category as mass-production articles, and that it is to his advantage to have the job well thought out and prepared.

It is frankly impossible to go into a job properly in the manner in which some schemes are started at the present time, it being no uncommon thing for the surveyor to have an uncoloured, unfinished print to start to take the quantities off from, also working without a specification, with the usual prevalence of having the drawings altered when the specification is written. Actually it takes a surveyor twice as long to prepare a bill under these circumstances, with a 50 per cent. chance of errors—a thing that we are taught quantities should never stand for, otherwise their value is lost. Another extraordinary thing I have found with all rushed jobs is the extended period that usually elapses before the contract is signed after the estimates have been received.

These examples are not fictitious. Recent cases known to the writer was a case of a villa to cost £4,000; ignoring the time the architect had his scheme in hand, quantities had to be prepared and a competitive tender received within ten days. This was done, but the client, although the price came out to his satisfaction, did not sign the contract on the eleventh day, which one would assume he would after the rush, but took this step some six weeks later because he happened to be on his holidays.

Another example was the case of a large addition for a public body: the usual rush in getting in estimates, the quantity surveyors having all their staff working until a late hour for a large number of weeks, then a ridiculous time given to the contractors who were invited to tender, making it frankly impossible for them to consider their pricing or obtain quotations in the manner they should; all this rush ending in the sealed tenders not being opened for some six weeks after receipt, owing to the simple fact that no meeting of the governors was due to take place before that date; here again we have the question, "Who was to blame?"

It is, of course, only natural and also "proper business" that no job should be kept hanging about, but there is common sense in everything, and what I am strongly condemning is this mad policy of trying to do a week's work in a day in a profession in which such a practice counts for such liability to error. If a job has to be rushed, and there is justification for so doing, the procedure is obviously simple: obtain a maximum time from the client, take the maximum time for the quantity surveyor to prepare his bill accurately and the contractor to price it correctly; if the time left makes it impossible for you to prepare your scheme, get an extension from your client, for undoubtedly a large proportion of contracts that I have seen abandoned on account of high cost has been so brought about by rushed planning, rushed quantities, and rushed estimating.

CURRENT WORK

Northcliffe House

A NEWSPAPER office is unique among trades in that its manufacturing plant must be in the middle of the city with its office. Each newspaper organization is a self-contained unit composed of members of widely differing trades. Clerks, compositors, founders, telegraphists, eminent journalists, and oilcan-bearing mechanics all make up a community whose building is at once an office, a factory, a habitat of writers, and an advertising business. Northcliffe House seems to express all these elements. There is something of the stark utility of the factory, a little of the display of the office building, and a lot of dignity worthy of a great undertaking. In the white cast concrete stone used on the exterior of the building, "Atlas White" Portland cement was specified and used to obtain the colour content. It is typically British that this enormous and world-famous newspaper business should emanate from a quiet and comparatively small building in a back street. Contrast this decent, gentlemanly building with the offices of any insignificant New York journal.

The clients insisted on efficiency before any other consideration. The architects were allowed no play for any fanciful notions they might have. Very rightly they had none in a building so purely commercial. But within the limits of their efficiency they were allowed to give dignity and a touch of magnificence to the main entrance. A wonderfully executed scheme in Italian marbles and travertine gives the required effect. Yet the rule of efficiency was observed. The lifts being of greater importance than the

stairs are placed nearest the entrance; the stairs have non-slip blocks let into the travertine, and located conveniently is the reception hatch for copy.

A directors' room typical of the others is panelled in mahogany with furniture to match. The panelling is designed with a feeling for the beauty of the wood. There is a commendable absence of carving and frills. Everything is solid, dignified, and orderly. The panel heating system dispenses with visible radiators and pipes, switches and door furniture are small and unobtrusive, and there is one powerful ceiling electric light point. The room gives a sense of dignity and simplicity.

The publishing room, situated on the ground floor, has ample circulation for vans on two sides and counters for newsboys on the third. The automatic hoists, situated between the metal tables, take the papers from the presses in the basement and deliver them to the tables in counted bundles. Between tables are band conveyors which carry the packed bundles to the despatching counters at the sides of the room. The van circulation is outside the glazed screens; they enter on the left of the picture and proceed round and out to the right. They pass the handbill room, the two paper lifts, and the weighbridge. The whole arrangement and organization for easy and rapid despatch could hardly be improved.

The general advertisement office is well arranged with ample counter space, numerous telephones and conveyors. Efficiency is the keynote. The ceilings are of concrete. It was decided not to use plaster, as the vibration of machinery



*Northcliffe House, Tudor Street, London.
By Ellis and Clarke. A general view.*

SOANE'S BANK OF ENGLAND

vii : THE OLD DIVIDEND OFFICE

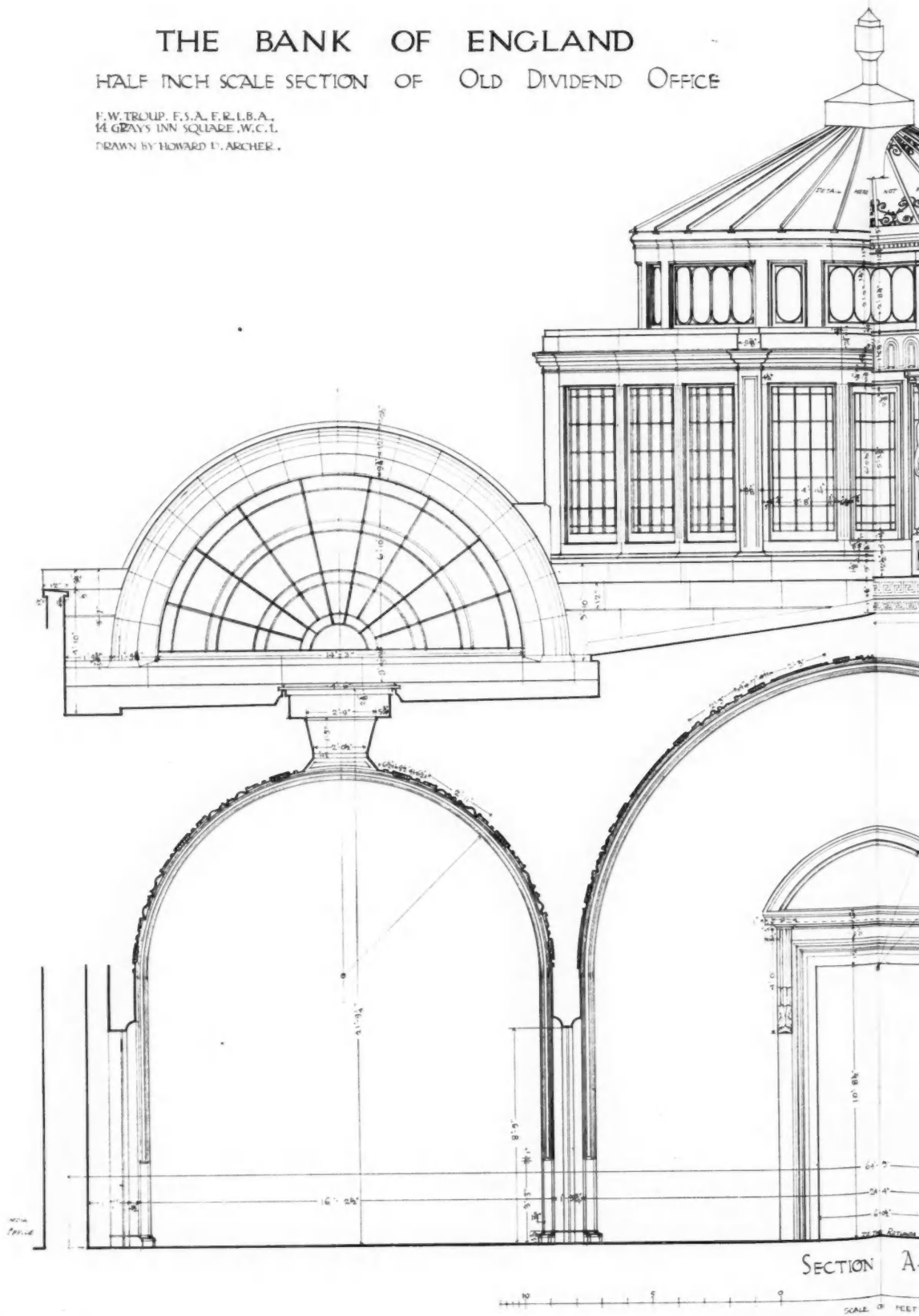
b : Long Section

On entering the Old Dividend Office the vision was immediately led by the simple curves of the understructure to the rich lantern covering the eye of the central dome. Eight pairs of caryatides stood round the stone rim, supporting on their headpieces an upper arcaded and glazed tier. The figures were cast in "Coade Stone" some $1\frac{1}{4}$ in. thick and through the hollow centre of each passed an iron rod, $1\frac{5}{8}$ in. square, let into the solid stone base and coupled at the top to its neighbour with a flat iron bar just beneath the lintel stone. The modelled discs on the pendentives of the dome were of plaster and appeared to be exact replicas of stone discs carved by Thomas Banks on the south wall of the Lothbury Courtyard some twenty years earlier.—[H. ROOKSBY STEELE.]

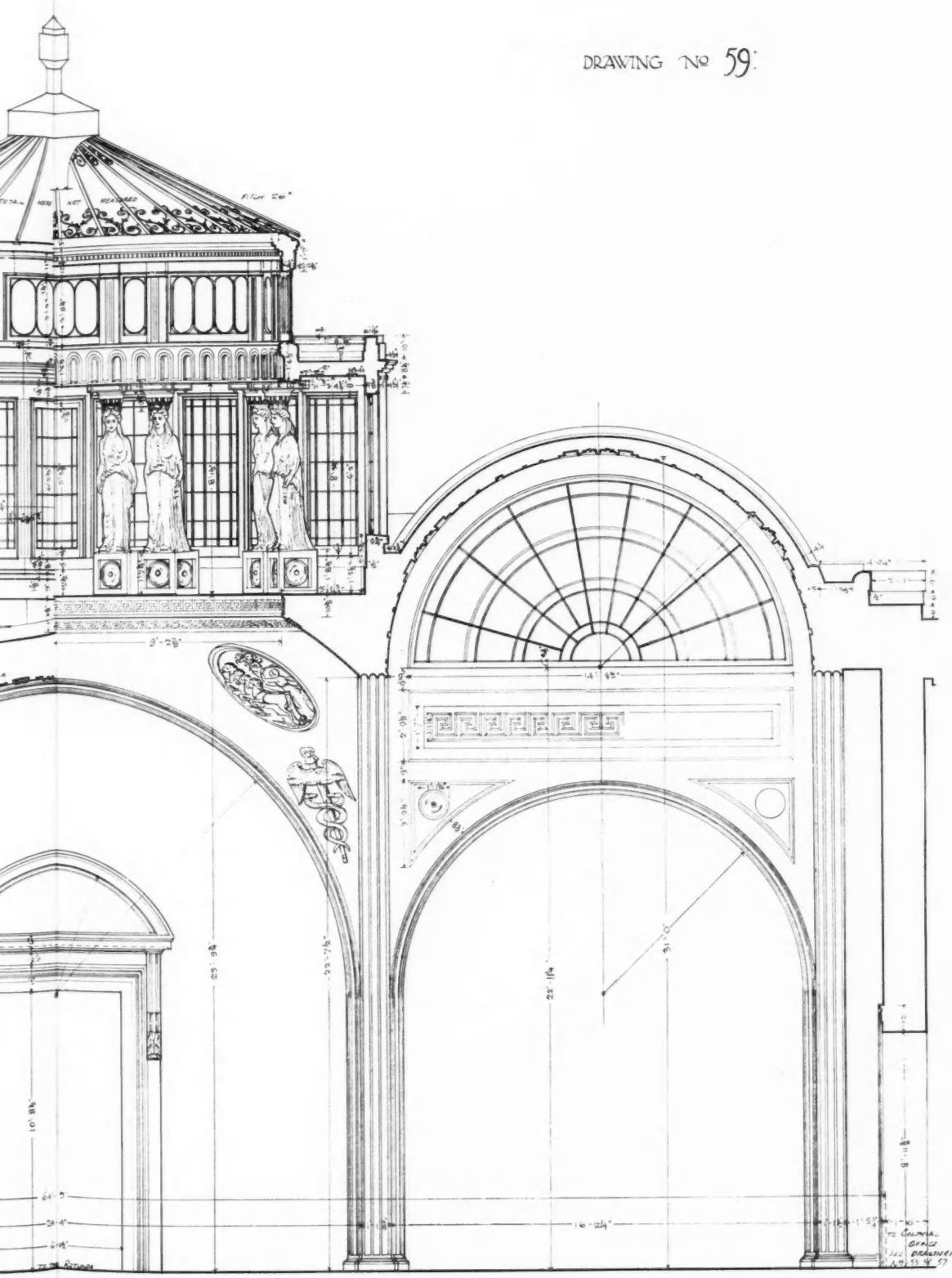
THE BANK OF ENGLAND

HALF INCH SCALE SECTION OF OLD DIVIDEND OFFICE

F. W. TROUP, F.S.A., F.R.I.B.A.,
14, GRAYS INN SQUARE, W.C.1.
DRAWN BY HOWARD L. ARCHER.



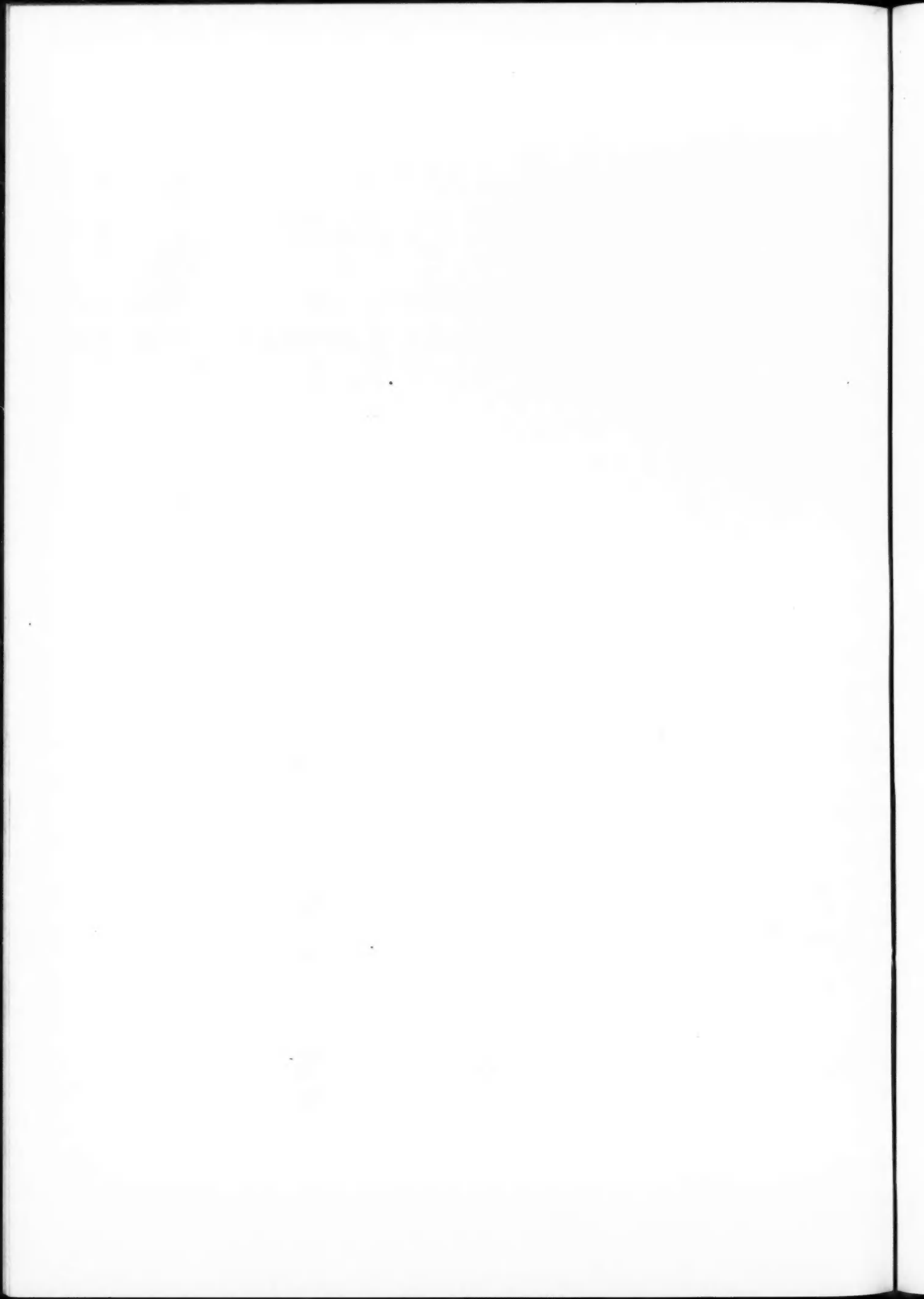
DRAWING No 59.

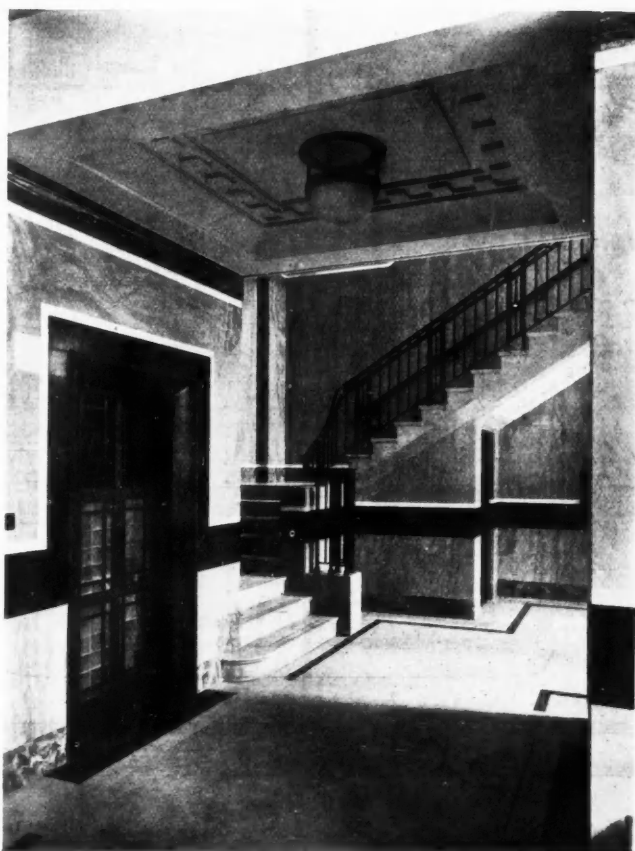


SECTION A-A

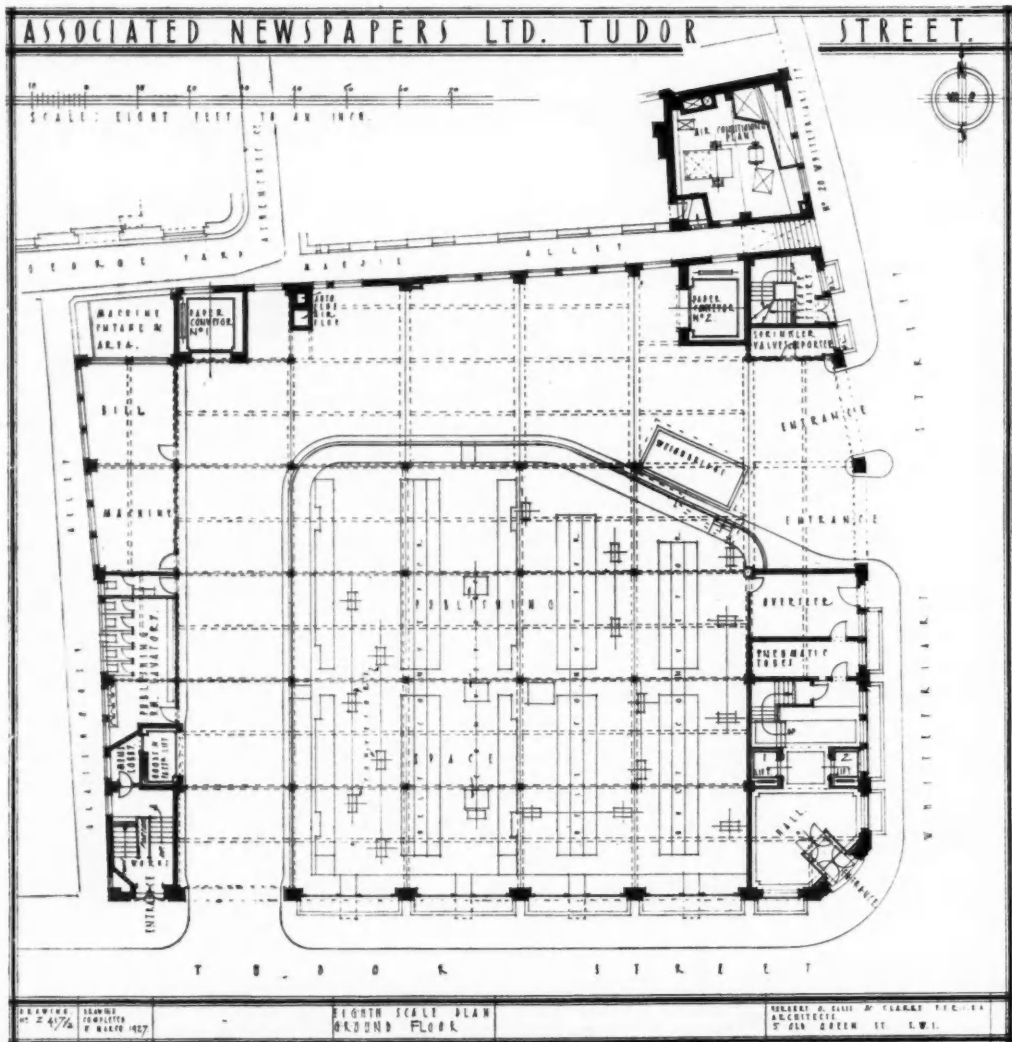
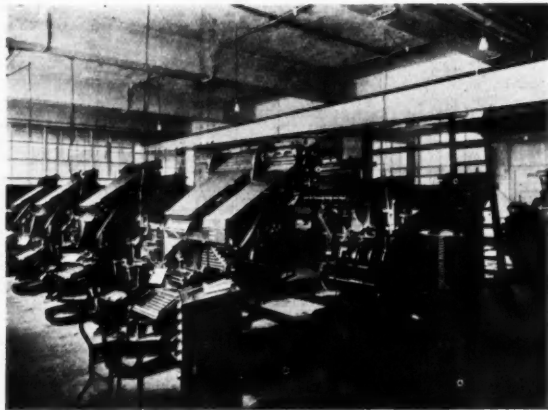
SCALE OF FEET

SOANE'S BANK OF ENGLAND. MEASURED DRAWINGS OF THE INTERIORS. (vii) THE OLD DIVIDEND OFFICE. (b) LONG SECTION.





*Northcliffe House, Tudor Street,
London. By Ellis and Clarke.
Above, a director's room. Below,
a corner of the entrance hall.*



Northcliffe House, Tudor Street, London. By Ellis and Clarke. Above, left, the composing room, showing some of the linotypes, and, right, the publishing department. Below, the ground-floor plan.

was liable to loosen it; so the bottoms of the formwork were covered with felt which gave the concrete a matt finish ready for distemper. The pipes of the heating panels are cast in the ceilings, as are also tubing for the automatic sprinklers and electric light wiring. The floor surfaces of concrete in the sub-basement and on the ground and first floors are granolithic toppings made resistant to wear and tear by the addition of "Colemanoid." A private office is illustrated on page 691. The architects have sensible ideas about light. The cornice has had to give way to the window so that the advantage of the last inch of glass-light should be seized to light the back of the room. Copperlight glazing scarcely reduces the light area at all, and presents a pleasant pattern through which the other side of the street is viewed. In efficiency, lightness and solid dignity this is an admirable example of what an office should be.

Part of the main staircase showing the entrance to the editorial department is illustrated on page 691. This consists of a number of small rooms used as offices with convenient planning for inter-communication. The directors' offices, of which a typical example is shown on page 687, are along one side of a corridor with the staff rooms opposite. Behind the latter are the writers' rooms. Opposite the staircase door is the tape machine-room, and between the editorial and printing departments with doors giving access to both is placed the business management department. One is struck by the easy way in which the building "articulates." Rooms seem to be placed exactly where they are wanted, and to fit that place as a shape functionally convenient. The *Daily Mail* seems to have taken its own labour-saving campaign very much to heart.

The composing room is situated on the top floor and excellently lit. An illustration on page 688 shows the linotype machines. These are electrically heated and the latest type. Notice the tapering air trunk, fixed to the ceiling with its graduated slots, which distributes the fresh air evenly along the room. Over part of this room, actually on the roof, is the canteen. Between bursts of concentrated high-speed work newspaper offices have periods of comparative slackness. This, in addition to the fact that the business period is the early hours of the morning, makes a canteen or rest-room essential. This one opens on to the roof and enjoys an unusual view of St. Paul's and St. Bride's.

The first-aid room, illustrated on this page, is one of the several minor service departments which have been fitted into a complicated building; somehow all these seem to be placed precisely where they are wanted. One is impressed also by the apparent compactness and smallness of the building compared with the size of the undertaking which it contains.

The foundry (page 689) in the basement, is next to the press room, with which it communicates by means of an interesting conveyor for the castings, a number of which can be seen on the

left of the illustration. The matrices descend by another conveyor from the composing room. In the foreground are electric planing machines which can remove the thinnest shavings from the castings. In spite of the gas-heated furnaces, the air-conditioning plant keeps the room at a comfortable temperature and instantly removes all fumes. This is not surprising when one is told that the plant gives six changes of air per hour. The walls are lined with glazed bricks and all paint is white. The foundry is usually the dirtiest part of a newspaper plant; here it is as clean as the composing room. The plant for the artesian well and the pneumatic tubes is only a very small portion of the astoundingly complex and complete mechanical equipment. The interiors more nearly resemble a battleship than a building. Apart from the air-conditioning plant, the panel heating and sprinkler system, there are two passenger lifts, a staff lift, two paper lifts, a very complete telephone system, numerous conveyors, elevators and pneumatic tubes, a drenching system for the outside walls, a Monis stacking machine in the paper store, and an artesian well. All this is apart from the electric light and power system, the intricacy and scale of which can be gauged from the fact that every single piece of all this complicated machinery is driven by electricity. Yet this is all secondary to the actual printing plant.

The problems of air-conditioning in different departments of a great newspaper office call for more expert solution than probably in any other industry. In the press room, for instance, where men are lightly clothed, it is desirable to maintain a temperature of about 70 deg. F. to avoid chills at times when they are less actively employed. For this, and another important reason, it is necessary to maintain a relative humidity: static electricity is generated on the paper as it passes through the rolls, and if the air is dry, dust and fluff are projected into the atmosphere. This room houses the most powerful presses yet built, requiring 2,000 h.p. to drive them. Equable conditions are maintained, summer and winter alike, by the Carrier air-conditioning system.

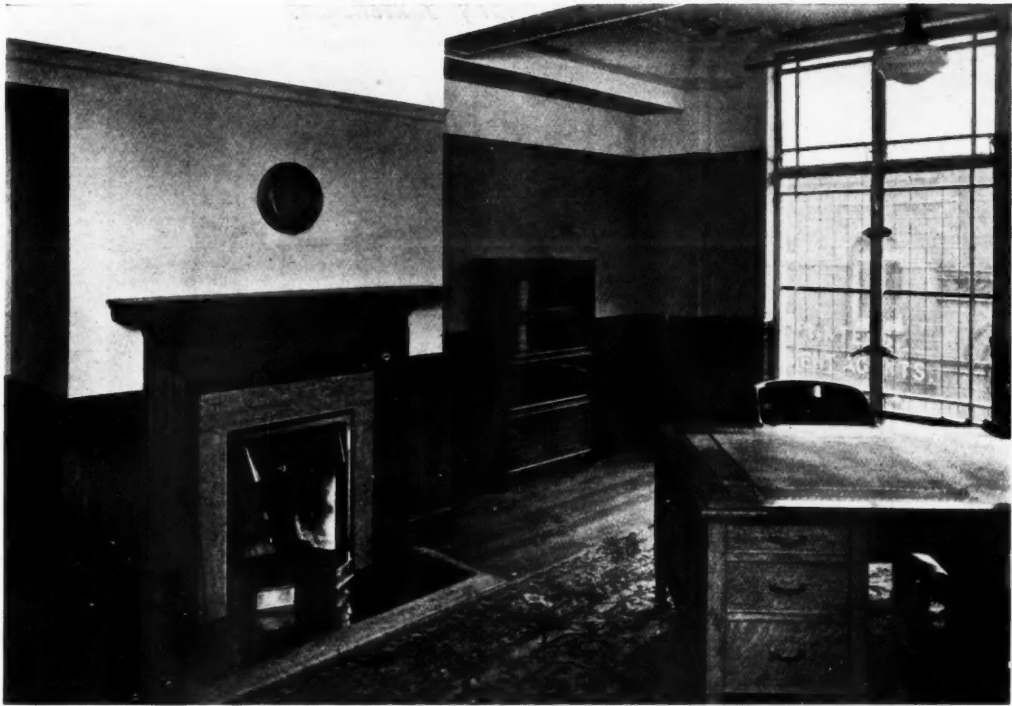
Five million cubic feet of fresh air per hour is conveyed to the press room, and 3,500,000 cubic feet per hour to the foundry and composing room.

Unfortunately it is practically impossible to obtain a photograph of the main printing plant as the press room is so closely packed with machinery. One gets an impression of row upon row of bewildering intricate machines reaching from floor to ceiling—actually they are 30 ft. high and extend from the sub-basement floor almost to ground level—while at each end of the room is a control gallery rather like a ship's bridge with hundreds of switches, cut-outs, and indicators. There is also a public gallery to which visitors are admitted. One is impressed by the amount of forethought entailed in the planning and fitting in of all this machinery and by the way in which it has been achieved.



Northcliffe House, Tudor Street, London.

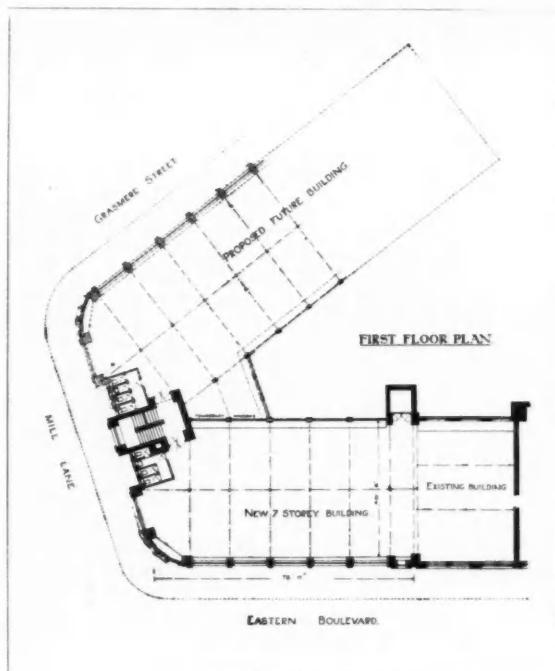
By Ellis and Clarke. The first-aid room.



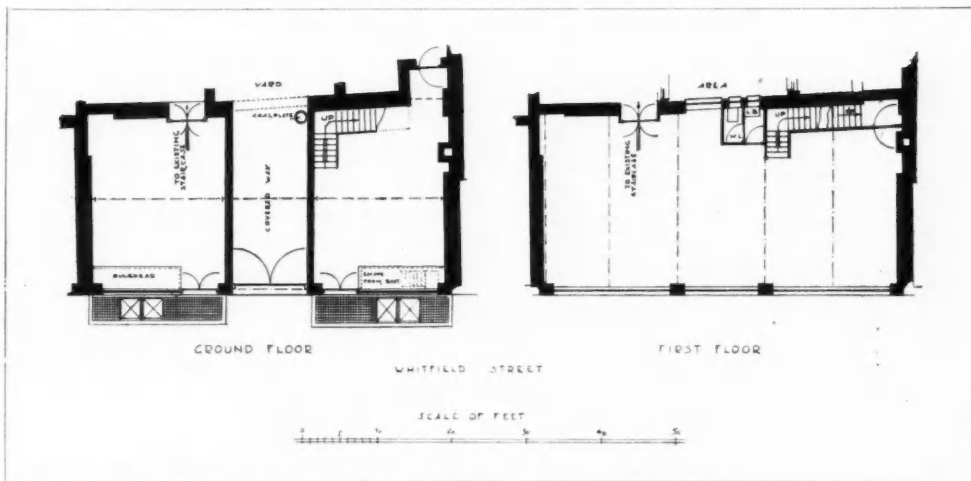
Northcliffe House, Tudor Street, London. By Ellis and Clarke. Above, a private office. Below, the main staircase, showing the entrance to the editorial department.

Modern Factory Extensions

Extensions to hosiery factory at Leicester. By Fosbrooke and Bedingfield. Above, a general view. Below, the first-floor plan. This extension consists of a seven-story building. It occupies a corner site at the junctions of Grasmere Street and Eastern Boulevard with Mill Lane. The site will allow the factory to be further extended in the future on the Grasmere Street front.



The additions to the printing works in Whitfield Street, London, illustrated on the facing page, consist of a basement, ground, first, second, and third floors, capable of carrying a superimposed load of 1½ cwt. per foot super. All the floors are of ballast concrete reinforced with filler-joists. The building is of fire-resisting construction. The main staircase and lift are in the adjoining building.

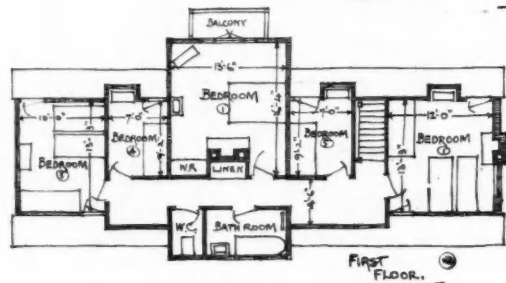
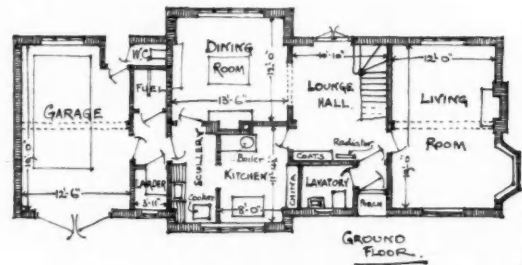


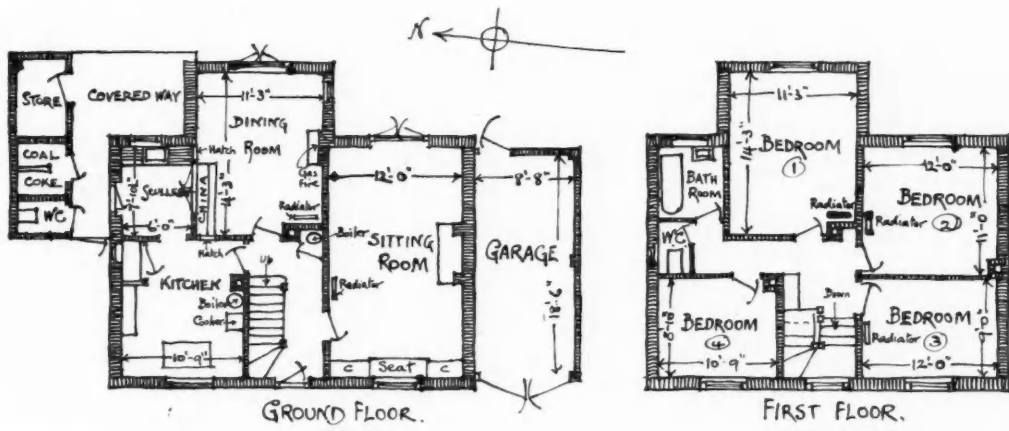
Additions to printing works in Whitfield Street, London. By M. K. Matthews. Above, the main front. Below, the ground- and first-floor plans.



Two Houses at Frinton-on-Sea

"The Bower," Frinton-on-Sea. By F. G. Coates. Above, the garden side. Below, the plans. This house stands on a triangular site, the front aspect being north. Every room is equipped with plugs for electric heating. The dining-room, drawing-room, and two of the bedrooms have open fires. In the hall is a radiator operated from the domestic boiler. The "Outlook" at Frinton-on-Sea, illustrations of which appear on the next page, has only one open fire—in the sitting-room. A small system of five radiators warms the bedrooms and the sitting-room. There are gas fires in the principal bedrooms, and an electric heating point in the sitting-room. In the dining-room is a labour-saving china cupboard, opening also into the scullery. There are also hatches from the dining-room into the kitchen and the scullery for serving and clearing of meals.





The "Outlook," Frinton-on-Sea. By F. G. Coates.
Above, the entrance front. Below, the plans.

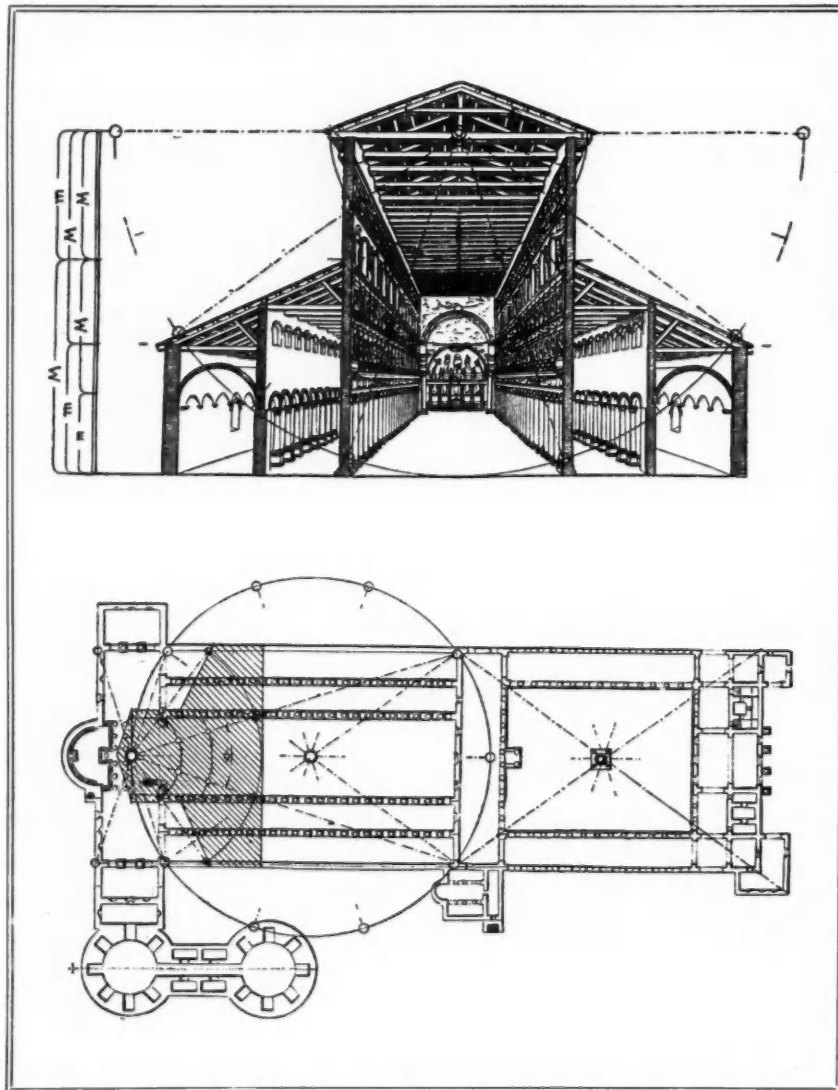
LITERATURE

A THEORY OF PROPORTION

IT is only recently that the already theory-ridden domain of the arts was favoured with the first systematic apology for the modern spirit. The work of Ozenfant, Jeanneret, and Le Corbusier in organizing the chaos of inspirations that has perplexed the public of two decades is too well known for lengthy comment. But between them they have made of abstract art a thing so purely subjective as to render any canon of criticism an impertinence, while its applied forms, especially architecture, are submitted to an economic test so drastic as to constitute, in practice, the whole æsthetic standard in itself. Judged by its plastic products, their system is as far as ever from a satisfactory relation of means to artistic ends. For this reason I thank Dr. Ernst Moessel, of

Munich, for the fascinating, if exacerbating, hours I have spent of late in his company. It is a tribute to his reasonableness that, armed with dividers and anti-Teutonic embitterment, I have so far had to give the dragon best.

Somewhat ironically, while the French extremists have been declaiming on "orthogony" to artistic aspirants, this professor has been quietly preparing what he confesses to be no more than an excerpt from the labours of twenty years, in anticipation of a *magnum opus* that is still in the womb of hard times—an excerpt, nevertheless, which promises to cramp some Gallic generalizations. Not that the book is conceived as a challenge; Dr. Moessel deliberately confines himself to the historical, with only a postscript on the æsthetic problem of proportion. But his scientific conception of the historical problem deals a heavy blow at the



Old St. Peter's, Rome. M = radius of circle. m = side of decagon.
From Ernst Moessel—Die Proportion in Antike und Mittelalter.

romanticism of the "ultras" at the very outset. "The trend (of art)," he says, "is in direct opposition to universally current ideas, particularly to that inveterate conception of the freedom of artistic creation which suffers no conditions or limitations, and moreover could not have subsisted under such conditions in antiquity." And the whole book is a detailed examination of conditions and limitations which, revealed in the masterpieces of all ages down to the Cinquecento, indicate a common aesthetic heritage. The sum of his observations is reduced to a system which he labels "Kreisgeometrie." Perhaps "cyclic proportion" is the nearest approach to a rendering of the idea.

Briefly the system is this. From the earliest times artists have been governed by a principle of proportion, which, sanctioned originally by the hieratic orientation of buildings, developed into a subconsciously inherited canon of constructional and aesthetic fitness. Vitruvius is cited as evidence that orientation began with a circle; Dr. Moessel's contribution is the discovery that all measurements of the plan are strictly proportionate to this circle; its diameter or radius is the length, while the breadth is the side of a polygon inscribed in or described about the circle. All other details are similarly based on circles systematically proportioned to the circle of orientation. Elevations, even decorative elements, fall into the scheme, and the transition to painting becomes almost obvious.

As a system covering all variations there is nothing very remarkable in this; the equilateral triangle as the basis of Gothic art is an ancient song, and where that triangle is the circle is easily traceable. A little ingenuity, indeed, could fit the most random composition into the scheme. What gives pause, however, that among a choice of five, six, seven, eight, ten, and twenty-sided figures, those almost universally employed are the pentagon and the decagon, frequently in combination. Both Dr. Moessel's examples and numerous others I have tested yield the same conclusion, though Dr. Moessel prefers to let figures speak for themselves. He tabulates the proportions employed where the octagon and decagon respectively are the basis of the composition. I quote his figures for the decagon:

R	Radius of circle.				
Si 10	Side of decagon inscribed in circle.				
Su 10	Side of decagon described about the circle.				
R: Si 10	$\frac{1}{2}\text{cosec.}$	$\frac{1}{2}(5-1)$	1'618: 1	1 (1 p): 1	
Si 10: R	2sin.	$\frac{1}{2}(5+1)$	0'618: 1	p: 1	
R: Su 10	$\frac{1}{2}\text{cot.}$	$\frac{1}{2}(5-1)$		1'539: 1	
Su 10: R	2tan.	$\frac{1}{2}(5+1)$	sec.	0'650: 1	

Here p is the factor of proportional diminution of measurements, and varies, of course, with the particular polygon concerned. Different powers of p are used to arrive at the proportional dimensions of any part of the whole. 1/p is the corresponding factor of proportional increase. But the working of the system is best understood by reference to the accompanying example:

Old St. Peter's, Rome, from the MS. of Alfaro and the Measured Drawings of Bunsen and Knapp

		Dimensions in Roman Palms		
		Actual measurements	Calculated m.	Factor of error
Basilica; inside width	285	—	—
" " length	393	392'27	0'002
Nave; height of walls	175	176'13	0'006
" overall width	106	108'87	0'027
Height of outer longitudinal walls, taken from section and front elevation	67	67'26	0'004
Aisles; inner length	393	392'27	0'002
" outside width	92	92'62	0'007

Method of Calculation

B: cot $\frac{C}{10}$	=	285: 1'376	=	392'27
B: p	=	285: 0'618	=	176'13
B: p ²	=	285: 0'618	=	108'87
B: p ³	=	285: 0'618	=	67'26
B: tan $\frac{C}{20}$	=	285: 0'325	=	92'62

(B = inside width of basilica; $\frac{C}{10}$ and $\frac{C}{20}$ = the inside angle of the decagon and 20-sided polygon respectively.)

The general proportions of the plan of the atrium are the same, and it will be seen that the margin of error is remarkably small; indeed, similar proportions hold good, with as precise results, of the western temple at Philae and Pollaiuolo's Martyrdom of St. Sebastian. In the space of 130 pages Dr. Moessel does not pretend to be exhaustive, but there is enough in his data to lead one to hope for the early fruition of his life work.

What relation his system bears to the aesthetic problems of today is an open question. Nothing is more deplorable than the imposition of a hidebound dogma such as Dr. Moessel's theory might easily become, were its authority established. In that sense it is a pity that he has so far reduced to logic a practice which, dogmatic in origin, became sanctioned empirically as a good and useful example. In justice to Dr. Moessel, one must admit that he scouts the suggestion that artists have ever consciously practised his theory; he sees in it simply a concession of common sense in successive ages to what had a purely hieratic and non-artistic origin—an historical embodiment of the truth, only half-understood by the moderns, that man has no existence apart from his past. Pure art, in its present mood, will scarcely heed him; for architecture, on the other hand, he may present a way of escape from the complete disintegration of design which is threatened by a strict adherence to the function of modern materials, themselves so plastic as to impose no logical limit of aesthetic development whatever. In reminding the "Cubists" that the logic of aesthetics is neither so utilitarian in origin nor so instinctive in selection as they would have it, Dr. Moessel may have fashioned a bridle for the uncurbed rectangularity of extremist aspirations.

C. CAMPBELL CROWTHER

Ernst Moessel—Die Proportion in Antike und Mittelalter. Munich: C. H. Beck.

[A POCKET PRICE-BOOK SPEAKS

Now the office was closed and no longer "bang'd and buzz'd and clack't," Spon's pocket-book gazed at his companions, some with leaves half uncut, standing in rows upon the shelves, and between them sprang up talk of their careers, and echoes of past successes drawn from memory "fled and died in far apartments." Spon's roused himself from deep thought. Of course, he said, I cannot fire the imagination as vividly as some of you with grandiose schemes for architectural wonders, fit to live through the ages; or with such visions of cathedral towers and abbey walls, of

"Parks with oak and chestnut shady,
Parks with order'd gardens great,
Ancient homes of lord and lady,
Built for pleasure and for state."

My voice, he said, controls the wings of imagination with the judgment of cost. Mr. Clyde Young gave me an excellent education in London prices and taught me a system, which he calls the constants of labour, to enable me to obtain close estimates in any particular country district. Thus, like a fleeting shadow, I can pass over every detail of every building in this country, and name its present-day price. When one travels the paths of architecture as such a specialist, and lives in intimacy with all who have the chief conduct of affairs, one is bound to meet with many adventures by the way. I only succeeded my predecessor this year, yet, he said, with a saucy smile, there are many buildings in which, on the score of economy, I have added the charm and impressiveness of simplicity and mass. At the end of the year I shall retire in favour of a younger book, who will be the fifty-fifth to hold office. He, like me, will be specially trained, and will be able to give the latest prices in force at the time of his succession.

E. R.

Spon's Architects' and Builders' Pocket Price-Book. Edited by Clyde Young, F.R.I.B.A. Fifty-fourth edition. E. and F. N. Spon, Ltd. Price 5s. net.

THE REGISTRATION BILL

QUALIFICATION OF THE TERM "ARCHITECT"

THERE was a fair attendance at the first meeting of the Select Committee of the House of Commons which is considering the Architects (Registration) Bill. Sir Clement Kinloch-Cooke presided, and the first witness was Major Harry Barnes, the President of the Registration Committee of the R.I.B.A.

Major Barnes said he was authorized by the Institute to say that, in accordance with the undertaking given on their behalf during the second reading of the Bill in the House of Commons, they were prepared to qualify the term "architect" as used in the Bill. It was only natural that they did so with considerable reluctance. Words such as "authorized," "recognized," and "statutory" had been suggested by Members of the Institute, but they considered that it was impossible to find one to which less objection would be taken than the word "registered." The use of the word "registered" as a qualification would appear to remove all the opposition to the Bill, and would have the effect of changing the register from a compulsory register to a voluntary register. As the Bill stood, persons were considered to be registered who were entitled to be registered, and it might have the effect of putting on the register persons who did not desire to be put on. It was, therefore, proposed that persons desiring to be put on the register would have to make application so that no one would be put on against his will. The adoption of the term "registered architect" would remove the fear expressed on behalf of local authorities that the Bill would interfere with their officials; it would remove the apprehension of the civil engineers that they would not be allowed to use freely and unrestrictedly the term "architect" in connection with their work; and it would also remove the apprehensions of the co-operative societies that, by placing a restriction on the use of the word "architect," the Bill would interfere with certain departments of their work. A number of amendments consequential on the adoption of the term "registered architect" had become necessary. In addition to these, the Institute had prepared other amendments for the consideration of the committee.

It was proposed to amend the clause relating to the Admission Committee for the regulation of entry to the register. Several applications had been made by bodies not at present included in the schedule laying down the constitution of the Admission Committee, and it was proposed to add the names of the National Association of Auctioneers, House Agents, Rating Surveyors and Valuers, the Land Agents' Society, and the Faculty of Architects and Surveyors.

The Chairman: I notice that it is proposed to take Northern Ireland out of the Bill.

Major Barnes said that the architects of Northern Ireland wished to have conditions of registration adapted to their own position, and it had not been found possible within the range of the Bill to make such modifications as they desired. Consequently, it was suggested that Northern Ireland should be left out of the Bill in order that they might proceed with a measure of their own.

Referring to other amendments proposed by the Institute, Major Barnes said it was felt that, as registration was not to be compulsory, a fee might be charged. The disciplinary powers provided under the Bill would, of course, only apply to members on the register. In connection with the constitution of the Board of Architectural Education, provided for in the first schedule to the Bill, it was proposed that, instead of three representatives being nominated by the National Association of Art Masters, two should be nominated by the Association of Technical Institutions and one by the National Association of Art Masters. The Faculty of Architects and Surveyors and the National Federation of Building Trades Operatives were to be added to the Board.

Major Barnes then went on to explain the part taken by the Institute in drawing up the Bill. The Council of the Institute, he pointed out, was entrusted with setting up the register. The Admission Committee would control the entrance of all men at

present in practice or assistants or students. The Board of Architectural Education would control those who might become students after the passing of the Act. The Discipline Committee would control removal from the register. In framing the Bill, regard had been had to the fact that there were men at present in practice who were members of bodies other than the Institute, and steps had been taken to ensure that the admission of such persons should be as free and open as in the case of any other person. The Admission Committee was therefore made up of representatives of every body from whose representatives admission was likely to be sought.

The Board of Architectural Education had been constructed on the general principle that the profession should be open to all classes, and that it should be possible to enter the profession from any level of society, and that a standard of educational value should be set up. It would represent every educational stage. Asked whether there was to be any representative of the Workers' Educational Association, Major Barnes replied that it was not at present provided for in the Bill. Reference had been made to that body during the second reading debate, and it would be entirely in keeping with the views of the Institute if such a representative were appointed.

The machinery for the removal of members from the register, continued Major Barnes, was set up on the principles followed in other professions. It was proposed to safeguard the position of everyone on the register by making the Discipline Committee contain not only a number of his peers, but also persons entirely apart from the profession. There would be three registered persons and two others, one appointed by the Minister of Health (who must be regarded as a representative of the general body of citizens) and the other appointed by the President of the Law Society (who must be regarded as a representative to see that the case had a proper hearing).

In conclusion, Major Barnes explained to the committee the constitution of the Institute and the precedents existing in other professions for placing registration in the hands of such a body.

Following a number of questions put to Major Barnes by Major Tasker, a member of the committee, as to the activities of the Scientific Committee of the Institute, it was agreed that these questions should be given to Major Barnes in writing and opportunity afforded at a later sitting for their discussion. Major Tasker explained that he had no desire to attack the Institute.

In reply to Capt. Wallace, Major Barnes said that although they would prefer the word "chartered" to "registered," he did not think it could be put in the Bill, because there would be the difficulty of persons who were members of the Institute having the right to be called "chartered" by reason of their membership of the Institute which held a charter, and at the same time prevented from calling themselves chartered by reason of the Bill.

The committee adjourned until next week.

ANNOUNCEMENTS

Mr. W. R. Jaggard, F.R.I.B.A., has moved to 98 Gower Street, W.C.1.

Mrs. E. Gillian Harrison, A.R.I.B.A., and Mr. H. St. John Harrison, A.R.I.B.A., practising as Cooke & Harrison, A.A.R.I.B.A., architects, have removed their offices to No. 10 Staple Inn, Holborn, W.C.1. Telephone: Chancery 7314.

The Westminster Bank announces that Mr. Robert Hugh Tennant, deputy chairman, has been elected chairman of the bank, and that the Hon. Rupert E. Beckett has been elected to succeed him as a deputy chairman.

The annual conference of British Architects will take place in London from June 20 to June 25 (inclusive). All Members of the R.I.B.A., the Architectural Association, and the Allied Societies in Great Britain, Ireland, and Overseas are invited to take part in the conference. It is hoped that many ladies will be present, as guests of members, at all the events contained in the programme. Members are particularly requested by the R.I.B.A. to make a note of the date and to keep themselves free from other engagements.

IN PARLIAMENT

[BY OUR SPECIAL REPRESENTATIVE]

Mr. Chamberlain informed Lt.-Col. Horlick that the average annual loss per house in respect of houses erected by local authorities under the terms of the 1919 Act was estimated at £46 per annum.

Mr. Chamberlain, in reply to Mr. Taylor, gave the following statement showing the number of houses completed during each year ended in March since 1919:

Year.	With State Assistance.	Without State Assistance.	Total.
1920	715	53,800(a)	251,988
1921	28,549		
1922	101,071	67,546	86,210
1923	67,853		
1924	18,664	69,220	136,889
1925	67,669	66,439	173,426
1926	106,987	64,200(b)	217,979
1927	153,779		
Total	545,287	321,205	866,492

(a) Separate figures are not available for the years 1920-1923, and the number is based partly on an estimate.

(b) This figure includes an estimate of 33,000 for the half-year ended March 31, 1927. Final figures for this half-year are not yet available.

Sir K. Wood informed Mr. T. Williams that since the armistice 132,226 houses had been completed in 590 rural districts under the various Housing Acts.

Sir J. Gilmour informed Mr. Taylor that the number of subsidized houses built in Scotland each year since the war was as follows:

Year.	Number of Houses.
1919	Nil
1920	692
1921	5,816
1922	10,505
1923	6,618
1924	4,384
1925	8,201
1926	13,592

According to returns made by local authorities, the number of non-subsidized houses built was as follows:

Year.	Number of Houses.
1919	
1920	
1921	approximately 5,000*
1922	
1923	
1924	1,553
1925	1,852
1926	1,812

* These returns were not instituted until 1924, and information for the previous years was incomplete.

During a debate on the vote for the Ministry of Transport, Col. Ashley, the Minister, referred to a letter which the Prime Minister had written to the L.C.C. stating that he had hoped that the Council would see its way to proceed immediately with the reconstruction of Waterloo Bridge on the lines recommended by Lord Lee's report. The Government desired, for their part, to proceed at once with the suggested inquiry into the financial, engineering, and other aspects of the scheme for a double-decked bridge at Charing Cross. With regard to new bridges in general, Col. Ashley said he was extremely anxious that, in two hundred years' time, our descendants should not make disparaging remarks on the new bridges we had built during these past few years. We had had some extraordinarily fine bridges handed down to us, and it was up to us to see that the next generation had bridges worthy of us. What he had always insisted on, in regard to the major or minor bridges, was that a competent architect should be engaged in order that the design of the bridge should be worthy

of the situation. It was possible, in regard to the smaller bridges made with reinforced concrete, for the concrete to be so tinted as to harmonize with the natural landscape.

COMPETITION CALENDAR

The conditions of the following competitions have been received by the R.I.B.A.

June 15. Shakespeare National Memorial Theatre, Stratford-upon-Avon. The competition is open to architects of the British Isles and America. It will be in two sections—a preliminary competition for sketch design only, from which six designs will be selected by the assessors; each of the selected competitors will be paid £100 premium towards the cost of preparing a further more detailed design, which will form the second half of the competition. The selected architect will be paid in accordance with the Schedule of Charges sanctioned by the R.I.B.A. Assessors, Mr. E. Guy Dawber, F.R.I.B.A., and Mr. Cass Gilbert, who will both act in an honorary capacity, and Mr. Robert Atkinson, F.R.I.B.A. Particulars, with site plan, etc., from the Secretary, Shakespeare Memorial Theatre, Stratford-upon-Avon. Deposit £1 is., which will be refunded should the conditions be returned within one month.

June 30. Designs for the planning of the Civic Centre, Birmingham. Assessor, Mr. H. V. Lanchester, F.R.I.B.A. Premium of £1,000 to the design placed first, and a further sum not exceeding £1,000 divided between the authors of other approved designs. Particulars from Mr. Herbert H. Humphries, M.INST.C.E., City Engineer and Surveyor. Deposit £1 is., which will be returned after the receipt of a design or the return of the documents supplied.

June 30. New school for 1,000 boys for the Governors of the Bradford Grammar School. Premiums, £300, £200, and £100. Assessor, Mr. Arnold Mitchell, F.R.I.B.A. Particulars and plan of site from Mr. W. Brear, Secretary, Grammar School, Bradford, Yorks. Deposit £1 is.

The conditions of the following competitions have not as yet been brought to the notice of the R.I.B.A.

May 30. Architects are invited to submit schemes for the building, by the Urban District Council of Ross, of forty non-parlour type and ten parlour type houses, under the 1924 Housing Act, on sites to be selected. Twenty guineas will be paid to the architect whose scheme is selected. Schemes to be submitted to Mr. Ernest R. Davies, Clerk, Council Chambers, Ross, before noon on May 30.

July 1. The Reading Corporation invite architects residing or practising in Berkshire, Buckinghamshire, or Oxfordshire, to submit, in open competition, designs for a chapel which it is proposed to erect in a new cemetery. A premium of 50 guineas will be awarded to the author of the design placed first by the assessor, Mr. Charles J. Blomfield, F.R.I.B.A., and twenty-five guineas to the author of the design placed second. Particulars from the Borough Surveyor, Town Hall, Reading. Deposit £2 2s., which will be returned after receipt of a bona fide design. Should architects, on receipt of the particulars, not desire to compete, the deposits will be repaid provided the papers are returned within four weeks. Designs in sealed packages, endorsed "Design for Chapel," to Mr. Charles J. Blomfield, F.R.I.B.A., 13 Ashburn Gardens, London, S.W.7.

No date. New municipal technical college and school of art for Rotherham Education Committee. Premiums: £200, £100, and £50. Assessor, Professor S. D. Adshead, F.R.I.B.A. Instructions to architects and site plan from Mr. J. A. Mair, Secretary for Education, Education Offices, Rotherham. Deposit one guinea, cheques to be made payable to the borough treasurer. The last date for the receipt of applications for instructions, etc., was April 30.

SOCIETIES AND INSTITUTIONS

Annual Service for Art in Westminster Abbey

With reference to the following letter which has been received by the R.I.B.A., will members who wish to attend the service to be held on Thursday, June 2, at 5 p.m., please notify the Secretary, R.I.B.A., as soon as possible, and in any case not later than May 20.

Royal Academy of Arts,
Piccadilly,
London, W.1.

DEAR SIR,—The President and Council of the Royal Academy desire me to inform you that they have made preliminary arrangements with the Dean and Chapter of Westminster Abbey for holding an annual service for art in the Abbey, and that it is

proposed to hold the first service this year on or about Thursday, June 2, at 5 p.m. The Royal Academy will undertake the advertisement of the service and the issue of tickets; and I am to request you to be so good as to let me know whether your members would be likely to attend the service in good numbers and about how many seats would be required for them and their wives. I should also be pleased to lay before my Council any remarks on the proposal which your Society may think fit to make.

Yours faithfully,

(Sgd.) W. R. H. LAWS, Secretary.

The Sheffield, South Yorkshire and District Society of Architects and Surveyors

At the annual general meeting held in the University, under the presidency of Mr. F. E. Pearce Edwards, the following new members were elected: Messrs. C. A. Broadhead, A.R.I.B.A., Wynyard Dixon, J. E. Lancashire, A.R.I.B.A.; and the following gentlemen were nominated for membership: Messrs. D. G. Cockrill, L.R.I.B.A., W. A. Mitchell, L.R.I.B.A., H. Ogden, L.R.I.B.A., W. S. Playle, H. G. Rawcliffe, L.R.I.B.A., H. C. Scaping, L.R.I.B.A., W. Southall, L.R.I.B.A., H. Taylor, L.R.I.B.A., W. F. Wills, L.R.I.B.A. The election of officers for the session 1927-28 resulted as follows: President, Mr. F. E. Pearce Edwards, F.R.I.B.A.; vice-president, Mr. C. M. Hadfield, F.R.I.B.A.; hon. treasurer, Mr. J. R. Wigfull, F.R.I.B.A.; hon. secretary, Mr. H. B. S. Gibbs, A.R.I.B.A. Council: Messrs. E. M. Gibbs, F.R.I.B.A., W. C. Fenton, F.R.I.B.A., W. J. Hale, F.R.I.B.A., A. F. Watson, F.R.I.B.A., C. B. Flockton, F.R.I.B.A., W. G. Buck, F.R.I.B.A., E. M. Holmes, B.ENG., F.S.I., J. M. Jenkinson, A.R.I.B.A., H. I. Potter, A.R.I.B.A., J. C. P. Toothill, A.R.I.B.A., J. A. Teather, L.R.I.B.A.; Associates: Messrs. F. H. Wrench, A.M.I.C.E., L.R.I.B.A., J. H. Odom, A.R.I.B.A., J. Lancashire, L.R.I.B.A.

TRADE NOTES

Messrs. Standard Telephones and Cables, Ltd., of London, have received an order to manufacture and install a 3 kw. (Geneva rating) Standard broadcasting radio equipment at Kosice (Kassa), Czechoslovakia.

The electric passenger lift installed by the Medway Safety Lift Company, Ltd., in the Elizabeth Fulcher Nursing Home, illustrated in this issue, is specially designed for nursing homes and is fitted with an automatic push button control. It serves five floors and has a load of seven and a-half cwt., and a speed of 100 feet per minute. The whole of the lift is enclosed by means of ornamental wrought iron enclosure and collapsible gates provided by Medway's. The gates are provided with "Medway's" safety locks and switches to prevent the lift being operated unless all the gates are properly closed and locked. The electric service lift is also of the fully automatic push button type, and serves six floors. It has a load of two cwt., and a speed of 120 feet per minute.

Messrs. S. Davis & Co., of Aldwych House, Aldwych, London, a British firm of advertising contractors who specialize in technical publicity, have been instructed by the Société Anonyme des Chaux et Ciments de Lafarge et du Teil, of Paris, Marseilles, etc., to undertake the publicity of their white cements throughout the world. That an important French house should consider it advisable to select a British firm to conduct their publicity is a marked tribute to British publicity methods. The negotiations were carried through by Mr. H. E. Palmer, who is in charge of Messrs. S. Davis & Co.'s consultancy department.

A MODERN NURSING HOME

The general contractors for the Elizabeth Fulcher Nursing Home, illustrated on pages 677 to 681, were Messrs. Bovis, Ltd. The sub-contractors were as follow: H. Sabey & Co., Ltd., demolition and excavation; Ragusa Asphalte Co., Ltd., asphalt; Roberts Adlard & Co., Ltd., bricks; Greenway and Ludlow, French Portland stone and English Leckhampton stone floors and mantels; Aston Construction Co., structural steel and iron staircases; Siegwart Fireproof Floor Co., Ltd., fireproof construction; Ames and Finnis,

tiles; Pilkington Bros., Ltd., glass; Crittall Manufacturing Co., patent glazing and steel casements; R. A. Petrucco & Co., Ltd., compo and terrazzo flooring; Abbey Heating Co., central heating and boilers; George Wright, Ltd., Devon fires; Gas Light and Coke Co., gasfitting and fixtures; Berkeley Electrical Engineering Co., electric wiring, bells, light and heating fixtures; B. Finch & Co., plumbing; John Ellis, stairtreads; N. F. Ramsay & Co., door and window furniture; Alfred Brown, locks and springs; Reliance Telephone Co., Ltd., private telephones; S. W. Francis, sunblinds; "Calime," Major H. Vincent, plaster; James Walker, decorative plaster; H. S. Kemp & Co., metalwork; Soole and Son, Ltd., doors; W. Shepherd & Co., tiling; Medway Safety Lift Co., lifts.

CURRENT WORK

Following are the names of the architects, general contractors, and some of the sub-contractors for the buildings illustrated on pages 686 to 695:

Northcliffe House, Tudor Street, E.C., for the Associated Newspapers, Ltd. Architects, Herbert O. Ellis and Clarke, F.R.I.B.A.; general contractors, Allen Fairhead and Sons, Ltd., who were also responsible for the joinery and plumbing; clerk of works, Mr. W. Barton; general foreman, Mr. Frost. Sub-contractors: Limmer and Trinidad Lake Asphalt Co., asphalt; B.R.C. Co., reinforced concrete; Moreland Hayne & Co., Ltd., structural steel; B. Wotton Bros., glass and patent glazing; Zeta Wood Flooring Co., wood-block flooring; Richard Crittall & Co., central heating, offices, etc., sprinklers and drenchers; Geo. Wright & Co., grates; Rashleigh, Phipps & Co., electric wiring; Doulton & Co., sanitary fittings; Joseph Kaye and Sons, Ltd., door furniture; Crittall Manufacturing Co., casements; De Jong & Co., decorative plaster; J. W. Singer and Sons, metalwork and signs; Patent Impervious Co., stonework; Fenning & Co., Ltd., marble; Waring and Gillow, Ltd. office furniture, desks, carpets, etc.; Sankey, Sheldon & Co., Roneo (Art Metal Equipment) office fittings; Express Lift Co., Ltd., lifts; Magneta Time Co., clocks; Le Grand, Sutcliffe and Gell, water supply; Sturtevant Engineering Co., vacuum cleaning plant; N. F. Ramsay (London), Ltd., floor springs; Adamite Company, Ltd., "Atlas White" Portland cement; and Colemanoid retaining wall; and floor surfaces in the sub-basement, and on the ground- and first-floors; Carrier Engineering Co., Ltd., Carrier air-conditioning system.

Hosiery Factory, Eastern Boulevard, Leicester, for B. Russell and Sons. Architects, Fosbrooke and Bedingfield; general contractors, W. and H. Foulds; clerk of works, M. W. Binns. Sub-contractors: Empire Stone Co., Ltd., artificial stone; Gimson & Co., Ltd., structural steel and lifts; Young, Austen and Young, central heating; Gent, Hurley and Orringe, electric wiring; Crittall Manufacturing Co., Ltd., casements; Arthur L. Gibson & Co., Ltd., rolling shutters; Mather and Platt, Ltd., fireproof doors.

Additions to Printing Works, 44-46 Whitfield Street, London. Architect, W. K. Matthews. General contractors, T. Stevens, Ltd. The front elevation is carried out in Sussex facing-bricks, Southwater brindles for the lower part, and Sussex hand-made stocks above, with artificial stone dressings; the lintels over the windows and the panels on the first-floor are rendered in white cement.

"The Bower," Frinton-on-Sea. Architect, F. G. Coates. Sub-contractors: Gibb's dark antique hand-made tiles supplied and laid by Nethercot & Co.; H. Hope and Sons, Ltd., casements and casement fittings; Stevens and Adams, wood-block flooring; Sanderson and Sons, wallpapers; Ideal open fire domestic boiler.

"Outlook," Third Avenue, Frinton-on-Sea. Architect, Mr. F. G. Coates. General contractor, Chas. H. Jones. Sub-contractors: Empire Stone Co., sills, chimney caps, etc.; H. Nethercot & Co., Delabole slates; Stevens and Adams, wood-block flooring; Ideal Premier boiler and Ideal radiators; Hartley and Sugden's "White Rose" boiler for domestic supply.

THE WEEK'S BUILDING NEWS

ELTHAM—plans passed by L.C.C.: Eighteen houses, Green Lane, for Mr. G. T. Scudamore; five houses, Green Lane, for Mr. W. E. Wright; twenty-three houses, Footscray Road, for Mr. W. Childs; six houses, Weigall Road, Lee, for Mr. E. Hosking; four houses, Glenlea Road, for Messrs. Flood and Wright; ten houses, Footscray Road, for Mr. S. Browne; twenty-one houses, Cadwallon Road, for Mr. J. G. Francombe.

*

The BARNSELY Board of Guardians is to enlarge the casual wards at the Poor Law Institution.

*

The BARNSELY Corporation has approved the lay-out of the housing site at Burton Grange.

*

Mr. P. M. Fraser is to erect a public-house in Horbury Road, WAKEFIELD, for the People's Refreshment House Association.

*

The WAKEFIELD Corporation has passed plans submitted by Mr. P. O. Platts for the erection of offices for the West Riding c.c. at the corner of Wood Street and Bond Terrace.

*

At a meeting of the BARNSELY Health Committee the borough engineer submitted plans of the proposed abattoir at Bunker's Hill. The cost of erection is estimated at £35,000. The committee recommends that the plans and estimate be approved, and that application for sanction to a loan of £35,000 be made to the Ministry of Health.

*

The borough engineer of BARNSELY has submitted drawings of the shops proposed to be erected on the Ardsley site, and the committee recommends that tenders be invited for their erection.

*

Sir Aston Webb and Son have prepared plans for extensive alterations at the Army and Navy Stores, Victoria Street, WESTMINSTER.

*

Plans passed by the EAST HAM Corporation: Rebuilding, 46-48 High Street South, for Messrs. Welch and Hollis; lavatories, Manor Park Cemetery, for Messrs. Burge and Berry; alterations, 255-9 Katherine Road, for Mr. H. Blackman; pipe-fitters' shop, Cairn Mills, Silvertown, for Messrs. Loders and Nuoline, Ltd.; vicarage, St. Michael's Church, Beckton, for Messrs. C. and W. Crampton, Ltd.; alterations, 703-705 Romford Road, for Mr. E. Shanahan; alterations, 126 High Street North, for Mr. R. Landau; additions, rear Rehobath Chapel, High Street North (amended), for Mr. W. Doddington, A.R.I.B.A.

Plans passed by the DARTFORD U.D.C.: Shop and store, High Street, for Messrs. Sander Bros., Ltd.; steel-framed engineering shop, Kent Road, for The Dartford Copper and Engineering Works; eight houses, Carrington Road, for Mrs. and Miss Mackney; street plan, Lawrence Hill Gardens, for Mr. W. J. Brise; eight houses, Lawrence Hill Gardens, for Mr. W. J. Brise; additions and alterations, Hythe Street, for Messrs. Keyes Daren Mills, Ltd.; offices, Spital Street, for Mr. J. W. Ellingham.

*

Plans passed by the WHITEHAVEN Corporation: Roman Catholic Mission Hall, at Kells, for the Trustees; alterations, Queen Street, for the Barrow Ice Co.

*

Plans passed by the WESTMINSTER City Council: Building, 11-27 Artillery Row, S.W., for Mr. G. Jeeves; shop fronts, 46-48 Belgrave Road, for Mr. F. W. Southgate; addition, 1 Montpelier Place, for Mr. A. Kirkham; shelter, Victoria Station, for Mr. Heaps (Metropolitan District Railway).

*

Plans passed by the LEWISHAM B.C.: Five houses, Round Hill, for Mr. E. C. Christmas; eighty-three houses, Downham estate, for Mr. J. G. Stephenson (for L.C.C.); eighty-eight houses, Downham estate, for Mr. J. G. Stephenson (for L.C.C.); fifteen houses and shops, Catford Road, for Mr. James Watt; flats, London Road, Forest Hill, for Messrs. Dorrell Bros.; buildings, Loampit Vale, Lewisham, for Mr. A. E. Thomas; two streets from Grierson Road to Ballina Street, Brockley, and from Ballina Street to Lessing Street.

*

Messrs. Robersons, Ltd., are to erect shops upon a site at Rochester Row, WESTMINSTER.

*

The BRADFORD Corporation has obtained sanction to borrow £20,614 for the construction of a new road from Thornton Road to Allerton Road, Bradford.

*

The Corporations of Liverpool and Birkenhead have come to an arrangement for two entrances to the tunnel in BIRKENHEAD. The plan prepared by the joint engineers of the Mersey Tunnel Committee and the town clerk of Liverpool shows two entrances on the Birkenhead side—one at the junction of Rendel Street and Marcus Street, giving an exit to a 27-ft. tunnel, the other at the junction of Bridge Street and Chester Street, giving an exit to a 44-ft. tunnel. The additional cost, apart from land (over and above what would have been incurred in connection with the Woodside entrance as authorized), is estimated by Mr. Basil Mott at the sum of £222,000.

The WORKING U.D.C. has appointed a sub-committee to consider the kind of swimming bath to be provided and the cost. The sub-committee will view various baths elsewhere.

*

Plans passed by the FULHAM B.C.: Buildings for Macfarlane Lang & Co., Townmead Road, for Messrs. Troy & Co.; buildings at Hammersmith Distillery, Chancellors Road, for Messrs. J. W. Faulkner and Sons.

*

Plans passed by the EASTBOURNE Corporation: Two houses, King's Avenue, for Mr. C. Ford; three houses, Cavalry Crescent, for Mr. P. D. Stonham; five houses, St. Philip's Avenue, for Mr. C. Ford, architect; sanitary block, St. Anthony's School, Vicarage Road, for Mr. F. G. Cooke, architect; office, Hampden Park, for Shell-Mex, Ltd.; two houses, Milton Crescent, for Mr. S. Box, architect; additions, new road off North Street, for Mr. P. D. Stonham, architect; two houses, Milton Road, for Mr. W. R. Hamblyn, architect; additions, Mostyn Hotel, for Mr. P. D. Stonham; five shops and houses, Seaside, for Mr. A. Ford, architect; four houses, Ringwood Road, for Mr. C. Ford.

*

The Office of Works is to erect a telephone exchange on a site in Kingston Road, WIMBLEDON.

*

Plans passed by the ILFORD Corporation: Three houses, Ethel Gardens, Tomswood Hill, for Mr. J. J. Mullenger; new road and sewers, Bloomfield Crescent, for the Suburban Developments, Ltd.; four houses, Somerset Gardens, Tomswood Hill, for Mr. D. Skelding; extension of road and sewers, Ashurst Drive, for Suburban Developments, Ltd.; alterations, "Lord Napier" public-house, Green Lane, for Mr. W. Stewart; 104 houses, Lonsdale Gardens, Milton Crescent, Albemarle Gardens, Bloomfield Crescent, and Middleton Gardens, for Suburban Developments, Ltd.; new roads and sewers, Forest Mews and Joinant Drive, for Suburban Developments, Ltd.; additions, Ley Street, for Messrs. J. Luton and Son, Ltd.; nine houses, Exeter Gardens, for Mr. A. P. Griggs; six houses, Levett Gardens, for Messrs. J. W. Moore and Son; offices and stores, 9 Eastern Avenue, for Suburban Developments, Ltd.

*

Plans passed by the WIMBLEDON Corporation: Fifteen houses, Salisbury Road, for Mr. F. H. Skeens; ten houses, new road south of Merton Hall Gardens, for Messrs. H. Coombe and Sons; shops, Wimbledon Hill Road, for Messrs. North, Robin and Wilson; shops and offices, 87 and 89 Merton Road, for Mr. M. G. Hazell.

Plans passed by the MARYLEBONE B.C.: Building, Marble Arch by Edgware Road, for Mr. C. A. Aish; flats, Abbey Lodge, Park Road, for Mr. John Murray; additions, 135 Marylebone Road, for Mr. E. G. Page.

The trustees of the SHEFFIELD district of the Wesleyan Methodist Church have obtained a site on the Manor estate for the erection of a church.

The trustees of the Roman Catholic Diocese of Leeds have acquired a site on the Manor estate, SHEFFIELD, for the erection of a church.

The Lancashire Education Committee has acquired further land for the site of the proposed new infants' school at FLEETWOOD.

The SHEFFIELD Corporation has approved an estimate of £53,000 for the construction of four further units of plant in connection with the bio-aeration sewage disposal scheme.

The SHEFFIELD Corporation has approved the City architect's revised lay-out plan showing 50 bungalows and 122 parlour-type houses on the Ridgeway Road estate.

The SHEFFIELD Corporation has voted an estimate of £83,000 for the erection of 172 houses on the Ridgeway Road housing estate.

The SHEFFIELD Education Committee is to acquire a site on the Longley estate for the erection of an elementary school.

Plans passed by the HULL Corporation: 12 houses, Springfield Road, for Mr. G. E. Kirkwood; 4 houses, Dundee Street, for Mr. A. T. Lison; 8 houses, Ormonde Avenue, for Mr. E. Mowforth.

Plans have been prepared by Messrs. Tatchell and Wilson, architects, for new masters' and butlers' quarters at EASTBOURNE College.

Mr. Cyril Getcliffe has prepared plans for a new theatre, to be known as the New Majestic Theatre, in Coronation Street, RETFORD.

The DURHAM C.C. has obtained the consent of the Board of Control to the acquisition of School Aycliffe estate for the purpose of a colony for mental defectives, on condition that the expenditure on the scheme is limited to £50,000 during the next three years.

The managers of the Holy Name Roman Catholic School are to erect new buildings on a site in Dover Street, MANCHESTER.

The OLDHAM Corporation has obtained sanction to borrow £10,000 for further housing advances.

Plans passed by the SHIPLEY U.D.C.: Alterations, Leeds Road, for the Windhill Industrial Co-operative Society, Ltd.; six houses, Wharncliffe Road, for Mr. James Cooper; four houses, Carmona Gardens, for Mr. A. Chippendale; two houses, Norman Street and Russell Street, for Mr. J. F. Sanders.

The BOLTON Corporation has obtained a site in Firwood Grove, Tonge Moor, for the erection of a branch library.

The London County Council architect will visit VIENNA to report on high tenement dwellings there.

The London County Council is to provide further accommodation for nurses at BEXLEY Mental Hospital at a cost of £20,000.

The TRURO Corporation has under consideration a scheme for improvements at the municipal offices.

Being satisfied that the cost of erecting houses by direct labour is not in excess of contract prices, the Bristol Housing Committee is of opinion that a further extension of the direct labour scheme be sanctioned and recommends the erection of 200 houses on the SHIREHAMPTON site at an estimated cost of £86,000. The erection of 142 houses on the adjoining site at Rodney Road has been approved.

Plans passed by the BRISTOL Corporation: sixteen houses, Thanet Road, Bedminster, for Messrs. Greenhill & Low; fifty-one houses off Whitehall Road for Bristol Housing Ltd.; eight houses, Filton Avenue, for Mr. D. Cotterell.

The London County Council has passed plans for the proposed rebuilding of Nos. 138a, 140, 142 and 144, High Street, PECKHAM, for Messrs. Selfridge & Co., Ltd.

The London County Council is to proceed with the erection of 2,221 houses on another section of the BECONTREE estate at a cost of £1,270,000.

The L.C.C. is to construct sludge tanks at the BARKING outfall works at a cost of £21,000.

A factory is to be erected at the Baulk, Merton Road, WANDSWORTH, by Messrs. G. Mason & Co., Ltd.

A sports pavilion adjacent to Kidbrooke Park Road, CATFORD, is to be erected by the Roan School.

The L.C.C. is preparing a comprehensive scheme for the provision of new licensed refreshment houses on model lines on the BECONTREE housing estate.

Plans passed by the HACKNEY B.C.: Nineteen houses, Cazenove Road, for Mr. A. H. Jones; new building, Margaret Street, Stamford Hill, for Mr. G. Coles, F.R.I.B.A.; building, 64 Well Street, for Messrs. H. S. Couchman and Sons.

The L.C.C. is to proceed with the development of the George's Road area, ISLINGTON. It is proposed to erect two blocks of dwellings, one the normal and one of the simplified type, and it is desired to proceed with the preparation of the necessary particulars for the invitation of tenders for the building work. The block of normal type of accommodation will comprise 110 tenements, containing 332 rooms, to afford accommodation for 664 persons, while the block of the simplified type will contain twenty-four tenements with forty rooms, to accommodate eighty persons.

Plans passed by the BRADFORD Corporation: Four houses, Hawes Road, for Mr. Smith Priestley; eight houses, Hawes Road, for Mr. Jesse Priestley; seven houses, Thorncroft Road, for Messrs. Groves and Greenwood.

The STRETFORD U.D.C. has approved the erection of public baths in Trafford Park at an estimated cost (excluding purchase of site and street charges) of £10,800, on a site in Third Avenue.

The STRETFORD Education Committee is seeking sanction to borrow £12,565 10s. for the erection of a public elementary school at King's Road, Old Trafford.

The PLYMOUTH Corporation is to acquire a site at St. Budeaux for a street cleansing depot.

The LEEDS Corporation Housing Committee is considering land off Stanningley Road, Bramley, for housing purposes.

Mr. W. G. Heath is constructing streets on an estate to be developed at Higher Compton, near PLYMOUTH.

The COVENTRY Corporation is making arrangements for improvements in Much Park Street, Little Park Street, Radford Road, and Foleshill Road.

The WARWICK Corporation has prepared plans of the proposed new houses in All Saints' and Beauchamp Roads, and a sub-committee has been appointed to consider the provision of further houses.

Plans passed by the PLYMOUTH Corporation: Six houses, Hillcrest Avenue, for Mr. J. H. Endean; seven houses, Queen's Road, for Messrs. J. Blatchford and Son; dairy, 31 Beaumont Street, for Mr. W. H. Webb; six houses, Higher Venn estate, for Mr. J. H. Dyer; six houses, Glenarm Road, for Messrs. Pearce Bros.; eight houses, Fircroft Road, for Mr. W. H. Webb.

*

The LEEDS Corporation Libraries Committee is to consider the provision of library facilities at Middleton.

*

Mr. A. Searle is developing the Whiteleigh estate at HIGH ST. BUDEAUX.

*

The Board of Education has approved the plans of the BIRKENHEAD Education Committee for the new elementary schools at Cole Street and sanctioned a loan of £20,286 for its erection.

*

Plans passed by the DUDLEY Corporation: Warehouse, High Street, for Messrs. A. Preedy and Sons; drying-room and store-room, Tipton Road, for Messrs. Mullins & Co., Ltd.; steel-framed engineering shop, Pear Tree Lane, for Messrs. John Thompson, Ltd.

*

Plans passed by the PORTSMOUTH Corporation: Store, Waltham Street, for Mr. J. Moore; alterations and additions, Commercial Road, for the West of England Clothing Association; four houses, Kirby Road, for Mr. E. H. N. Haynes; twelve houses, Kensington Road, for Mr. J. Brittan; fourteen houses, Maurice Road, for Mr. M. Berney; store and stables, Brunswick and King Streets, for the Portsmouth United Brewery, Ltd.; mission house, Simpson Road, for Mr. S. Salter; alterations, "The Solent" public-house, Fratton Road, for the Kemp Town Breweries; twelve houses, Maurice Road, Eastney, for Mr. M. Berney.

*

The MERTHYR Corporation has passed plans for the erection of a cinema on the site of the Castle Hotel, High Street, Merthyr, for Mr. O. P. Bevan, Bargoed.

*

Plans passed by the MERTHYR Corporation: Alterations, 64 High Street, Merthyr, for Messrs. Montague Burton, Ltd., Leeds; alterations and additions, Lloyds Bank premises, Market Street, Dowlais, for Lloyds Bank, Ltd.

*

The Hampshire County Council is raising a fund for the extension of the Lord Mayor Treloar Cripples' Hospital, ALTON.

*

The Scottish Board of Health approves the plan of the alterations and rearrangements proposed to be carried out at the administrative block, Bellefield Sanatorium, by the GLASGOW Corporation.

Plans passed by the TORQUAY Corporation: Two houses, Audley Park, for Mr. W. H. Shobbrook; 156 houses, Barton, for Mr. G. E. Tozer; two shops, Hele Road, for Messrs. Thumpston and Jones; four houses, Appaway Road, for Messrs. Stubbs & Co.; four houses, Leys Road, Chelston, for the Chelston Building Co.; new roads, Barton Road, for Mr. A. Nettleton; eight houses, Marcombe Road, for Messrs. Riggs & Co.; ten bungalows, Shiphay, for Mrs. A. Hardie.

*

The Devon County Council is asking local authorities to consider the question of providing a by-pass road on the TEIGNMOUTH Road from Black's Hill to Easterfield Lane.

*

The Harwich Corporation has acquired a housing site at DOVERCOURT, and tenders are to be invited for the erection of forty-six houses.

*

The HARWICH Corporation has decided to erect seventeen houses on the Rosebank site.

*

The BIRKENHEAD Corporation is seeking sanction to borrow £100,000 for further housing advances.

*

The LEEDS Watch Committee has passed plans for the Capitol (Leeds), Ltd., for additions and alterations at the dance hall, Green Road, Meanwood.

*

The LEEDS Corporation has received sanction to borrow £100,000 for buildings and civil engineering works, and £400,000 for generating plant in connection with the new electricity works.

*

Plans passed by the WOKING U.D.C.: Bungalow, Victoria Road, Knaphill, for Mr. A. Denny; bungalow, Anchor Hill Knaphill, for Mr. F. Hilder; shop and house, High Street, Horsell, for Mr. L. H. Aldridge; new vestry, St. Saviour's Church, Brookwood, for St. John's Church Council.

*

On behalf of the trustees Mr. H. E. Ayris has prepared plans for extensions at the Central Hall, Market Street, CARLISLE.

*

The EAST HAM Corporation Baths Committee has prepared a scheme for extensions at the central baths.

*

The borough engineer of DUDLEY has been asked to prepare a lay-out for the erection of further houses on the Dudley estate.

*

Mr. Reginald Brown is to erect eighteen houses on the Stone Garden suburb, DARTFORD.

The DUDLEY Corporation is seeking sanction to grant another fifty housing subsidies.

*

The EAST HAM Corporation has appointed a committee to select a site for the erection of electricity showrooms.

*

The LEEDS Corporation Housing Committee has decided to erect fifty-four houses on the York Road estate, and sixty-eight on the Meanwood estate.

*

The CITY OF LONDON Corporation Lands Committee has prepared a scheme for rebuilding the Public Health Department committee room and the offices of the city engineer at the Guildhall.

*

Plans passed by the LEAMINGTON Corporation: Extensions, Bath Hotel, Bath Street, for Mrs. Dowding; showroom and garage, Trinity Street, for the Trinity Garage and Motor Mart; alterations, 51 Warwick Street, for Mr. H. C. Newton.

*

The NEWPORT (I. of W.) Corporation Health Committee is to consider at their next meeting the provision of public slaughter houses.

*

Messrs. Stratton and Millgate have prepared plans for the erection of a Conservative club in High Street, NEWPORT, Isle of Wight.

*

The DOUGLAS (I. of M.) Corporation has approved the lay-out plan prepared by Mr. Teare, the architect, for the housing scheme at Olympia estate.

*

The Salvation Army is to erect a hall at the corner of Hanover Street and Lord Street, DOUGLAS (Isle of Man).

*

Plans have been prepared on behalf of the Westminster Bank, Ltd., for premises at the corner of Sussex Place and Onslow Gardens, KENSINGTON.

*

The HULL Education Committee has obtained a site in Hall Road for the erection of an elementary school.

*

The Board of Education has asked the managers of the St. Mary School, HORNSEY, to prepare a comprehensive scheme for the improvement of the school.

*

At a meeting of the HULL Corporation Works Committee terms were agreed for the acquisition of land which it was necessary for the East Riding County Council to acquire for the purpose of making a 100 ft. by-pass road from Hull to Hessle.

*

BARKING has obtained sanction for a clearance and re-housing scheme, costing £34,000, at Parsons Row.

RATES OF WAGES

		I		II				I		II				I		II								
		s. d.	s. d.					s. d.	s. d.					s. d.	s. d.									
A	ABERDARE	S. Wales & M.	1 8	1 3 1/2	A	E. Glamorgan-shire & Monmouthshire	S. Wales & M.	1 8	1 3 1/2	A ₃	NANTWICH	N.W. Counties	1 6 1/2	1 2 1/2	A	Neath	S. Wales & M.	1 8	1 3 1/2					
A ₁	Abergavenny	S. Wales & M.	1 7 1/2	1 2 1/2	A	Exeter	S.W. Counties	1 7	1 2 1/2	A	Nelson	N.W. Counties	1 8	1 3 1/2	A	Newcastle	N.E. Coast	1 8	1 3 1/2	A	Newport	S. Wales & M.	1 8	1 3 1/2
B	Abingdon	S. Counties	1 6	1 1 1/2	B	Exmouth	S.W. Counties	1 5	1 1	A	Normanton	Yorkshire	1 8	1 3 1/2	A	Northampton	Mid. Counties	1 7	1 2 1/2	A	North Shields	Mid. Counties	1 8	1 3 1/2
A	Accrington	N.W. Counties	1 8	1 3 1/2	B	FELIXSTOWE	E. Counties	1 6	1 1 1/2	A	North Staffs.	Mid. Counties	1 8	1 3 1/2	A	North Shields	N.E. Coast	1 8	1 3 1/2	A	Norwich	E. Counties	1 6 1/2	1 2
A	Adlestone	N.W. Counties	1 6 1/2	1 2	A ₁	Filey	Yorks	1 6 1/2	1 2	A	Nottingham	Mid. Counties	1 8	1 3 1/2	A	Nottingham	Mid. Counties	1 8	1 3 1/2	A	Nottingham	Mid. Counties	1 8	1 3 1/2
A	Adlington	N.W. Counties	1 8	1 3 1/2	A ₂	Fleetwood	N.W. Counties	1 8	1 3 1/2	A	Oldham	Mid. Counties	1 5 1/2	1 1 1/2	A	Oldham	Mid. Counties	1 5 1/2	1 1 1/2	A	Oswestry	Mid. Counties	1 6 1/2	1 2 1/2
A	Aldrie	Scotland	1 8	1 3 1/2	B ₂	Folkstone	S. Counties	1 5	1 1	A ₃	Oxford	S. Counties	1 6	1 1 1/2	A	Perth	Scotland	1 8	1 3 1/2	A	Paisley	Scotland	1 8	1 3 1/2
C ₁	Aldeburgh	E. Counties	1 4	1 0 1/2	A	Frome	S.W. Counties	1 4 1/2	1 0 1/2	A	Peterborough	Mid. Counties	1 6 1/2	1 2 1/2	C	Pembroke	S. Wales & M.	1 4 1/2	1 0 1/2	C	Pembroke	S. Wales & M.	1 4 1/2	1 0 1/2
A	Altrincham	N.W. Counties	1 8	1 3 1/2	A	GATESHEAD	N.E. Coast	1 8	1 3 1/2	A	Plymouth	S.W. Counties	1 8	1 3 1/2	A	Perth	Scotland	1 8	1 3 1/2	A	Peterborough	Mid. Counties	1 6 1/2	1 2 1/2
B ₂	Appley	N.W. Counties	1 4 1/2	1 0 1/2	B ₁	Gillingham	S. Counties	1 5 1/2	1 1 1/2	A	Pontefract	Yorkshire	1 8	1 3 1/2	A	Peterborough	Mid. Counties	1 6 1/2	1 2 1/2	A	Plymouth	S.W. Counties	1 8	1 3 1/2
A	Ashton-under-Lyne	N.W. Counties	1 8	1 3 1/2	A ₂	Gloucester	S.W. Counties	1 6 1/2	1 2 1/2	A	Pontypridd	S. Wales & M.	1 8	1 3 1/2	A	Pontypridd	S. Wales & M.	1 8	1 3 1/2	A	Pontypridd	S. Wales & M.	1 8	1 3 1/2
A	Atherstone	Mid. Counties	1 6 1/2	1 2	A ₃	Goole	Yorkshire	1 6	1 1 1/2	A	Preston	N.W. Counties	1 8	1 3 1/2	A	Portsmouth	S. Counties	1 6	1 1 1/2	A	Preston	N.W. Counties	1 8	1 3 1/2
B ₂	Aylesbury	S. Counties	1 4 1/2	1 0 1/2	A	Grantham	Mid. Counties	1 6 1/2	1 2 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
B ₂	BANBURY	S. Counties	1 4 1/2	1 0 1/2	A	Gravesend	S. Counties	1 7 1/2	1 3 1/2	A	Reigate	S. Counties	1 5 1/2	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
B ₂	Bangor	N.W. Counties	1 5	1 1	A	Greenock	Scotland	1 8	1 3 1/2	A	Retford	Mid. Counties	1 6 1/2	1 2 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
A	Barnard Castle	N.E. Coast	1 8	1 3 1/2	A	Grimbsby	Yorkshire	1 8	1 3 1/2	A	Rhondda	S. Wales & M.	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
A	Barnsley	Yorkshire	1 8	1 3 1/2	B ₁	Guildford	S. Counties	1 5 1/2	1 1 1/2	A	Ripon	Yorkshire	1 6 1/2	1 2 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
B ₁	Barnstaple	S.W. Counties	1 5 1/2	1 1 1/2	A	HALIFAX	Yorkshire	1 8	1 3 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
A	Barrow	N.W. Counties	1 8	1 3 1/2	A	Hanley	Mid. Counties	1 8	1 3 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
A	Barry	S. Wales & M.	1 8	1 3 1/2	A	Harrogate	Yorkshire	1 8	1 3 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
B ₂	Basingstoke	N.W. Counties	1 8	1 3 1/2	A	Hartlepool	N.E. Coast	1 8	1 3 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
B	Bath	S.W. Counties	1 6	1 1 1/2	B ₂	Harwich	E. Counties	1 5	1 1	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
A	Batley	Yorkshire	1 8	1 3 1/2	B ₂	Hastings	S. Counties	1 4 1/2	1 0 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
B	Bedford	E. Counties	1 6	1 1 1/2	B	Hatfield	S. Counties	1 5 1/2	1 1 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
A ₃	Berwick-on-Tweed	N.E. Coast	1 7	1 2 1/2	B	Hereford	S.W. Counties	1 6	1 1 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
A ₂	Bewdley	Mid. Counties	1 7	1 2 1/2	B	Hertford	E. Counties	1 5 1/2	1 1 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
B ₂	Bicester	Mid. Counties	1 4 1/2	1 0 1/2	A ₁	Heysham	N.W. Counties	1 7 1/2	1 3 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
A	Birkenhead	N.W. Counties	1 10	4 1/2	A	Howden	N.E. Coast	1 8	1 3 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
A	Birmingham	Mid. Counties	1 8	1 3 1/2	A	Huddersfield	Yorkshire	1 8	1 3 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
A	Blispham	N.E. Coast	1 8	1 3 1/2	A	Hull	Yorkshire	1 8	1 3 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
A	Blackburn	N.W. Counties	1 8	1 3 1/2	A	Immingham	Mid. Counties	1 8	1 3 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
A	Blackpool	N.W. Counties	1 8	1 3 1/2	B	Ipwich	E. Counties	1 6	1 1 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
A	Blyth	N.E. Coast	1 8	1 3 1/2	C ₁	Isle of Wight	S. Counties	1 4	1 0 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
A	Bognor	S. Counties	1 4 1/2	1 0 1/2	A	JARROW	N.E. Coast	1 8	1 3 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
A	Bolton	N.W. Counties	1 8	1 3 1/2	A	KEIGHLEY	Yorkshire	1 8	1 3 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
A	Boston	Mid. Counties	1 6 1/2	1 2	B ₁	Kendal	N.W. Counties	1 5 1/2	1 1 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
B ₁	Bournemouth	S. Counties	1 6	1 1 1/2	B ₁	Keswick	N.W. Counties	1 5 1/2	1 1 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
B ₂	Bovey Tracey	S.W. Counties	1 5	1 1	B	Kettering	Mid. Counties	1 6	1 1 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
A	Bradford	Yorkshire	1 8	1 3 1/2	A ₂	Kidderminster	Mid. Counties	1 7	1 2 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
A	Brentwood	E. Counties	1 7	1 2 1/2	B ₂	King's Lynn	E. Counties	1 5	1 1	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
A	Bridgend	S. Wales & M.	1 8	1 3 1/2	A	LANCASTER	N.W. Counties	1 8	1 3 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
B ₂	Bridgwater	S.W. Counties	1 5 1/2	1 1 1/2	A ₂	Leamington	Mid. Counties	1 7	1 2 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
A ₁	Bridlington	Yorkshire	1 7 1/2	1 3 1/2	A	Leeds	Yorkshire	1 8	1 3 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
A	Brighouse	Yorkshire	1 8	1 3 1/2	A	Leek	Mid. Counties	1 8	1 3 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
B ₁	Brighton	S. Counties	1 6	1 1 1/2	A	Leicester	Mid. Counties	1 8	1 3 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
A	Bristol	S.W. Counties	1 8	1 3 1/2	A	Leigh	N.W. Counties	1 8	1 3 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
B ₂	Brixham	S.W. Counties	1 4 1/2	1 0 1/2	B ₁	Lewes	S. Counties	1 4 1/2	1 0 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
A	Bromsgrove	Mid. Counties	1 7	1 2 1/2	A ₂	Lichfield	Mid. Counties	1 6 1/2	1 2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
C	Bromyard	Mid. Counties	1 4	1 0 1/2	A	Liverpool	N.W. Counties	1 10	4 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
A	Burslem	N.W. Counties	1 8	1 3 1/2	B	Llandudno	N.W. Counties	1 5 1/2	1 1 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1 1 1/2
A	Burslem	Mid. Counties	1 8	1 3 1/2	A	Llanelli	S. Wales & M.	1 8	1 3 1/2	A	Rochdale	N.W. Counties	1 8	1 3 1/2	A	Reading	S. Counties	1 6	1 1 1/2	A	Reading	S. Counties	1 6	1

PRICES CURRENT

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 4½d. per hour; LABOURER, 1s. 4½d. per hour; NAVY, 1s. 4½d. per hour; TIMBERMAN, 1s. 6d. per hour; SCAFFOLDER, 1s. 5½d. per hour; WATCHMAN, 7s. 6d. per shift.

Broken brick or stone, 2 in., per yd.	£0 11 6
Thames ballast, per yd.	0 13 0
Pit gravel, per yd.	0 14 6
Pit sand, per yd.	0 15 6
Washed sand	0 15 6
Screened ballast or gravel, add 10 per cent. per yd.	
Clinker, breeze, etc., prices according to locality.	
Portland cement, per ton	£2 19 0
Lias lime, per ton	2 10 0
Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.	
Transport hire per day:	
Cart and horse	£1 3 0
Trailer	£0 15 0
3-ton motor lorry	3 15 0
Steam roller	4 5 0
Steam lorry, 5-ton	4 0 0
Water cart	1 5 0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube. 0 3 0
 Exceeding 6 ft., but under 12 ft., add 30 per cent.
 In stiff clay, add 30 per cent.
 In underpinning, add 100 per cent.
 In rock, including blasting, add 225 per cent.
 If basketed out, add 80 per cent. to 150 per cent.
 Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0 1 6
SPREAD and level, including wheeling, per yd.	0 1 6
FILLING into carts and carting away to a shoot or deposit, per yd. cube	0 10 6
TRIMMING earth to slopes, per yd. sup.	0 0 6
HACKING up old grano. or similar paving, per yd. sup.	0 1 3
PLANKING to excavations, per ft. sup. Do. over 10 ft. deep, add for each 5 ft. in depth, 30 per cent.	0 0 5
If left in, add to above prices, per ft. cube	0 2 0
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	0 2 1
Do. 6 in. thick, per yd. sup.	0 2 10
PUDDLING, per yd. cube	1 10 0
CEMENT CONCRETE, 4-2-1, per yd. cube Do. 6-2-1, per yd. cube	1 18 0
Do. in upper floors, add 15 per cent.	
Do. in reinforced-concrete work, add 20 per cent.	
Do. in underpinning, add 60 per cent.	
LIAS-LIME CONCRETE, per yd. cube	£1 16 0
BREEZE CONCRETE, per yd. cube	1 7 0
Do. in lintels, etc., per ft. cube	0 1 6
CEMENT concrete 4-2-1 in lintels backed around reinforcement, per ft. cube	0 3 9
FINE concrete benching to bottom of manholes, per ft. cube	0 2 6
FINISHING surface of concrete spade face, per yd. sup.	0 0 9

DRAINER

LABOURER, 1s. 4½d. per hour; TIMBERMAN, 1s. 6d. per hour; BRICKLAYER, 1s. 9½d. per hour; PLUMBER, 1s. 9½d. per hour; WATCHMAN, 7s. 6d. per shift.

Stoneware pipes, tested quality, 4 in., per yd.	£0 1 3
Do. 6 in., per yd.	0 2 8
Do. 9 in., per yd.	0 3 6
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0 6 9
Do. 6 in., per yd.	0 9 2
Portland cement and sand, see "Excavator" above.	
Lead for caulking, per cut.	£2 5 6
Gaskin, per lb.	0 0 5½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft.	0 4 3
Do. 6 in., per ft.	0 5 0
Do. 9 in., per ft.	0 7 9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0 8 0
Do. 6 in., per ft.	0 10 0

Note.—These prices include digging concrete bed and filling for normal depths, and are average prices.

Fittings in Stoneware and Iron according to type. See Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 9½d. per hour; LABOURER, 1s. 4½d. per hour; SCAFFOLDER, 1s. 5½d. per hour.

London stocks, per M.	£4 15 0
Flettons, per M.	2 18 0
Staffordshire blue, per M.	9 10 0
Firebricks, 2½ in., per M.	11 3 0
Glazed salt, white, and ivory stretchers, per M.	24 10 0
Do headers, per M.	24 0 0
Colours, extra, per M.	5 10 0
Seconds, less, per M.	1 0 0
Cement and sand, see "Excavator" above.	
Lime, grey stone, per ton	2 17 0
Mixed lime mortar, per yd.	1 6 0
Damp course, in rolls of 4½ in., per roll	0 2 6
Do. 9 in. per roll	0 4 9
Do. 14 in. per roll	0 7 6
Do. 18 in. per roll	0 9 6

BRICKWORK in stone lime mortar, Flettons or equal, per rod	£33 0 0
Do. in cement do., per rod	36 0 0
Do. in stocks, add 25 per cent. per rod.	
Do. in blues, add 100 per cent. per rod.	
Do. circular on plan, add 12½ per cent. per rod.	
Do. in backing to masonry, add 12½ per cent. per rod.	
Do. in raising on old walls, etc., add 12½ per cent. per rod.	
Do. in underpinning, add 20 per cent. per rod.	
HALF-BRICK walls in stocks in cement mortar (1-3), per ft. sup.	£0 1 0
BEDDING clinker in cement mortar, per ft. run	0 0 3
BEDDING window or door frames, per ft. run	0 0 3
LEAVING chases 2½ in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run	0 0 2
CUTTING DO. in old walls in cement, per ft. run	0 0 4
CUTTING, toothing and bonding new work to old (labour and materials), per ft. sup.	0 0 7
TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cuttings, per ft. run	0 3 6
Do. 14 ft. by 9 in. do., per ft. run	0 6 0
FLAUNCHING chimney pots, each	£0 2 0
CUTTING and pinning ends of timbers, etc., in cement	0 1 0
FACINGS fair, per ft. sup. extra	0 0 3
Do. picked stocks, per ft. sup. extra	0 0 7
Do. red rubbers gauged and set in putty, per ft. sup. extra	0 4 9
Do. in salt white or ivory glazed, per ft. sup. extra	0 5 6
TUCK pointing, per ft. sup. extra	0 0 10
WEATHER pointing, do. do.	0 0 3
TILE creasing with cement fillet each side per ft. run	0 0 6
GRANOLITHIC PAVING, 1 in., per yd. sup.	0 5 0
Do. 1½ in., per yd. sup.	0 6 0
Do. 2 in., per yd. sup.	0 7 0
If coloured with red oxide, per yd. sup.	0 1 0
If finished with carborundum, per yd. sup.	0 0 6
If in small quantities in finishing to steps, etc., per ft. sup.	0 1 4
Jointing new grano. paving to old, per ft. run	0 0 4
Extra for dishing grano. or cement paving around sullies, each	0 1 6
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0 0 7
ASPHALT (MASTIC) DAMP COURSE, 1 in., per yd. sup.	0 8 0
Do. vertical, per yd. sup.	0 11 0
SLATE DAMP COURSE, per ft. sup.	0 0 10
ASPHALT ROOFING (MASTIC) in two thicknesses, ½ in., per yd.	0 8 6
Do. SKIRTING, 6 in.	0 0 11
BREEZE PARTITION BLOCKS, set in Cement, 1½ in. per yd. sup.	0 5 3
Do. Do. 3 in.	0 6 6
BREEZE fixing bricks, extra for each	0 0 3

THE wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry.

MASON

MASON, 1s. 9½d. per hour; DO. fixer, 1s. 10½d. per hour; LABOURER, 1s. 4½d. per hour; SCAFFOLDER, 1s. 5½d. per hour.

Portland Stone:	
Whitbed, per ft. cube	£0 4 6
Basebed, per ft. cube	0 4 7
Bath stone, per ft. cube	0 3 0
Usual trade extras for large blocks.	
York paving, av. 2½ in., per yd. super	0 6 6
York templates same, per ft. cube	0 6 9
Slate shingles, rubbed, 1 in., per ft. sup.	0 2 6
Cement and sand, see "Excavator" etc., above.	
HOISTING and setting stone, per ft. cube	£0 2 2
Do. for every 10 ft. above 30 ft. add 15 per cent.	
PLAIN face Portland basis, per ft. sup.	£0 2 8
Do. circular, per ft. sup.	0 4 0
SUNK FACE, per ft. sup.	0 3 9
Do. circular, per ft. sup.	0 4 10
JOINTS, arch, per ft. sup.	0 2 6
Do. sunk, per ft. sup.	0 2 7
Do. Do. circular, per ft. sup.	0 4 6
CIRCULAR-CIRCULAR work, per ft. sup.	1 2 0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0 1 1
Do. circular, do., per ft. run	0 1 4

HALF SAWING, per ft. sup.	£0 1 0
Add to the foregoing prices if in York stone 35 per cent.	
Do. Mansfield, 12½ per cent.	
Deduct for Bath, 33½ per cent.	
Do. for Chilmark, 5 per cent.	
SETTING 1 in. slate shelving in cement, per ft. sup.	£0 0 6
RUBBED round nosing to do., per ft. lin.	0 0 6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1 9 0
YORK SILLS, W. & T., ft. cub. fixed	1 13 0
ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0 1 6
Do. 2½ in. thick, per ft. sup.	0 1 9

SLATER AND TILER

SLATER, 1s. 9½d. per hour; TILER, 1s. 9½d. per hour; SCAFFOLDER, 1s. 5½d. per hour; LABOURER, 1s. 4½d. per hour.

N.B.—Tiling is often executed as piecework.	
Slates, 1st quality, per 1,200:	
Portmadoc Ladies	£14 0 0
Duchess	27 0 0
Old Delabole	32 0 0
24 in. x 12 in.	Med. Grey £45 1 0
20 in. x 10 in.	31 4 3
16 in. x 10 in.	20 18 0
14 in. x 8 in.	12 1 0
Green Randoms, per ton	8 3 9
Grey-green do., per ton	7 3 9
Green pebbles, 12 in. to 8 in. long, per ton	6 3 9
In 4-ton truck loads, delivered Nine Elms station, Clips, lead, per lb.	£0 0 6
Clips, copper, per lb.	0 2 0
Nails, compo, per cut.	1 6 0
Nails, copper, per lb.	0 1 10
Cement and sand, see "Excavator," etc., above.	
Hand-made tiles, per M.	£5 8 0
Machine-made tiles, per M.	5 8 0
Westmorland slates, large, per ton	9 0 0
Do. Peppies, per ton	7 5 0

SLATING, 3 in. lap, compo nails, Portmadoc or equal:	
Ladies, per square	£4 0 0
Countess, per square	4 5 0
Duchess, per square	4 10 0
WESTMORLAND, in diminishing courses, per square	6 5 0
CORNISH DO., per square	6 3 0
Add, if vertical, per square approx.	0 13 0
Add, if with copper nails, per square approx.	0 2 6
Double course at eaves, per ft. approx.	0 1 0
SLATING with old Delabole slates to a 3 in. lap with copper nails, at per square.	
Med. Grey	Med. Green
24 in. x 12 in.	£5 0 0
20 in. x 10 in.	5 5 0
16 in. x 10 in.	4 15 0
14 in. x 8 in.	4 10 0
Green randoms	6 7 0
Grey-green do.	5 9 0
Green pebbles, 12 in. to 8 in. long	4 17 0
TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	5 6 0
Do., machine-made do., per square	4 17 0
Vertical Tiling, including pointing, add 18s. 0d. per square.	
FIXING lead soakers, per dozen	£0 0 10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0 10 0
LABOUR only in laying slates, but including nails, per square	1 0 0
See "Sundries for Asbestos Tiling."	

CARPENTER AND JOINER

CARPENTER, 1s. 9½d. per hour; JOINER, 1s. 9½d. per hour; LABOURER, 1s. 4½d. per hour.

Timber, average prices at Docks, London Standard Scandinavian, etc. (equal to 2nds):	
7 x 3, per std.	£20 0 0
11 x 4, per std.	30 0 0
Memel or Equal. Slightly less than foregoing.	
Flooring, P.E., 1 in., per sq.	£1 5 0
Do. T. and G., 1 in., per sq.	1 5 0
Planned boards, 1 in. x 11 in., per std.	30 0 0
Wainscot oak, per ft. sup. of 1 in.	0 2 0
Mahogany, per ft. sup. of 1 in.	0 2 0
Do. Cube, per ft. sup. of 1 in.	0 3 0
Teak, per ft. sup. of 1 in.	0 3 0
Do., ft. cube	0 15 0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0 5 6
Do. framed in floors, roofs, etc., per ft. cube	0 6 6
Do., framed in trusses, etc., including ironwork, per ft. cube	0 7 6
PITCH PINE, add 33½ per cent.	
FIXING only boarding in floors, roofs, etc., per sq.	0 13 6
SARKING FELT laid, 1-ply, per yd.	0 1 6
Do., 3-ply, per yd.	0 1 9
CENTERING for concrete, etc., including horsing and striking, per sq.	2 10 0
TURNING pieces to flat or segmenta soffits, 4 in. wide, per ft. run	0 0 4½
Do. 9 in. wide and over per ft. sup.	0 1 2

continued overleaf

CARPENTER AND JOINER: continued.

Table listing carpentry and joinery work including shuttering, deal battening, stout feather-edged tilting fillet to eaves, and various framing and finishing tasks with associated costs.

SMITH

Table listing smithing work including mild steel in British standard sections, sheet steel, corrugated sheets, and wrought iron chimney bars.

PLUMBER

Table listing plumbing work including lead milled sheet, drain pipes, soil pipes, copper sheet, and guttering with associated costs.

PLASTERER

Table listing plastering work including chalk lime, hair, sand and cement, lime putty, and various plastering techniques with associated costs.

GLAZIER

Table listing glazing work including glass in crates, cathedral white, polished plate, and rough plate with associated costs.

Table listing glazing work including glazing in beads, lead lights, and various sizes of glass with associated costs.

PAINTER AND PAPERHANGER

Table listing painting and paperhanging work including genuine white lead, linseed oil, turpentine, and various painting materials with associated costs.

SUNDRIES

Table listing sundries including fibre or wood pulp boardings, asbestos sheeting, asbestos composition flooring, and metal casements with associated costs.

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