ARCHITECTS' JOURNAL

Architectural Engineer

With which is incorporated "The Builders' Journal."



FROM AN ARCHITECT'S NOTEBOOK.

St. Paul's high dome amid her vassal bands
Of neighbouring spires, a regal chieftain stands;
And over fields of ridgy roofs appear
With distance softly tinted, side by side,
In kindred grace, like twain of sisters dear,
The towers of Westminster, her abbey's pride,
While far beyond the hills of Surrey shine
Through their soft haze, and show their wavy line.

BAILLIE.

Drawings of Architecture. 13.—The "Hampshire Chronicle" Office, Winchester



(From a pencil drawing by Harold Falkner.)

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Modernity in Architecture

HE word "modern" is a wonderfully attractive one. It calls to mind qualities of interest and desirability, it stimulates our love of mystery and surprise, yet it suggests a certain self-assurance born of maturity and knowledge. It is a noble, precious word. Let us, therefore, treat it with reverence and use it carefully, so that it never become cheap nor, worse still, be malappropriated by charlatans and sectaries. With what delightful expectation do we read for the first time the opening verse to "Leaves of Grass," in which the poet says, "The modern man I sing." That is exactly what we wanted the poet to sing, and we are well content to put our Shakespeares away for a while and listen to Modern Man. And what did Walt Whitman display to us? A modern man, indeed, but one who in spirit was at the same time very young and very old, who looked to the future yet embraced and redeemed the past, who was mightily intolerant yet "rejected nothing." What poetry affirms science proves, and the modernity which grows from reason is also catholic while yet exclusive, is linked just as much with yesterday as with to-morrow and rejoices to clothe itself in paradox

How can architecture be modern? To-day some people answer, "Through reason. Our reason will make us modern. If we but transform architectural composition into a science we shall be independent of the traditions of the past." Let us concede this at once. Architectural composition should henceforth become a science. It may be of advantage, therefore, to compare it with other sciences. There is in particular one science, the greatest and most venerable of all, which imposes on its votaries a strict integrity of mind. I speak of mathematics. Do the innovators in this science cry out, "Let us get away from the Binomial Theorem, let us at last have done with Logarithms, let us be bold and repudiate that horrid old back-number the Differential Calculus." Of course not, for in mathematics there are no "modernists"; that is to say, there are no men whose conception of modernity leads them to wish for a complete break with the past. That is because mathematics is a science. And we may take it for granted that there will be no "modernist" in architecture when architecture has also become a science. The modernists are persons who would like to have the prestige of being men of science without undergoing the discipline of science. One of the characteristics of science is that it is dominated by reason, and in its eyes the reason of the past, if this be right reason, has the same status and value as has the reason which is just being born, which belongs to the future. Intellect calls to intellect throughout the ages, and this communion is independent of time and place.

Of all the injuries to art which are directly to be attributed to an abuse of words none is greater than that caused by the far too common application of the term "modern"

to a work of architecture. It should be most clearly established that only a very small percentage of the buildings erected to-day are worthy of this title. live at the present time are often described as heirs of all the ages; we are not really modern, however, until we have entered into our heritage. One is doing no violence to this word in insisting that it should connote something which embodies the best knowledge of the past as well as of the present; a man must be learned before he can be modern, he must be aware of the splendour of ancient civilization. According to the terminology which we are adopting here, in mediæval times and in what are called "the Dark Ages the most notable works of art and literature were not modern even when first produced. That is why they exert little influence over us to-day. On the other hand, there have been eras when men had attained to such a high degree of intellectual emancipation that their achievements have not yet been surpassed. Plato and Thucydides are far more modern than St. Augustine or Calvin; the Parthenon is more modern than Westminster Abbey.

It is not a modern age but a new "Dark Age" into which Mr. Eric Mendelsohn and his friends would lead us. Yet Mr. Mendelsohn has an academy for architectural students. It is a bad prospect for our civilization when Nihilism emanates from the school. Most of the forms which Mr. Mendelsohn presents to us have, indeed, novelty; he designs doors and windows and roofs such as no mortal man ever saw before. But at this time of day are we in need of new species of door or window? Is it not rather the case that architecture, having now quite satisfactorily solved in a great variety of ways all the problems which concern the composition of the features and elements of building, must now look for its chief conquests in the harmonious development of cities as a whole? Is not such a task novel enough or grand enough for our modernists? A school of architecture like that at Liverpool, which was the first to establish a department of civic design in continual and intimate association with itself, though it may give us no doors nor windows the sight of which makes us rub our eyes with astonishment, yet it powerfully contributes to the main stream of cultural development; and when Professor Reilly goes out into the market place and, as he does in his articles on street architecture, exposes what is vulgar and pretentious in urban building of to-day, and seeks to impose standards of dignity and order upon our towns, such an activity is of greater public benefit than twenty modernist" movements.

It is said that all reformers have a blind side. The blind side of the "modernists" is the civic side. This is unfortunate, for it prevents them from taking any part in the main battle of architecture. They seem content if they make a little demonstration well behind the lines. And worse than this, they fail in loyalty to some of the causes

on behalf of which architects should unceasingly contend. Nobody can walk about London without being aware that day by day beautiful buildings, expressing the highest genius of the English race, are being pulled down for no reason whatsoever other than that people of to-day are either too lazy or too "busy" to put up a fight for their protection. Will the modernists lend a helping hand here, or are they secretly pleased at this wholesale vandalism? If the latter, then they deserve to have no status in the architectural world, for the complete architect is one who, while he brings into being buildings which are new and true and embody principles representing an addition to the treasury of human reason, yet preserves and fosters the greatness of his forbears. The noble buildings of the past which adequately serve a social purpose to-day are modern still. As soon as we deny them this title, we have sold the pass, and with the best conscience in the world the housebreaker comes along with his pick-axe.

A. TRYSTAN EDWARDS.

Drawings and Design

Modern architectural design has been often criticized for its complete subjection to the drawing-board, and few will deny the general justice of the criticism. Much modern street architecture bears on its face visible evidence of its origin. Features that look well in true elevation lose their significance when regarded from the pavement of a narrow street. How often we see hood moulds to windows hiding the detail of entablatures; projecting cornices partially obscuring the view of balustrades above. Fore-shortening is only one of the difficulties that beset the modern architect who must needs set down his thoughts on paper; there are many others that need not now be detailed. The point that we come to is: Is it possible to dispense with drawings in modern architectural design? Is it possible to do the designing, so to speak, on the job? Under the complicated conditions of modern building, the answer, generally speaking, must be-No. Yet we hear of architects who are dispensing with drawings wherever they possibly can. One distinguished architect will never provide a drawing for carved detail if he can avoid it; he sketches his design on the rough wood or the boasted stone and gives personal directions to the craftsman, much in the mediæval The possibilities in this respect are obviously limited, yet the fact that drawings are being dispensed with at all is surely a sign of the times. Even where they are essential, drawings are becoming simpler. The useful word "repeat" is much more frequently found upon them than it used to be. In some kinds of work, indeed, architectural design is becoming in a measure standardized. In the case of his very charming domestic work at Welwyn, Mr. Louis de Soissons has evolved some excellent standard types of windows and doorways that are capable of being used in a great variety of effective combinations. As a result there is no longer any need for elaborate drawings; a simple outline elevation with the types of windows and doorways indicated meets every requirement.

Bad Joins

A defect that is often noticed in the new street frontages of London that are everywhere arising as a result of intensive rebuilding operations, is the unsatisfactory way in which one building joins on to another. Mostly, adjoining elevations are entirely individualistic conceptions, often with different floor levels and roof lines. Sometimes, however, there is a blank wall surface several feet in width between adjoining buildings. This space certainly serves the doubtful purpose of marking off one building from another, but it gives far too much emphasis to the fact that the street is made up of a series of units, and definitely prevents any continuity of effect in the façades. Sometimes there are plain vertical strips of ashlar in between, with sections of cornice, string course, and mouldings

stopping off against them. No attempt is made to incorporate them with either of the adjoining elevations. There they remain like no-man's-land between two contending forces. It is as though the adjoining architects were reluctant to allow their designs to come into contact lest they start fighting. It is a pity that, with London in process of rebuilding, we cannot be more neighbourly together.

Bethlem Hospital

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The removal of Bethlem Royal Hospital to the country (presumably the existing building will be demolished) will mean a distinct loss to the St. George's Fields neighbourhood, which, apart from Lambeth Palace, Pugin's St. George's Cathedral, and a few streets of eighteenth- and early-nineteenth-century houses, has little of architectural interest. Bethlem Hospital itself, built in 1815 from the designs of James Lewis, is by no means a fine specimen of its period, but it has a good portico and a dome (added by Sydney Smirke, who was architect to the hospital from 1843 to 1868) that is the most conspicuous architectural feature of the neighbourhood. Bethlem Hospital has a melancholy interest for architects, for it was here that, after his mind had given way, Augustus Welby Pugin was confined-within a stone's throw of the two buildings with which his name is chiefly associated, the Houses of Parliament and St. George's Cathedral. Another inmate of the hospital last century was a well-known artist who had committed parricide. He was allowed to continue his work in the hospital, however, and it is understood that he was responsible for the large painting of "The Good Samaritan," which is, or was up to a few years ago, to be found hanging on the wall of the main staircase.

Decentralization

The decision to transfer Bethlem Hospital to the country is not to be wondered at, for the tendency in the matter of great metropolitan institutions is more and more towards decentralization. Charterhouse has gone to Godalming, Christ's Hospital to Horsham, King's College Hospital to Denmark Hill; while there are lesser examples of migration too numerous to mention. These changes of situation are due primarily to the great increases that have occurred in metropolitan site values, increases which, though in certain respects not to be regarded as an unmixed blessing, are positively beneficial in so far as they decree removal to a healthier environment. It is conceivable that the day will come when all the great London hospitals will be in the country, which is obviously the proper place for them. All that we shall have in the metropolis will be small clearing stations, with accommodation for accident and other emergency cases.

"Training Reliable Officials"

The West Riding Education Committee has appointed three pupils, under the West Riding Education Architect. to serve a five years' apprenticeship, during which they will be paid a salary of ten shillings per week. The object of these appointments is "to give youths in the county an opportunity of serving an apprenticeship to a profession which was really specialized "—to quote the words of Sir James P. Hinchcliffe, chairman of the County Council, who added that "it seemed a pity that a large authority like the County Council did not take its fair share of responsibility in training reliable officials." Whether the limited training that can thus be provided is all that is necessary to the holding of (ultimately) important appointments under the County Council is a question that could be argued at some length. The point that we should like to emphasize, however, is that there is no dearth, nor is there likely to be any dearth, of fully-trained architects' assistants to fill any vacancies that may occur in the architectural staff of the West Riding Education Committee.

Innsbruck Revisited

By G. L. PEPLER

ANY people must cherish in the eye of memory the picture of some town, visited in their travels, that held for them some special charm. It is probably safe to assume that a town so taken into fellowship will be no Colossus, but something smaller-a comprehensible entity with a distinctive charac-Innsbruck — capital of the Tyrol-held such a place in my memory, and it was therefore with great pleasure that I looked forward to revisiting it after an interval

of some twenty years. "Character" is surely as essential an attribute of a town as it is of a person; yet the writer must confess that he has more often felt its presence in provincial townson the Continent than he has in England, except for the few old country towns that have retained their old traditions and have not forfeited the allegiance of the surrounding population by surrendering to some neighbouring metropolis the meeting of all cultural needs and the supplying of all amusements.

The design of a town planner will fall very short if the town built or reconstructed to it does not express "character," and it is therefore worth while to attempt some analysis of this undefinable attribute, when its presence is felt. We have not here in mind the capital city of a mighty State, but rather the provincial town—centre of a considerable region.

Innsbruck has a population of about 67,000 inhabitants, and is a railway and road centre of some importance. It



STATUE OF ANDREAS HOFAR. BY HEINRICH NATTAR (1895).

is the principal seat of government for the Tyrol, and is also the chief tourist centre for the Eastern Alps. In a mountainous country; a valley with a wide floor-as at Innsbruck-is such a rare phenomenon as to give it exceptional advantages for the site of a town. Clearly this was recognized by the Romans, who, no doubt, also had in mind the strategic importance of the position on the line of route between Germany and Italy-a route which later carried much trade between the same countries, so that

we find Innsbruck raised to the rank of a town by 1233, and fortified. One notices here, as in other places, e.g., on the Rhone, how a swift-flowing river has lost a carrying trade that it once possessed. It is said that, years ago, salt used to be sent down the Inn, from Hall, a few miles below Innsbruck, to Turkey, but no river traffic is now carried on as high up as this. The golden (perhaps gilded by romance) age of the town, in glory, was under the rule of Emperor Maximilian (whose tomb occupies so much of the Hofkirsche), revived later in the eighteenth century under Charles VI, and Maria Theresa.

One attribute of the town (a virtue extolled by Dr. Unwin) is that it is not too large to be seen as a whole from one viewpoint; and such a viewpoint exists at Hungerburg, reached in a few minutes by a funicular railway. From this point of vantage one can see the whole city, the semi-satellite town of Hall, and satellite villages, such as Aldrans and Sistrans, still distinct from the parent body,



A GENERAL VIEW OF INNSBRUCK.

separated by cultivated fields, and let us hope ever so to remain.

The town itself is not notable for formal "places" or fine boulevards, but yet has a sense of dignity and completeness, in short, of quality. Its main entrance, namely, the railway station, is of simple and symmetrical design, and is approached from an adequate Station Place, flanked by the big hotels, so that one feels that one has arrived by the front door, and has not crept in at the scullery entrance, as one so often feels on entering an English town from the railway station.

The principal public buildings are gathered round about the old centre, near the bridge which gives the town its name, and adjoining them is the pleasant public park called the Hofe Garten, with its municipal theatre, open air café and restaurant. The river front is also partly flanked by another part of the town, which stands out finely in front of its background of foliage. One would like to describe other monuments and some of the interesting Baroque architecture, but we are rather seeking to discover the essential character of the place, than to enjoy its ornamentation.

One feels that this brief description of some characteristics gives little key to the character that the town undoubtedly possesses. Comprehensibility certainly accounts for much. The frame is not too large, and a series of good pictures is sufficiently connected for the whole to be impressed on the mind as a pleasing composition made up of a variety of patterns. The roomy entrance from the station certainly gives a good first impression. Water power provides cheap electricity, which makes for cleanliness in industry and consequently of atmosphere, thus



THE "ANNA COLUMN" IN MARIA THERESA STRASSE.

public gardens. There is a municipal art gallery containing examples of the works of some of the masters, but where space is kept for contemporary work. Near the centre of the town, but not in the old part, one finds an exhibition ground kept permanently for the purpose and where, incidentally, I had the pleasure of seeing a first-rate travelling circus.

The principal street is the Maria Theresa Strasse, with the cloistered Friederick Street at one end, the Triumphal Arch, erected in 1765 (which does not stand clear enough of other buildings for adequate effect) at the other end, and the Anna Column in the centre. Unfortunately the effect of these architectural features is belittled because the street is neither of even width nor straight. However, the view of mountains at either end far more than compensates for the shortcomings of the works of man. Mention should be made of the statue of Andreas Hofer—the Tyrolian patriot—in

facilitating more out-door life, as in the garden restaurants, but this extended use of electricity is a development since the last visit, and therefore does not account for the favourable first impression.

The sense of "character" expressed by the town in its buildings and general arrangement, may perhaps be put in this way: One is made conscious that here, in one place, most of the requirements of civilized life have been recognized and have been provided for, that a sense of perspective of true values has been preserved and that greed of gain has not been allowed ruthlessly to obliterate amenity and culture.

After twenty years, with a great war in the interval, one felt, perhaps, some sense of shrinkage of the place (though in the meantime it had actually grown) and noticed the need of paint and repair, but the essential charm of quality remained—a charm reflected in the people of the town and of the Tyrol generally.



The Town Hall, with Open-air Restaurant on Terrace.



The Triumphal Arch at the end of Maria Theresa Strasse (erected 1765).

VIEWS IN INNSBRUCK.

Architects' Own Homes-8

Mr. Arnold Mitchell's Town House: Walpole House, The Mall, Chiswick



THE GARDEN FRONT.

ORTUNATE indeed is the architect who can happen upon such a place as Walpole House, on the Mall at Chiswick, in which to live. More than two hundred years have passed since this house was built, and it is extraordinary how little change, both in the house itself and in its surroundings, has taken place; and there are portions of a structure still two hundred years older even now retained in the present building. Facing the Thames, with the Chiswick Eyot in the foreground, the southern front looks out upon much the same view as when, in Tudor times, the building was first built. And in its rear some two acres of old walled gardens form a screen effectively hiding the ever-encroaching London suburbs. Herons still sail slowly up and down over the river in the early mornings. Swans nest and rear their cygnets upon the Eyot opposite, and the reservoirs upon the farther side of the river harbour rare and beautiful birds, seldom found so near to the haunts of man. A peaceful spot, truly, a backwater to busy London life in which repose and quiet come unsought-indigenous to the place. Famous names, too, are amongst the associations of the place-Walpole, the Duchess of Cleveland, with her romantic story (her ghost is still said to haunt one of the rooms), and, in later times, the scene of Thackeray's delightful opening chapter to "Vanity Fair," for this house is the "Miss Pinkerton's Academy for Young Lodies". house drawn by Thackeray himself as the title-page to his first edition—the academy where Becky Sharp and Amelia Sedly began their acquaintance, and the scene of that famous incident when Becky Sharp hurled back at Miss Pinkerton the dictionary of the great Lexocrifer which had just been given to her as a leaving present, in the forecourt to the mall.

The great bulk of the building dates from about 1720—with panelling, staircases, fireplaces, etc., all of this period—and here it may be said that every room on all its three floors is panelled—in most cases for the whole height of the rooms—the only portions of the older fabric remaining being the northern chimneystack, with its separate

octagonal chimneys, with their cut and moulded bases, and the Tudor fireplace in the drawing-room.

One extensive alteration was, however, made, towards the close of the eighteenth century, when every one of the twenty-four sash windows upon the southern front seems to have been removed and sashes of the period substituted. Everywhere else there are the wide flush frames with their fat and sturdy sash-bars—but in these windows the frames have been set back from the face—their substance hidden behind the brickwork, and their glazing bars thin and attenuated. The whole character and proportion of the windows suffered greatly, and one wonders whether the gain in glass-area compensated the perpetrators of this change for the terrible architectural loss.

Fortunately, the northern window in the drawing-room was left untouched; standing in this room it is most instructive to contrast the older with the more modern. Some day perhaps the older style will again be restored-and what the gain will be to the principal front it is easy to see when contrasting the garden front, where the original windows remain untouched, with the river front of the house. principal staircase is a well-known example of the period, and it would be difficult to find more charming detail in the spandrels and the balusters, and still more in the treatment of the newels, than this staircase shows. At present much of the carving is clogged with paint, but the delicacy of the acanthus leaf carving upon the little pilaster capitals is a pure delight, and so is the way in which the handrail is designed—upon the wall side as well as to the balustrade. In some of the best bedrooms there are Adam fireplaces, but in other rooms the original marble mantels still exist, and it is really extraordinary how little the place has been interfered with, though there is much to interest even where alteration has been made.

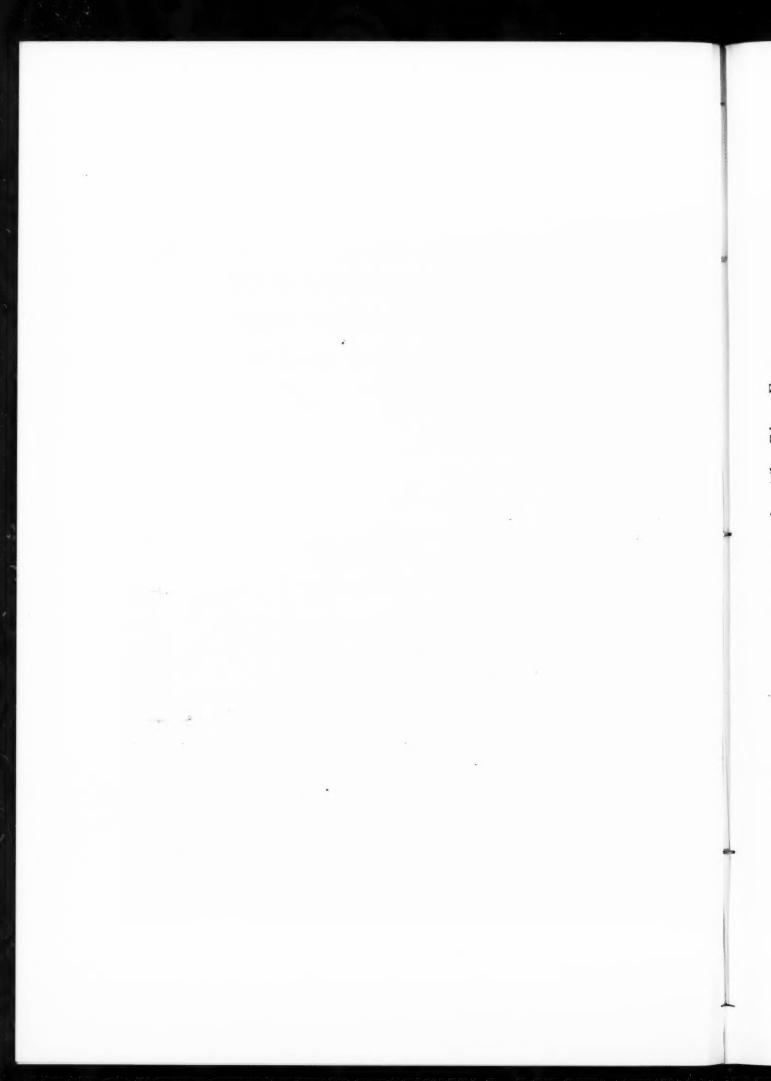
The whole building is full of old furniture of many periods, but it is subordinate, and nothing in the way of comfort is sacrificed. Perhaps the old piano, with its

(Concluded on page 536.)

Walpole House, The Mall, Chiswick: View from the Eyot



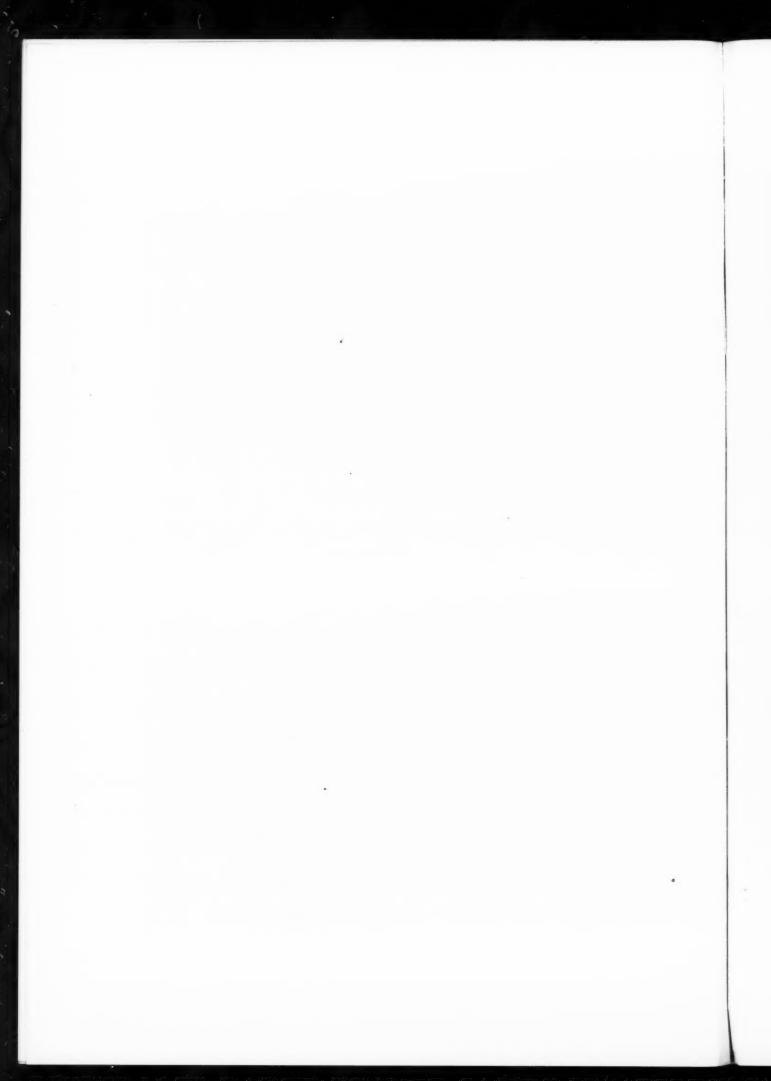
Walpole House, Chiswick, is the town house of Mr. Arnold Mitchell. It is the actual "Miss Pinkerton's Academy" in "Vanity Fair," and was sketched by Thackeray for the frontispiece of the first edition.



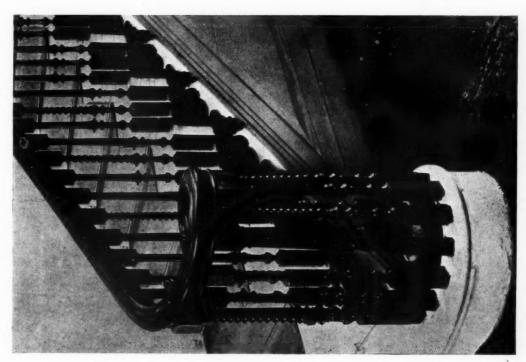
Walpole House, The Mall, Chiswick: The River Front



"Facing the Thames, with the Chiswick Eyot in the foreground, the southern front looks out upon much the same view as when, in Tudor times, the building was first built.... Herous still sail slowly up and down over the river in the early mornings. Swans nest and rear their cygnets upon the Eyot opposite, and the reservoirs upon the farther side harbour rare and ibeautiful birds."



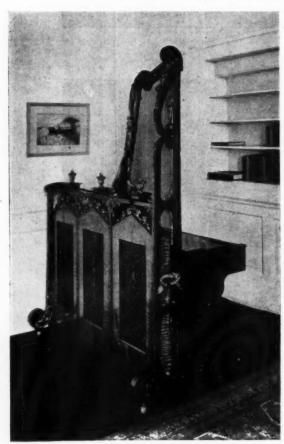




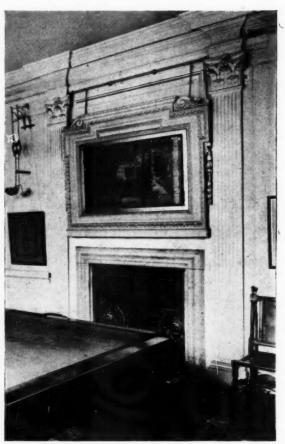
WALPOLE HOUSE, THE MALL, CHISWICK: THE PRINCIPAL STAIRCASE.



Old Venetian Altarpiece—"The Presentation in the Temple."

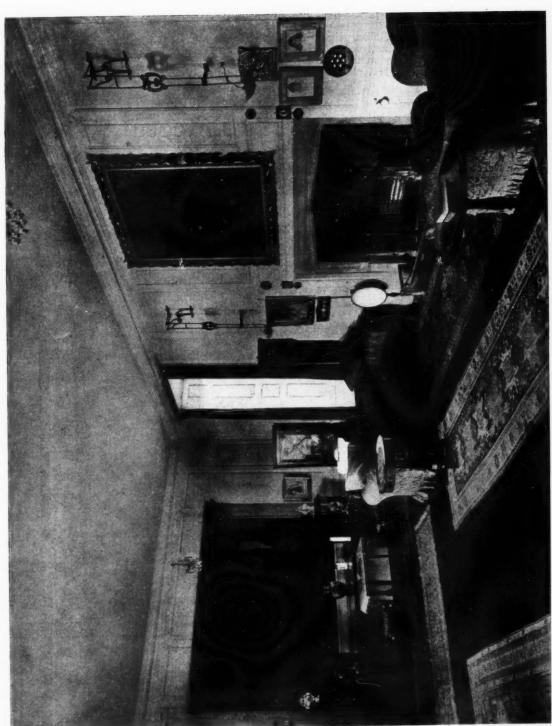


An Old Piano, in Mr. Mitchell's Collection.



The Billiard-room Chimneypiece.

WALPOLE HOUSE, THE MALL, CHISWICK.



WALPOLE HOUSE, THE MALL, CHISWICK: THE FIRST-FLOOR DRAWING-ROOM.

(A reproduction of the large picture in the background appears on the facing page.)

upstanding harp-shaped frame, is one of the most interesting pieces; there is a similar example in the South Kensington Museum, but at Walpole House the piano frame is in black lacquer, inlaid all over with green shell and mothero'-pearl, with other ornament in gold, whilst the piano back is divided up into three sounding boxes, these of satinwood inlaid with ebony borders; altogether a very odd but very delightful illustration of the transition period from the spinet to the upright piano.

Another interesting object is the fine Italian painting at the end of the drawing-room. This is an unsigned picture—a large one—nearly 9 ft. by 7 ft., and undoubtedly belongs to the Venetian school of the time of Tintoretto or Paul

Veronese, c. 1550. The subject is the "Presentation in the Temple," the colouring rich and beautiful. Placed, as it is, at the end of the large drawing-room and lit at both sides, the architectural effect is exceedingly good. The pedestals upon either side are French Empire, in tulip wood, with medallions of Louis XVI and Marie Antoinette. They were a "find" in a rubbish shop, as were many other things in the house.

In the billiard room the large picture is by Burne Jones, but its glazing defeated the photographer; added interest in this room belongs to the artist's series of studies for the figures in the big picture: there are between twenty and thirty of them hung upon the walls.

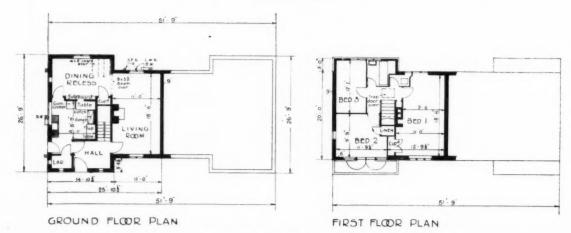
Garden City Architecture

Some Further Examples from Welwyn LOUIS DE SOISSONS, F.R.I.B.A., S.A.D.G., Architect

(See notes on page 542.)

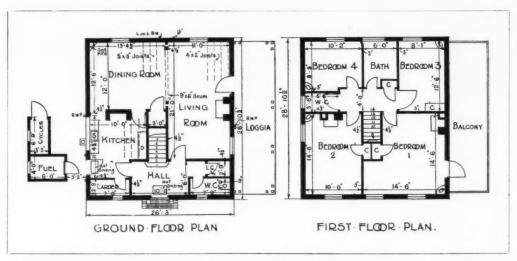


A GENERAL VIEW.

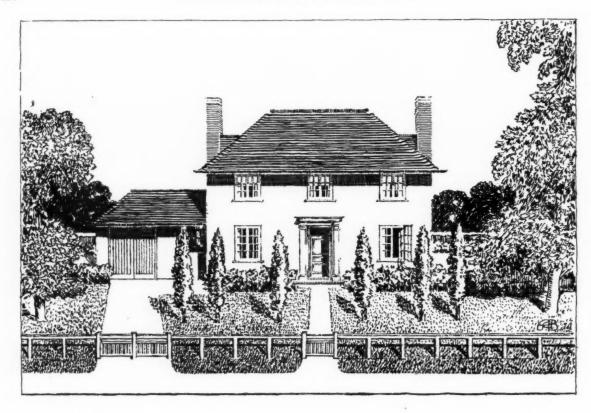


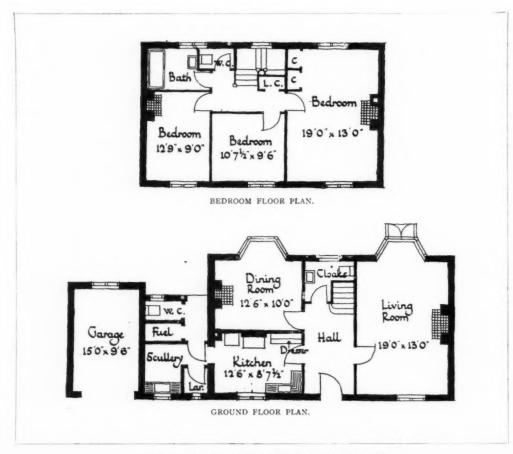
STANDARD TYPE HOUSES IN HANDSIDE LANE, WELWYN GARDEN CITY.



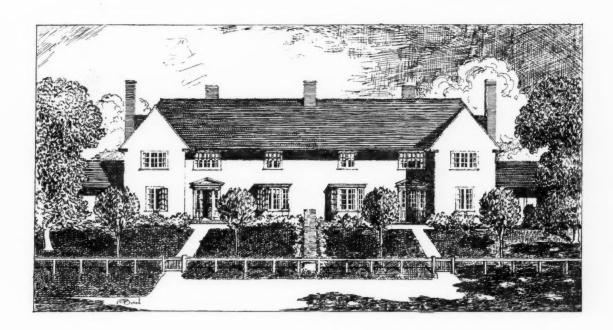


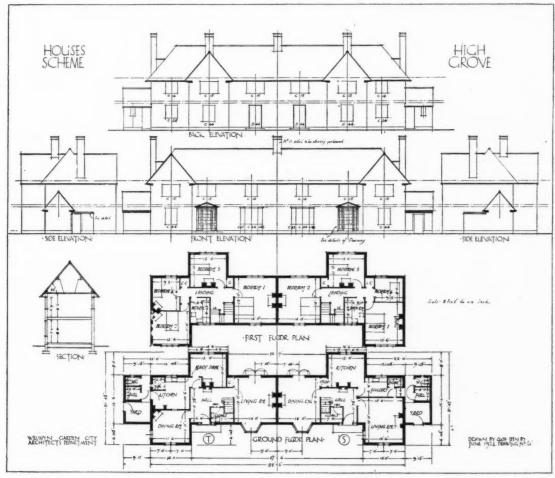
A HOUSE IN WELWYN GARDEN CITY.
LOUIS DE SOISSONS, F.R.I.B.A., S.A.D.G., ARCHITECT.



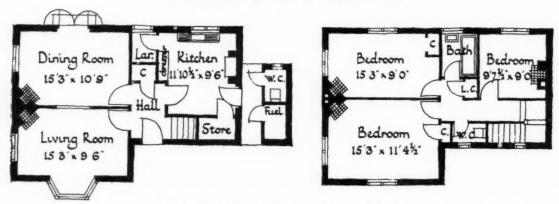


A HOUSE IN HIGH GROVE, WELWYN GARDEN CITY. LOUIS DE SOISSONS, F.R.I.B.A., S.A.D.G., ARCHITECT.

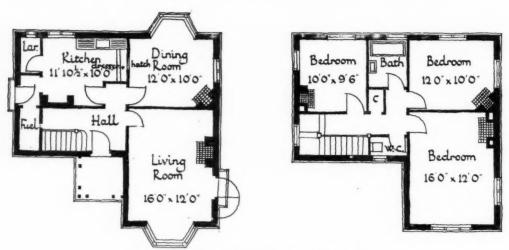




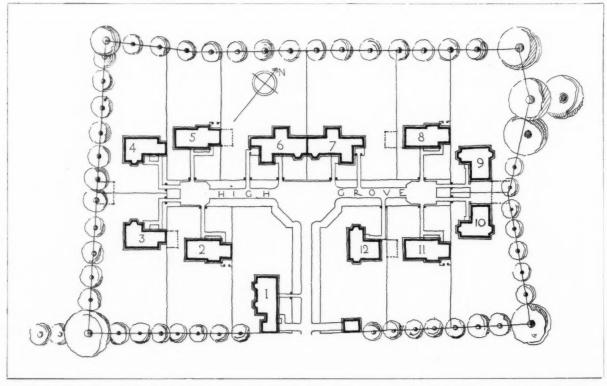
HOUSES IN HIGH GROVE, WELWYN GARDEN CITY. LOUIS DE SOISSONS, F.R.I.B.A., S.A.D.G., ARCHITECT



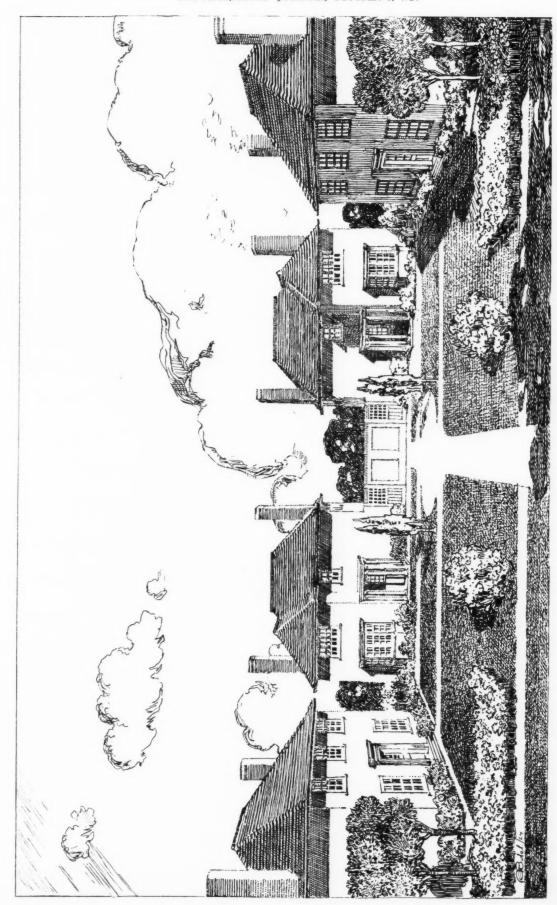
PLANS FOR HOUSES NUMBERED 3 AND 4 ON LAY-OUT.



PLANS FOR HOUSES NUMBERED 9 AND 10 ON LAY-OUT.



HIGH GROVE, WELWYN GARDEN CITY: PLAN OF LAY-OUT. LOUIS DE SOISSONS, F.R.I.B.A., S.A.D.G., ARCHITECT.



HIGH GROVE, WELWYN GARDEN CITY: LOOKING EAST. LOUIS DE SOISSONS, F.R.I.B.A., S.A.D.G., ARCHITECT.

Standardized Houses at Welwyn

E have illustrated in the preceding pages some standard types of cottages at Welwyn Garden City.

"Standardization" is one of the evils architects connote with the nineteenth century; if they hear but the word they are oppressed with thoughts of fancy ridge-tiles, ornamented chimneypots, wavy barge-boards, and terra-cotta window-sills of horrible design. And, in truth, these things were certainly a result of standardization; they were products of the time when men first discovered things could be made by machines. Fascinated with their new playthings, they set their machines to make everything; they did not inquire whether there was any use for the things made, for they were lost in admiration of the whirring wheels and the wonder of it. Like a child for the first time in possession of a lead pencil, they were anxious to leave their mark on everything—on the plain wall, on the chimneypiece, on the furniture: on all sides could their unfortunate handi-

work be found.

Machinery was not the evil Ruskin thought it, of course; it was simply unintelligently used. There is no harm in useful things being standardized, if they are first of all properly designed.

The ease with which standard parts can be dealt with is confined not only to their manufacture and their assembly; even in the office of the architect is the convenience felt. A glance at one of Mr. de Soissons' drawings will illustrate this. (See page 539.) Is it a practice reprehensible in draughtsmanship? It is one which is growing even in the presentation of monumental architecture, since architects are no longer willing to waste time and sight in the microscopic detailing of repetitive work.

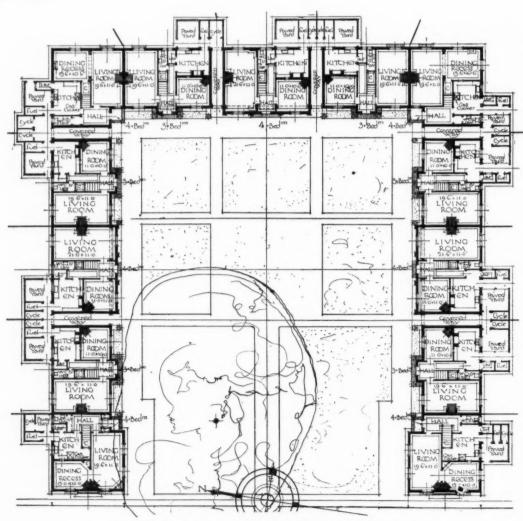
The Welwyn houses illustrated, besides being more or less standardized, form an attempt at speculative building

to an architect's designs.

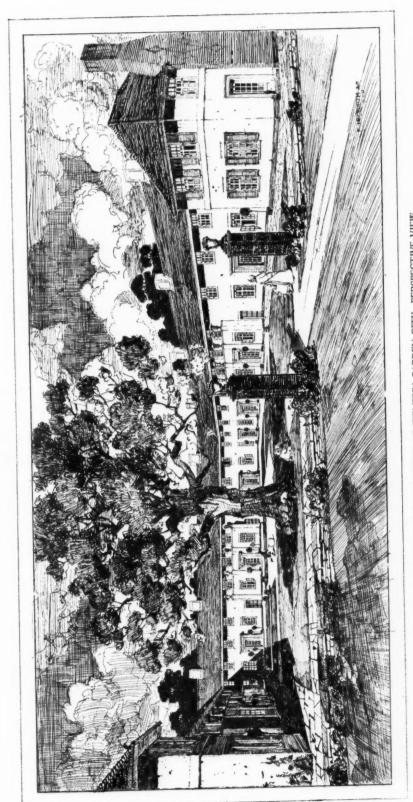
For too long speculative work has been a synonymous term in house building for all that is ugly, all that is foolish, all that is cheap. And, of course, it need be none of these. As if the fact that a row of houses is a speculation must determine their very proportions, their very style!

After the presentation to us of the housing schemes of three different Governments, it is declared by those who ought to know that the only solution of the housing problem will be speculative building. But that need not be feared by even the most fastidious, if only it is handled in the same manner as now at Welwyn.

н. J.

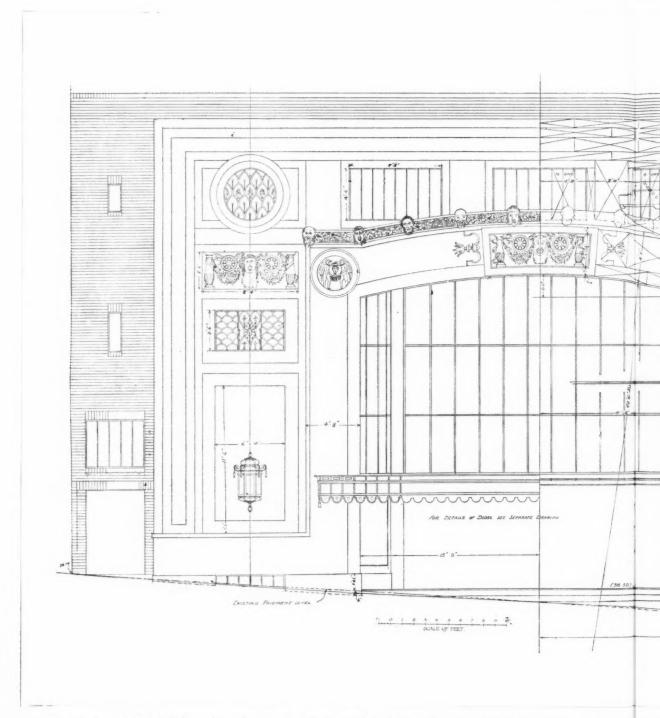


A PROPOSED CLOSE OF HOUSES AT WELWYN GARDEN CITY.
LOUIS DE SOISSONS, F.R.I.B.A., S.A.D.G., ARCHITECT.



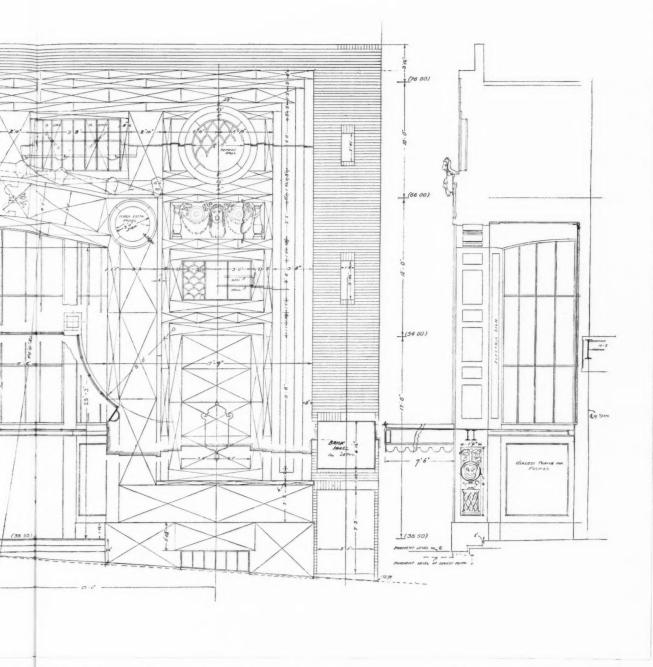
A PROPOSED CLOSE OF HOUSES AT WELWYN GARDEN CITY: PERSPECTIVE VIEW LOUIS DE SOISSONS, F.R.I.B.A., S.A.D.G., ARCHITECT.

Architects' Working Drawings. 86.—The 'Robert Atkinson, F.R.I.



The main front, details of which are shown above, consists of a large and deeply recessed opening, which encloses an upper-floor restaunt and and panels, in blue, white and green, sorate

6.—The "Regent" Kinema Theatre, Brighton Inson, F.R.I.B.A., Architect



restause and the main entrance. This feature is squarely set in a flat façade of Roman marble panelled with red strips. Della Robbia plaques green, corate the flat black marble architrave.

Little Things That Matter-39

Symmetry and its Semblance

By WILLIAM HARVEY

SYMMETRY is not a primal necessity of good architecture, but it is so generally accepted as a useful adjunct to it that it receives, and deserves to receive, the most careful attention. It may be that an ordered balance of part with part, and of all parts, in the grouping of the whole building is really the aim of the architect in pursuit of the highest artistic excellence, and different monuments, some studiously regular, and others just as definitely informal, have been admired in their own appropriate settings; but elements of symmetry appear in them all. The Parthenon itself, chief among the examples of precision, is enormously enhanced by the base of irregular rampart wall and the bold mass of precipitous rock upon which it stands, and in it symmetry and asymmetry mingle to produce an ensemble that has been recognized as a standard of almost unapproachable beauty.

Modern architectural training, which tends to divorce the regular from the irregular—in reality its natural and legitimate foil—exacts a standard of geometrical orderliness that, while it not infrequently defeats its own object, is yet in the main an aid to good design. Granted, then, that harmony is to be achieved by way of symmetry in some projected building, what means can be taken to ensure an appearance of symmetry if, from circumstances over which the designer can exercise no control, the site itself is irregular in the length of its main lines and the

number of degrees contained in its angles?

Sir Christopher Wren has been credited with exceptional skill in placing apparently symmetrical buildings upon lop-sided plots and at the same time utilizing every inch of space. In many instances he seems to have succeeded by the audacious process of ignoring the irregularity, and allowing the regular features to hit or miss the irregular surrounding walls without resorting to the practice of dubbing out the latter, or even providing them with pilasters. Wherever the divergence from the rectangular is not too great this architectural equivalent of the old maxim "least said, soonest mended," has much to recommend it. Unless they are advertised and brought into prominence by injudicious treatment it is really very difficult to detect whether the angles of a building are slightly obtuse or acute, or its walls longer or shorter on one side or the other.

Plainness is an advantage, since rustication of joints, or the addition of emphatic horizontal lines above and below eye level, makes for detection by revealing the fact that the two diverging walls of the chamber have different vanishing points when seen in perspective. Even with these aids to discovery a trained eye is often deceived, and careful scrutiny that stops short of actual measurement and triangulation sometimes fails to reveal the departure of the plan

from rectangularity.

Bernini's famous colonnade, enclosing the forecourt of St. Peter's at Rome, may be instanced as illustrating the freedom that may be taken with geometrical rule without apparent effect in the building. Architects already acquainted with the plan of the converging rows of columns experience some difficulty, when they visit the building, in associating the known and noticeable inclination of the lines on plan with the slight appearance of it in execution.

On the other hand, a panelled ceiling or a floor divided into conspicuous reticulations immediately brings into prominence any irregularity in the angles by calling attention to the obliquity of the walls wherever a rail of the panelling or a line of the pattern runs out on the slope at the margin. Such a regular square mesh acts as a standard of visual measurement set up where it is able to suggest comparisons to the detriment of the whole (see Fig. 1).

Lop-sided rooms should be provided with concentrated masses rather than lines of decoration, though the exact form of such features and ornaments must, of course, depend upon the circumstances of each case, and the designer's intentions with regard to their interpretation. They should be arranged in rings and stars which will not clash with the irregular angles but serve to occupy the field of wall or ceiling without demonstrating their boundaries

(see Fig. 2).

A horizontal line about eye-level is permissible, for it is non-committal in respect to the vanishing up or down which affects lines placed lower or higher in the wall. It might be incorporated with a body of colour extended over the whole of the lower part of the wall and the floor, as is the case in many a charming old room wainscoted to a height of about 6 ft. and floored with parquet. This arrangement disguises, as far as practicable, the junction between the vertical and horizontal planes, especially when the highly polished floor receives a strong reflection of the wall surface and carries down its vertical lines. The white plaster of a ceiling carried down into a deep frieze is another device which gives an air of neatness, as well as of brightness, to an irregular apartment, and this treatment was often used in connection with an oak-panelled wall in the days when men not only knew how to build but how to set out their buildings on the site, perhaps with some irregularity, but without too much preliminary plan-making on paper. The accessories of an unequal-sided chamber must be placed where they will not suggest hardand-fast centre lines that condemn the setting out. It would be a pity to have carefully avoided check patterns and rectangular panels on the rhomboidal ceiling only to find that, by an oversight, the electric pendants had indicated the unwanted visual standard and were heavily emphasizing it both by day and night! (see Fig. 1).

It should be remembered that while slight divergences from the rectangular are difficult to detect, bends in the plane of a wall or in the axis of a hall or corridor are at once apparent. The crooked line contrasts with the straight line of vision, and the bent surface expresses itself not only in terms of different rates of vanishing in perspective (see Fig. 3c), but by the different amount of light

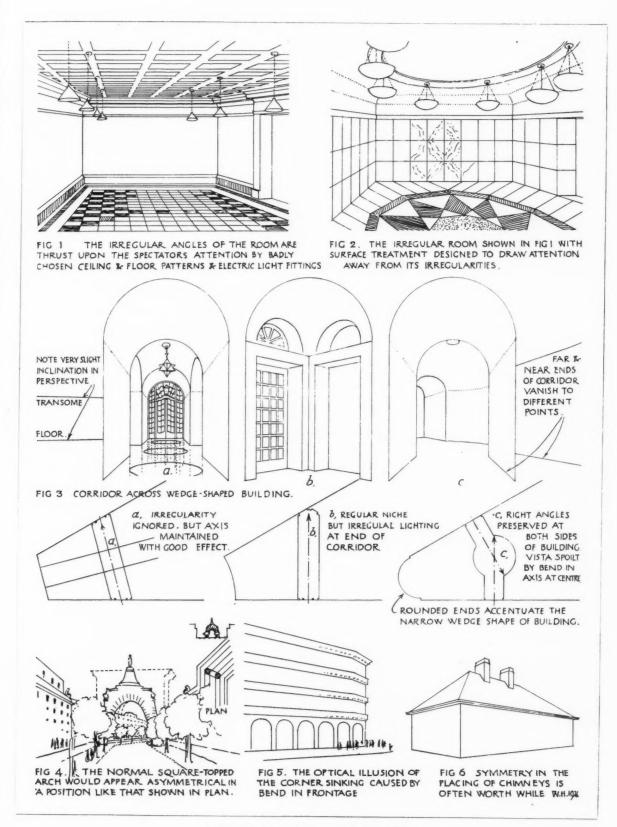
or shade picked up by its several parts.

The mean, unpleasant appearance of a building with a kink in it is not in the least improved by the provision of sumptuous architectural trimmings; in fact, the more important the character of the work the more distressingly

does the bent line obtrude itself (see Fig. 5).

Very often in a building which fronts on to two streets that are not parallel to one another it is required to carry a corridor from a main front entrance on one street to another entrance at the back. Three different ways of planning the corridor suggest themselves, and the one that makes the most promising pattern as a diagram on paper happens to be the least satisfactory in execution. As architecture is now taught, practised, and assessed very largely by means of diagrams on paper this is a singularly unfortunate state of affairs, for the vista through one of the finest of London's recent buildings has suffered eclipse through inattention to this point. Sir Christopher Wren may be consulted in this connection also, for his works leave not the slightest doubt that he understood the importance of straight axis lines from a point of approach to a point of principal interest. He was prepared to accept odd angles in the surrounding wall but not in the direction of the axis.

To apply the precedent to the case in hand, an axis line



LITTLE THINGS THAT MATTER DIAGRAMS.

DRAWN BY WILLIAM HARVEY.

for the corridor would be found by simply joining the centres of the doors at front and back of the site. The advantages of so doing would be that the architecture of the corridor would be symmetrical about its axis except at its ends in the two entrance lobbies where the acute or obtuse angles would be hidden in the dark corners beside the doors. The light shapes of the open doors, or of fanlights and windows placed above and beside them, would also appear symmetrically disposed to persons viewing them from the corridor (see Fig. 3a).

Various methods of softening down the effect of the oblique line of walling might be employed, such as giving the entrance lobbies an elliptic or oval form and avoiding the use of horizontal lines in the fanlights, transom, and windows. Horizontal lines set at an angle to the line of vision appear to be inclined and might betray the irregularity of the plan. Dutch window bars have therefore been suggested in Fig. 3a. Whether the angles were softened down or left crude the whole of the irregularity would be dealt with on the spot and not allowed to affect matters

further in the interior of the building.

Another method which might be hailed as more geometrical, at any rate as far as the plan on paper is concerned, would be to run the axis of the corridor straight in at right angles to the principal front of the building and terminate it at the back entrance in an artfully contrived niche with the back entrance door on one side of the axis line and a panelled recess or internal door to match it on the other. The symmetry of this scheme would be admirable in plan, elevation, and section, but would fail in execution if the entrance door were required to contain any glass area for admitting light. In this case the one half of the niche would be bright and the other half would be the darkest object in view (see Fig. 3b). By a cunning scheme of glass in the internal door, and a window reaching down to the ground, the violent contrast might be avoided, but it is questionable whether the borrowed light would ever count as equivalent to the direct one.

The most speciously attractive solution (on paper) is to run the centre lines from both doorways into the building at right angles to its two fronts and allow them to meet at an obtuse angle in the centre of the plot. In reality the effect is extremely poor. The view from either entrance includes the bend in the corridor no matter how entertainingly the architectural trimmings are applied at the junction, and nothing short of opaque doors will shut out

the unpleasant kink.

The worst results are obtained when an important hall of state is placed with its centre upon the junction of the axis lines of the back and front corridors (see Fig. 3c).

The vista up each approach will be satisfactory as long as the doors leading to the stately hall are shut, but the moment they are opened it will be recognized that the axis aims, not at the central doorway on the other side of the hall, but at some odd fragment of its door jamb. This might, of course, be recognized in the decoration of the hall and the whole setting-out be subordinated to the provision of an important object on which the eye can rest. But this would raise a secondary problem in planning for symmetry, or the appearance of it, that would have been entirely avoided by taking the bull by the horns in the first instance, and running the axis straight through the building from door to door as in Fig. 3a. Even were such decorative features to be added on the sides of the hall opposite its doorways, their effect might be spoilt by the undue proximity of the openings from hall to corridor, so that the play of light and shade, when the doors were open, might altogether nullify their value.

Planning for symmetry has sometimes a commercial as well as an artistic quality, though the financial side probably does not concern itself very greatly with details of light and shade. The reservation of part of an irregular site was made a condition in the competition for the design of the Port of London Authority Building, and the brilliant geometrical solution which allotted a manageable and nominally rectangular site for this purpose and at the same

time produced a building with a high degree of symmetry was very properly adopted for the execution of the work.

The objection is sometimes raised that some fine geometrical plan has only been made possible at the cost of minor adjustments in spacing and by the sacrifice of equality in apparently equal wall masses or angles. Provided the adjustment has been done with discretion and without necessitating bent axis lines, the building will probably look all the better for it. An assessor detecting evidence of adjustment in an otherwise convenient scheme would use his own judgment in an attempt to visualize the effect of such minor departures from geometrical regularity and weigh them against the merits of some more mechanically accurate, but less interesting, plan submitted in the competition. The only objection to successful adjustment is its cost to the architect himself under modern conditions of the contract system where all works are executed from drawings.

In times and places where the master-builder was to a large extent also the architect, the adjustments carried out with all the wealth of his practical experience as constructor and artist lent a charm to the work. The combination of a geometrical setting out with fudging reduced to a fine art is exemplified in the arrangement of ribs at the springing of a Gothic vault or in the assembling of the stones in an Arab stalactite pendentive. The modern architect is required to design adjustments in terms of ordinates and dimensions, whereas the mediaval craftsman could arrive at them by actually experimenting with the

material of construction on the site.

The design of a monument to disguise a change in the direction of a street or a processional avenue is a geometrical exercise involving a certain amount of adjustment. A round tower placed on the actual angle of the axis lines would be symmetrical and also appear so in the view from both ends of the street, but more complicated buildings could only fulfil these conditions in a partial manner. A triumphal arch erected in such a position would have for its principal artistic function the division of the street into two parts, each of them straight and orderly instead of wandering aimlessly on around a more or less meaningless bend. The size of the proposed monument will modify the conditions of its design, for if it is of substantial bulk the arches may attain the character of tunnels and practically blot out the view of the distant street. In this case the question of symmetry and the identity of design in the two principal faces of the building does not arise. Each face can be treated to look well on its own side, and the plan can be modified to fit with the angle of the part of the street in which it stands.

The Admiralty Arch at the Charing Cross end of the Mall is such a monument of substantial bulk, and though its arches are not exactly tunnels, the length of their soffit and the corresponding width of the building is considerable. An arch of smaller dimensions, in which the bulk of masonry was relatively slight, would be subjected to more exacting criticism from the point of view of symmetry. It would achieve its purpose by focusing attention upon the view framed in the opening, and the design of it would be governed by considerations which apply also to pictureframes in combination with the rules which apply to objects placed obliquely across the line of sight. The maximum of symmetry would be achieved by giving the supports a rounded form, and this might be carried into the soffit of the arch in order to preserve the roundness of its curve. A flat soffit seen from the side turns the silhouette of a round arch into an irregular pointed shape. A horizontal sky-line should be avoided, and the centre of the monument might be marked by a finial or statue which would be visibly central on the street axis when seen from either side (see Fig. 4).

The site for such an ornamental arch would be a littleused drive in a park or over the central avenue of a large boulevard provided with alternative traffic tracks, otherwise the supports of the monument would obscure the view of drivers just where the turn of the road demands addi-

tional vigilance.

The modern science of town-planning has to take into account the provision of routes for rapid through transport with the result that a great many more or less triangular sites will be produced between roads whose principal characteristic must necessarily be directness. The small ends of the wedge-shaped plots almost invariably look poor and thin and very often meet the longer sides at irregular angles. In an attempt to bring symmetry to this part, buildings are sometimes given a convex end, though the result is singularly meagre for the thin line of high light caught on the cylindrical surface makes the wedge-

shape more obvious than it need have been. Where a consistent scheme cannot be arranged for the collection of buildings at a street crossing the designer might fall back upon Wren's method and let the planes of the buildings express themselves with the least possible fuss (see Fig. 3, a, b, c). The method of leaving things to adjust themselves is not ideal in all cases, however, and in one large building where the lines of cornice and balcony have been carried on around a very slight and almost imperceptible bend in the frontage, the said balconies and cornices appear to be drooping as if the corner of the building were sinking bodily into the ground (see Fig. 5). Under mediæval conditions the upper part of the wall-face would have been carried out on corbels to maintain the fair plane of the front, but since the bye-laws would probably veto such a manœuvre, the cornices and balconies might have been stopped around a slight setback of the front to avoid the creation of a most unfortunate illusion. In domestic architecture the provision of symmetrical features is not generally considered a matter of supreme importance, for if regularity is carried too far all sense of homeliness may be dispelled. A sufficient recognition of order can be achieved by seeing that all doors and windows are reasonably well framed up in the masses of walling, and that the roof is carried on around all breaks without being unduly cut up by gables, dormers, and chimneys.

A great deal of effort is sometimes bestowed upon torturing the flues into a central position, and provided that adequate support can be found for the chimney, and the inclination of the flues to the horizontal is maintained at 45° or steeper, a certain amount of lateral travel is no disadvantage. It is more important to avoid piercing the

roof for chimneys where they will break into the lines of hips and valleys than to achieve absolute symmetry in the position of the stacks. A chimney rising out of a valley is nearly always a singularly awkward-looking feature and one that is to be dispensed with wherever an alternative position can be found. There is always a concentration of water in the lower part of the valley during rain, and the tendency of the gutter to leak is accentuated, at the turn behind the chimney, particularly when a heavy downpour finds an accumulation of dead leaves and similar rubbish at this rather inaccessible point. When, in the interests of symmetry or of appearance, flues are artificially carried to points distant from the solid chimney breasts the effects of their weight and of wind pressure should be taken into account. First-floor and ceiling joists have some value as props or ties, but as they are very often only dependent upon nails and the inertia of slender modern walls, too much must not be expected of them. In these days of light construction, reinforced concrete slabs are probably better than arches as supports for flues and chimney stacks carried above voids in the lower part of the house.

Friendly Society Premises at Croydon

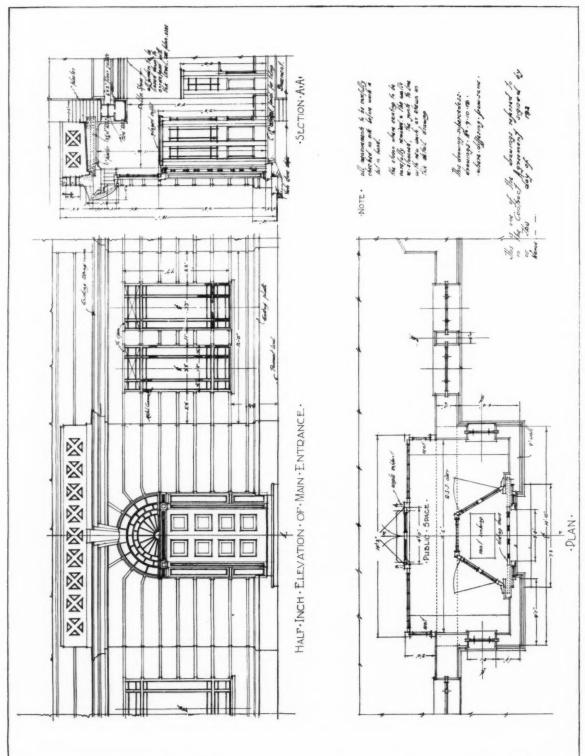
Considerable alterations have been carried out under the direction of Messrs. Rees and Archer-Betham, of Croydon, to the newly-acquired premises for the Croydon branch of the National Deposit Friendly Society. Practically the whole of the interior walls to the ground floor have been removed, thus providing a large general-office space. A large secretary's room has been arranged, with access to the side entrance, which also leads upstairs to offices let out to various firms. These offices have been so arranged that the whole of the upper portion of the building can be taken over later by the society without further alteration. The interior woodwork, screens, etc., are in Columbian pine, stained to a walnut colour, and polished, and the entrance doors and fanlight are in oiled oak.

The general contractors were Messrs. Lewis, Helby and Tanner, of Croydon, and the sub-contractors were Messrs. Moorwood, Ltd. (heating and sanitary goods); Smith, Walker, Ltd. (constructional steelwork); Carter and Aynsley, Ltd. (ironmongery).



ALTERATIONS TO THE PREMISES OF THE NATIONAL DEPOSIT FRIENDLY SOCIETY, CROYDON.

REES AND ARCHER-BETHAM, ARCHITECTS.



ALTERATIONS TO THE PREMISES OF THE NATIONAL DEPOSIT FRIENDLY SOCIETY, CROYDON: DETAILS OF MAIN ENTRANCE. REES AND ARCHER-BETHAM, ARCHITECTS.

The "Pass Pantry": A New Feature in Domestic Planning

By H. BRYANT NEWBOLD, M.S.A., A.I.Struct.E.

N mediæval times, long, broad corridors and capacious halls were a proper setting for the spectacular procession of the master cook and his assistants with the "feast." To-day the old-time plan, still so often met, of interposing the hall between the dining-room and the kitchen, is out of date, and the most direct service from the kitchen to the eating-place is more in keeping with the spirit of the times.

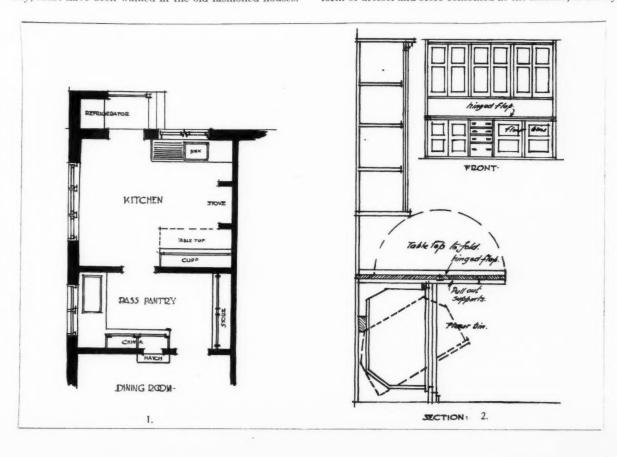
Obviously, the most direct course to adopt is to eat as near the stove as possible, and so save carrying to and fro; in other words, in the kitchen. But until the design of the kitchen is considerably altered it may be taken that eating in the kitchen is out of the question. There are possibilities in this direction, it is true, such as the installation of a small closet or kitchenette containing a sink, stove, and china cupboards, adjoining a kitchen which, relieved from these unsightly necessaries to service, may be furnished with taste, and made suitable for use as a dining-room. But this it is proposed to deal with later, attention being first directed to the replanning of the house so far as the relationship of the kitchen and dining-room is concerned, and the saving of unnecessary domestic work in connection with the preparation and laying of meals.

In a servantless house the kitchen, where it is not used as a sitting or dining-room, may contain the sink, and the room itself need not be so large. In fact, the smaller it is, so long as it gives room for movement, the less will be the energy wasted in walking to and from larder to stove, stove to table, and to and from table to sink. Miles, each day, must have been walked in the old-fashioned houses.

The ideal in this respect would be a stool on which one could sit with everything in reach, and some portable kitchen combinations are said to supply this in part. But for the moment we are considering the planning of the kitchen as we know it, having regard to the saving of unnecessary work. With the sink for washing up the utensils used in cooking now installed in the kitchen, the scullery will be unnecessary, and may be dispensed with. The most convenient position for the sink is as near to the stove as possible, but in this position difficulties will probably arise in meeting the necessity for the sink to be as near as possible, if not directly, under a window. However, with careful planning, bearing in mind that the proper position for a stove or range is one giving a left-hand light, the proximity to the sink will not be impossible of attainment.

In the old days, when considerable quantities of food were stored, big larders were no doubt necessary; but to-day, in situations where daily deliveries of groceries and milk are customary, this accommodation is no longer needed, and if only our national conservatism would give way in the matter of ice, the larder might be entirely dispensed with. In America the daily delivery of ice for the refrigerator is as much an accepted fact as the daily call of the baker and other tradesmen. The refrigerator should be installed near the tradesmen's door. In America the refrigerator is placed in the back porch or veranda; and there is no reason why a covered space should not be provided to accommodate it as shown in Fig. 1.

Another method to save walking is to install a modern form of dresser and store combined in the kitchen, as handy

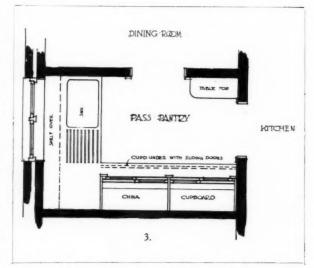


to the stove as possible, and to use this in place of the store cupboard which is usually in another part of the house. This combination, as shown in Fig. 2, contains, in place of the shelves for crockery, cupboards for stores, and flour The table-top and the sliding extension can be used instead of a kitchen table, with the result that the area of the kitchen is reduced, and the floor space kept free.

The plan (Fig. 1) shows a handy arrangement of the adjuncts of the service-room, with the sink under the window next to the stove, the stove left-hand lighted, and the store combination next to the stove, and with two walls left free for lighting by large window spaces. Thus a light and airy service-room replaces the often dark and always too large old-fashioned kitchen. And this has been achieved by allowing the plan to spring out of the practical require-

So far, consideration has been given only to the requirements of the kitchen, and no accommodation has been made for the china and glass used in the dining-room. Still, bearing in mind the disinclination for unnecessary walking, we will place the dining-room no longer on the other side of the hall, but as near as possible to the room in which the meals are prepared. This, of course, would be next to it, but there are certain objections to such a proximity. One is noise, another smell, and a third that some provision, as mentioned above, is necessary for the china and glass.

A disconnecting lobby, between the kitchen and the dining-room, ventilated from the outer air, and serving as a china closet, will meet these requirements. This disconnecting lobby is known in America as a pass pantry, and, as the name implies, is in the nature of a passage, with storage cupboards. Here the crockery plate used in the diningroom is kept when not in use, and in a pass pantry fitted with a sink it need never pass into the kitchen at all. In Fig. 3, such a sink is shown under the window and on the left hand, easily reached by the person washing up, is a china closet into which the articles may be directly placed after washing. When used with a service hatch into the dining-room the table may be laid from the dining-room without entering the pantry. To further facilitate the



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service of a meal, the pass pantry should be fitted with swing doors. These should be provided with a beaten copper kicking plate on the bottom rail so that they may be opened with the foot, and they should be arranged to close of their own accord. To the left, when passing from the kitchen to the dining-room, is a table-top, upon which to rest a tray during transit. This may be a hinged lift-up flap to fold downwards when not in use, and where gas is laid it may have a small stove or ring upon it.

The reduction of work achieved, by the use of a pass pantry, in the preparation and laying of meals, clearing away, and washing up is very considerable when compared with that entailed by the old English type of plan, still almost invariably met with, where the kitchen is at the farthest point from the dining-room, and the service across

the entrance hall.

University of Liverpool School of Architecture

E have received a copy of the prospectus of the University of Liverpool School of Architecture for the forthcoming session, which began last week, under the direction of Professor C. H. Reilly, O.B.E., M.A.Cantab., F.R.I.B.A. Mr. L. B. Budden, M.A., A.R.I.B.A., is the associate professor of architecture at the school, and Mr. L. P. Abercrombie, M.A., A.R.I.B.A., is the Lever professor of civic design. The school offers courses which are designed to provide a full professional education at a university standard for all who intend to practise as architects and who wish to acquire their training in an atmosphere of liberal studies side by side with the students of other professions. meet the varied needs of architectural practice as they have now developed, the school offers courses of study leading, if preceded by matriculation, to the degree of Bachelor of Architecture (B.Arch.) or, if not so preceded, qualifying for the diploma in architecture. These courses, which are identical both for the degree and for the diploma, extend over five years and are of three kinds-the pass course, the course with honours or distinction in architectural design, and the course with honours or distinction in architectural construction. curriculum of the first three years is common to all three courses, whilst that of the fourth and fifth years in the case of students taking honours or distinction goes beyond the pass

Each of the courses is devised so as to equip the student with the most efficient training possible for the vocational work he proposes to do. The study of design, beginning with exercises in the elements of architectural form, is finally carried to a stage at which it involves the solution of large and complex problems of composition. Construction is taught in its simplest aspects in the first year and in that year as in all the subsequent parts of the courses is progressively related to the teaching of design. From the third year onwards students are required to develop carefully rendered schemes with the detailed and working drawings necessary for a contract. stress is laid on logical planning as the basis of good architecture, and a large proportion of the subjects set in the school studios are planning problems. The lecture courses are studios are planning problems. The lecture courses are arranged to run parallel with the work done under instruction in the studios.

Under the regulations governing the courses of study students are required to spend six months of their fourth and fifth years respectively in some approved form of practical work, usually in an architect's office, where they can earn a salary. For some time past the school has established connections with certain of the best-known architectural offices in New York. In consequence, students during the summer term and long vacation of their fourth year of study have the opportunity of securing temporary positions as paid assistants in these offices at rates of pay which, with care, cover their passages either way.

The school was the first to formulate and to present degree and diploma courses of a full professional kind to the Board of Architectural Education of the R.I.B.A., and was the first of the six schools now recognized by the Institute to secure for its graduates exemption from all subjects but one of the Institute's final examination.

The prospectus is illustrated with reproductions of ' Memorial Lecture Theatre," the Rome scholarship design submitted by F. X. Velarde (fifth-year student); "A Community Building"; a thesis design by E. H. Ashburner; two of a set of sixteen working drawings of a design for a theatre, by A. L. Gabr (fifth-year student); and "A Monumental Terrace and Stairway," a six-hour sketch design by G. A. Butling (third-

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.

HYDRAULIC LIME.

"E.M.P." writes: "I should be glad to know if you consider hydraulic lime mortar, which was mixed eight weeks ago and has since been standing exposed to the weather, is fit for use for ordinary walling. The contractor maintains that it is all the stronger for standing, but I have always understood that mortar should be used fresh, say, within seven days. Walling executed in this mortar a week ago shows no sign of setting."

—The keeping of mortar for two months after mixing is probably somewhat excessive for "feebly hydraulic" lime and is distinctly excessive for "hydraulic" or "eminently hydraulic" lime. Text-books sometimes assign a limit of nine days to the keeping of lime mortar after mixing, without stating to which quality of lime they refer, though in reality, each lime has its own appropriate period determinable by experiment. The normal English practice tends to show that E.M.P.'s contractor is asserting a belief that is very largely held among builders who prepare a pile of mortar large enough to last for a very considerable amount of walling. As the setting of lime that is only "feebly hydraulic" depends largely upon its obtaining carbonic acid from the air and the interior of the mass is protected from aeration by the outer layers, the amount of harm done through the lime setting before use is probably not great if the heap is used systematically by taking a little from the whole circuit of the exterior and gradually reducing the mass towards its centre.

Whether a particular mortar can stand keeping for two months depends upon several conditions that can only be judged locally, and delay in setting might be caused by dirty or otherwise unsuitable sand as well as by delay in using the mortar. The opinion of an umpire familiar with the class of lime and the usages of builders in E.M.P.'s district might be valuable, or it would be possible to test the case experimentally by mixing a mortar of identical composition and using it either fresh or after a period not exceeding nine days and noting the time it takes to set in the wall.

The objection to using fresh slaked lime is two-fold, in that it makes a mortar that is harsh in working and will also probably contain particles of hot lime that slake after incorporation in the wall and throw the stones apart as they swell in slaking. Under laboratory conditions, with finely ground material, immediate use of lime after slaking would be ideal.

A SEPTIC TANK FOR A COUNTRY HOUSE.

"H. R." writes: "I have constructed a septic tank for a country house (two w.c.'s, one bath, two lavatory basins, one sink, and five bedrooms) as shown on the accompanying drawing. The ground is a clayey subsoil, and below a depth of about 2 ft. 6 in. is saturated with water to such an extent that the water finds its way through the effluent pipe into the filter bed, and there remains to a height of about 2 ft. above the bottom of the filter bed."

—This appears to be an impossible position unless you can do one of two things:—

(a) Continue your effluent drain to some place where it can obtain a free outfall.

(b) Drain the field and so relieve the ground of the subsoil vater

I should think the first plan would be the better one, because it would then be possible to make the outfall drain impervious to the ground water, and it would clear itself in all weathers.

E C I

OWNERSHIP OF PLANS.

"Architect" writes: "Please give me a ruling as to the legal aspect governing the ownership of plans for a building scheme which has been abandoned. I am not sure if there is a court decision on this point. The facts are briefly as follows: It was proposed in 1914 to make alterations and additions to an institution and school, and sketch schemes were submitted, discussions took place, and proposals and counter proposals were made. A larger scheme was approved, and plans were prepared for the builders and fully discussed with the district surveyor and other authorities. This scheme was abandoned, and other alternative sketch schemes were prepared. Instructions were eventually received in 1924 in writing that the scheme had been finally abandoned. A list of fees and charges were submitted in accordance with the R.I.B.A. schedule, and a cheque was received in final settlement. I have subsequently received a request to send the plans of the 'abandoned scheme' to the principal. Am I under an obligation to supply these plans?"

—The plans of the now abandoned scheme belong, under the circumstances, to the client, and it is necessary that the request for delivery be complied with.

PRACTISING IN AMERICA.

"Reader" writes: "I wish to practise in America as an architect and surveyor. I have friends and relatives there, and have also associations with one of the leading architects in New York. Please tell me: (I) Is their style of practice likeours? (2) What are the prospects of business or employment? (3) What salary is paid to assistants? (4) What is the usual way of obtaining an appointment? (5) Do the Americans practise as quantity surveyors now? and (6) Are there any prospects for land surveyors?"

—As my associations with American practice were made in a large New York office, my information may be wanting in accuracy. I have made enquiries from friends who have spent some time in America, and have gathered enough information to make the following answers:—

1. American practice differs from our own in detail only. The law relating to architecture varies somewhat, and one meets new types of construction, but in the main there is nothing that will not be assimilated in a short time.

2. It is difficult, in so large a country, to say anything definite of the prospects of either employment or business. In the larger towns there is much competition for a great deal of work, but even in a city like New York there is a strong demand for good, experienced assistants, and I am told there is abundant opportunity in a hundred smaller towns within the pale of the very populous regions.



"Septic Tank for a Country House."

3. As a very junior assistant I received from a large New

York firm 30 dollars per week, and salaries for assistants vary up to sixty and more dollars a week.

4. Failing an introduction, it might be advisable to get in touch with the Architectural League of New York. I know that this organization has been helpful to other men coming out from England. There is an agency in the Architects' Building, Park Avenue, and "Pencil Points," or one of the fortnightly architectural journals might be a useful medium for adver-

5. Bills of quantities are seldom used, it being the universal practice for the contractor to make his tender on the detailed

drawings and specifications, from which blue prints are taken. The contractors in America are rather different from those here.

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6. I have no accurate information on this last point, and cannot say whether the American combines the practice of architect and surveyor, but never having met the case I might hazard the guess, that, except in small jobs, surveying is a thing

I know one or two men who have spent years in architectural practice on both sides of the water, and they have never experienced any great difficulty in fitting themselves into either system, the difference, as I remarked, being in detail E. MAXWELL FRY.

Correspondence

Housing and Standardization

To the Editor of THE ARCHITECTS' JOURNAL. .

SIR,-It has been said that necessity is the mother of invention, and if the housing world is eagerly discussing a variety of new methods of house building, surely it is because a necessity really exists for some speedier methods of construction. If there were any prospect of getting nice little brick and mortar houses in reasonable number and at an economic cost, these new methods would, of course, be superfluous. The facts are obvious: the normal methods of house building are at present too slow and too costly to meet the urgent needs of the moment. Hence proposals for standardized houses of steel, timber, and concrete, if not of "papier mâché and cardboard," as your recent editorial ironically suggests.

But let us consider the case fairly. If it can be proved that these alternatives will build habitable and pleasant dwellings in a tithe of the time and at half the cost of a conventionally built house, why in the name of common sense should they not be built? If these alteratives are practicable let them be used, and, if possible, let them be used artistically—the very problem is an opportunity for the exercise of architectural genius and skill. Ugliness is not inherent in steel or concrete, and beauty is certainly not an intrinsic property of brick and mortar, as the hideous areas of dingy brick-built dwellings (only too permanent, alas!) in most of our big towns abundantly testify.

We presume the reference to cardboard and papier maché in the article already referred to is intended to deprecate the use of such new materials as fibre wallboard. A cousinly connection with paper (some papers being produced from wood fibre) which these materials possess is not a practical objection to their use. Paper itself, indeed, is very enduring, and if protected from exposure to the elements will last for hundreds of years, we might say thousands if we include the papyri of the ancient Egyptians. The proof of a material's suitability for constructional work is not to be found in theoretical considerations of its original nature, but in practical results obtained in use, and if the writer is tilting at wallboard, it is only fair to say that it has been proved that when properly fixed, wallboard forms a permanent, a satisfactory, and an artistic interior lining. It is no more logical contemptuously to decry the use of such materials by referring to "cardboard and papier mâché," than to pour contempt on plaster by classing it with the mud lining of uncivilized

Wallboard is, after all, timber pulped, treated, and remanufactured into boards with, of course, this difference, that the natural grain of timber and all knots are removed

in the process of manufacture.

It is estimated that something like a million feet of wallboard were used in the British Empire Exhibition. Most of the excellent decorative and constructional work in which this was used was designed by architects with results that are most creditable to them, and a proof of the usefulness and adaptability of the material.

The housing problem needs to be regarded broadly, and without prejudice. Every possible solution should be carefully examined and tested, and all suggested materials deserve to have their properties and possibilities studied so that the best use possible can be made of them. We submit that it is an absurd proposition that bricks and mortar and lath and plaster are the only materials with which pleasant and habitable houses can be constructed, and if the new houses which may develop as a result of experiments with these new materials are ugly, it will not be the fault of the materials, but lack of imagination in

Our leading article on "Standardization" was a protest against the growing idea that the housing problem can be solved by putting up factory-made houses on the mass production principle, without any regard for architectural character or for the amenities of the various localities in which they would be erected. We made no mention of fibre wallboard nor, indeed, of any other kind of wallboard, and there is nothing in our article that can possibly be construed as a reference to such materials. Nor do we anywhere maintain that "bricks and mortar and lath and plaster are the only materials with which pleasant and habitable houses can be constructed." On the contrary, we have frequently described and recommended the use of composition wallboards for panelling and the inside lining of walls generally.-ED. A.J.]

Unlovely Advertising

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,-The preference which business firms accord to unlovely advertising signs is not always due to lack of perception on the part of those responsible for their erection. In their private life they may be persons of fine taste, and in their personal relations with friends and neighbours they may be models of courtesy. But it has unfortunately become an accepted doctrine that conscience and public spirit has nothing to do with business. For that the accepted rule is too often to do what competitors do; and the prevailing practice is apparently based on the assumption that the crudest design attracts custom as effectively as that which has artistic merit. I believe that the calculation is unsound. Certainly in Kensington High Street many of the most prosperous establishments have pleasing exteriors. But I must own that those which affront the sight with huge lettering thrive also.

The remedy obviously is to develop a wholesome public opinion on the subject in the general community. The society in whose name I write has done much during the thirty years of its existence to do this. I wonder whether your correspondents have helped. Have they even taken note of some cases of very recent date, in which some of the worst forms of advertising disfigurement have been renounced by those who had till then employed them?

Let me recall a single incident which illustrates the frame of mind in which many business men approach these questions. During one of the Jubilee celebrations of our good Queen Victoria, many of the old firms in the City obtained permission from the Corporation to hang out replicas of the ancient signs. Everyone was pleased, but the manufacturers of the common-place devices for attracting attention represented that they were being injured, and accordingly the old-fashioned and restful devices had to be removed.

RICHARDSON EVANS,

Hon. Secretary, The Scapa Society for Prevention of Disfigurement in Town and Country.

A New Presidential Badge

On this page we illustrate the new presidential badge of office of the York and East Yorkshire Architectural Society. The pendant is executed in silver-gilt with an azure enamelled, convex section, oval ground, upon which are depicted the coats-of-arms of the important centres within the area of the York and East Yorkshire Architectural Society, viz., York in the centre, Hull on the left, Beverley on the right, and Scarborough below. The coat-of-arms of York consists of the Cross of St. George, on which are five lions. The insignia presented by William I to the five brave burgesses of York who defended the city; the Cap of Maintenance conferred by Richard II when bestowing the title of Lord Mayor of York on William de Selby in 1389; the Sword of State presented by the Emperor Sigismund, Richard's father, and the city mace. The coat-of-arms of Hull owes it origin to the Merchant Adventurers, who, likening themselves to the Three Merchant Kings of the East who presented themselves with offerings at Bethlehem, assumed the Three Crowns as a device for their seal, and this was subsequently adopted by the town. coat-of-arms of Beverley has three azure-coloured wavy bars and a beaver with its head turned biting off its fur. coat-of-arms of Scarborough shows a ship, watch-tower, and a star. Above, the keys of St. Peter complete the series. The devices are supported by the title of the Society in gold letters on a raised ground, and capped by the White Rose of York. The pendant measures $2\frac{1}{2}$ in. by $3\frac{1}{2}$ in., and was executed by Messrs. Fattorini and Sons, Ltd., of Bradford. The Society was founded in 1882, and has a total membership of sixty-nine. The president is Mr. Stephen Wilkinson, A.F.C., F.R.I.B.A., and the hon. sec. Mr. J. E. Reid, Licentiate R.I.B.A.



Contemporary Art

A Distinguished Exhibition.

At the Grosvenor Galleries there are seventy drawings by seven artists, none of which is large, all of which are admirable. Some of the architectural subjects are a joy both in their selection and execution, each of the artists contributing works of distinctive character, separating them from the others, but allied in their general attraction. Hester Frood has a strange tentative style, minute, and yet not laboured in the particular; her buildings and bridges are but faintly indicated, yet with a feeling evocation of subject. Charles E. Cundall provides the antithesis to this evanescence in his direct, large style, exercised by means of an admirably economic technique. concentrated interest of the houses, roofs, and closes of his "Edinburgh" is cleverly rendered, but "Holyrood Palace" is an even more striking example of direct architectural ren-dering of truth. "Knoe" is a drawing the tone of which is most pleasing. Job Nixon is an adept at crowding interest into a small space, as his Dieppe drawings, with their buildings, the excellent "Castle," "The Harbour," and the beach scene with carts and horses. "Amalfi," too, is a fine crowded, but not overcrowded, drawing, in which churches, houses, campanile, market-place, and people are packed in a very successful composition. But the principal work of this artist is the startling "Peasants Travelling in Italy," an interior of a railway carriage, with several large figures, rendered in fine line, and scumbled tints of red and black. It is a generously realistic study, the men and women drawn in a manner so after the life as to be almost plastic. There is an attractive naïveté in Algernon Newton's work exercised in the simple representation of the "Canal Bridge, Regent's Park," with its fine brushwork and flat colours. The particular draughtsmanship of this is further elaborated in the white houses of "Salisbury, Outskirts," and "Salisbury," a view of the spire rising above the houses with their beautiful, contrasted lights. Admirable as is the drawing of these examples, they are also distinguished by their delicate tone which comes nearer than anything else in the show to the mastery of Girtin and other early masters.

Sir D. Y. Cameron is seen at his sketchiest, and admirably, at that; the "Ely Cathedral" is quite a small fragment, but even so it shows enlightenment of its subject. "The Valley of the Forth" is more extensive, but just as slight. Muirhead Bone contributes sketches, too, the "Gibraltar Harbour" providing a mere indication of the buildings. The pillars in "Tourists at Corinth" are interesting; the view "From a Window in the Alhambra" shows a crowded scene; the harbour and houses at Stockholm are interesting, but the best drawing is the "View from Toledo," with its many houses, palaces, and churches. "The Galata Tower, Constantinople," does not explain or excuse itself by its inky, sombre darkness. James McBey's "Dieppe" is simple and pleasing, but "Dieppe Castle" is better; the dark-blue luminosity of "The Belfry, Bruges," is a new vision of this subject. The rough sketches in Holland and at Versailles are clever.

Poole Pottery.

Poole is likely to become an artistic "regional" zone. widespread shallow harbour, creeks, islands, and rivers have afforded inspiration and subject to many good modern artists. The town itself has picturesque patches and a few lovely Georgian houses, and it has an old pottery. It is within a tram-ride of most popular and populous watering places, with a residential as well as a great shifting population. Close by, at Bournemouth, there is the excellent Russell-Cotes Art Gallery, for exhibition and educational purposes. Now the old pottery has become a new institution, for the production of stoneware—wholesome, simple, and in good taste; not a bit arty, but something quite sound; something between true peasant art—no longer possible—and true craft, or applied art; something with faith and truth in it, just as the ancient Chinese stoneware figures had, as Mr. Joseph Thorp points out in his introduction to the catalogue of the exhibition now being held at the Gieves Gallery. There are hundreds of examples, including some figure work. They are largely table ware, with the addition of a number of admirably-designed pieces in which the coloured glazes are relied upon for the particular excellence sought for. The glazes to be seen in this show are fine, and the designs are worthy of them. There is no doubt of the basic soundness of this now successful undertaking, and architects could not do better than place commissions for ornamental objects and fittings in the KINETON PARKES. Poole pottery stoneware.

The Week's News

More Houses for Keighley.

A number of slum houses are being abolished at Keighley, and 536 persons are to be accommodated in new houses.

New Schools for the West Riding.

New schools are contemplated at South Kirby, Moorthorpe, Upton, and Braithwell, near Rotherham.

New Municipal Offices for Purley.

The Purley Urban District Council propose to spend £20,000 on new offices.

Monmouth Road Widening Scheme.

The Monmouth County Council are to spend £150,000 on widening the main Newport to Cardiff road.

Proposed New Hospital for Strabane.

It is proposed to build a new hospital at Strabane, near Belfast, at a cost of £20,000.

Mitcham's Housing Loans.

The Mitcham Urban District Council are raising a loan of £17,000 for housing.

German Bricks for Teddington Houses.

Cargoes of bricks from Germany are arriving at Twickenham for the local housing schemes.

Proposed Garden Suburb for Exeter.

On the Birchy Barton estate, near Exeter, it is proposed to erect 150 houses.

The late Mr. J. J. M'Donnell.

We regret to record the death of Mr. J. J. M'Donnell, J.P., M.R.I.A.I., of Belfast, architect.

Change of Address.

Mr. G. Alan Fortescue, A.R.I.B.A., architect, has moved to 46 Dover Street, W. Telephone: Gerrard 3415.

Shrewsbury's Cathedral Elect.

The Old Abbey Church, Shrewsbury, near the old Welsh bridge, is to be altered and adapted as a cathedral.

New Civic Hall for Truro.

The Ministry of Health have sanctioned the erection by the Truro Corporation of a £6,000 civic hall.

Wembley Closing Date.

It has been officially announced that the closing date of the British Empire Exhibition at Wembley will be November 1.

Proposed New Welfare Centre for London.

Efforts are being made to erect a new building upon a new site to house the Old Kent Road Infant Welfare Centre.

Proposed Tidal Swimming-bath for Brighton.

It is proposed to build a tidal swimming-bath at Brighton at a cost of £60,000.

The Rebuilding of a London Store.

Messrs. William Whiteley's old premises in Queen's Road, London, W., are to be rebuilt from the designs of Mr. W. Curtis Green, A.R.A.

Proposed "Skyscraper" for Rome.

Negotiations are proceeding for the erection of an eightystory building in Rome from the designs of Palanti, an Italo-Argentine architect.

Trackless "Trams" for Ipswich.

The Ipswich Corporation have decided to abandon the tramways and substitute a modern service of trackless trolley vehicles.

Five Millions for Glasgow Housing.

The Glasgow Corporation Housing Department is committed to an expenditure of approximately five million pounds on various housing schemes.

Building Developments at Eltham.

On a new estate being formed opposite Well Hall Station, in Well Hall Road, Eltham, a colony of 500 houses is to be erected.

Warwickshire's Ancient Monuments.

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The Office of Works have scheduled as ancient monuments Wyre, Eckington, Pershore, Tenbury, and Ham bridges, all in Warwickshire.

A New Athenaum Library for Liverpool.

A new athenæum library is to be erected on the corner of the old St. Peter's Churchyard, Liverpool. The architects are Messrs. Willink and Dod.

Houses at Heanor.

The Heanor Urban District Council have decided to submit proposals to the Ministry of Health for the erection of 115 houses in the district within two years under the 1924 Act.

Proposed New Swimming-bath for Watford.

The Ministry of Health are to hold an inquiry into the application of the Bushey Urban District Council for permission to erect a swimming-bath. The estimated cost is £3,100.

The Site of St. Michael's, London.

To mark the site of St. Michael's Church, which was demolished in 1831, the City of London Corporation is to fix a plaque over No. 51 King William Street.

Sheffield Improvement Schemes.

The Sheffield Corporation propose to erect a new abattoir at an estimated cost of £100,000, to build the Hillsborough baths at an estimated cost of £30,914, and to carry out several electrical extensions at a cost of £61,459.

New Buildings for Barnsley.

The Barnsley Corporation are considering the building of municipal washhouses, and the Education Committee propose to erect a new mining college and technical institute. Plans are being prepared for the erection of a new town hall.

The Extension of Ossett Grammar School.

The West Riding Education Committee have resolved to extend the Ossett Grammar School if the Board of Education approve of the scheme. The estimated cost is £22,000 for buildings and £3,000 for equipment.

Proposed New Concert Hall for Leeds.

A new concert hall and swimming bath are proposed for Leeds. The swimming bath will be designed to enable it to be turned into a concert hall in winter, to seat about 5,000 people. The total cost is estimated at £70,000.

£250,000 New Tees Bridge.

With the object of linking up the important industrial areas of the Tees, a conference of Durham and North Yorkshire authorities have decided upon a further crossing of the Tees at Newport. The bridge will cost a quarter of a million.

The Restoration of an Old Essex Church.

The tower of St. Peter's Church, Maldon—claimed to be the oldest church in Essex—is to be restored. A beacon used to be lighted in the tower every night to guide ships entering the estuary of the Blackwater from the North Sea.

Sir John Soane's Museum.

Sir John Soane's Museum, 13 Lincoln's Inn Fields, W.C.2, will be open free from 10.30 a.m. to 5 p.m. on Thursdays and Fridays during October, and from 10.30 a.m. to 4 p.m. on those days during November.

Proposed Municipal Brickworks for Brighton.

The Brighton Corporation have asked the town clerk to ascertain if they have legal power to establish municipal brickworks, and, if so, the borough surveyor is to report as to the practicability of the proposal.

An Ancient British Fort Discovered.

A discovery of remnants of an ancient British fort has been made near Barrasford (Northumberland), east of the Roman highway, Watling Street. Several hut circles have also been found.

London Workhouse as Flats.

The Lambeth Borough Council are negotiating for the purchase of the Princess Road workhouse, now closed, for conversion into flats. This is the fourth South London workhouse to be closed within a comparatively short time.

Manchester's Employment Schemes.

To provide work for the unemployed in the coming winter the Manchester Town-planning Committee recommend the carrying out of a new scheme of road making and extension estimated to cost £180,000.

New Bridge and Schools for Selby.

To provide work for the unemployed the Selby Urban District Council propose to erect a new bridge over the canal, new Council schools, and a new junior school at the Abbey schools. The estimated cost of the canal bridge is about £15,000.

Kenilworth's Urban Housing Scheme.

Application is being made to the Minister of Health for sanction to borrow £1,923 for housing grants to private enterprise, and to the Public Works Loan Board for a loan for the purchase of a site for housing scheme in Albion Street and Herberts Lane.

Redcar Development Scheme.

The Redcar Corporation are considering a scheme involving an estimated expenditure of £7,500 for the extension of the Coatham promenade, and the development as a park, with tennis courts and bowling-greens of the land to be enclosed by the new road.

Bathing Pool for Weston-Super-Mare.

Plans are being prepared for building a wall across Glentworth Bay. It will enclose a large area of water, which will be available for bathing and boating at all states of the tide. Plans are also in preparation for the widening of the parade around Madeira Cove.

Extension of Cowes Esplanade.

The Ministry of Transport have sanctioned the scheme of the Cowes Urban District Council for the shore road, in continuation of the esplanade, in a westerly direction, linking up with Gurnard. The cost of the new road is estimated at £15,000, of which a 75 per cent. Government grant has been promised.

The Minister of Agriculture's Residence.

Extensive alterations and additions are nearing completion at the residence of the Minister of Agriculture (The Right Hon. Noel Buxton), near Waltham Abbey. The architect is Mr. Kenneth M. B. Cross (of A. W. S. and K. M. B. Cross) and the general contractors are Messrs. Bentley and Sons, of Waltham Abbey.

Romford Rural Housing.

The Minister of Health has informed the Romford Rural District Council that he would give approval to the Council promising financial assistance under the Housing Act, 1923, in respect of 200 houses, on condition that they were commenced before December 31 and completed before June 30, 1925. Sanction was given to the Council raising a loan of £9,000 to meet housing needs for the next six months.

A New Housing Scheme for Rothesay.

A scheme of housing development will be begun this winter at Rothesay. It is a private-enterprise venture, and comprises in its complete form about 700 houses, which will be built as a planned residential area at Ardbeg, immediately to the south-west of the Skeoch Wood. The scheme has been planned by Mr. Joseph Boyd, F.I.A.(Scot.), M.S.A., of Glasgow.

The Development of Romanby.

The Ministry of Health held an inquiry into the application of the Northallerton Rural District Council for sanction to borrow £2,000 towards the provision of extra drainage and water mains in the township of Romanby, where several new houses have been erected. Lay-out plans for the erection of about 100 houses in the future have been submitted to the Council.

The Payment of Housing Subsidies.

Replying to a letter from the Woking Urban District Council, the Ministry of Health state that no objection will be raised to the payment of housing subsidies where local authorities have already committed themselves by the issue of certificates. The Council had asked the Ministry for an assurance that if the Council acted to the best of its judgment at the time when it decided to grant the subsidy, it should not be its duty afterwards to investigate the actual cost or sale price before it paid over the subsidy which it had undertaken to pay.

Housing Progress in Scotland.

The following figures show the progress made in State-aided housing schemes in Scotland to August 31, 1924:—

1919 Act		 Completed.	Construction.
Private subsidy schemes		 2,324	
Slum clearance schemes		 533	1,708
1923 Act		 618	4,471
		26,095	8,977

Of the total number of houses completed and under construction under the 1923 Act, 1,918 are by the local authorities, and 3,171 by private enterprise.

The Building Materials Bill.

The Minister of Health, the Right Honourable John Wheatley, M.P., received a deputation from representatives of the manufacturers and suppliers of building materials. The deputation, while accepting the principle of legislation directed against persons seeking to exploit the necessities of the country, represented that some of the provisions of the Building Materials (Charges and Supply) Bill went beyond the pledges that had been publicly given by the Minister, in the course of the negotiations prior to the Housing Bill. In particular they could not accept the clauses of the Bill providing for temporary taking over of works in certain circumstances. The Minister undertook that if they could put forward amendments which, without prejudice to the underlying principles, would meet their requirements, he would give them full and fair consideration.

The Romance of the Middle Ages

Sir Banister Fletcher, F.R.I.B.A., gave the introductory lecture of a course of twenty-four university extension lectures on Mediæval Architecture at the Central School of Arts and Crafts, Southampton Row. He dealt first with the nature of the lectures to be given during the session, and explained that he would deal with the study of architectural history on broad lines from a popular point of view, and trace its evolution in the different countries of Europe. He pointed out that architecture was the basis of all design, and a knowledge of it was necessary not only to designers and art students, but practically to the whole community. The author and novelist, for the settings of their historical novels; the journalist and the photographer, who deal largely with buildings; the connoisseur of the accessory arts, and the teaching profession, all required a knowledge of architecture. Sir Banister illustrated his lecture with lantern slides, of which some twelve hundred will be shown during the course, thus making the study of this sub-ject easy and enjoyable. He showed that mediæval architec-ture was a continuous evolution from the round-arched or Romanesque period to the pointed-arch or Gothic period, and was the result of forces and tendencies underlying the whole life of mediæval times. Views were shown comparing the architecture of the ancient periods of history, so as to form a connecting link with the other courses of lectures.

List of Competitions Open

Date of Delivery.	COMPETITION.				
Dec. 1.	New church and Sunday school for the First Church of Christ Scientist, Southport. Premiums £75, £50, £30. Apply the Assessors, Messrs. J. E. Sanders and Son, A.R.I.B.A., 279a Lord Street, Southport, accompanied by a payment of 10s., returnable only to those who send in designs.				
Jan. 20, 1925	Art gallery and museum of art for the City of Manchester. Assessors, Mr. Paul Waterhouse, Professor C. H. Reilly, and Mr. Percy S. Worthington. Premiums £500, £300, £200, £100. Apply with payment of 5s., which is not returnable, to Mr. P. M. Heath, Town Clerk.				
Mar. 31, 1925	Bethune War Memorial. Assessor, Sir Aston Webb, P.R.A. Apply Secretary, Imperial War Graves Commission, 82 Baker Street, W.r.				
May 1, 1925	The United Grand Lodge of England invite designs for re-building the Freemasons' Hall in Great Queen Street, Kingsway, London. Apply with deposit of one guinea, to the Grand Secretary, Freemasons Hall, Great Queen Street, London, W.C.2. The envelope should be marked "M.M.M. Competition."				

Competition News

Nottingham Freemasons' Hall.

The design of Messrs. John Howitt and Son has been placed first in the Nottingham Freemasons' Hall competition.

Book Reviews

Dimensions and Properties of British Standard Rolled Steel Sections.

The British Engineering Standards Association has now published the complete edition of the Section Book (Report No. 6, 1924) giving the geometrical properties of the revised British Standard Rolled Steel Sections for Structural Purposes issued in 1920. In this edition the values of the geometrical properties for all standard thicknesses have been given; hitherto those relating to the minimum thicknesses only have been published.

In addition to the tables, the introduction to the original book published in 1904 has been revised and included as an explanation of the quantities printed in the lists, with a

few examples of their application in designing.

The properties of the sections have been calculated on the exact formulæ which were used in obtaining those for the original Section Book, but for the convenience of designers a series of approximate formulæ has been given by which the geometrical properties of intermediate sizes of the standard sections having web thickness other than those given in the lists or sections of similar proportions to the standards can be obtained. These formulæ are believed to be more exact than any approximate formulæ hitherto published. The tables are divided into two parts, the first part giving the values in British measure which are the standard, the second part, which has been prepared for the convenience of users in countries in which the metric system obtains, giving the metric equivalents, deduced from the British values and correct to the last decimal place.

British Standard Relle I steel Sections for Structural Purposes. B.E.S.A. Publication Department, 28 Victoria Street, London, S.W.L. 5-5. net.

The Stones of Stonehenge.

There is an undoubted charm in the pursuit of a mystery with a view to its unravelment, and when we come to every-day matters of public intercourse and public commerce, an unsolved mystery is a menace to our peace of mind. But in the realms of archæology and geographical exploration we may well be satisfied to witness a continuance of endeavour towards the solution of a mystery destined to be a permanent source of enquiry. Short of a solution of the problem of Stonehenge, monographs upon the subject, such as this of Mr. Stone's, are deserving of high welcome, and it is easy to perceive that he writes with a knowledge such as personal acquaintanceship alone could ensure.

The similarity of idea in this structure and the Flavian Amphitheatre (the Colosseum) at Rome, advanced by the author, is not apparent to an architect. The one shows single-story concentric circles, with a horseshoe setting-out within; the other, a four-story ellipse with a clear arena; the one, constructed upon the lintel principle, as contrasting with the arcuated principle displayed in the Amphitheatre. I can no more regard the Colosseum as a development from Stonehenge than I can regard Westminster Abbey as

developed from Deerhurst (Saxon) Church.

Famous architect as everybody recognizes Inigo Jones to have been, he seems to have misconceived the plan of Stonehenge, though it was better preserved, when he surveyed it for James I, than it is to-day. His "restoration" shows a completed hexagon of trilithons, where every one else shows either a horseshoe or (see John Wood's plan) a stilted semicircle. The angular inclination of the stones is certainly opposed to the idea of a hexagon.

Where the author confines himself to archæological details, his text is both interesting and valuable, but he is apt to go wrong when he uses architectural terminology. But even from the archæological standpoint, surely it is scarcely accurate to state that Stonehenge is unique in Britain, when Abury is in existence, which, whilst differing in development, is similar in essentials.

All will agree that the structure bears evidence of great engineering skill, and Part VI of Mr. Stone's book, dealing with the possible mode of erection, not only makes very interesting reading, but possesses, too, an air of vraisemblance that does much credit to the author's intelligent labours.

The diagrams and photographs are usefully illustrative of the text; and the general evidences of careful preparation throughout, and of careful revision of the proof-sheets, will commend themselves and the author simultaneously. A split infinitive, a casual error—I noticed only three—will be sure to receive attention at the author's hands whenever he is called upon to prepare for the Press a new edition of a work which it is a pleasure and a privilege to add to one's library.

P. L. M.

"The Stones of Stonehenge." By E. Herbert Stone, F.S.A. London; Robert Scott, Paternoster Row. Price One Guinea.

Publications Received

"The Decoration and Renovation of the Home." By Arthur Seymour Jennings, F.I.B.D. With a chapter on "Period Furniture and Appropriate Mural Decoration." By Herbert E. Binstead. Price 12s. 6d. net. Trade Papers Publishing Co., 301 Bank Chambers, 329 High Holborn, W.C.1.

"A Hundred Years of Portland Cement, 1824–1924." By A. C. Davis, M.Inst.C.E., M.I.Mech.E., F.C.S. Net prices: cloth binding, 21s.; leather, 25s. Concrete Publications, Ltd., 35 Great St. Helens, Bishopsgate, E.C.3.

Houses in Relation to Wind, Rainfall, and Sunshine

The question, "What is the best aspect for a house?" has been asked many times, and invariably answered in accordance with the taste or prejudice of the person replying. In a reprint of an article published in the R.I.B.A. Journal on "Aspects of Houses in Relation to Wind, Rainfall, and Sunshine," Mr. Nathaniel Lloyd, O.B.E., says: Houses have been placed on sites in accordance with the fashion of their times, or with supposed advantages in health and enjoyment, but subject to modifications dictated by the slope of ground or other characteristics of particular sites. The mediæval house almost invariably faced towards the north, seldom due north, but more frequently north-east than north-west. writers who concerned themselves with such matters were emphatic in denunciation of southerly aspects and in praise of those facing north. That a south aspect breeds sickness we no longer believe, but while a northerly prospect has the advantage of objects being lighted by the sun from behind the observer, and so appearing with greater charm than when viewed under the light, few would now choose that aspect. Except that, in a vague way, choice of aspect is now dictated by desire to secure as much sunshine as possible, quite irrespective of the quality of the sunshine or of the time of day at which it will enter rooms, the choice is made in what can only be called haphazard fashion without either scientific or logical reasons. Due south appears to be the favourite aspect, after that south-west and, less often, south-east. South, however, is reigning favourite, generally without allowance being made tor variation in conditions in different parts of the country. He then considers the influences of wind, rainfall, and sunshine as affecting the garden front of the house, in which the architect strives to place as many as possible of his living-rooms and bedrooms.

Coming Events

Friday, October 15.

British Society of Master Glass-Painters.—Meeting in the hall of the Art Workers' Guild, 6 Queen Square, W.C.I. "Architecture and Stained Glass." By Sir Charles Nicholson, F.R.I.B.A. 6.30 p.m.

Building Education in Lancashire and Cheshire.

A meeting of Lancashire and Cheshire building trades teachers and others interested will be held on October 18, at 2 p.m., at the Manchester College of Technology, under the chairmanship of D. W. Steele, M.R.San.I., of Wigan. The report of the teachers' representatives on the joint committee appointed to meet the Institute of Builders will be presented, and discussions will take place on "Building Examinations and the Necessity for National Certificates," "Training for Higher Positions in the Building Industry," and the introduction of trade courses.

