Wednesday, December 24, 1924 Vol. LX. No. 1564.

THE ARCHITECTS' JOURNAL & Architectural Engineer

With which is incorporated "The Builders' Journal."

FROM AN ARCHITECT'S NOTEBOOK.

Here the architect
Did not with curious skill a pile erect
Of carved marble, touch or prophecy,
But built a house for hospitality.
No sumptuous chimneypiece of shining stone
Invites the stranger's eye to gaze upon
And coldly entertain his sight; but clear
And cheerful flames cherish and warm him here
No Doric or Corinthian pillars grace
With imagery this structure's naked face;
The lord and lady of this place delight
Rather to be in act, than seem in sight.
. . . .
Nor think because our pyramids and high
Exalted turrets threaten not the sky,
That therefore Wrest of narrowness complains,
Or straiten'd walls; for the more numerous trains
Of noble guests daily receives, and those
Can with far more conveniency dispose,
Than prouder piles, where the vain builder spent
More cost in outward gay embellishment
Than real use, which was the sole design
Of our contriver, who made things not fine,
But fit for service.

CAREW:
"To his friend G. N., from Wrest."

9 Queen Anne's Gate, Westminster.

Old Fronts, Rothenburg

"Shop Fronts and their Treatment" was the subject of a paper at the R.I.B.A. by Mr. Arthur J. Davis, who illustrated his thesis with numerous examples, ancient and modern, including the picturesque fronts of Rothenburg illustrated above.

THE

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Treasuries of Design

THERE have been many Treasuries of Design both before and since the most famous of that name, by Batty Langley, first saw the light of day in 1745. There were those Dutch detail books, imported in the sixteenth century, together with Flemish and German workmen in vast numbers, the combination of which produced the second most depressing period in the history of English domestic architecture. The peculiarities of this period should be pointed out for a warning, as we seem to be drifting into a "handbook" order of things at the present day; Walpole called it a "bastard style which intervened between Gothic and Grecian architecture," but he was too lenient.

Those great mansions which sprung up all over the country, like Longford Castle and Wollaton Hall, were under direct influence of the Flemish pattern books. They were, indeed, for the most part, but "heterogeneous masses of absurdity"—the mixture of Gothic and Italian Renaissance "motifs" being sufficiently nauseating, but add to that the charm of entablatures broken "and frittered away into small parts," indescribable Orders, and every available square inch of unbroken surface plastered with hideous strap-work ornament or little scrolls "curling up like so many pieces of scorched leather," and the absurdity is even more pronounced. Holland House, Kensington, is another marvellous effect, with its "picturesque skyline," its pot-bellied arcades, "quaint gabled conceits," and a central feature like a Belgian Renaissance brass clock. The circulation of these pattern-books kept alive the spirit of this extraordinary "style," and the perpetration of "conceits" in this manner was the principal amusement of the country gentleman of the time. The county of Northampton can boast some fine examples, notably in the work of that inspired idiot, Thomas Tresham, who, not content with the comparative restraint and good proportion of the Market House at Rothwell, left, hard by at Rushton, the Triangular Lodge as a supreme example of these phantasies for the perpetual amusement of generations yet unborn.

The tower of the Bodleian Library at Oxford is another masterpiece of the inane. The base order, following an Italian precedent, is stark and severe, a stumpy Tuscan with a clumsy entablature supporting a string of diabolical ornament. Above we find the same order slightly more refined, and above that, an Ionic, the bottom two feet or so of the shaft of each column curiously like a stack of Bologna sausages one sees in Soho delicatessen shops, or those tobacconists' piles of plug tobacco. Above that we have yet another order, which appears to be a species of Corinthian, for, as we have now reached a height of about sixty feet, it is difficult to say. The crowning order is also of the same species, slightly more attenuated, and with a little variety on the shafts, and the whole supports something which resembles more than anything else in the world, a Victorian overmantel. One, Thomas Holt, was responsible for this columnar feat, and its date, 1612, marks the close of this entrancing period.

At Castle Ashby, in 1624, we find brave Inigo struggling out of the slough, and making the ground more firm for Wren to stand on, and then the age of handbooks closes, at any rate, for a time.

The eighteenth century abounded in handbooks, though not of the Flemish variety, but Ware, Langley, Paine, and Gibbs, a glorious throng, cunning in the profiles of mouldings, the rake of a pediment and the proportions of the Orders, put their thoughts and their knowledge on to paper that those who run may read. *They* played no architectural tricks, but were, for the most part, content to give us the five Orders according to Palladio, Vitruvius, or Scamozzi unadorned. And so the handbook flourished until Messrs. Parker, Paley, Bloxham (solicitor in Rugby!), Rickman, *et hoc genus omne*, led us down the primrose path of church restoration and taught us how to embellish the villa-residence.

But I have a handbook of a much more recent date which seems to elucidate the art of architecture better than any of its predecessors. All you have to do is to turn over the seventy odd pages until you find a house which takes your fancy, if there are several, then you look at the plans, and choose the one most "suited to your requirements," and mark its number (they all have a number and a price). Then you write out a cheque for twelve guineas, and, by return, you receive, among other papers, "a coloured set of eighth-scale working drawings from which any builder can work." You then telephone your builder and tell him to get on with it while you sit back and watch your old-world Sussex cottage spring into being. Those half-timbered gables, that charming little crazy path, oh! and *such* pretty chimneys. And the rough-cast and the little diamond panes! This is indeed architecture made easy. You avoid all those little technical and meaningless discussions those troublesome architects will have before they can start to draw your house. They talk about hollow walls, aspect, damp, and such trivialities, and if you mention that sweet little cottage you saw from the train going to the Plumpton Races, they sneer!

No! the whole object of this new handbook system is that "the services of a professional architect" shall be "quite dispensable," although if your site should not happen to come under any of the various categories scheduled by the versatile genius presiding over this "house-factory," such as "level," "very level," "sloping," "slightly sloping," they are prepared, for a small additional fee, say, half-a-crown and expenses, to furnish a competent man to superintend the laying of the foundations.

So it is obvious how absurdly simple the whole job is, and the little book is most fascinating reading. You may choose your fireplaces, umbrella-stand, doors, draining-board, and if you are at all imaginative, you could make a marvellous architectural pot-pourri. The "old-world effect," however, seems to predominate, and of such there is an enormous choice. With your little book in hand you may spend many happy hours on the job watching your house grow. Here are two honest carpenters, solemnly nailing strips of nine-by-two on to your gables (with an adzed face outside of course), and assiduously staining them with a dark brown, nearly black, stain, to give the requisite old-world effect; there are two other decent men gravely breaking up regular rectangular slabs of stone so that your "crazy" path may have "that charm peculiar to those old-world Sussex cottages." An old-world Sussex cottage, eight minutes Charing Cross, 'buses numbers 850 and 596B pass the door!

But such is the effect of the handbook, and the habit is catching on. As a result the so-called Garden of England is slowly growing to resemble more a jerry-builder's back-yard. There are hundreds of such handbooks about; one describes a certain eight-roomed house (costing about £600!) as "neat and crafty," which was not a subtle burst of humour on the part of the compiler, but was written in all seriousness, the perspective sketch demonstrating the element of craft in the form of a wealth of imitation timber work. By the aid of a book of this nature it is *possible* for anyone to have a house built without ever consulting an architect. True, an "architect" is consulted when you buy a set of his plans, but that is as far as you may go.

Any handbook which is conducive to thought and appreciation of craftsmanship, both on the part of the student and the craftsman, and there are many such, should be encouraged, but the publication of such books of designs, which often find their way *direct* into the builder's hands even without the medium of the "coloured set of eighth-scale working drawings," should be made a criminal offence.

W. E. PALMER.

Shop-Fronts

"He would be very glad if the lecturer would read his paper and show his illustrations to an audience of shop-keepers," said Mr. A. S. Gaye, in the course of the discussion that followed Mr. Arthur Davis's paper on shop-fronts at the R.I.B.A. The suggestion is an excellent one, and we hope it may be followed up, for, no matter how we may soothe ourselves with fair words about the improvement in public taste, the fact remains that far too many shop-fronts of no architectural quality whatsoever are still making their appearance, not only in suburbia, but in the West End itself. There is too much readiness, even among architects, to concede the "practical" claims of the shopkeepers—which usually means nothing more than a dogmatic insistence upon vast expanses of plate glass, revealing cavernous maws, that so far from setting-off the goods they are intended to display, merely succeed in swallowing them up. As Mr. Davis remarked, the point upon which the salesman needs education is that good architecture forms a feature of attractiveness in itself. Retail businesses are highly specialized nowadays, and "we must have a wider variety of ideas to correspond with our many kinds of shops." The architect, by the very nature of his calling, is an expert in giving three-dimensional expression to ideas, and his instinctive apprehension of the right solution of a given problem is likely to be much nearer the mark than that of the shopkeeper himself, who, being so intimately concerned with the detail of his business, is commonly under the disability of not being able to see the wood for the trees. If Mr. Davis could be prevailed upon to give his lecture before the shopkeepers he would do uncommonly valuable service for architecture.

The Devonshire House Site

At last the fate of the Devonshire House site is settled. We are able this week to show in a series of illustrations something of the character of the great buildings which are to rise on this famous plot, whose fate has been the subject of so much rumour and conjecture for months past. Briefly, the site is to be divided up into three separate islands, with streets between, and on the first island, facing Piccadilly, will be erected a block of apartment flats, to be known as "Devonshire House," from the designs of Mr. Thomas Hastings, the distinguished American architect, and Professor C. H. Reilly, in association; behind this block will rise a new office building for Messrs. Thomas Cook and Son, from the designs of Mr. Arnold Mitchell; while on the third and rearmost plot will be erected another block of residential flats, to be known as "Devonshire Court," from the designs of Mr. W. Henry White. An important feature of the scheme is the provision in all buildings of a great amount of shop accommodation, which presages the uprising in London's most aristocratic residential quarter of a great new shopping centre. Though the passing of Devonshire House is to be much regretted (we note, by the way, that some parts of it are to make their way to America), the owners of the site, Messrs. Holland and Hannen and Cubitts, Ltd., are to be sincerely congratulated upon their enterprise in promoting one of the most ambitious schemes of development that London has known for many years.

Mr. Walcot in Paris

We note from the Paris newspapers that Mr. William Walcot has just held a very successful exhibition of water-colours and etchings at the Galerie Devambez. His work seems to have captivated the critics. Writes M. Emile Henriot: "Imaginez la rencontre de Piranèse et de Whistler, de Brangwyn et de Turner: voila Walcot," which is praise, indeed, and a delightful compliment to boot. At the close of the exhibition Mr. Walcot was entertained to dinner by "ses confreres et quelques admirateurs," a company that included M. Georges Wybo (the architect of the Printemps), M. Georges Vaudoyer, the distinguished art critic; M. de Saint-Maurice, and Mr. Welles Bosworth, the well-known American architect. The dinner appears to have been a delightfully unconventional affair, for it was held in the barge of Marshal Joffre—which we take to be a subtle compliment to Mr. Walcot, who is a devotee of the river, and during the summer months spends much of his time in his barge on the Thames.

Disunity

At a time when rival professional organizations are putting an end to duality of representation (and, as a consequence, to the waste, inconvenience, and inefficiency which inevitably follow) by forming into a united body, it is somewhat surprising to find an important group of professional men banding themselves together in a new organization, to wit: "The National Association of Auctioneers, House Agents, Rating Surveyors, and Valuers." With the prospectus of this new body there is included a note which says: "Having regard to recent reports in 'The Times,' it is expected legislation will shortly be introduced, directed towards preventing many bona-fide practitioners (not members of a central organization) earning their livelihood. The N.A.A. (with a large and influential membership) has now created a great and powerful machinery to protect existing rights, and you are urgently asked in your own interest to join and strengthen it." It is doubtful, in our opinion, whether any real danger threatens the non-associated members of the professions referred to; Parliament does not readily agree to deprive a large number of useful citizens of their means of livelihood. The event will show.

The late Mr. Paul Waterhouse

As we go to press we learn, with profound regret, of the sudden and unexpected death of Mr. Paul Waterhouse. Our tribute to his memory must be deferred to a later issue.

A MONTHLY CAUSERIE

Joking Apart

Bricks

SPEAKING as an architect I want nothing better than good bricks; put the right sort of brick into the slot and this model will work in a most exemplary manner. Building, for me, spells "bricks," and bricks "building." The conceptions which most readily fire my imagination—those castles in the air which, in common with my brethren, I build in bed of mornings as an alternative to nursing my grievances, counting the flies, or getting up—always rear themselves in bricks. I have, in fact, a definite sensation of bricks in the blood; but this is not to be marvelled at when we remember that bricks are among the oldest building materials known to man, and have been, throughout history and long before, intimately associated with the communal life of humanity; and there is accordingly no reason why bricks should not lurk in the background of those hereditary memories which cause the smell of wood fires and of food cooked in the open, the cry of hunting dogs, and the thousand aspects of forest, mountain, and plain—although they may be as new in our experience as our first introduction to a tube railway—to leap so instantaneously and joyously into our affections.

Bricks, in the first place, captivate me by their sheer brickiness; their gritty roughness; their lowly origin; their small size; their unassuming simplicity and the paradoxical refractoriness with which they resist accommodating themselves to architectural concepts and yet inspire them—the architect learns that bricks will not do what he wants, it is he who has to do what they want; yet could any material give a finer effect of mellowed grace than those piled millions of little bricks in the tower of St. Anastasia at Verona, for instance, or the Belfry at Bruges? Will its final incrustations of marble and mosaics, I ask, enhance the effect of the solemn, cavernous interior of Westminster Cathedral, or better display its proportions or augment its devotional mystery? The enrichment, with marbled inlay, of successive chantries and side-chapels only confirms me in the opinion that it will not: and what a pity it was that Bentley used such slick, natty, monotonous facings on the exterior, instead of taking courage and exploiting the glories of archaic brickwork! Even the collapse of a brick building awakens my sympathy; I seem to be able to enter into its feelings. What could be more admirable than the behaviour of the Campanile of St. Mark at the hour of dissolution? A masonry tower would have cracked, set the whole population scrambling in consternation with props and screw-jacks, split, rocked over, and crashed to earth, spreading ruin far and wide. Not so this old brick tower, which, taxed beyond endurance, quietly rumbled down upon its heels in the night and exhibited a neat pile of debris, ready for carting, in the morning. As a certain bricklayer foreman endeared in my remembrance would have said: "That old tower just took and sot down, she did."

The chief ground of my attachment to brickwork lies, however, in the brickmaker's instinct, and the bricklayer's skill; but the rule that the capacity to receive pleasure exposes us to pain, holds good in this as in other things. A bit of old walling—the ruin of a barn, maybe—can delight me with the sense of its sound craftsmanship, by the implication it carries of the happiness in their work of the men who built it, by exemplifying the dignity of all handicraft, and by suggesting that atmosphere of bygone times with its definite quality of mingled sweetness and power which, for lack of better words, I will describe as subsisting in a fervid spirit of true worship. This, of course, is the spirit which illumines all mediæval craftsmanship; but its association with the humble needs of the every-day life of the people gives brickwork a special eloquence. I apprehend that in this field, as in that of the fine arts and the more accomplished crafts, the joy we gain from contemplating its output is, in the main, the joy expended in the act of production; in the long run—that is, when time has yielded the perspective and detachment which gives us insight—it is not so particularly skill of hand as impulse of spirit—the inspiring motive—which enchants us. True fervour of aspiration gains expressiveness, I fancy, when impeded by a limited technique, because the devotional purpose is not masked by slick efficiency in the rendering; and it is for this reason that the machine-made thing, or the thing made in emulation of the exactness of the machine, has no beauty. How, otherwise, are we to explain the inimitable quality which underlies the whole mass of the craftwork which we designate "archaic"? What is that subtle appeal—not to the eye, I insist, but to the heart and conscience—that dwells, for instance, in the Byzantine chalice which its possessor prices at above its weight in rubies? It seems to me that, when we search ourselves, we discern that the quality that so overpoweringly captivates us in viewing a work of this kind is the sense we get of the man who made it—not of the skill of his hand, his truth of eye, his experience in his craft—but of the man himself, the spirit that was his, the impulse that moved him; and that this perception is the essence of the delight with which we view the work of the brick-builders of, for instance, Compton Winyates or Layer Marney. I am tempted to picture the scene of those building operations, and to imagine myself upon the scaffolding among the men, or eavesdropping in the neighbourhood of those exquisitely-rendered chimneystacks (at Compton Winyates), which have the variety and spontaneity of wayside flowers; and then to speculate on the results which would follow a general instruction to our Union of Bricklayers to build chimneys; but I am held back by the consideration that our men are all right. Every architect knows the delight, the pride, the meticulous conscientiousness with which the ordinary country-bred bricklayer engages upon any particular bit of work which allows him to taste the quality of the birthright of which "Industry" has robbed him.

Yes, our men, obfuscated and confounded though they be, are all right; it is the wretched system that is wrong. This lover of bricks went, once upon a time, to a Building Trades Exhibition, and verily had his reward when he observed a group of well-fed, prosperous, careworn-looking men gathered in grave attendance, as though it were a religious observance, about a hulking brute of a machine which, with the loud groans appropriate to the act, was slowly and painfully extruding an endless, rectangular, grease-slavered sausage of prepared brick earth, which was then cut up into tablets to be burnt and sold as bricks—or, in fact, as anything more profitable to the manufacturer that the public could be persuaded to accept them for. I was, in fact, mingling in the heart of the modern guild of brick-craft—in the bosom of the great fraternity of the wire-cuts—rubbing shoulders, like enough, with some of the merchant princes of this Empire and, maybe, breathing down the neck of the Brick King himself, should that potentate exist, as I have no doubt he does. In industry it is usually the large producers of the worst descriptions of a commodity, and not the makers of the best, who are pre-eminent and representative; and it was characteristic of the times in which we live that this modern guild of the brickmakers should not care a dump about the beauty of brickwork nor the merit of bricks. Their careworn game was to cadge another fourpence a thousand from the attenuated forbearance of the public.

The fact that so many excellent bricks are now made, and so much good walling built, is due to architects, whose

pleasure it has been to gather the secret of the ancient craft and reproduce its effects by the cumbersome mechanism of specification, half-inch details, and full-size setting out of pointing, chequer work, and oversails for interpretation by the union of bricklayers, which numbers few men with a practical instinct for their craft, and none who have true understanding of it. The chief difficulty of the architect is to prevent the bricklayer from pursuing what he deems to be his calling. Bricklayers who have been accustomed to have their elbows perpetually jogged in this way through working under the direction of particular architects, are beginning to get a true sense of brickwork, and an enthusiasm which sometimes spreads to their masters when those masters are individual builders and not directors of limited liability companies, which, I observe, are beginning now to identify themselves under registered designations like patent foods and proprietary commodities, so that the contract for our next cathedral may be entrusted to "Bildquik."

It will not be questioned that during the past twenty years there has been a great advance in our understanding of brickwork, and curious evidence of this may be found in the specification clauses of our text-books. I take it that the text-book always lags behind accepted practice. It is twenty years now since I observed that the books I kept in my office to alleviate indecision and to stiffen confidence, described brickwork in terms exactly opposite to those in which I would instruct a builder; and I was astonished, a few minutes ago, to find that an authoritative text-book published only a year ago repeats the old rigmarole, prescribing just the sort of walling our wire-cut brethren would commend, and precisely the kind of work that architects have been trying to get bricklayers to hate. In fact, for all ordinary purposes a standard specification which exactly reversed and contradicted the essentials of this old bogie would serve quite well, and tend to establish a right conception of what brickwork should be, instead of a wrong one. Such a specification clause would read somewhat as follows: "The facing bricks to be unequal in size, colour, and texture, and are on no account to be square or to have true arises. They are to be unselected, and only warped and crooked bricks will be allowed. Any brick which is not rough and uneven, and which does not show cracks, flaws, or imperfections of some kind, must be thrown out. Bats are to be freely used, and neither Flemish nor English, nor any other bond is to be recognizable. Care must be taken to see that joints are not of equal width, and that perpends are on no account kept. Any workman found using a plumb-bob to perpends is to be at once discharged. The work is on no account to be carefully cleaned down, though conspicuous stains may be roughly brushed away; and no pointing will be allowed. The projecting mortar is to be cut off with the edge of the trowel or smoothed with the thumb. Any work pointed will have to be pulled down and rebuilt."

KARSHISH.

Shop Fronts and Their Treatment

Mr. Arthur J. Davis at the R.I.B.A.

ON Monday evening of last week Mr. Arthur J. Davis, F.R.I.B.A., read a paper on "Shop Fronts and Their Treatment" before the R.I.B.A. Mr. Alfred J. Gotch, the president, occupied the chair, and among the Council guests of the evening were: the reader of the paper; Mr. A. S. Gaye, H.M. Commissioner of Woods and Forests; Captain Ivor Stewart-Liberty, M.C.; and Mr. John Murray, F.R.I.B.A. The lecturer illustrated his remarks with a large number of lantern slides of English, French, American, and other shop fronts.

Mr. Davis, in the course of his paper, said: The commercial and æsthetic developments which have taken place during recent years in the treatment of the shop front clearly show that after a period of neglect this problem is at last receiving the attention it deserves, and that the merchant is no longer content to leave the decorative treatment of his window to the tender mercies of the contractor and fitter. The modern shop front is essentially a problem requiring artistic consideration. It is one which appears frequently in most architects' practices, and its many aspects present opportunities where skill and taste can be displayed to the advantage of the client, and to the embellishment of the street in which his premises are situated. It has become more and more recognized that an appropriate shop front is in itself a commercial asset of no small value, in the same way as the beauty of a picture is enhanced when presented in a well-designed frame.

The eighteenth century was a remarkable time so far as the development of shop fronts was concerned. With the accession of George I the distributive industries of the country seemed to become suddenly imbued with a progressiveness responsible for the erection of a great number of shop fronts of good architectural character. The introduction and gradual cheapening of glass gave rise to many possibilities in the treatment of the shop front, and we find much charming originality and freedom of design.

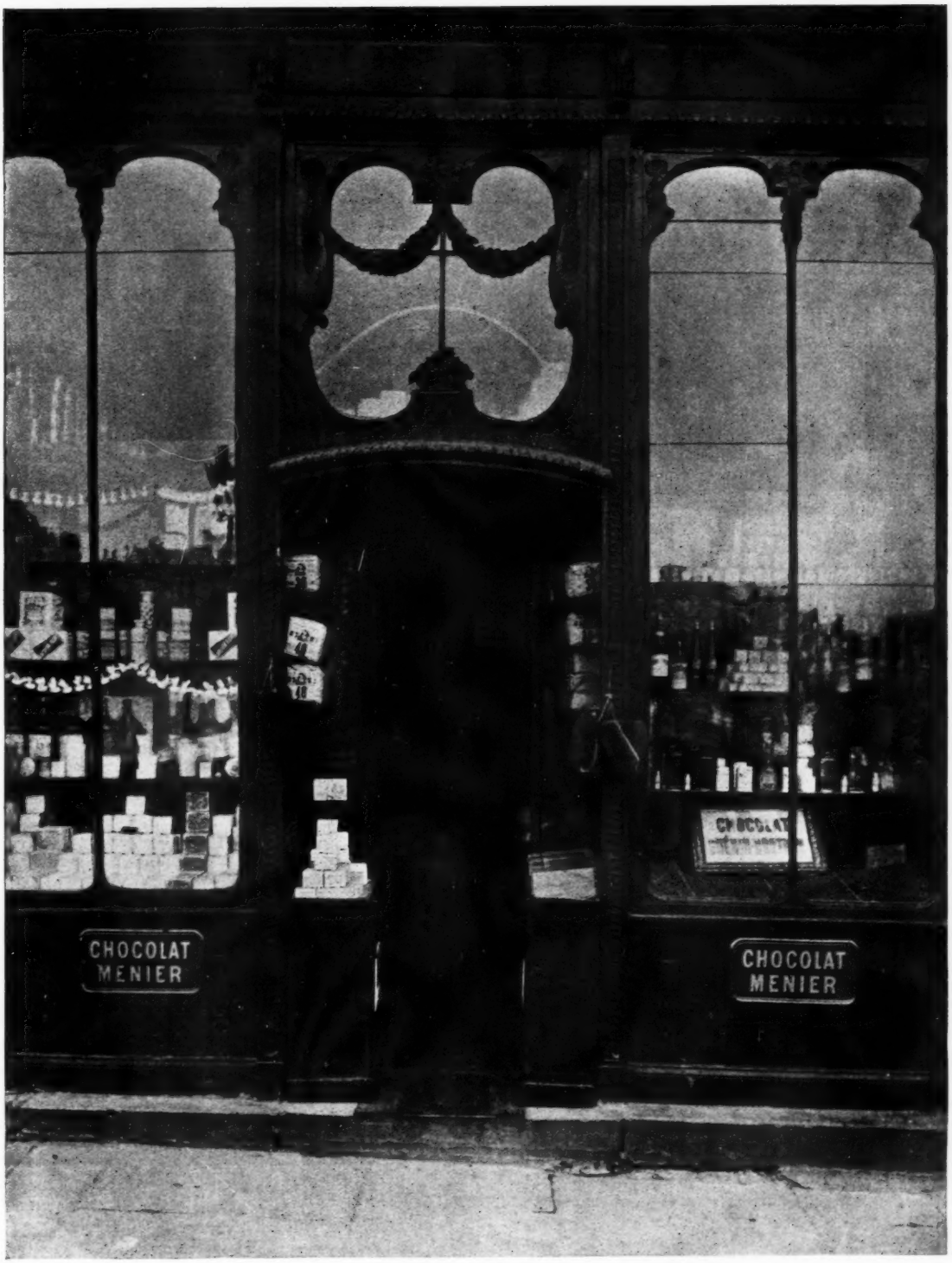
Although the designs of the eighteenth century are considerably varied, yet there are certain marked characteristics common to them all. The windows, for instance, are almost invariably divided into squares by means of moulded glazing bars, these bars becoming lighter in form as time advanced. In fact, in regard to shop fronts, a reliable guide as to date is the coarseness or delicacy of the woodwork details.

The shop fronts of the nineteenth century are lighter and more refined than the sturdy and perhaps more architectural examples of the seventeenth and eighteenth centuries. Semicircular fanlights decorated with radiating and curved glazing bars are commonly seen. Cornices and pilasters are very much alike in the manner of their use, the enrichments being plentifully varied. Most of the fronts of this period are well proportioned, due recognition having been given to the limited uses of material, the latter being usually wood. A classic influence upon the nature of the moulding and details is quite pronounced. Thin pilasters, fluted or panelled, and usually without capitals, are frequently introduced. The stall boards are rather high, panelled in wood, and often additionally protected by some excellent wrought-iron or lead work. Bead butt or bead flush doors are greatly in favour, and sliding shutters used in preference to the flap arrangement of previous centuries.

In the early nineteenth century we see examples illustrating a further step in the development of shop-front design—the architect adopting a treatment incorporating some classic details in the manner of Sir John Soane.

Following this period of intensive development it is perhaps inevitable that a decline should manifest itself. The charming little fronts no longer satisfied the needs of the shopkeeper. The glazing bars were an interruption to the display of his increasingly varied stock. In the rapidly developing industries of Germany and Belgium plate glass was being manufactured in larger sheets and greater quantities to meet a demand becoming every day more insistent, and it is the abuse of this material perhaps more than any other factor that is responsible for the rapid decline in the shop fronts subsequent to the exhibition of 1851.

Modern shopkeepers have introduced a practice which opens a new field in design. The custom of recessing the display front so as to provide one or more openings off a



A LOUIS XVI SHOP FRONT, QUAI BOURBON, PARIS.
(Now demolished.)

corridor or vestibule leading from the pavement into the shop. This arrangement is called "an arcade," and here the buying public may circulate and view a large part of the tradesman's stock excellently displayed before entering the shop. This treatment attracts the casual passer-by, and it also economizes the salesman's efforts. Architecturally it introduces a new conception : instead of a screen across the front we have an intricate series of parts, and design changes from two into three dimensions presenting endless possibilities.

With the growth of our centres of population and corresponding increase in property values and rentals, the arcade treatment has become of more and more importance. By adopting this type of plan and providing one or more island show-cases, a 20 ft. frontage may easily be made to develop a display of 60 ft. or more. Although the financial returns are probably not in proportion to this increase, they are related to it to such an extent that the extra cost of installation has proved a sound investment to many merchants.

Apart from the broader considerations of general principles, the needs of the shopkeeper as affecting the design of the show window are many and various, depending on the type of business, the goods to be displayed, the locality, the custom to be invited, and the reputation to be established.

It may generally be stated that large, open spaces of window create an effect of cheapness upon the passer-by, which is not always the impression which the particular business wishes to convey. The smaller window, well-proportioned and properly framed, has an air of exclusiveness very necessary to the firm that wishes to please a select clientèle. The perfume shop of Messrs. "Atkinson" in Bond Street provides a notable example of what the architect can do in this respect.

Liberty's new building in Argyle Place is another illustration on a larger scale that a much greater appeal is made by not exposing everything the shop contains, but rather hinting at the contents by a number of separate and uncrowded window compositions is a psychological fact that no one will deny.

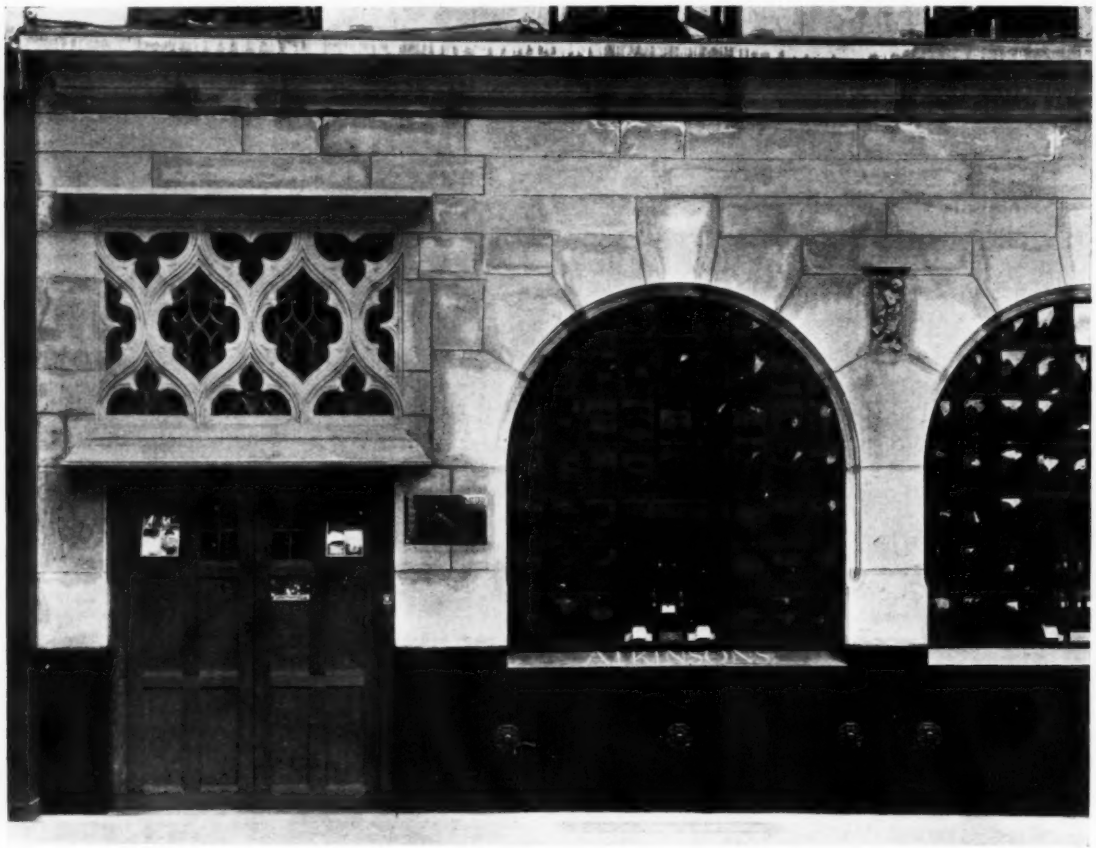
On the other hand, the shop for the sale of numerous articles of a cheap nature designed to attract the pennies of the casual pedestrian is a problem requiring a very different solution. It is here that the plate glass front has its merits.

Architecturally there are several principles which may be applied to counteract the effect of undue weight upon the plate glass shop front. An excellent solution is afforded by setting back the window from the general frontage. While admitting the loss of 4 ft. or 5 ft. of valuable site, the advantages to the business are obvious; the public are tacitly invited to come within the line of the building itself; they are in a position where they have leisure to examine the display without fear of jostling by passing crowds. Messrs. Heal and Sons' store in Tottenham Court Road is one of the few places in which this plan has been adopted.

The use of the deep, flat architrave or frame as a surround enhances enormously the value of the window as a place wherein to expose fine goods. A frame has the advantage of cutting off discordant surroundings, and immediately gives the window dresser that opportunity to compose his wares which is so necessary to accentuate their value and add to their effectiveness.

The use of colour, not only in the exterior surround of the window but also as a background for the goods, is one that should make an increasing appeal to the designer.

With regard to artificial lighting, the general tendency is towards a softly-toned light of sufficient quantity either evenly distributed or concentrated on articles of outstanding interest. Whatever light is required outside the shop



ATKINSON'S SCENT SHOP, BOND STREET. C. F A. VOYSEY, ARCHITECT

PARFUMERIE D'ORSAY, RUE DE LA PAIX, PARIS. SÜE AND MARE, ARCHITECTS.

should be so treated as to be in keeping with the design. Exterior lighting is falling into disfavour, and the powerful arc lamps of twenty years ago have practically disappeared. All that is really necessary is that the name of the shopkeeper shall be sufficiently apparent, and it is now becoming the custom to place an illuminated hanging sign within the window itself.

In fact, the shop-front, in addition to being a show window, is becoming one of the devices of modern salesmanship, and is itself now often used as a means of publicity.

The growing practice of illuminating the display many hours after the premises are closed constitutes an advertisement of fundamental importance. The appearance of the goods displayed is greatly enhanced by cleverly concealed and well-placed artificial illumination, and many customers are no doubt attracted by this means. Particularly is this the case in regard to shops which specialize in feminine commodities, and in this connection it may be mentioned that light and colour have the same irresistible fascination for women as the candle has for the moth.

Another modern innovation is the use of flood lighting which creates unusual contrasts of light and shade.

In the interests of publicity this is a very effective method of primarily introducing the building itself to the public notice. An example of this can be seen in Mr. Curtis Green's Wolseley Building in Piccadilly and at Selfridge's, Oxford Street.

The use of effective lettering has recently been acknowledged as a commercial necessity, and as such the value of expert advice is recognized. The well-known incised gilt letters are gradually being replaced by characters of careful design and proportion, properly spaced and harmonizing with the general decorative treatment.

An extreme and original example is that at the Banque Populaire in Paris, where a profuse scheme of simple lettering has been adopted.

With regard to the construction of shop-fronts, it may be remarked that bent windows are no longer the fashion. Not only are they expensive, but they produce distorted reflections which are very objectionable, especially where concave glass is used.

Much thought has been given to the question of avoiding condensation upon the inside of the shop window. Theoretically the problem is quite easy of solution, for it is only necessary to keep the temperature equal on both sides of the glass. To do this, however, the external air must be allowed to circulate freely, and the difficulty of admitting it evenly, at the same time excluding dust, is one that is not easily overcome. The most effective method yet evolved is to provide a film of hot air on the inside surface of the glass by means of a coil of heating pipes concealed in the window board extending across the whole front and to a depth of about 12 in. This system has the effect of drying the air locally, and is very efficient in preventing condensation.

The level of shop floors should be made about the same as that of the pavement, thus making it easy for prospective customers to enter the merchants' places of business. This may seem to be but a detail, yet it is important, for the buying public, to quite an extent, follow the line of least resistance, so that all steps or obstacles which might deter people from entering should be omitted.

The heights of window-floors should be made to conform to the kind of goods displayed. Furniture should be shown at nearly pavement level, while rings and articles of jewellery should be presented in about the position a person would naturally wear them. In fact, it might be adopted as a maxim that merchandise, to be displayed to the best advantage, must be shown as nearly as possible in the position in which it is intended to be used.

In the limited time at my disposal it is, of course, impossible to enlarge on the few general principles which I have very briefly stated. It is gratifying to note that this interesting branch of civic architecture is receiving the consideration it deserves, and that those engaged in merchandise are alive to the importance of a problem so long neglected. In conclusion, I will quote Mr. Marshal Field, an American authority on the subject, who says that "Goods well displayed are half sold."

Discussion.

Captain Stewart-Liberty, in moving a vote of thanks to the lecturer, said he agreed with everything Mr. Davis had said. The shop window question was a very difficult one. The more educated the customers the less the need for a shop-front, but the shop-front was undoubtedly an advantage. Goods, he thought, should be displayed in the environment in which they would be used. With regard to Liberty's new premises in Argyle Place, he pointed out that the board of directors were at first somewhat uncertain as to the advisability of using leaded lights for the shop windows. In fact, they went so far as to put aside £1,000 in case it should be necessary to replace them with plate glass. He was glad, however, to say there had been no need to replace them, and he hoped there never would be. Recently he asked an American lady what she thought of these windows. She replied that they were very cute, but she felt unwilling to look into them as it was like prying into a private house. He emphasized the value of the temporary shop window during rebuilding schemes. He agreed with the lecturer as to the use of a surround or frame for the shop window, but he pointed out that the shopkeeper should be careful as to what colour he used on that frame. In the same way they could not play with colour on the background of the window.

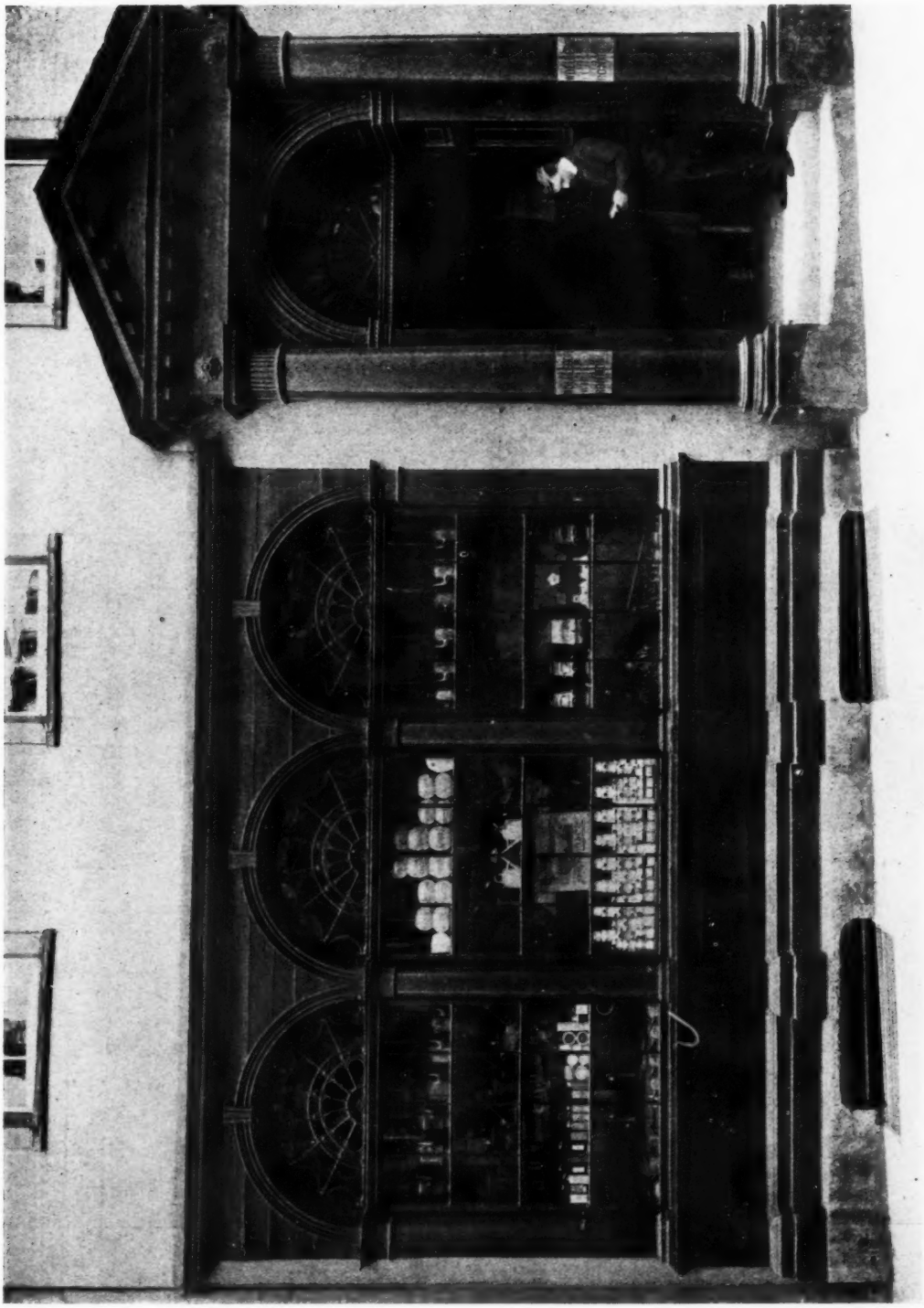
Mr. A. S. Gaye, in seconding the vote of thanks, said that the lecturer had chosen for his subject one of the most difficult problems the architect had to tackle. Every shopkeeper wanted to be different from his neighbour, and the average shopkeeper did not care what his shop looked like so long as it suited his own ends. Sometimes he wondered whether they would not achieve their object better by adopting greater simplicity and by following the advice of their architect. He came to hear the lecture as a sceptic, but he was encouraged by the recent work Mr. Davis had shown them. He would be very glad if the lecturer could read his paper and show his illustrations to an audience of shopkeepers.

Mr. A. A. Braden agreed as to the importance of the shop window, and pointed out that, unfortunately, there were a great number of less sympathetic clients than Messrs. Liberty. In connection with shop-front design he thought that architects should make it their business to know more of the requirements of the various trades.

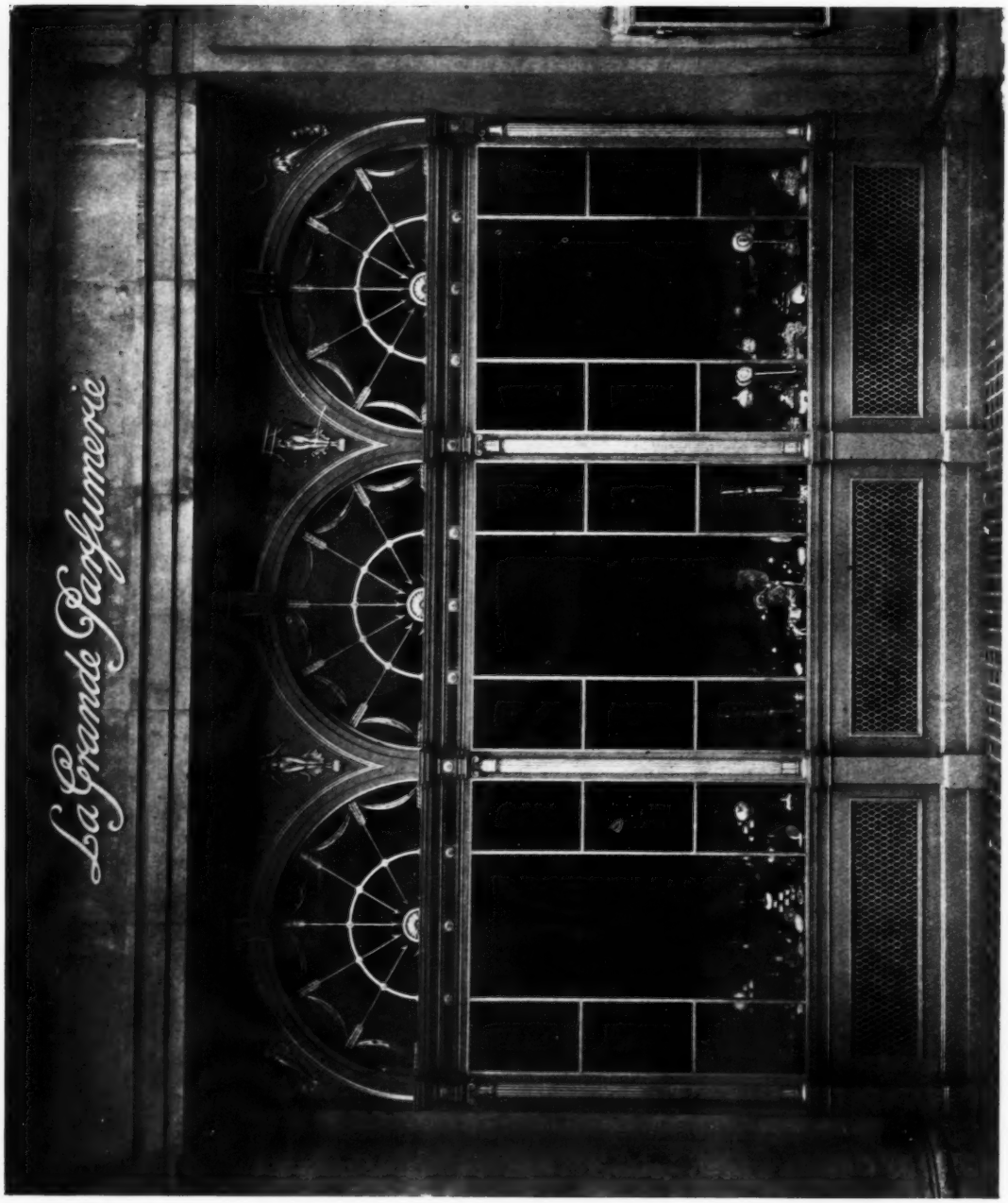
Mr. Percy J. Waldram emphasized the need for the close co-operation of the architect and the lighting engineer at the earliest possible moment. The proportion of the shop-front meant a lot to the lighting engineer. The problem of reflections in shop windows was a similar one to that encountered in connection with picture galleries. It could be overcome by adopting a shallow shop-front. From the point of view of the lighting engineer the high shop-front was a very difficult problem.

Mr. G. H. Jenkins said that a shopkeeper had expressed the view that it would be better if he had a shop-front and an interior which could be changed, say, every ten years. A new shop-front always attracted a large number of new customers. He, the speaker, thought that sufficient care was not taken in the treatment of the back of the shop window.

Professor A. E. Richardson said that he had very little to say in connection with the first part of the paper. He would, however, carry them forward to the rebuilding of New Oxford Street, which would come about in the near future, and here, he said, would be the opportunity to zone the shopping interests. This street could be built on highly imaginative lines. A design had been prepared (under his direction, in the atelier of the University College School of Architecture) by gentlemen in that room, to relieve the congestion of passenger traffic at the pavement level, which was particularly overwhelming near the store buildings.



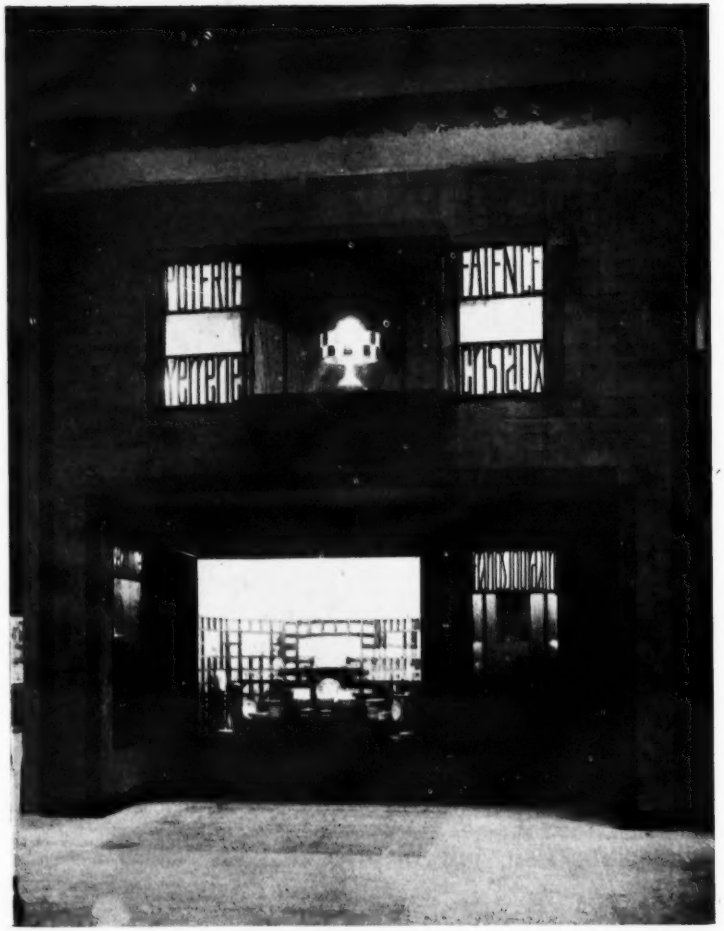
A SHOP-FRONT IN LEWES, SUSSEX.



LA GRANDE PARFUMERIE, 290 REGENT STREET, LONDON.
MEWÈS AND DAVIS, ARCHITECTS.

MORNY'S PHARMACY, REGENT STREET. MEWES AND DAVIS, ARCHITECTS.

A TWO-STORY SHOP FRONT, NEW YORK.
DESIGNED BY ELSIE COBB WILSON



BOUTIQUE DE CÉRAMIQUE (SALON D'AUTOMNE).
FRANCIS JOURDAIN, ARCHITECT

The scheme consisted of a triple arrangement of shops interpenetrating the several blocks which occurred on the valuable site between Tottenham Court Road and Kingsway. The individual blocks were treated as complete buildings; there were shops on the ground floor and shops on the first floor, and again at the level of the roof; and these thoroughfares were carried across the intervening streets by means of light flying bridges. With the example of the loggia at the top of the Uffizzo Gallery at Florence, the rows of Chester, and the many decorative bridges which connected London buildings, such as the interesting bridge off the Strand, and those at the rear of the Army and Navy Stores, Victoria Street, the idea was well within the range of practical politics. Access to the various levels would be by means of lifts at the extremities of each of the blocks. This scheme would form a step in the direction of a comprehensive steel design. Although the older shop fronts presented a charm, he thought they should treat present-day problems on more imaginative lines.

Mr. E. Stanley Hall agreed with Mr. Waldram that the reflection trouble was similar to that of the picture gallery. The secret was to keep the back of the shop-front light rather than dark.

Messrs. H. V. Lanchester, John Murray, and A. H. Moberley also took part in the discussion.

Mr. Davis, owing to the lateness of the hour, did not attempt to deal exhaustively with the points raised in the discussion.

[The ARCHITECTS' JOURNAL published last year a special issue dealing fully with the design of modern shop-fronts. A small number of copies of this issue are still available. Readers desiring copies should apply to the Publisher, The Architectural Press, 9 Queen Anne's Gate, Westminster, S.W.1.]

The late Mr. John Slater

An Appreciation

MR. JOHN SLATER, F.R.I.B.A., who died recently at his house at Hampstead, was born at Bishop Stortford, on July 28, 1847, and was educated at the Collegiate School and at University College, London, were he graduated as a B.A. In 1867 he was articled to Professor T. Roger Smith, and he was elected an Associate of the R.I.B.A. in 1879, and a Fellow in 1881. In 1877–78 he was President of the Architectural Association, and Vice-President of the R.I.B.A. in 1900–4.

He was one of my oldest friends in the profession, and we have been associated together at the Architectural Association, the R.I.B.A., and the Royal Sanitary Institute for many years. I have always had a high regard for his sound and practical opinion on architectural practice. He was an ideal chairman of the many committees with which he was associated at these institutes, and while he kept a firm hand on the business before the meeting, each member knew that he had an equal opportunity of expressing his views, and that those opinions would be treated with fairness by the chairman.

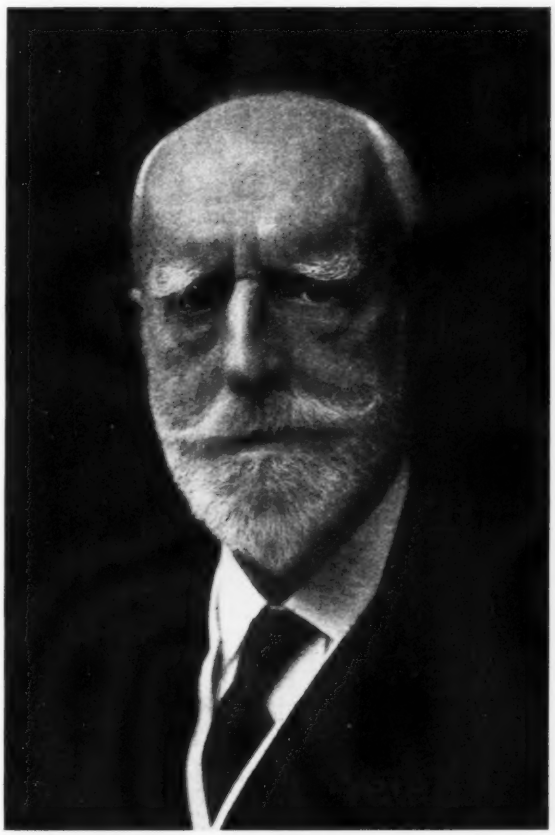
Mr. Slater was appointed by the R.I.B.A. to represent architects on the tribunal of appeal under the Metropolitan Building Acts, and in him the architectural profession had a representative on whose judgment it could safely rely. And the general opinion is that the work of the tribunal is well done, its awards sound and for the benefit of the public interests.

He was one of the Chadwick Trustees and lectured for the Trust. He was author of a "Short History of the Berners Estate," and joint author, with Professor T. Roger Smith, of "Classic and Early-Christian Architecture." He was also well-known as a lecturer.

Mr. Slater had an extensive practice as an arbitrator, and the legal profession had a high opinion of him in this capacity. He held the office of surveyor to the Berners Estate in London for many years, and had a large practice in the West End. In collaboration with his partners, Messrs. J. M. Keith, and J. A. Slater, he designed and executed many town residences, hotels, and industrial buildings. The following is a list of the more important works for which he was responsible; those marked with an asterisk were his personal work: electric lighting stations, in Wood Lane and Notting Hill*; factory for Messrs. Schweppes, Hendon*; house for Colonel Crompton, in Kensington Court*; Berners Hotel; York Hotel; factory for Messrs. Caley, Chenies Street; Messrs. Bourne and Hollingsworth's premises; hostels in Store Street and Gower Street; shop premises in Berners Street, Newman Street, and Wells Street; cottages and alterations at Garston, Watford; and factory and garage for Messrs. Bourne and Hollingsworth, Ltd.

In June, 1923 at a dinner at which he was the guest of the evening, the President, Vice-Presidents and Members of Council of the R.I.B.A., presented to him an illuminated address bearing fifty signatures, as a token of the affection and esteem in which he was held by his friends and colleagues.

H. D. SEARLES-WOOD.



THE LATE MR. JOHN SLATER, F.R.I.B.A.

The Devonshire House Site Development

The Proposed New Buildings

WE are now able to make an authoritative statement with regard to the new buildings which are to occupy the site of the well-known house and gardens of the Dukes of Devonshire in Piccadilly. So many proposals for dealing with this, the most valuable of all West End properties, have been marked and discussed in the Press, that it is interesting to be able to say definitely, now that pulling-down of the old buildings has actually started, what is really going to take their place. It is a fine building, which will include the best appointed "apartment" flats in London, with shops and a restaurant underneath. The new building will begin to arise immediately the land is cleared, and, it is stated, will proceed with more than American speed. The new block will face Piccadilly and the Green Park on its main front, a widened Berkeley Street and Stratton Street on its two flanks, and a wide new street connecting them at the rear.

Immediately opposite the north frontage, and with a long frontage to Berkeley Street, will come the future headquarters home of the great business of Messrs. Thos. Cook and Son. The migration of this firm from Ludgate Circus to the Devonshire House site is another striking instance of the gradual western movement so noticeable in almost all cities. Messrs. Cook's building will be flanked by a second new street running from the end of Stratton Street to Berkeley Street. Between this new street and Lansdowne Passage, Messrs. Edcaster, Ltd., are now starting on the erection of another great block of flats and shops.

The magnitude and importance of these developments will be apparent from the fact that within the next two years it is estimated that over two-and-a-half to three million pounds will be expended on the Devonshire House site.

It is interesting to note in connection with these undertakings that the Westminster City Council are immediately starting practically to double the width of Berkeley Street. This will not only help to solve the traffic problem in this congested area, but at the same time convert the present insignificant street into a handsome and important thoroughfare.

Almost immediately after the present Duke had sold his famous town house the price of building rose to such a prodigious height that for some time it was practically impossible to formulate any scheme which would show an adequate return on the capital involved, and this prevented many an attractive proposition from materializing, but now that building costs are more normal and reasonable, it has been decided to start on the erection of buildings in every way worthy of the position.

The Piccadilly Frontage

The designs for the block fronting on Piccadilly have been placed in the hands of Mr. Thomas Hastings, of New York, and Professor Reilly, of Liverpool. The former, who is, perhaps, the leading architect of America, is a gold medallist of the R.I.B.A., and *persona grata* in both Paris and London, while the latter is too well known in English architectural circles to need any introduction. The owners of the site, Messrs. Holland and Hannen and Cubitts, Limited, will, of course, be the contractors. It will be remembered they were responsible for the super-structure of the New County Hall at Westminster Bridge, the large Cunard Building in Liverpool, and many other of the principal buildings of England. The firm has been in existence nearly 150 years, and to it London owes some of its finest squares.

Those who are familiar with New York will know with what fine architectural effect Americans have developed what they term "the apartment house." The great block now to be built on this site will be on somewhat similar lines to those straightforward, clean-looking, and beautiful buildings, but modified to conform to English ideas. Flats of all sizes will be embodied in the scheme, but whether large or small they will be fitted with every convenience and luxury comprised in the very latest American practice, with its lavish supply of bathrooms and wardrobe accommodation, supplemented by such devices for comfort as "panel heating," etc., in which the English are ahead of all rivals. The pile will depend largely for its architectural effect on the grandeur of its mass, and external decoration will be reduced to a minimum in conformity with modern taste.

The whole scheme should prove a welcome addition to London, and Messrs. Holland and Hannen and Cubitts are to be congratulated on their great enterprise.

Messrs. Thomas Cook's Block

It is the central site of the three divisions which has been secured by Messrs. Thomas Cook and Son, and the big block of buildings, to be erected for them, is being designed by Mr. Arnold Mitchell.

The famous travel agency will occupy one of the biggest and handsomest offices in London, features of the plans being restaurant accommodation for a staff of 1,800, and a great circulating hall, similar to those of the chief banking offices. According to the present plans, the banking-hall will be a central court with an outer edging of shops. The restaurant will be at the top of the building.

"Devonshire Court," Mayfair, W.1.

On the northern portion of the Devonshire House estate and adjoining Lansdowne House Gardens a fine block of residential flats is to be erected.

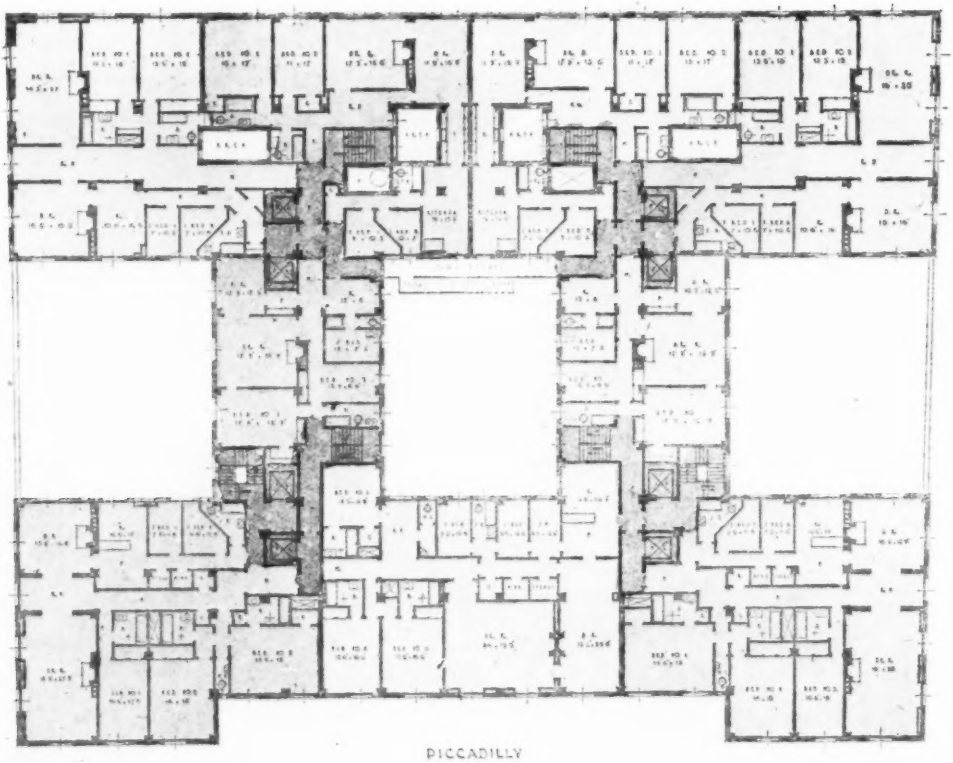
This portion of the Devonshire House site faces on the south the 50 ft. roadway which is being formed to connect Berkeley Street with Stratton Street, and will be an extension of the latter.

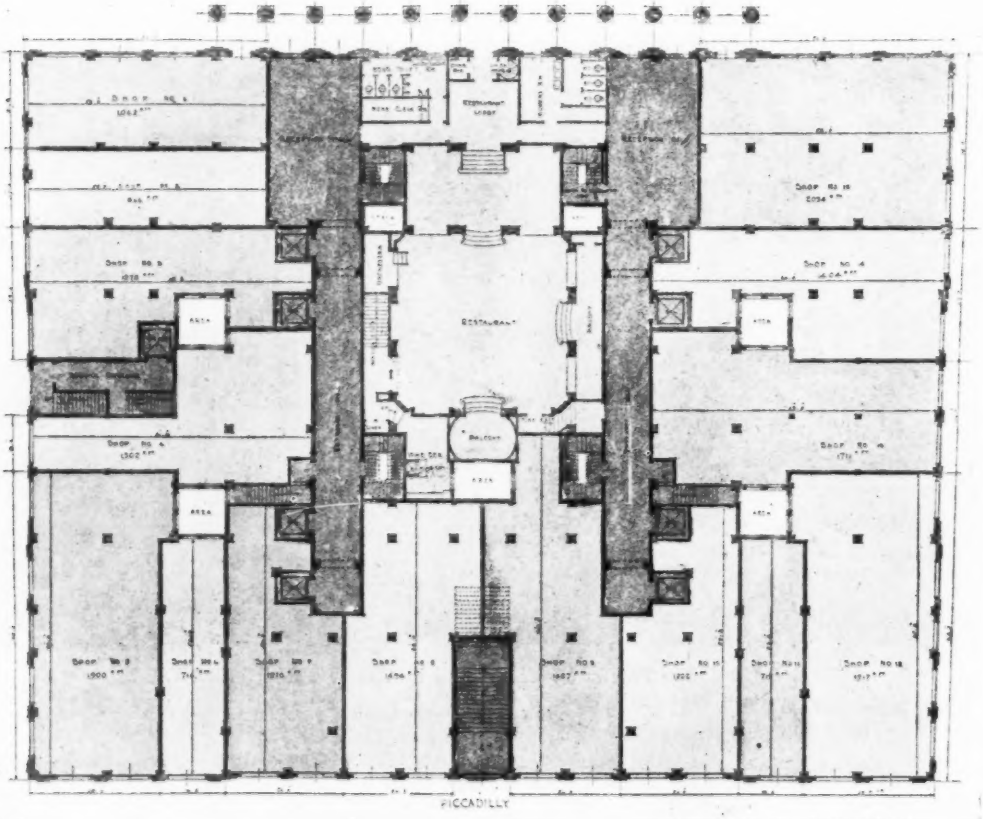
The eastern frontage of the site is to Berkeley Street, shortly to be widened to 55 ft., and will form a broad thoroughfare from Berkeley Square to Piccadilly, which in addition to relieving the congested traffic in this at present narrow street, will greatly improve the value of the property in the street, and add to its amenities, and it is fully expected this widened thoroughfare, with the fine blocks of buildings we are now promised, will rival Bond Street as the resort of "Fashion" and, owing to its width and lightness, without the discomforts of that much overburdened street.

The block of buildings to be known as "Devonshire Court" will be erected by Messrs. Edcaster, Ltd., London, W.12, from the designs of the architect, Mr. W. Henry White, F.R.I.B.A., and operations have already been commenced upon the site.

The block will contain: 47 flats with 5 bedrooms, 2 sitting-rooms, hall, 2 bathrooms, 4 w.c.'s, kitchen, and butler's pantry; 5 flats with 4 bedrooms, 2 sitting-rooms, hall, 2 bathrooms, 4 w.c.'s, kitchen, and butler's pantry; 20 shops with basements; restaurant—a large building under the

THE DEVONSHIRE HOUSE SCHEME: THE BERKELEY STREET FRONTAGE.
THOMAS HASTINGS AND PROFESSOR C H. REILLY, F.R.I.B.A., ASSOCIATED ARCHITECTS.

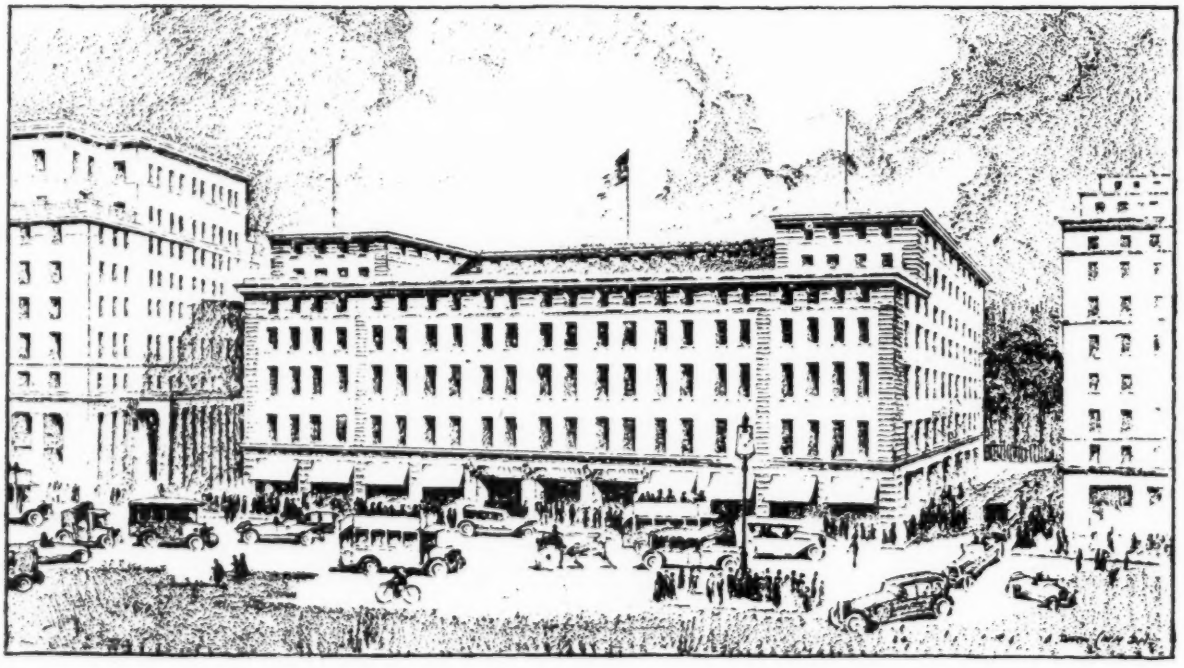




THE DEVONSHIRE HOUSE SCHEME: PLANS OF THE FLATS FRONTING ON PICCADILLY. THOMAS HASTINGS AND PROFESSOR C. H. REILLY, F.R.I.B.A., ASSOCIATED ARCHITECTS.

THE DEVONSHIRE HOUSE SCHEME: THE PICCADILLY FRONTAGE.
THOMAS HASTINGS AND PROFESSOR C. H. REILLY, F.R.I.B.A., ASSOCIATED ARCHITECTS.

A MODEL OF THE BUILDING FRONTING ON PICCADILLY
THOMAS HASTINGS AND PROFESSOR C. H. REILLY, F.R.I.B.A., ASSOCIATED ARCHITECTS



MESSRS. THOMAS COOK AND SON'S BUILDING ARNOLD MITCHELL, ARCHITECT.

THE DEVONSHIRE HOUSE ESTATE: 'DEVONSHIRE COURT.'
W HENRY WHITE, F.R.I.B.A., ARCHITECT

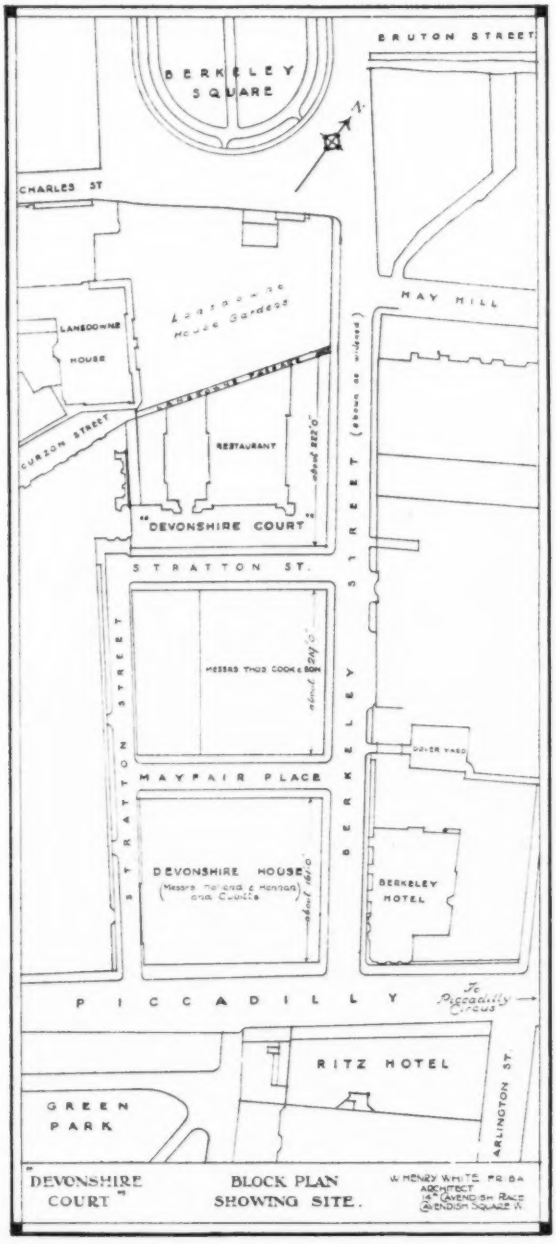
court with balcony which comprises about 19,000 sq. ft. of floor area.

The flats have been designed to contain within a given area the maximum amount of accommodation with a minimum waste of space, and so arranged that the service question should be largely solved, owing to the ease with which each flat can be worked, as an examination of the sketch plans will show.

Although each flat will be self-contained—in these days important to many people—the advantages of an hotel is also available, as provision is being made on the lower ground floor for a first-class restaurant, with opportunities for music and dancing, and there will be access to the restaurant from each of the entrance halls to the flats, in addition to the main entrance to the restaurant in Berkeley Street.

The intention is to fit up the flats with the most up-to-date schemes for electric lighting, heating, and cooking, and improved sanitary fittings, etc., and each bedroom will have its own fitted lavatory.

These flats have been especially and deliberately designed to enable them to be let at moderate rentals, for the accommodation they contain and the unique position they will occupy in the very heart of Mayfair and the fashionable world, and it is confidently believed they will be in great demand as soon as it is known that they are available, and the first portion of the block should be so before the end of 1925.



BLOCK PLAN OF THE DEVONSHIRE HOUSE SITE.

Lodges to go to America

The stone urns and the gate pillars with ball finials, as well as the two porters' lodges, on the Piccadilly front of the Devonshire House site, are to be removed to the United States and re-erected at Syosset, Glencove, Long Island, the estate of Mr. Burton, who was recently the host of the Prince of Wales. They are to be set up at the main approach to the estate.

This will not be the first time that a well-known house has given place on this site to what in its time was regarded as a remarkable building.

An early eighteenth-century drawing and Morden and Lea's map (1682) show that Berkeley House and grounds at that time embraced the site of Devonshire House, Lansdowne House, and Berkeley Square. Evelyn described the house, "or rather palace, for I am assur'd it stood him in neere £30,000."

In 1684–5 Evelyn seems to have been retained to advise a development scheme, which involved the laying-out of streets through the Berkeley House grounds and the first "break-up" sale, which in due course led to the formation of Devonshire House and grounds.

In 1698, after a law suit, the Duke of Devonshire was held to be the buyer of the land, which will now enter on a new mode of user. Just as Devonshire House was in its day accounted a very great ornament of London, and a bold departure even for the then Duke of Devonshire, so, it is safe to say, the great structure, now planned or actually begun, will be noteworthy even in the rebuilding of the West End, which is now in progress.

Berkeley Street Improvement

At the last meeting of the Westminster City Council the Improvements Committee, reporting on the proposed laying out of a new street connecting Stratton Street and Berkeley Street, Piccadilly, stated that they had considered a letter from Messrs. Holland and Hannen and Cubitts, Limited, submitting that in view of the fact that they propose giving to the City of Westminster the land on which the new street is formed, the Council should relieve them of all expense in making up the street, and put in any sewers or mains that may be required. They pointed out the great value of the road, both as a relief to the traffic congestion and as a by-pass when repairs have to be carried out from time to time.

It was pointed out by the committee that under the Metropolitan Management Acts the expense of the making up and paving of new streets falls on the owners of the land bounding or abutting thereon, and the Courts have held that the authority has no power to contribute to such expense, and it was recommended that Messrs. Holland and Hannen and Cubitts be so informed.

The committee reported that they had had before them a notification from the superintending architect, London County Council, of an application from Messrs. Holland and Hannen and Cubitts for consent to the erection of a new building on the site of Devonshire House. The plan submitted shows a give-and-take line, with piers projecting about 9 in. beyond the existing building line at the east and west ends of the proposed building on the Piccadilly front. The central portion, between the piers, is set back behind the present building line to the extent of 9 in. also.

The Improvements Committee is of opinion that the proposed bringing forward of the piers on the Piccadilly front is objectionable, and the Council agreed to their recommendation that the superintending architect of the L.C.C. be informed that the City Council disapprove of the proposed encroachment on the footway of Piccadilly.

The Faculty of Arts Building, Liverpool University

BRIGGS, WOLSTENHOLME and THORNELY, and FRANK W. SIMON, FF.R.I.B.A.,
Associated Architects

THIS building faces Ashton Street, and is connected on either side with the existing University buildings. It forms the fourth side of the quadrangle. The planning is straightforward and compact. On one side of the entrance hall accommodation is provided for a large seminar classroom, a large departmental library, a staff common room, transcript room, and two private rooms; and on the other side are the dean's room, and the women's common room, cloaks and lockers, and lavatory accommodation. The porter's room adjoins the entrance hall, and is in close proximity to the entrances from Ashton Street and from the quadrangle. Including the archway the building has a frontage to Ashton Street of about 167 ft.

From the entrance hall, which is reached through a lobby, corridors turn right and left, giving access to rooms on either side. From the entrance hall, also, rises the main staircase, reaching the first floor in three flights, and being lighted by a big window, which forms the central feature of the quadrangle front.

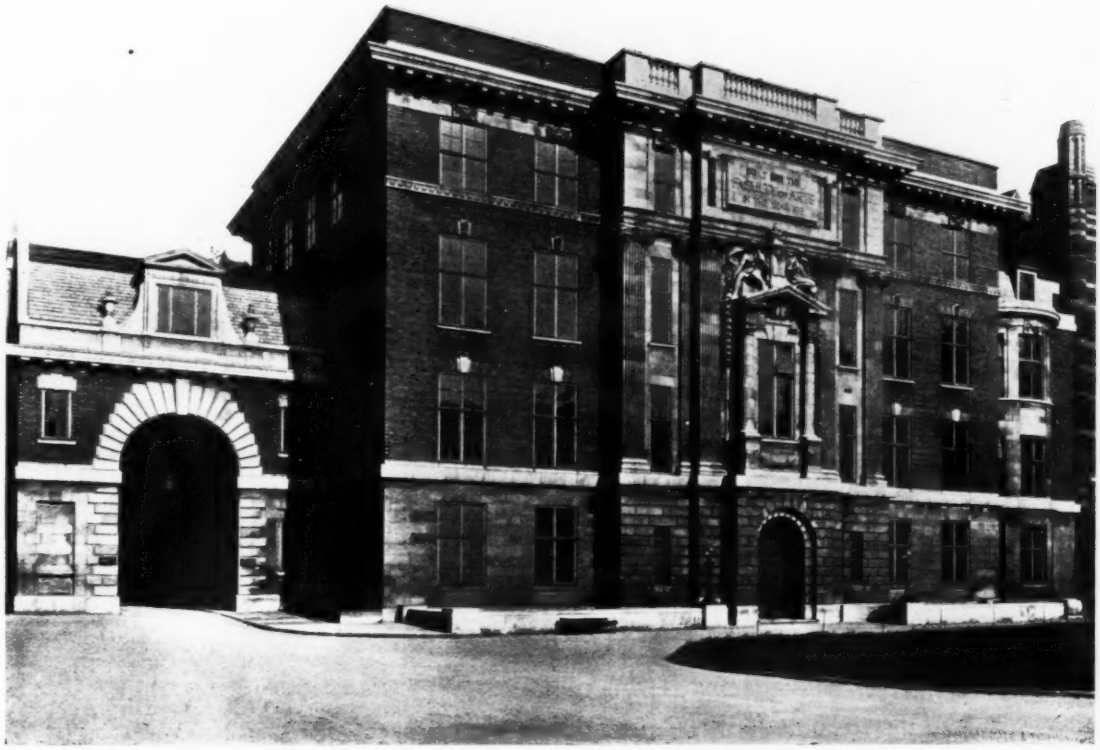
The second and third floors are almost a repetition of the first floor, and comprise classrooms, lecture-rooms, and professors' private rooms.

As will be seen from the ground-floor plan, the building itself gives through access to the quadrangle, but in addition there is an archway entrance to it, which affords opportunity for a dignified architectural treatment. The architects have made practical use of this feature in the planning of the building.

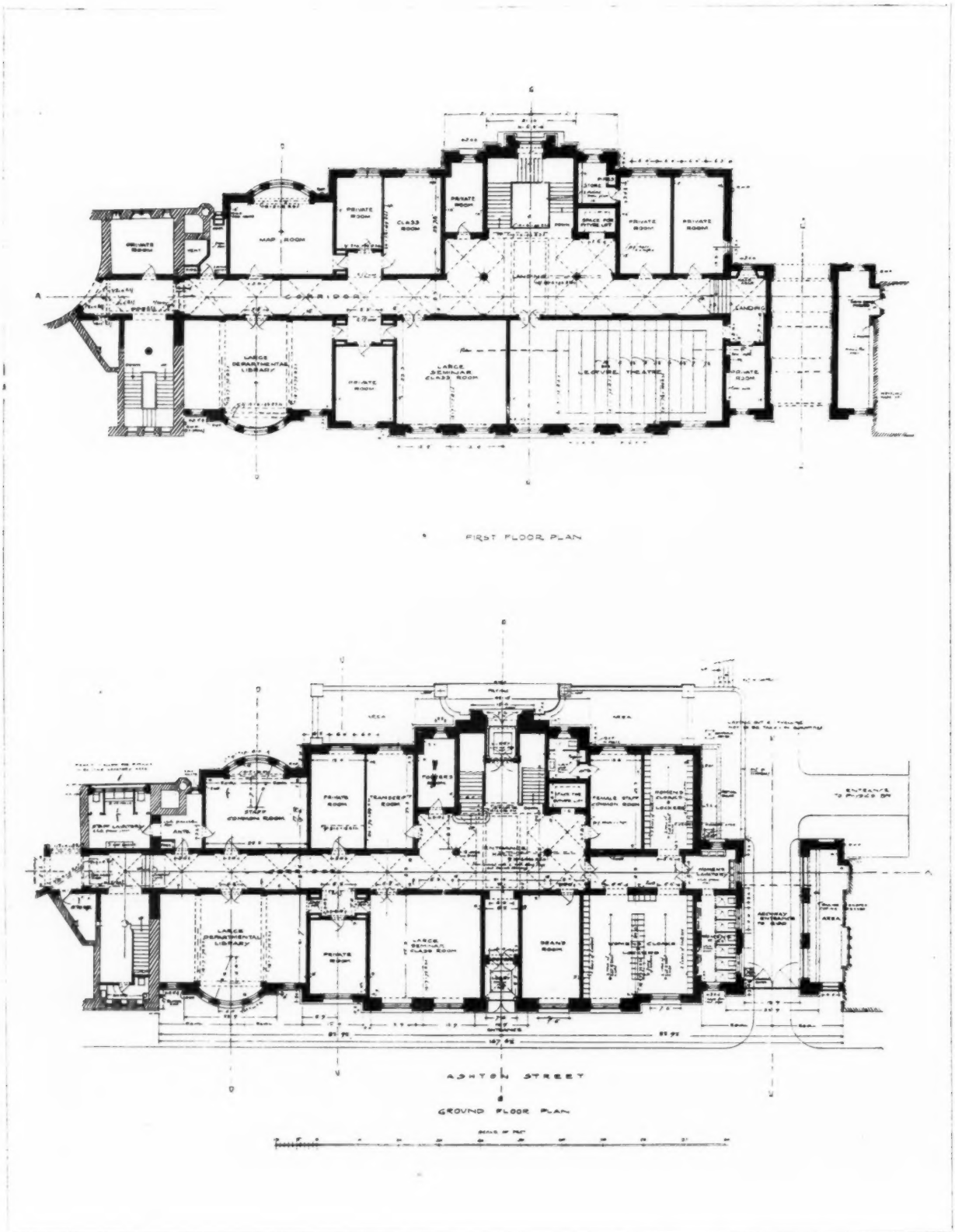
The same scale is preserved on both façades, yet each is given a distinctive character becoming to its outlook.

Externally the building is faced with Portland stone and thin red Sutton Oak rustic bricks. The main building is covered with an asphalt flat, and the sloping roofs are covered with Gloucestershire stone slates. The sculpture, including the figures over entrance, and the four sphinxes, was executed by Mr. Birnie Rhind, R.S.A., of Edinburgh.

The general contractors were Messrs. Joshua Henshaw and Sons, of Liverpool; and sub-contractors were as follows: The Bath and Portland Stone Co. (Portland stone); Kleine Patent Flooring Syndicate, Ltd. (floors); John Tanner and Son, Liverpool (plaster work); Walter Macfarlane & Co., Glasgow (iron balustrades); J. P. White and Sons, Ltd., Bedford (bookcases and other fittings). Heating and ventilating are by means of the Crittall panel system.



A VIEW OF THE QUADRANGLE FRONT.



THE FACULTY OF ARTS BUILDING, LIVERPOOL UNIVERSITY: GROUND- AND FIRST-FLOOR PLANS.
BRIGGS, WOLSTENHOLME AND THORNELY, AND FRANK W. SIMON, FF.R.I.B.A., ASSOCIATED ARCHITECTS.

Current Architecture. 256.—The Faculty of Arts Building, Liverpool University

Briggs, Wolstenholme and Thornely, and Frank W. Simon, FF.R.I.B.A., Associated Architects

This is a view of the Ashton Street front, access to the quadrangle (of which an illustration is given on the following plate) being gained through the archway shown on the right-hand side, as well as through the building. Externally, the building is faced with Portland stone and thin, red Sutton Oak rustic bricks. The sphinxes are the work of Mr. Birnie Rhind, R.S.A.

Current Architecture. 257.—The Faculty of Arts Building, Liverpool University

Briggs, Wolstenholme and Thornely, and Frank W. Simon, FF.R.I.B.A., Associated Architects

The Faculty of Arts Building is connected on each side with the existing University buildings, and forms the fourth side of the quadrangle, a detail of the quad front being shown above. The sculpture was executed by Mr. Birnie Rhind, R.S.A.

The Architecture Club Dinner

SIR GILES GILBERT SCOTT, the architect of Liverpool Cathedral, was entertained at dinner last week, at the Hotel Cecil, by the Architecture Club, Mr. J. C. Squire being in the chair. The club, the chairman said, was proud of the fact that the architect of such a magnificent building, which had been received by acclamation by all sections of professional and lay opinion, should have been one of the original members of that club.

Lord Newton, in proposing the health of the guest of honour, dwelt upon the opportunities that had been neglected of beautifying Parliament Street. The Home Office, he said, had never been completed. The two towers which ought to stand on the building facing Parliament Street had never been finished, for the simple reason that they would have cost £3,000, and the Government of that day declined to find the money. Smoke was the chief enemy of the architect, and so terrible had been its ravages on the buildings of the Houses of Parliament that an army of men had to be maintained to preserve the ornaments of the fabric from falling down. Many of the more delicate pieces of work were so badly injured by smoke that a lady could easily pull them off with her hands. He sincerely hoped Sir Giles Gilbert Scott would not live to see Liverpool Cathedral defaced by smoke in the same way that St. George's Hall, Liverpool, was to-day.

Sir Giles Gilbert Scott, in reply, said he believed the opening of the cathedral at Liverpool had received more notice and public recognition than the opening of any cathedral in the past, owing to the existence of the modern Press. The difficulty of architects was that they had to deal with so many interests. In architecture they were all the time up against the public, their clients, building committees, and various other interests, which all had to be reconciled as regards both practical considerations and æsthetic aims.

In conclusion, Sir Giles said that, being in the Liverpool Cathedral recently, he was spoken to by a lady who wished for information. While conversing about the cathedral she said, suddenly, "It is an extraordinary thing to me that the architect of this building should have had so big a thing in so small a brain." "Chastened in mind and spirit, I thanked the lady with all humility," added the architect, amid renewed laughter, "but I thought it better to move away from my well-meaning friend before I heard any more about myself."

The toast of "The Club" was given by Mr. Norman Wilkinson.

Among those present were : The Hon. Humphrey and the Hon. Mrs. Humphrey Pakington, Sir Frederick Radcliffe, Mr. and Mrs. E. V. Knox, Sir Frank and Lady Newnes, Mr. and Mrs. Clough Williams-Ellis, Dr. and Mrs. Bashford, Mr. R. M. Barrington-Ward, Lieutenant-Colonel H. P. Cart de Lafontaine, Mr. and Mrs. H. C. Cart de Lafontaine, Mrs. L. Barrington-Ward, Mr. and Mrs. Oswald P. Milne, Mr. and Mrs. Walter Tapper, Mr. H. de C. Hastings, Mr. and Mrs. Cecil Harmsworth, Mr. Nathaniel Lloyd, Mrs. Norman Wilkinson, Mr. D. Braddell, Mr. P. M. Horder, Mr. E. M. Kauffer, Mr. and Mrs. K. North, and Mr. J. Thorp, Mr. Muirhead Bone, Mr. James Bone, Mr. and Mrs. Arthur J. Davis, Mr. C. F. W. Dening, Mr. and Mrs. G. Topham Forrest, Mr. and Mrs. H. Austen Hall, Mr. and Mrs. E. Vincent Harris, Mr. C. H. James, Mrs. Ralph Knott, Mr. and Mrs. Alister G. MacDonald, Mr. and Mrs. Charles Marriott, Mr. and Mrs. Phipps, Mrs. Harold Stabler.

The A.A. Pantomime

THE A.A. pantomime this year was unusual in that it did not confine itself so much to subjects of topical interest relating to the profession of architecture. In "Guffaws, or the Double Elephant and Castle," a revue in eleven scenes, very little mud was thrown (there was not even an allusion made to Regent Street), and but for Professor Reilly and the unfortunate secretary of the A.A., who never escape, I did not notice that mark was made of anyone.

Notwithstanding, or, it may be, owing to this, the pantomime this year was a brilliant success, as everyone who saw it will agree. If anything, the humour throughout was not quite varied enough. Towards the end one grew tired of laughing, as scene after scene of almost pure fooling followed one on top of another without a break. It is impossible to keep the audience in "one continual roar," as the papers say, unless the character and form of humour change constantly. Contrast is essential in a production such as this, and the scenery and dresses invented by the genius of the A.A. are generally so staggering that one suffers from mental indigestion if insufficient change is given. Thus it would have been happier, perhaps, if more items such as "Charlie's Wife" had been introduced, where the more conventional scenery and get-up of the players, as well as the entirely different kind of humour, gave one a momentary rest in which to prepare afresh for more startling scenic effects. As an instance of what was always a well-timed effect, the appearance of Mr. F. Haliburton-Smith was never unwelcome, so that whenever this famous humorist walked on I, personally, was glad to see him. There is considerable artistry needed in the arrangement and selection of scenes for a piece such as this, to prevent this feeling of sameness occurring.

The pantomime opened with "Balbus and His Wall," in which Mr. Haliburton-Smith, at the top of a ladder, is engaged in building the said wall with the help of another workman, Mr. L. H. B. Roberts, an ingenious Roman, with a scale for measuring bricks tattoed on his bare leg. The subject of Roman workmen, properly handled, as it was by these two, is an endless source of joy, and I think this first scene was one of the best. The second scene was especially designed, I suppose, to show the public exactly what the students of the A.A. do in their working hours. Behold three first-year students, in their innocence, discussing india-rubber, architectural books and the possibilities of life classes ; next the same students later on in the third year, now fully steeped in the art of architecture, their feet upon the desk, and a gramophone playing; and, lastly, the fifth-year room, empty, alas ! and somebody in the distance calling for someone else to answer the telephone. "Mistress Art" (A Morality), by Mr. J. M. Easton, was exceptional through the masterly playing of the secretary of the A.A. by Mr. I. B. Jeffcott. The scenery and dresses by Mr. L. H. Bucknell were successful, as well. "Popular Architecture" (scene four) explains itself when it is related that Mr. Haliburton-Smith as the guide (direct from Messrs. Cook and Son) is conducting a party of sightseers round a historic building. Scene five, a rustic opera entitled "The Innkeeper's Daughter," contained many charming dresses and pretty music. Miss Enid Caldicott looked delightful as Margery, and Mr. S. N. Bertram acted well with her as the young squire. Mr. D. D. Robinson looked and acted the typical villain, and Mr. F. B. R. Brown was good as the oldest inhabitant.

"The A.A. Blues" (music by P. F. H. Cardew) was greeted with much acclamation by the audience: a haunting

and melodious refrain which, I hope, will be heard again in the A.A. studios. "Vi-Vi, The Belle of Balham," was outstanding in that the A.A. Beauty Chorus (do students go to the A.A. School of Architecture for art's sake alone?—I wonder) made their first appearance in ultra beauty chorus dresses, designed by Mr. A. G. Brodie. Miss Caldicott and Mr. L. M. White sang a good sentimental-musical-comedy song, and Mr. Haliburton-Smith wore an amazing uniform. "Charlie's Wife" was an excellent little play, with a clever plot, and an impressive butler. This was, perhaps, the most successful scene in the piece. Miss Prudence Bateson and Mr. H. E. G. Browning (the author of the play) acted extremely well, and Mr. L. H. B. Roberts's performance as the butler was epic.

But in scene nine, what have we here? None other than the cabin of the good ship "Dogge of Rotherhithe," with bad Captain Blarstem, swearing and drinking rum, and looking like neither Sir Charles Hawtrey nor Arthur Bourchier, but like Mr. Haliburton-Smith. It goes without saying that this scene is full of oaths, treasure, charts, walking the plank, murders and desperate men, besides a puffickly horrible mate (excellently acted by Mr. F. C. Holland). And at the end of it all, when the captain, mate, and bosun all lie dead, the little cabin boy (Mr. R. S. Lavers) pulls out his "Chums" and says he is the captain now, and goes off with the daughter (Miss Janet Fletcher) of a professor, who has already walked the plank.

The last two scenes did not seem to me to be up to the standard of the others. I thought, myself, that they were inclined to make the performance drag at the end. Possibly this was accounted for, in part, by the fact that there had really been enough funniness for one evening already. The last scene, "The A.A. in 1950," struck me as being the better of the two.

Besides writing and acting the revue, which lasted three hours, the A.A. designed and made the scenery and dresses, composed a greater part of the music, and built the stage and the wings. Most of the scenes were written by Mr. E. L. Bird, who, I believe, has assisted the A.A. in this way for a number of years. And, lastly, the orchestra under the direction of Dr. Oscar Faber and Mr. E. R. Jarrett, added the finishing touch to quite an astonishing performance. A.

Housing Administration, 1923-4

Mr. Aldridge is in an optimistic mood, not that we would accuse him of ever having been a downright pessimist, but there have been times during the last few years, especially during the Addison debacle, when his tone has sounded, shall we say, a little weary. But he now seems to think that Mr. Wheatley's programme, "the greatest housing programme ever launched in this or any other country in the civilized world," which forecasts the erection of two and a half million houses within the next fifteen years, will be fulfilled. Unfortunately there is not always an intimate relation between programme and performance, and Mr. Aldridge must surely have had sufficient experience to be aware of the fact. Neither do we share Mr. Aldridge's admiration for the programme *qua* programme. The much-despised programme of Dr. Addison, shorter though it was, was, nevertheless, in our opinion, better. It was better because the type of houses which it produced was of a higher standard; because it enabled the Government to keep a firm control over the quality of houses for which it was paying, because it allowed fewer loopholes for unscrupulousness, and for the defacement of England; because, in its early days, it had succeeded in rallying to its standard the eagerness and zeal of housing enthusiasts all over the country; because it was a national programme run on national lines. True it failed, but its failure is not so much a reflection on the Government as on the governed. No matter in what part of the country one travels to-day, here and there, singly, in groups, or in large, well-organized numbers, one comes across houses, conveniently planned, well built, architecturally pleasing, nay, more, very often architecturally beautiful. They were built under the Addison regime. Similarly, no matter in what part of the country one travels to-day, here and there, now singly, now in ill-assorted groups, now in doleful desolating congeries, as if rained promiscuously from the sky, as if developed by some monstrous spawning process, one comes across houses, inconveniently planned, vilely constructed, architecturally monstrous. They are subsidy houses, partially paid for by you, gentle reader.

We are glad to note that Mr. Aldridge is a little doubtful as to the quality which the present housing legislation is likely to produce, but his chief ground of complaint is on account of the maximum sizes allowed; exiguous though these are, we do not think that therein lies the real cause for complaint. The real danger lies in shoddiness and ugliness. If, as Mr. Aldridge says, we are embarking on "the greatest housing programme ever launched," would it not be a monstrous insult to posterity to bequeath to them an immense debt for the creation of slum property, for that is what bad houses eventually become? So soon as property deteriorates and is deserted by the class of owner for which it was intended, its downward career has begun. Houses become broken up into tenements, hovels spring up in the interstices between the houses, decay, filth, squalor, misery, disease, and all the other disagreeable results of civilization gather together.

So much faith does Mr. Aldridge place in the Wheatley Act that he even thinks it unlikely that the present Government will interfere with its financial provisions. "It is a foregone conclusion," he writes, "that there will be no endeavour—or even desire—on the part of the Government elected on October 29, 1924, to destroy the financial provisions of the 1924 Act, with its greater stimulus to the building of houses by local authorities for tenancy by ordinary working-class families." We think if any conclusion is foregone it is just this, that the present Government will endeavour to turn the scale in favour of private enterprise by reverting to the Chamberlain plan of a smaller subsidy and less restrictions.

These, however, are matters of opinion; the fact remains that Mr. Aldridge has produced an extremely useful volume in which he lucidly expounds the intricacies of the Acts of 1923 and 1924, and anyone who wishes to know what can and what cannot be done, how to set about doing it, and what will be the financial advantages, cannot do better than to refer to the "Guide to the Administration of the Housing Acts, 1923 and 1924." H. J. B.

"Guide to the Administration of the Housing Acts, 1923 and 1924." A supplement to the "National Housing Manual." By Henry R. Aldridge, Secretary, National Housing and Town Planning Council. Price 8s. 6d. net.

Correspondence

The Oldham Nurses' Home Extension Competition

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—In criticizing the winning design of the above competition in your last issue, your critic states that the recreation room is inadequately lighted, and that there has been an attempt to borrow light through the sisters' room. Between the two rooms there is what I take to be a sliding partition, which can be removed on the occasion of social functions. Your critic has overlooked altogether the dome light which would make the lighting entirely satisfactory.

It would be interesting to have an explanation of the difference between the £20,000 to £30,000 stipulated cost and the estimated cost of £11,000. Was the first to include furnishings? H. T.

Concrete and Cement as Decorative Materials*

By T. P. BENNETT, F.R.I.B.A.

WITH the rapid development of steel as a constructional material, and the parallel development of reinforced concrete, architects and designers are faced with the necessity of studying surface treatment which can be used for the design of buildings which arise directly out of the constructional materials employed, and particularly out of cement. The rapidity with which these constructional materials have developed is something which is new in building construction, and the constructional revolution which has taken place is perhaps as yet only imperfectly realized by those who are faced with the responsibility of using it.

For some thousands of years brickwork and masonry have been the principal materials employed in the erection of buildings, and in the last century, when steel and iron first became prominent, they were regarded merely as supporting materials, and were faced with stone or brick, producing what one might call pseudo brick or masonry buildings. The objections to this system of facing one constructional material with another constructional material are rapidly becoming evident, and the most active brains in design cannot help seeing that the day is not far distant when steel and concrete building must evolve its own method of expression. This is being rendered increasingly important because we are realizing that the use of steel and concrete does not merely alter the external appearance of the building, but it alters the fundamental proportions upon which the design must be based. Design is, of course, much more a matter of proportion than of surface decoration, and it is therefore impossible to employ steel economically and cover it with a masonry skin with any real chance of a successful result.

In examining the history of the subject we find that concrete was used externally by Roman and Byzantine builders, and that they evolved methods of decoration of their own. In Roman work concrete was not reinforced with metal, and the proportions of the parts of their buildings, therefore, approximated to the proportions of masonry structures. Furthermore, the social conditions of the Romans demanded the use of excessive areas of concrete in order that they might safeguard themselves against possible failures from the employment of unskilled slave labour. As a result, piers were of massive proportions, vaults were sufficiently thick to eliminate thrust, and other parts of the structures were adjusted to give considerable effect from deep reveals and projections. From these social conditions springs also the principle of Roman decoration; that is to say, the Romans were able to command an unlimited supply of men, the majority of whom had little or no skill, but they were able also to command a supply of other men of highly-developed skill. Thus it will readily be seen that the most economical method of producing buildings was to build the carcass and case it with ornament. In the Roman baths, in the Roman palaces, in the great Fori, we get, therefore, mass concrete as a base, and plaster mosaic or marble sheeting as a finish. It seems to me logical to accept these broad systems of the Romans as possible sources of inspiration for our own buildings, because, although we have not experienced similar social conditions, the scarcity of skilled craftsmen and the steady increase in the number of unemployed unskilled men is tending to bring about a set of conditions which are not dissimilar.

Among the methods of decoration employed during the Renaissance in Italy was "Sgraffito." You are all familiar with the principle upon which this work is executed, namely, the introduction of a coloured base over which was placed a coat of plaster of a different colour, upon which a design, was impressed by rubbing, or pricked, and the subsequent scraping away of the top coat and the exposure of a permanently coloured ground. I am informed that "Sgraffito" in England is a lost art, and that it is impossible to obtain any men who are capable of executing it. This is put forward as a complete bar to its revival or present-day use, but it seems to me that if a system of decoration can be proved to be suitable for execution on a particular and much-used material it should be possible to train or obtain men who can carry out this work. In principle, "Sgraffito" seems to me to be particularly valuable as a method of decorating reinforced concrete buildings. *In situ* work is difficult on structural concrete, but I think structural concrete might quite well be mixed with a definite colour which would be part of the final scheme, and that over the top of this structural work it might be possible to put a coating of stucco in a second colour which would be scraped away and would expose the coloured ground, thereby producing a two-coloured scheme at relatively small cost. I am impressed by the fact that "Sgraffito" seems to meet many of the demands of reinforced concrete, and to be capable of sustaining the principles upon which modern decoration is based.

With regard to possible methods of surface treatment, the first of these is the possibility of colouring grey Portland cement used in blocks, or used as a fixing material. The first difficulty we have to face is a tendency of the acid in the cement to destroy the colour in the material; and the second, the tendency of the colouring material to destroy the setting powers of the concrete. I have arrived at a rough distinction in colouring materials which I believe to hold good universally, but which I have not yet completely tested. This distinction indicates that pure metallic colours are perfectly safe, both as regards permanence of colour and the absence of deleterious effect to the setting of the concrete. Lakes, which are mainly aniline dyes superimposed on colloidal clay, retard and may even completely destroy the setting powers of the concrete with, of course, disastrous results to the block or the stucco. Earth colours have a similar effect. I am at the moment using a purple oxide of iron in concrete blocks, which appears to be producing a very interesting warm red-purple.

Mr. R. R. Butler, chemist, of the Northern Polytechnic, has commenced to build up some definite information on this matter, and although his investigations are in their infancy, I am able to give a few details. We have experimented with certain dyes in an effort to mix cheap water dyes with the water, and so colour the whole of the cement at a more or less nominal cost.

The results obtained by mixing these dyes with cement have been more or less negligible. We are continuing these investigations. So far as the possibility of mixing ground colour with concrete is concerned, the following table may be of some value, as it indicates the percentage of alumina, or clay, which is present in a number of colours, and gives other colours which possess sufficient alumina to make them unsatisfactory. It will be seen from this list that safe colours are difficult to obtain, and that the colour-range is at present very restricted. We hope to be able to add to this list in the near future :—

Safe colours.—Red oxide of iron (Fe_2O_3).
Purple ,, ,, ,,
Chrome yellow (lead chromate).
Vermilion.

Unsafe colours.—Derbyshire ochre (10 per cent. alumina).
American ochre (4 ,, ,,).
Italian sienna (3 ,, ,,).
American sienna (5 ,, ,,).
Turkey umber (3 ,, ,,).
Devonshire umber (13 ,, ,,).

* Extracts from a lecture to the Institute of British Decorators.

Umbers and siennas in general are unsafe because they contain clayey matter.

Ultramarine contains clayey matter.

Prussian blue will turn brown because of the presence of lime. It will not stand up to alkalis.

Brunswick green is Prussian blue mixed with chrome yellow, and is therefore unsafe, and will lose its colour.

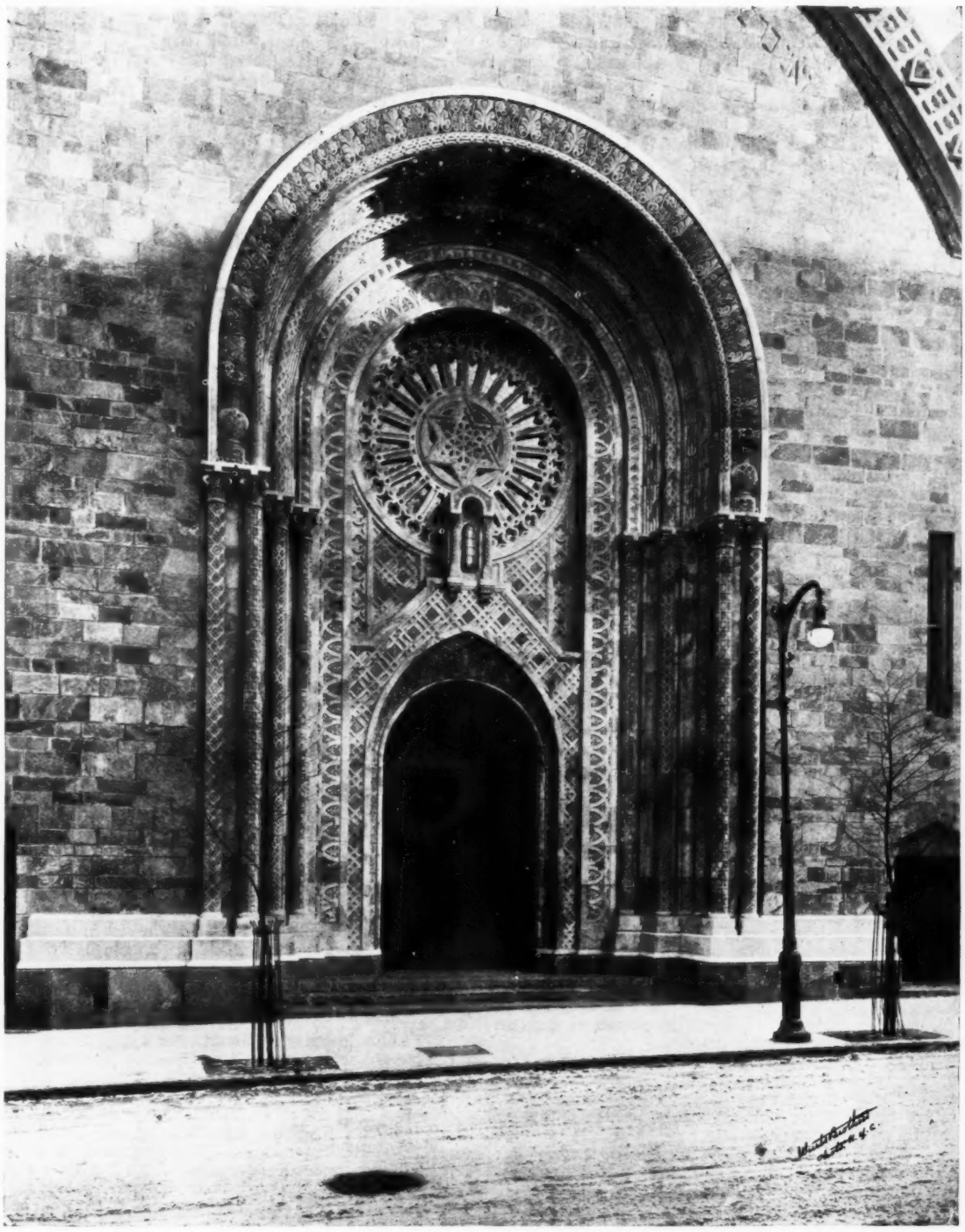
"Lakes" are organic colouring matter, and are mixed with clayey matter; they are therefore unsafe.

The next point which is of interest is the employment of the white cement. White cement is valuable for two reasons: (1) it provides an extremely attractive surface in itself; (2) it can be made the basis for effective colouring contrasts. Atlas White cement has been employed in a number of buildings in America, and is slowly finding its way to England. Its first possibility is as a pointing material, its second as a stucco. I have slides of a number of buildings in which it has been used in this way. Atlas White, even more than grey cement, lends itself to the use of scrubbed surfaces and coloured aggregates. Scrubbed surfaces with marble chipping or with stone produces some extremely interesting effects. The Art Pavements and Decorations, Ltd., have lent me some examples of this scrubbed work, which seems to me to be very attractive. I have inquired into the possibility of using scrubbed work upon original structural concrete, but I have found that considerable difficulty is experienced in striking the forms and executing the scrubbed face at the exact period in the process of setting, which leaves the concrete sufficiently hard for structural purposes, and is still sufficiently soft to enable it to be scrubbed. So definite is this difficulty that the attempt to execute scrubbed face on structural concrete has been abandoned, and it is usually employed upon a stucco surface subsequently added to the main structure. I have, however, succeeded in scrubbing the face of concrete blocks which are cast before being put into the building, and they have extensive possibilities. Attempts have also been made to obtain these surface finishes by treating the concrete with muriatic acid, which attacks the cement and leaves the aggregate untouched. Such a method might have very great value if one could be certain that the action of the acid could be permanently arrested at the desired moment. My recent investigations into the rusting of steel have shown that it is possibly a more serious feature than we have hitherto been led to expect, and that one is therefore extremely nervous about using an acid treatment which may perhaps go on operating after the building has been completed and when many parts of the structure are not accessible.

The scrubbed faces on concrete are produced by scrubbing the face of the block with a wire brush about twenty-four hours after it has been cast, or alternatively scrubbing the stucco front of the building at about the same period. It is necessary to get the stone in just the right condition, as if it is too soft the scrubbing causes the aggregate to loosen, and if left too long the surface is too hard to remove the cement. As many of the best effects are obtained by using a relatively costly aggregate, such as marble, it is necessary to back up the stone accurately in order that none of the backing may penetrate to the face of the stone. In Italy, where a number of buildings have been treated with cement, it is usual to tool the face of the blocks, leaving a margin of plain material around each block. This effect is interesting, but the cost is naturally higher than that of the scrubbed face.

If concrete is used in window dressings, mullions, and other small details, I am informed that the cost is about 17s. 6d. per cubic foot. The cost of the moulds is extremely heavy, and if the dressings could be standardized this cost would be reduced. The tooled face would cost approximately

A MODERN AMERICAN HOTEL AND APARTMENT HOUSE, SHOWING THE USE OF WHITE CEMENT.



ENTRANCE TO SYNAGOGUE, 88TH STREET, NEW YORK CITY. HERTZ AND SCHNEIDER, ARCHITECTS.

(THE DOORWAY IS IN WHITE CAST-STONE.)

1s. per foot super more than the washed. A material called "Biancola" is also being constructed of cement and marble chippings, finished with a polished face, which is suitable for lining walls or for forming partitions in bathrooms, etc. The cost of this, 2 in. thick, is 6s. per foot super, polished on two faces.

By using cast ornament it has been possible to obtain a certain richness of effect which is in many cases very valuable. Several attempts have been made in America to deal with this problem, and the result in many of these cases is excellent.

In this case the ornament is cast in moulds, and is then touched up by the carver, so that considerable sharpness and detail are obtainable without excessive cost. Again, I see no artistic objection to the use of cast ornament, provided it is applied with real intelligence and artistic feeling, bearing in mind that practically every building which is now erected is faced with the problem of high cost and the difficulty of adequate commercial return, and that we are bound to recognize the demand for economic methods of enrichment and for what one might call constructional methods of design.

I myself executed some relief sculpture cast in Roman cement at Messrs. Brinsmead's premises in Cavendish Square. These figures were only possible by using such a medium. In any other medium they would have been automatically eliminated on the score of expense. They were modelled by Mr. Gilbert Bayes, the well-known sculptor, and show that the employment of artists of recognized standing may be accepted simply because the material in which the work is to be executed is available at a price which is commercially possible. The whole of this front was similarly executed in Roman cement and finished in paint, the paint being applied almost as soon as the cement had dried. Except to a very minor degree the paint has not been affected by the cement. The cement work and painting were executed by Messrs. Greene and Abbott, and the figures cast by Messrs. Jackson.

In conclusion, I would briefly recapitulate the ways in which cement and concrete have hitherto been used and the methods of decoration which have been employed, and would suggest to you that the investigation of this subject is still in its infancy. There are many possibilities in the material, and both architects and decorators will be forced to investigate them and become familiar with them. The necessary readjustment of proportion must first of all be considered as a matter of paramount importance in the design of reinforced concrete structures. The use of mass concrete, pre-cast concrete, and concrete blocks are three phases of the subject which have certain similarities, but are susceptible to different treatment.

Passing from simple to expensive methods we have: (1) pre-cast coloured blocks; (2) plain rough cast; (3) stucco capable of receiving a large variety of finishes; (4) scrubbed face with various coloured aggregates; (5) coloured cement with metallic colours; (6) pre-cast ornament and sculpture, fixed either directly from the mould or touched up by the carver; (7) tooled face on cast concrete blocks or stucco walls; (8) stucco painting; (9) fresco painting, either as geometrical ornament or geometric and free ornament; (10) "Sgraffitto"; (11) Pompeian decoration and pure fresco work; (12) sheeting with various rich materials, such as faïence, vitreous glass tiles, mosaic, or marble.

Enquiries Answered

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

HEATING WATER AND COOKING BY OIL-FUEL.

"Subscriber" writes: "(1) What types of apparatus are used for: A, heating water for domestic purposes; B, cooking for domestic purposes; C, heating water for radiators by means of oil-fuel? What principles are involved? (2) What is the approximate and relative heating value to be obtained from commercial oil, versus heating value from anthracite or coke, taking into consideration the current prices for these commodities delivered in London?"

—Commercial oil-fuel has hitherto been principally applied to large steam-raising plants, and the types of domestic apparatus used for the provision of hot water and for cooking have been the calorifier, the steam oven heated by steam pipes or jacket, and the steam jacketed copper and vegetable boiler. Hot water for radiator circuit is produced by means of a steam coil in a cylinder on the calorifier principle.

It is at present exceptional for oil-fuel to be burned to heat oven or pan without the interposition of a steam-raising installation, for the flame of the oil-jet yields an intense local temperature unsuited for culinary operations except when controlled by an expert engineer.

The principles involved in the design of apparatus for: A, domestic water supply; B, cooking; and C, radiator circuit by means of commercial oil-fuel are:—

1. The complete combustion of the oil so that no particle escapes to the smoke stack, and the maximum temperature is produced in the form of available thermal units.

2. The conservation of the heat so obtained, and its application at chosen points only. The first principle is satisfied by the efficient design of the oil spray, air supply, and fire-box in connection with the water to be evaporated, and the second by surrounding all pipes and apparatus with a sufficient layer of non-conducting material to economize the heat obtained by the intense oil-flame.

At St. Thomas's Hospital, where commercial oil-fuel has been introduced as the principal heating agent, the conservation of heat has been achieved by careful lagging of all surfaces, and by placing a battery of nine large calorifiers in a chamber relatively near the boiler-room.

The hot water for domestic supply, as well as that for the radiators, is arranged as a circulating system, so that an immediate supply of hot water is obtained without drawing off a stream of cold and lukewarm water that has been left to stagnate in a branch pipe. This radical improvement eliminates a very real and very irritating delay, and relieves the calorifier from the burden of heating an equal quantity of cold water to replace the tepid water run to waste.

Attention to this point would, of course, be valuable in a system fired by any kind of fuel, but is particularly important wherever it is desired to make the most economic use of a powerful heat producer at a distance from the points at which the supply will be drawn off. In both the domestic water supply and the radiator circuits the circulation is aided by means of two sets of two 5 in. axial steam-flow turbine pumps. Steam mains are also run for heating sterilizers at local points in the hospital.

The oil-jet in use at St. Thomas's Hospital is the joint invention of Mr. Franklin, the chief engineer of the hospital, and Mr. Harry Stephenson. Oil is delivered to the burner by gravitation under a head of 6 ft., and is broken up into a revolving spray by passing through twelve tangential apertures in the nozzle. The oil-spray is further divided, and is projected into the mouth of the furnace by means of a continuous current of pre-heated air moving at considerable velocity through a tube placed concentrically around the oil-delivery pipe.

A secondary air inlet at the far end of the combustion chamber supplies additional oxygen to the flame, and at the same time causes it to spread and to traverse the complete surface of the firebrick lining, which is raised to an incandescent state, before the products of combustion escape into the flue. Provision is made in the burner for heating and atomizing the oil by means of a steam jet, but in practice it is found that

this is not needed with the pre-heated air-current and the concentric bush of the steam nozzle is screwed back when the flame is working on the air blast.

Boilers of Lancashire type with fire-boxes converted into firebrick cylinders are used with the oil-fuel, and good results have also been obtained with a Babcock and Wilcox water-tube boiler installed in a separate boiler-room. The fire-box is adapted for four jets, of which two only are fed with oil, and each flame is met by a current of secondary air from the jet on the opposite side of the combustion chamber. The water-tubes are not in immediate contact with the flames, but receive radiant heat without the deposition of soot, and a very high evaporation efficiency is attained.

2. The approximate relative heating value of oil-fuel as compared with anthracite or coke naturally differs considerably in different plants, or even in the same plant when run on pre-heated air or steam jet atomizer. Approximately 18,000 British thermal units can be produced per pound of oil burned under suitable conditions as against 12,000 British thermal units obtained per pound of good steam coal.

At St. Thomas's Hospital, where the oil-combustion is singularly complete, an actual saving of £900 in twelve months on the fuel bill is reported. In other cases where the methods of oil burning are not so highly systematized, and the conditions are less favourable, the actual cost of fuel consumed is stated to be about the same for oil as for coal.

Oil-fuel possesses some incidental advantages, however, that assume primary importance in certain cases. Large sums of money are saved in regard to removal of dust and ashes, not only from the ash-pit, but from gutters and down-pipes to which they have obtained access when discharged as partially consumed fuel from the chimney-stack.

The cleaning of window-glass and skylights and decorative paintwork in the neighbourhood of a boiler-flue is very considerably lightened by the change from coke to oil-fuel, and the saving in cost should be placed to the credit of the oil.

In the case of Messrs. Debenham's large drapery establishment, near Oxford Circus, these secondary considerations have more importance than the prospect of economy in the fuel bill itself, and the adaptation of two large Lancashire boilers for oil-firing was made as much in the interests of cleanliness as in the expectation of reduced cost.

It is found that the stock is preserved for a longer time free from damage by smuts, and the pavement is not rendered untenable by piles of coal and coke around the cellar shoots. In this instance the fuel costs are quoted as being much the same before and after the change, but reduction in stoking charges is experienced with the oil-firing.

A smaller delivery nozzle is used which feeds oil to the fire-box under a pressure of 60 lb. to the square inch at a temperature of 200°F., the steam-jet being used as atomizer. Ten to twelve pounds of water are evaporated per pound of oil burnt. The steam so obtained is used for water heating for domestic purposes, including the supply of three hundred lavatory basins, for cooking, and the radiator circuit in several blocks of building. Calorifiers and pumps are used to ensure continuous service and pressure, and all pipes are heavily lagged.

Not the slightest scent or sign of oil was noticed in either installation. Although but little attention is needed, that little must be intelligent, and further invention would seem to be necessary before oil-fuel can be adapted for economical exploitation in the kitchen of a private house. For office buildings where some cooking and some domestic water supply is required, in addition to a radiator circuit, oil-fuel is likely to prove highly beneficial.

W. H.

A SHALLOW WELL.

"W." writes: "Which is the best way to deal with the water from a well under the following conditions? The well was sunk in September in a clay soil on moderately high ground. The spot was indicated by a water diviner, and a small supply of water was discovered about 16 ft. or 17 ft. from the surface, in sand. The excavation was carried down to another 3 ft. in order that a wooden vat might be inserted. A vat was necessary at this point, because a stratum of running sand had been reached. Had we bored farther we should have gone beyond the part containing the water, the edge of which had been apparently cut through, as the water was percolating through one side of the well only. The well has been bricked up. The supply of water has been about 4 ft. or 5 ft. deep, and has been gradually clearing itself while being drawn upon for the purpose of building the dwelling. It is now proposed to convey the water to the dwelling by means of a lift and force-pump to a tank in the roof of the dwelling, to supply the usual household fittings. A few days ago, on visiting the site, I was surprised to find that about 12 ft. or 15 ft. of very dirty water had accumulated in the well in the course of a day or so. Is this due to the supply of water being too near the surface, and therefore been affected by the changing weather conditions? Is it wise to rely upon this to supply the dwelling (for three persons), and would it be best to have a chemical or other filter?"

—The presence of dirt of any kind in the water indicates that some system of purification will be needed before it can be used for drinking purposes. The nature and quantity of the impurities must be taken into account in devising a filtration scheme, and to ascertain this analysis of the water is necessary. If the dirt is merely caused by the presence of inert earthy particles stirred up by the recent excessive rains, rough filtration and settling in a storage tank might suffice to clear the water and make it wholesome. When the supply is contaminated by organic matter liable to contain disease germs, purification is more complex. Either a succession of coarse and fine sand filters and settling tanks are installed or the work may be carried out in a pressure filter supplied with a suitable chemical coagulant. Bacteria are sometimes destroyed by ozone treatment, or by chlorination. Chlorinated water has a decided taste, and a further process of dechlorination is used to remove the taste and the detritus of the former process. Boiling under pressure for twenty minutes is sometimes resorted to for the purpose of sterilizing drinking water.

The sudden rise in the water-level in the well may indicate that the new cutting for the well has allowed surface-water from the adjoining ground to flow down just outside the brick steining, and enter the water supply at the bottom of the brickwork or through its joints. In this case a catchment trench that would collect surface-water and convey it away from the well to lower ground would remove the cause of the trouble. Or, the excess of dirty water may be due to surface-water obtaining access to the subterranean supply at a point some distance up the hill through fissures which permit of its free flow without subjecting it to natural filtration. Careful scrutiny of the surroundings might reveal whether this is so.

The nature of the land farther up the hill on which surface-water collects must be considered in determining whether it is wise to rely upon the well. The presence of dwellings with large accumulations of manure, kitchen-middens, or leaky cesspools from which liquid filth periodically overflows into the supply after heavy rainfall, would necessitate extremely careful filtration and constant vigilance on the part of the householder. If such conditions apply it would be advisable to catch a separate supply of drinking water from the roofs of the house and store it, after filtration, in impervious tanks. These might be supported as near as possible to eaves level, in order that the supply can be made to gravitate to draw-offs at convenient points without necessitating recourse to pumping. The well-water would still be useful for gardening and some household purposes.

W. H.

HOTEL CLASSED AS PUBLIC BUILDING.

A "Subscriber" writes: "The Building Act says that a hotel above a certain number of rooms is classed as a public building. Therefore is this point applicable to Section 41 of the Act?"

—In answering the enclosed question, I have assumed (possibly incorrectly) that it has reference to a London hotel. The words which I have underlined in the enquiry cause me some difficulty. What I understand your correspondent to desire to ask is whether a London hotel of more than 250,000 cub. ft. in size, and having sleeping accommodation for more than 100 persons, must be built in accordance with the provisions of Section 41.

Section 5 of the London Building Act, 1894—the principal Act of Parliament relating to metropolitan buildings—enacts that an hotel which has more than 250,000 cub. ft. in size or has sleeping accommodation for more than 100 persons is a "public building."

We understand the question to be whether Section 41 of the same Act applies to hotels of the size described above.

In our opinion, it does not: but having regard to the importance of the enquiry and to some want of clearness in the wording of the question, it would be well to have it repeated and the facts set out.

S. J. S.

Mr. Louis F. Giron on Nationality in Architecture

MR. LOUIS F. GIRON, M.R.I.A.I., in his presidential address to the Architectural Association of Ireland, said that the Association were assembled in their new home for the first time that night, and it was his privilege to offer the members—on behalf of the committee—a most hearty welcome. Their entry into the premises marked the opening of a new chapter in the history of the Association. They owed the Institute a great debt of gratitude. The housing of the two bodies under a common roof should be of advantage to both, as it should provide more intimate contact and closer co-operation in dealing with matters affecting their common interests.

With regard to nationality in architecture, he continued: "Architecture has been very aptly described as the printing press of all the ages, which gives a history of the state of society in which it was erected. The truth of this definition at once becomes apparent upon looking back over the past. The works of the Greek, Roman, Romanesque, Gothic, and Renaissance periods in architecture become so many chapters in the world's history, each unfolding its story of relentless power, of conquest, of defeat or piety, and so forth, and giving an invaluable guide to the life and habits of the people.

"While we cannot trace individual expression in the works of the Romanesque and Gothic periods, there is a quality in them to which I would direct special attention, and that is the expression of National temperament. German Gothic differs from French and English differs from both, but the difference is not a difference of style, because the fundamental principles are the same, but a difference of expression due to National temperament. Our Irish Gothic possesses this quality, too, in a marked degree. Temperament is an essential element in architecture, just as it is in painting, music, or any other of the arts.

"Since the eighteenth century we appear to have lost much of our power of National expression, and this, I think, is probably due to the various revivals of the nineteenth century which broke down development on traditional lines. The publication of Stuart and Revett's 'Antiquities of Athens,' Robert Adam's 'Spalato,' Inwood's 'Erechtheion,' and other works brought about in England an increased interest in classic work, but at the same time a lot of slavish copying, while early in the nineteenth century the publication of works on Gothic by Batty Langley, Rickman, Brandon, and others, created a new interest in Gothic work. About the 'fifties of the last century the battle of the styles was raging fiercely, Ruskin, Parker, Sharpe, and others defending Gothic against Cockerell, Donaldson, and their following. This wordy warfare can hardly be claimed as resulting in a victory for either side, for while the Gothic revival was in progress the followers of the Classic school still kept their flag flying.

"Both parties left behind them some very scholarly achievements, but while I respect their memories, and admire the courage they displayed in defence of their convictions, I cannot help thinking that they unconsciously dealt a blow to National architecture by modelling their designs on foreign works.

"The question is how are we to restore this character which is wanting in much of our modern work? I believe that it can only be done by the establishment of a central live school of thought wherein our embryo architects will be trained to think as Irishmen all the time, and where they will be taught to develop their art on traditional lines, and to study and learn the proper application and use of the native materials with which our country abounds. Why is France so far ahead in the matter of National architecture? It is simply because for the past 200 years her sons have enjoyed the advantages of a State school, whose curriculum is framed on sound principles calculated to equip the student with that wealth of knowledge and culture which is necessary to the full expression of National ideals and aspirations in architecture. See the wonderful progress in America where architectural education was introduced only in the middle of the last century. In England, too, a number of schools are now established on a sound footing, and are tending to produce a more stable line of thought in matters architectural.

"Much has been said and written in recent years on the subject of establishing a Gaelic culture in this country, and efforts are now being made towards that end. As culture finds its highest expression in the arts we may express the hope that architecture—the Mother of the Arts—will not be overlooked in any scheme which may be formulated.

"It would seem more unnecessary in these days than ever before to emphasize the importance of architecture as a National asset, especially in Ireland, and although we architects may be accused of having an axe to grind if we venture to do so, let me conclude with the words of one whose axe has long ago passed the grinding stage—Sir Christopher Wren—who said 'Architecture has its political use; public buildings being the Ornament of the Country, it established a Nation; draws people and commerce; makes the people love their native Country, which passion is the great original of all great actions in the Commonwealth. 'The emulation of the Greek cities was the true cause of their greatness. The obstinate valour of the Jews, occasioned by the love of their temple, was a cement that held that people together for many ages through infinite changes.'"

MR. LOUIS F. GIRON, PRESIDENT, A.A. OF IRELAND.

Contemporary Art

Pastels and Water-colours and Oil Paintings.

The drawings of architecture, shipping, and dock scenes exhibited by Henry Winslow at the Cotswold Gallery are quiet and subdued in colour and in statement, but are none the less impressive. They are actualities rather than pictures; things realized keenly and presented carefully. Their author has a fine sense of form, and selects his compositions rather than invents them, and modifies his realism, stopping short of the pictorial effect. They are the essential studies of the things seen: three of them at Locarno—"Old Courtyards, San Quirico," and "San Vittore—The House of the Madonna," which is very good, and "A Farm and Church." The pastels are of New York subjects.

Mrs. Ralph Berners has roamed from Kashmir to Jugo-Slavia, apparently with a light heart and an ever-ready colour-box. Her considerable collection of water-colour sketches at Walker's Galleries has properties mainly of topographical interest. She has not attempted anything at all subtle, but has been content to record typical scenes in a facile way to which her art is quite equal.

There are some pleasant drawings at the Panton Art Club at 43 Leicester Square, and "Hawthorn, Hendon," and "Shillingford Village" are pictures by Edith M. Fry which have a nice feeling for their subjects. The prints are above the average of accomplishment of the exhibition, and "The White Warehouse," by Eleanor Fell, and several by John F. Greenwood are very good indeed. There are two busts by Mrs. N. F. Besseiner which have character, and "The Head of a Dancing Girl" is carved in wood. Amongst the craft-work shown are examples of pottery, bookbinding, lacquer-work, jewellery, and weaving.

At the Twenty-One Gallery in the Adelphi, Elizabeth Drury has a small collection of landscapes, still life, and portraits. The best thing is undoubtedly "Sutton Veny: I," a portrait which has promise in its unassuming quiet treatment. Most of the other work is somewhat clamant, and hardly rises to the importance of the occasion.

Still Life.

At the Phillips and MacConnell Gallery at 96 Bond Street, Ethel Mayer has used still life largely in conjunction with pleasant interior details, and thereby achieved a decorative success. Her flowers, lacquer boxes, desks, panels, and bowls are all rather charmingly welded into colour-patterns, and in the proper environment will certainly justify themselves.

Hampstead Pottery.

It would be interesting if one more artistic association should develop on the Northern Heights. Adjacent to the Heath, at Bellis's art shop, 3a Downshire Hill, there are indications, for Miss Waldram, an old pupil and helper of Lewis F. Day, is showing examples of her efforts in ceramics. She is making pots and bowls, dishes and dress-ornaments out of the London clay she digs locally. These things she fabricates herself, decorates them, glazes and lustres them, and fires them in her own kiln. The idea, so far as it has gone at present, has succeeded, and the failures, as is often the case in pottery, are amongst the decorative successes. Accidental happenings have given to them an unforeseen charm. No large work has as yet been attempted, but possibilities have been demonstrated. Here might be founded a new source of majolica for decorative purposes of a very interesting character.

The other side of Miss Waldram's work is normal in character. She takes ordinary plain china forms and decorates them with patterns of flowers, foliage, birds, and other motifs in the style which is associated with her late master, and makes a design overlay, which she fixes by firing in her kiln. The advantage of her pottery is that original and particular designs are obtainable instead of designs repeated time after time.

National Portraits.

The exhibition at 35 Russell Square consists of 156 portraits of distinguished men of the day out of the 2,000 collection made by Walter Stoneman as the National Portrait Gallery Photographic Record—an admirable and, indeed, an essential contemporary historical effort, under the auspices of the Royal Photographic Society. The photographs are, of course, of the highest character in themselves.

KINETON PARKES.

Parliamentary Notes

[BY OUR SPECIAL REPRESENTATIVE.]

Mr. N. Chamberlain, the Minister of Health, said that under the 1923 Act the number of houses approved to date had been 53,535 in the case of local authorities, and 116,858 in the case of private enterprise. For the twelve months ended September 30 last there had been built all over the country 110,000 houses. The maximum number of houses ever built in any one year was 129,000. Of these 110,000 houses upwards of 90,000 were of a rateable value of under £26 a year. On October 1 there were actually under construction another 92,000 houses, of which 71,000 were being built by private enterprise. Therefore, not only was private enterprise now supplying the greater number of houses constructed in the country, but he expected that the rate of building during the next twelve months would be very much in excess of that estimated last year. He intended to give Mr. Wheatley's Act of 1924 a fair trial; it should stand or fall on its own performance. The scheme organized by Mr. Wheatley for the augmentation and better distribution of labour and materials was a statesmanlike piece of work which he (Mr. Chamberlain) intended to support and encourage by every means in his power. He did not intend to proceed further with Mr. Wheatley's Bill to control the price of building materials, but the Government would keep a watchful eye on all building costs, and if they found reason to believe that the public were being exploited by anybody they would take their own measures to put a stop to such exploitation.

Dealing with new methods of construction, Mr. Chamberlain said recently he paid a special visit to Glasgow to see what was being done by Lord Weir and others who were designing and building houses of different types. He came back feeling very hopeful. Lord Weir's house was not a steel house. It was constructed with a timber frame, lined with steel plates on the outside, and lined inside with a material composed of compressed wood pulp and asbestos, which looked like smooth-faced brown paper or cardboard. He was not going to try to force a steel house on anybody who did not want one, but he was anxious that the working people should have an opportunity of judging for themselves. Hence he had made an arrangement under which Lord Weir had undertaken to set aside a part of his factory for the production of a certain number of demonstration or experimental houses to be supplied to local authorities. In order that it might be done quickly, and that local authorities might be ready to take these houses, he had, with the concurrence of the Chancellor of the Exchequer, set aside a certain sum of money from which he would give a grant to any local authority that was taking these particular experimental houses, and in return he should ask the local authority not to let them to begin with, but to erect them in some spot where they could be readily visited and inspected by the public. His own view was that these houses were not unpleasant to the eye, but were exceedingly comfortable and homelike inside. The cost must, to some extent, depend on the quantity ordered, but Lord Weir had authorized him to say that the cost would be lower than that of a brick house. Lord Weir had a "unit" factory in Scotland which could be multiplied to any extent over England and Wales. There were a number of unused factories which could be adapted to turn out these parts if the demand increased, and the manufacture would take place locally as far as possible. He was not committed to the approval of this type to the exclusion of all other types. A considerable number of types would probably be submitted to public approval, but ultimately they would, perhaps, get down to two or three.

Obituary

Mr. Fred Livesay.

We regret to record the death, which took place at his residence, Cleabarrow, Cockton Hill, Bishop Auckland, of Mr. Fred Livesay, architect. He had been in failing health for a very considerable time. He was fifty-five years of age, and was born at Staindrop.

Mr. James F. Fuller.

We regret to record the death of Mr. James F. Fuller, architect, at his residence, 51 Eglinton Road, Dublin, at the age of eighty-nine. He was for many years architect to the representative body of the Protestant Church in Ireland, to the benchers of the King's Inn, and to the Board of National Education. He designed many churches and residences.

The Prevention of Smoke

Professor Julius Berend Cohen, Ph.D., B.Sc., F.R.S., recently delivered a Chadwick public lecture on "Smoke—Its Cause, Nature, Effects, and Methods of Prevention," in the Gallery of the R.I.B.A. Sir Frank Baines, C.V.O., C.B.E., occupied the chair. He said that according to Professor Foster the average individual inhaled 2,600 gallons of air in twenty-four hours, or about 34 pounds by weight, as against 5½ pounds of food, liquid, and solid, or six times the weight of food. The lungs were more delicate in structure and function than the digestive organs, and we could not with impunity inhale a vitiated air without permanent injury to our breathing apparatus.

We might assume this, although definite evidence was difficult to obtain in so far as smoke was concerned, as the life and habits of town dwellers being so different from that of country folk, mortality statistics were of little use. Smoke was produced either by an insufficiency of air or too low a temperature (or a combination of the two), for complete combustion as instanced by a paraffin lamp burning with and without its chimney.

Soot from factory chimneys was very different in character from that from domestic fireplaces, where raw coal was burnt. In the former case, owing to the high temperature and strong draught the volatile portions of the coal were mainly consumed, whilst the draught carried off mechanically fine mineral dust and grit mixed with carbon containing little tar. Domestic soot, on the other hand, might contain as much as a quarter of its weight of tar. It was this tar which caused the soot to cling, accumulating with time and blackening every surface it touched with a varnish which was not removed by rain.

The observations of Sir Frank Baines had made it only too evident that sulphur acids from coal (and there was no other source than coal) attacked masonry. Historic and beautiful buildings all over the country were undergoing slow, but certain destruction. Fabrics, leather bindings, and metal work were being similarly attacked.

What was the remedy? So far as factory smoke was concerned the Public Health Act of 1875 gave powers to the local authorities to stop unnecessary smoke, and ample evidence was forthcoming before the Committee on Smoke Abatement that boiler chimneys need not smoke. A strict enforcement of these powers would stop the great bulk of factory smoke. It was difficult to legislate for the domestic fireplace. Gas and electricity were coming more and more into prominence for cooking and heating, and that was a good sign.

R.A. Schools' Prize Distribution

A large number of academicians, students, and friends attended the R.A. Schools' annual prize distribution at the Royal Academy Galleries, Burlington House.

Sir Aston Webb, P.R.A., who was to have presided, was unfortunately forbidden to attend by his doctor, so the chair was taken by Sir Frank Short, R.A., who read a short communication from Sir Aston, in which he said it was his good-bye address. Sir Aston, in his discourse, congratulated the schools on the excellent work during the last year, and noted the general tendency to work on traditional lines. This, he said, was no doubt a good thing provided there was an adventurous personal spirit working at the same time. Imagination was a thing to be developed. It was for the old men to see visions of what might have been, and for the young men to dream dreams of what might be. But it is not for them to dream all the time; they must try and make these dreams into facts. Both dreamers and practical men were wanted in this world, and when both these faculties were found in one man, genius was produced, like Sir Christopher Wren and Sir Joshua Reynolds.

At the close of the address Sir Frank presented the school's prizes and made the following awards in architecture:—

Travelling Studentship (England) (£60) for a design of an Art School and Picture Gallery.—James Francis Mason.

Landseer Prize (£20) and a Silver Medal for a Design of a Propylæum.—Hubert Edwin Furse.

First-term Students: First Prize (£10) and a Silver Medal for a Design of a Group of Buildings.—Wilfred John Brookhouse Price.

Second Prize (£5) and a Bronze Medal for a Design of an Arcade with Shops.—Edwin Herbert Horsley Williams.

Perspective Prize (£5) and a Silver Medal. Subject: Burlington House Courtyard and Detail of a Building showing cast Shadows.—Ronald Owen Vine.

Measured Drawing Prize. Subject: The York Water Gate—First Prize (£10) and a Silver Medal.—Edwin Herbert Horsley Williams.

Second Prize, Bronze Medal.—Herbert James Hall.