THE ARCHITECTURAL REVIEW
With which is incorporated "Details" . .
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A fascinating little figure to be seen in Gallery No. VI at this year's Royal Academy Exhibition

"THE FROG," BY W. REID DICK

STEPS LEADING TO "THE WILD GARDEN" AT WYCH CROSS PLACE, SUSSEX
THOMAS H. MAWSON, HON. A.R.I.B.A., GARDEN ARCHITECT

WALL GARDENS. BY WYNDHAM FITZHERBERT

BEAUTIFUL effects may be obtained by the association of stones and plants, but the rock gardens, which should show the capabilities of this system of horticulture to the best advantage, are too often spoilt by the great excess of stone over plants which they exhibit. It should be remembered that the garden is to be a garden of flowers and not of rocks, and any preponderance of the latter will inevitably ruin the appearance of the spot; whereas, if it is borne in mind that the mission of the rocks is merely to afford surfaces for the trailing growths to veil with foliage and flowers, and to provide deep and congenial rifts of gritty soil for the roots to explore, a charming effect will eventually be produced.

In wall-gardening, however, the danger of faulty construction does not arise, for the structures are merely perpendicular or sloping expanses of stone that are to be beautified by the introduction of flowering plants. With the lessons that Nature is always teaching, none need despair of growing plants on even the most apparently unsuitable wall, though it must be admitted that human efforts often fail where Nature succeeds. We see a strong plant of valerian (*Centranthus ruber*), three feet in height and in full flower, springing from an interstice between paving-stones that a knife-blade will scarcely enter; at the side of a cottage chimneypot a wallflower is in full bloom; snapdragons are flowering grandly in a crack in a bridge-coping; or the top of a twenty-foot wall is lined with the Mexican daisy (*Erigeron mucronatus*) in blossom, from seed blown upwards from the garden below.

Where possible it is always best to build walls specially for the reception of plants. If the ground is steep, terracing of some description is advisable, and this may be effected by building retaining walls. These walls are far more desirable in every way than the steep slopes or embankments of turf too often seen in gardens. The wall should be built of large, rough, flat stones, these being inclined slightly downward at the back, and each layer should be a trifle behind the one immediately beneath it, so that any rain falling on the surface of the wall will sink backwards and downwards into the joints. As the stones are placed in position a layer of gritty soil should be spread above them, and on this the roots of the plants to be used should be laid, separating them carefully and scattering a little sandy soil over them. In this manner, layer after layer, the wall may be built and planted.

The above is the best method of building and furnishing a wall with plants; but, in some cases, where the plants are not at hand, the layers of stone are simply laid on one another without any intervening soil, this being inserted into the cracks and fissures between the stones with the plants when they arrive. These retaining walls, backed by earth many feet in depth, in which the roots of the plants delight to run and remain cool in the hottest weather, are better for their health than any rock garden. Those that would perish of drought if planted on the level, during long-continued summer heat remain perfectly happy in the chinks of the wall; while in the winter, not being exposed to the cold and damp of surrounding earth, they endure with equanimity a temperature that would kill their relatives in the rock garden. For this reason all tender plants should be grown in walls, and it is surprising what severe frosts they will withstand in such sites.

It is not absolutely necessary that walls should be retaining ones in order to render plant-life possible upon them. Old walls may be seen in many gardens clothed with yellow fumitory (*Corydalis*) with its fern-like foliage, pennywort, and other plants. Such old walls may be improved for plant-growth by here and there chiselling out joints and corners of bricks or stones without at all interfering with the solidity of the wall. Even new walls, that the majority would at once condemn as totally unsuitable for plant-growing, are not without their possibilities, as was proved in a South Devon town, where the occupier of a villa started to grow plants on the top of an eleven-year-old limestone wall, 3 ft. 6 in. in height and 14 in. in breadth, facing the public street. Before planting, a stone chisel and hammer were used to break up the mortar to the depth of a few inches, and the little plants, with a trifle of soil adhering to their roots, were inserted in the powdered mortar, and watered. Success exceeded anticipation, and now for many weeks in the year the wall-top is bright with blossom. The plants are practically without soil, their roots being in the mortar, but it is extraordinary how contented they appear to be with their environment. Over thirty genera of plants are grown on this wall.

In planting a wall the subjects used should not be dotted about promiscuously, but should be grouped so that a good breadth of one variety is secured which will provide bold masses of colour. The following are good wall plants: *Achillea umbellata*, *Artemisia nana*, and *A. sericea*, white flowers and grey foliage; *Acantholimon glumaceum* and *A. venustum*, pink flowers and spiny leaves; *Arenaria balearica*, a charming plant best suited by a slightly shaded position, which drapes the stones with a filigree of clinging green starred

WALL GARDEN AT WYCH CROSS PLACE

with small white flowers in the spring; *A. montana*, with larger white flowers, good for the top or sides of the wall; the bright yellow *Alyssum saxatile;* the white *Arabis* and its double variety; the well-known *Aubrietias*, lavender, purple, and crimson; the Prophet Flower (*Arnebia echioides*); *Androsaces*, a lovely race of plants doing well in a wall, but often failing in the rock garden (of these *A. lanuginosa*, *A. sarmentosa*, and *A. Chumbyi*, natives of the Himalayas, are among the best); *Æthionema pulchellum*, *Æ. coridifolium*, and *Æ. grandiflorum*, beautiful little plants from the East with soft-pink flowers; the creeping snapdragons, *Antirrhinum glutinosum*, white, *A. asarinum*, pale yellow, and *A. sempervirens*, white with purple spots.

Numbers of the campanulas are excellently suited to wall-culture, among these being *C. cæspitosa* and *C. pusilla*, two very dwarf forms, purple-blue and white; *C. muralis*, purple; *C. garganica*, lavender-blue; *C. pulloides*, violet; *C. isophylla* and *C. fragilis*, both with drooping habit, and much used for pot-culture by cottagers; *C. pelviformis*, pale lavender; *C. Raineri*, dark blue; *C. serpyllifolia*, violet-purple.

All the foregoing are dwarf plants, but *C. pyramidalis*, the chimney campanula, which grows to a height of seven feet in the borders, often springs up in walls from self-sown seed, when it is a handsome object.

The pinks do well in walls, and of these *Dianthus deltoides*, *D. cæsius* (the Cheddar pink), *D. fragrans*, *D. superbus*, and *D. plumarius* are pleasing.

The helianthemums, or sun roses, delight in a hot wall, and are pretty when drooping over the top in their colours of yellow, white, pink, and crimson. *Hypericum Coris* and *H. repens* are two charming little yellow St. John's worts; *Convolvulus mauritanicus* is lovely when its hanging growths are lavender-blue with blossom; and *Zauschneria californica* is brilliant when carrying its vermilion flowers. *Cerastium tomentosum*, the well-known rock-plant, with white flowers and grey foliage, and the pink *Saponaria ocymoides*, with its white variety, are attractive. The species of Iberis, *Silene alpestris*, *Tunica saxifraga*, and *Hutchinsia alpina*, are pretty white-flowered plants, and *Lithospermum prostratum* is a deep blue.

The little *Erinus alpinus* is one of the best of wall plants, seeding itself profusely and springing up in every cranny of the stones; the type is magenta-pink, but there are crimson and white varieties.

The dwarf phloxes of the *setacea* section, such as The Bride and Vivid, are good; and the sham-

WALL GARDEN AT WYCH CROSS PLACE

rock pea (*Parochetus communis*), which bears sky-blue flowers in the autumn, is very beautiful.

Saxifrages are a host in themselves, and never do better than in a wall. The encrusted section succeed best in the full sun, but those of the mossy type appreciate partial shade. Sedums are also useful, and will grow in any position.

Most rock plants enjoy the sun, but there is no reason to conclude that the shady wall must depend entirely upon ferns for adornment. *Ramondia pyrenaica* is a lovely thing, with lavender golden-eyed flowers an inch across, that delights in a north wall, as does *R. Nathaliæ* and the nearly-allied *Haberlea rhodopensis*. Primula species also appreciate moisture and shade, and such sorts as *marginata, nivalis, viscosa,* and *involucrata* may be grown in subdued light. In arranging the plants in the wall care should be taken that those which assume a drooping habit are not placed immediately above such as are of tufted growth, or they will in time smother them with their foliage. For the top of the retaining wall plants of the *Cistus* family are well suited, while the creeping rosemary and *Cotoneaster horizontalis* will drape the edge. *Rosa wichuraiana,* if planted at the top, will cover the wall to the base with foliage and flowers, as will *Clematis flammula* and the yellow-blossomed *Forsythia suspensa*. A plant of this description here and there will prevent a wall having a stiff appearance.

Where the wall is cut through for a stairway leading from the upper to the lower level, the steps should be formed of wide flat stones, and an easy gradient arranged, while the sides of the stairway should be built up with dry walling in which stonecrops, sea pinks, and other plants may be grown.

The paths by the wall-garden should not be gravelled, but should be composed of flat, irregularly-shaped stones sunk in the earth. In the interstices of these stones will grow saxifrages, sedums, thymes, arenarias, and a host of dwarf plants that will soon hide their edges and jewel them with blossom, rendering the pathway by no means the least beautiful portion of the garden. Much may be done by scattering along these paths seeds of such things as the lovely purple and orange *Linaria alpina,* the annual yellow saxifrage, *S. Cymbalaria,* the charming little *Ionopsidium acaule,* better known as the violet cress, the Virginian stock—pretty when its colours of white, lavender, and pink are mingled—and *Erinus alpinus*. When these gems have once grown and flowered there will be no need for further seed-sowing, as the plants will reproduce themselves freely from self-sown seed.

WALL GARDENS

There is some excellent writing about gardens in the series of articles that appeared recently in the columns of *The Times*, now gathered together in book form.[1] The breeziness of the style, combining trenchant criticism with sound practical information, is delightfully refreshing, and as the writer is never idly discursive, but always intent on some particular point, the perusal of these articles is both interesting and profitable. As having relation to the subject dealt with in the preceding pages, the following quotation from one of the articles may here be given: "It is a curious fact that every gardener with a real love of his art tends sooner or later to become a rock gardener and to take a greater pleasure in his rock plants than in any others . . . . there is more pleasure to be got from growing Alpine plants than any others . . . There is nothing in Nature so full of wonder and delight as an Alpine spring . . . and it is not strange that, as we go to hear the songs of Grieg in a London concert room, so we should wish to see some of the magic of that spring in our lowland gardens. Therefore the rock gardener contrives his little make-believe. He cannot hope that his small rocks and slopes and valleys will in themselves have any look of the Alps; but they will at any rate serve as a frame not incongruous to the beauty of his Alpine flowers. And his pleasure in rock-gardening is enhanced by the fact that the nearer he gets to a natural arrangement of his rocks the more likely are his plants to thrive among them. This kind of natural arrangement is not easy to contrive, and will never come by chance. When people first began to make rockeries they seem to have had some dim idea of imitating chaos. They bought loads of clinkers, certainly the most chaotic objects ever produced either by Nature or Art, and they shot them down in confused heaps in parts of the garden most unfavourable to plant life. Among these heaps they planted ferns and stonecrops and London pride. Some of these perhaps contrived to live, and did in time conceal some of the desolation of the clinkers; but their survival was a credit to themselves rather than to those who put them there. When, however, rockeries first began to be thought of as places for the cultivation of rock plants, there was a violent reaction from the imitation of chaos . . . . Those who really loved the beauty of Alpine plants and were eager to grow them . . . . set to work to discover what benefit the plant got from its native rocks, and they saw that it was protected by those rocks from extremes both of heat and cold, of drought and moisture. They saw, too, that it could get that protection only from rocks arranged in certain natural ways; and therefore they set to work to imitate such arrangement in their own rock gardens. So the building of rocks became an art and also one of the chief pleasures of rock-gardening. . . . "

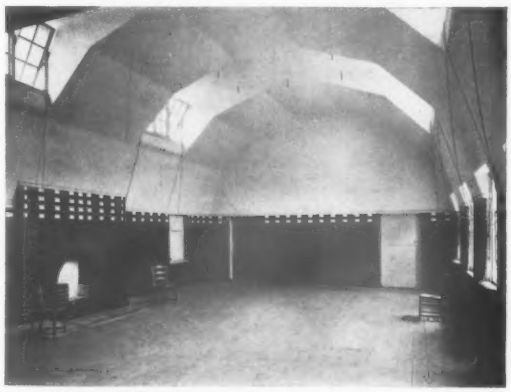
WALL GARDEN AT A HOUSE IN SOMERSET
THOMAS H. MAWSON, HON. A.R.I.B.A., GARDEN ARCHITECT

[1] "Studies in Gardening." London: *The Times* Office, Printing House Square, E.C. Price 1s. nett.

THE WORK OF SMITH AND BREWER

RUSKIN and Charles Lamb might be cited as two great writers who, on occasion, couched some of the most extravagant ideas in the most felicitous phrases; and, curiously enough, they happen to have done this in equal extremes on the subject of Town compared with Country as a place for men to work and live in. Ruskin's dictum about the country being the one and only place for architects—for the town bricks up men's imaginations, etc.—is so familiar and so untrue that the mere mention of it will suffice to recall the whole outlook in that direction. On the other side, among Charles Lamb's many contemptuous allusions to the country, is an out-of-the-way one in a letter to Wordsworth, written on January 22nd, 1830, which is worth quoting in this connection. He says: "O never let the lying poets be believed, who 'tice men from the cheerful haunts of streets—or think they mean it not of a country village. In the ruins of Palmyra I could gird myself up to solitude, or muse to the snorings of the Seven Sleepers; but to have a little teasing image of a town about one, country folks that do not look like country folks, shops two yards square, half a dozen apples and two penn'orth of overlooked gingerbread for the lofty fruiterers of Oxford Street—and, for the immortal book and print stalls, a circulating library that stands still, where the show-picture is a last year's Valentine, and whither the fame of the last ten Scotch novels has not yet travel'd—to have a new plastered flat church, and to be wishing that it was but a Cathedral . . . O let no native Londoner imagine that health, and rest, and innocent occupation, interchange of converse sweet and recreative study, can make the country anything better than altogether odious and detestable. A garden was the primitive prison till man, with Promethean felicity and boldness, luckily sinn'd himself out of it. Thence follow'd Babylon, Nineveh, Venice, London, haberdashers, goldsmiths, taverns, playhouses, satires, epigrams, puns—these all came in on the town part, and the thither side of innocence."

The question is as old as the hills, and crops

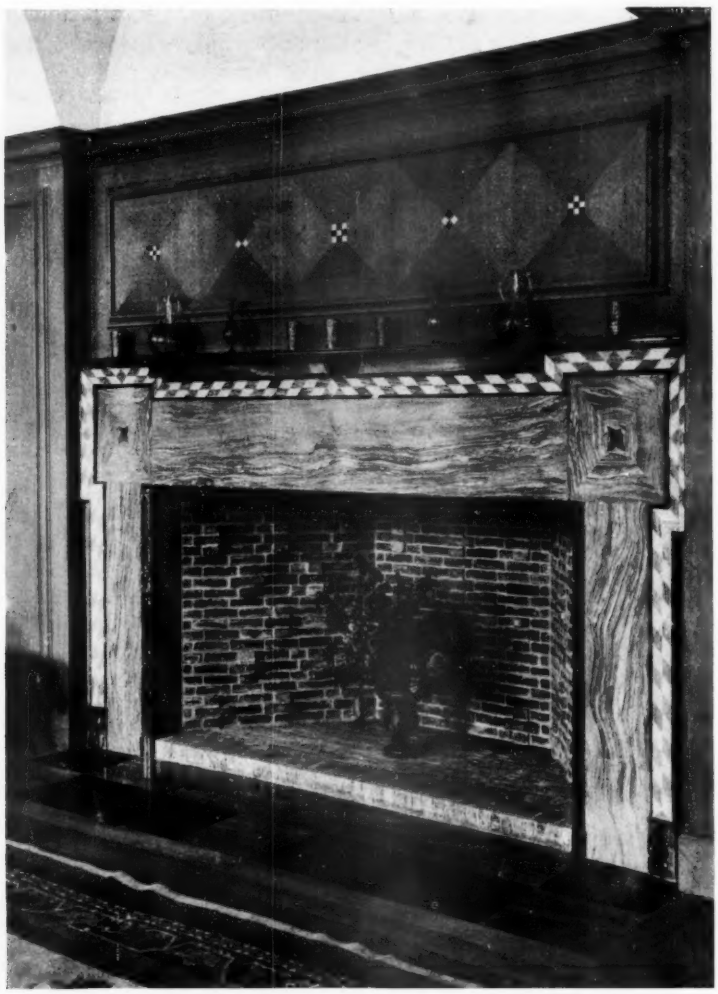


PASSMORE EDWARDS SETTLEMENT
MEN'S CLUB BILLIARD-ROOM

up for each generation to deal with. Architects to-day seem to settle it by taking up a position midway between the two extremes indicated; that is to say, they live in both town and country—quite apart from the necessities which the modern city imposes. In London, for instance, how many architects live with their work? Merely a handful. Yet more real aid is derivable from the buildings of the city than from those of the country, and more inspiration comes in the hours over the drawing-board, amid the dull drone of traffic, than in the fascinating time with pencil and sketch-book in the seclusion of the country. Perhaps the truth is, for the Englishman at least, if not for the Parisian, that the modern city is a splendid place to work in, but a wretched place to live in. Hence we find architects, like the rest, flitting in and flitting out, settling for the day in their office quarters, gathering together, as gregarious animals, into select squares and quiet streets. The West-Central squares of London are full of them. Gray's

PASSMORE EDWARDS SETTLEMENT,
TAVISTOCK PLACE, W.C.: RESIDENTS' ENTRANCE

Inn Square, especially, is full of them. Here are the houses of the day before yesterday, with sober fronts, almost negative outside (unless the forming of rectangular holes in a brick wall be counted as an architectural achievement), but having behind those fronts many a panelled room, many a delightful chimneypiece, with staircases, too—good fat balusters and substantial handrails—that make one sadder at every fresh sight of the suburban villa. In such a quarter, and housed in such fashion, are to be found the architects whose work is here illustrated.



GALLERY FIREPLACE AT "DITTON PLACE," BALCOMBE, SUSSEX

It is not the writer's purpose to enter into any biographical account of Mr. A. Dunbar Smith, F.R.I.B.A., and Mr. Cecil C. Brewer, but to give a brief description of the chief work which has been carried out from their designs up to the present time.

In point of date, the Passmore Edwards Settlement in Tavistock Place, W.C., may be taken first, as that was the first building designed by them. It was erected in 1896–7, the design having been selected in a limited competition, of which Mr. Norman Shaw, R.A., was the assessor. The accompanying illustrations show the entrance to the residents' quarters and the men's club billiard-room, the latter being in a small building erected some years after the main block had been completed. In an undertaking of this kind it will be obvious that economy is a ruling consideration, but even under this restriction the architects have been successful in the introduction of a few individual features, as the photographs show.

Their work, however, is seen to better advantage in the many houses, large and small, which they have carried out in various parts of the country. The largest, and perhaps the finest, of these houses is "Ditton Place," Balcombe, Sussex. It is here represented only by a detail of one of the drawing-room windows, with an oval niche above, and a detail of the chimney-

"LITTLE BARLEY END," ALDBURY, HERTS

piece in the gallery, as the house has already been fully illustrated and described in the pages of this REVIEW.[1] But in referring to it some comment may be made on the pervading character of the work. In this house, as in all the others they have designed, Messrs. Smith & Brewer follow English Renaissance precedent so far as main lines go, but with individual treatment in every detail. Refinement is observable throughout, though not of that ultra-sort which degenerates into weakness. Their work shows no straining after effect; it arises straightforwardly from the plan; yet it is full of fresh treatment, as, for instance, in the gallery chimneypiece, where the marble surround and its chequer border, the five inlaid panels above, enclosed by a bold moulding, and the brickwork pattern in the fireplace proper (where an effect is gained by slightly projecting some bricks in the courses), all go to make an individual piece of work.

[1] See the issue for October, 1907.

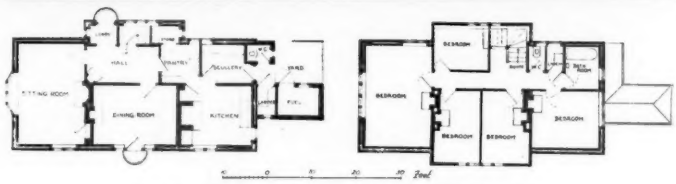
STABLES AT "LITTLE BARLEY END," ALDBURY, HERTS

Another good-sized country house designed by Messrs. Smith & Brewer is "Acremead," Crockham Hill, Kent. This is of quite different character from "Ditton Place," being built on a steep slope, facing south, with sandstone quarried on the site. Several large illustrations of the exterior and interior were given in THE ARCHITECTURAL REVIEW "Domestic" number for 1908; but, in order to make the present series fully representative, a small view of the garden front is here included. The house, it will be seen, has a very massive appearance — an appearance, in fact, which merges on the excessively massive in parts, as in the heavily buttressed wall below the terrace. It is, however, a house which would be judged best another half-century hence, when the mellowing hand of Time shall have softened the random

"ACREMEAD," CROCKHAM HILL, KENT: SOUTH FRONT

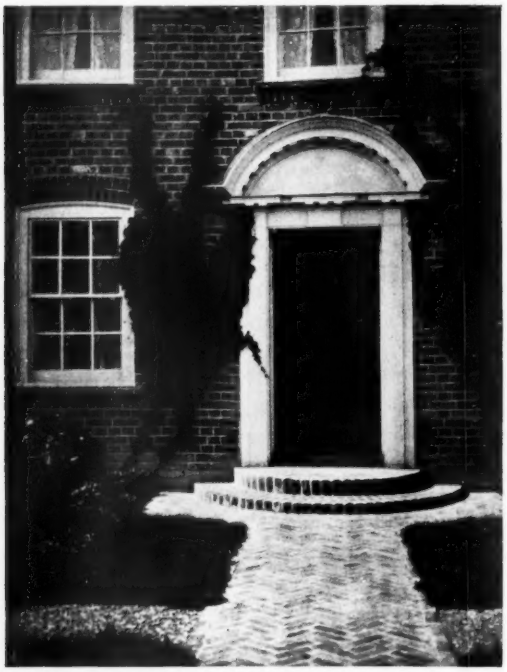
walling and smoothed away the newly-finished hardness which the photograph renders only too clearly.

A house of still different character from either of the two already mentioned is "Little Barley End," Aldbury, Herts. This is not entirely a new building, being in reality an old farmhouse on the estate of Mrs. Humphry Ward which has been almost obliterated by additions. The accompanying general view shows its setting amidst well-wooded ground. In the main building—the old portion—are the dining-room, kitchen, and playroom, with bedrooms over, while at the side is a smaller wing, which was built after the principal additions had been completed in order to provide extra bedroom accommodation and to house the library of the late Matthew Arnold.



One of a group of houses on a private building estate
"WAYSIDE," WESTCOTT, SURREY

On Mrs. Humphry Ward's estate also is "Stocks" farmhouse, near Tring, built to take the place of an older farmhouse which was turned into a gamekeeper's cottage. Messrs. Smith & Brewer, in fact, have had a considerable amount of work to do in enlarging and altering old houses to suit modern requirements. This was the case with "The Malting-House," at Cambridge. As the name implies, it was a conversion of an old maltings for use as a residence. Parts of the old buildings, including one oasthouse, were pulled down in connection with a scheme of street-widening, and the accompanying illustration shows the new front necessitated by this. The entrance hall is in the basement or lower ground floor, the living rooms and kitchen being above. The oasthouse that remains has been converted into a library, lighted chiefly through a lantern at the top, and is entered half-way up the stairs leading from the entrance hall to the main ground floor. It makes an unusual feature on the house, and offers, incidentally, a curious example in roofing.



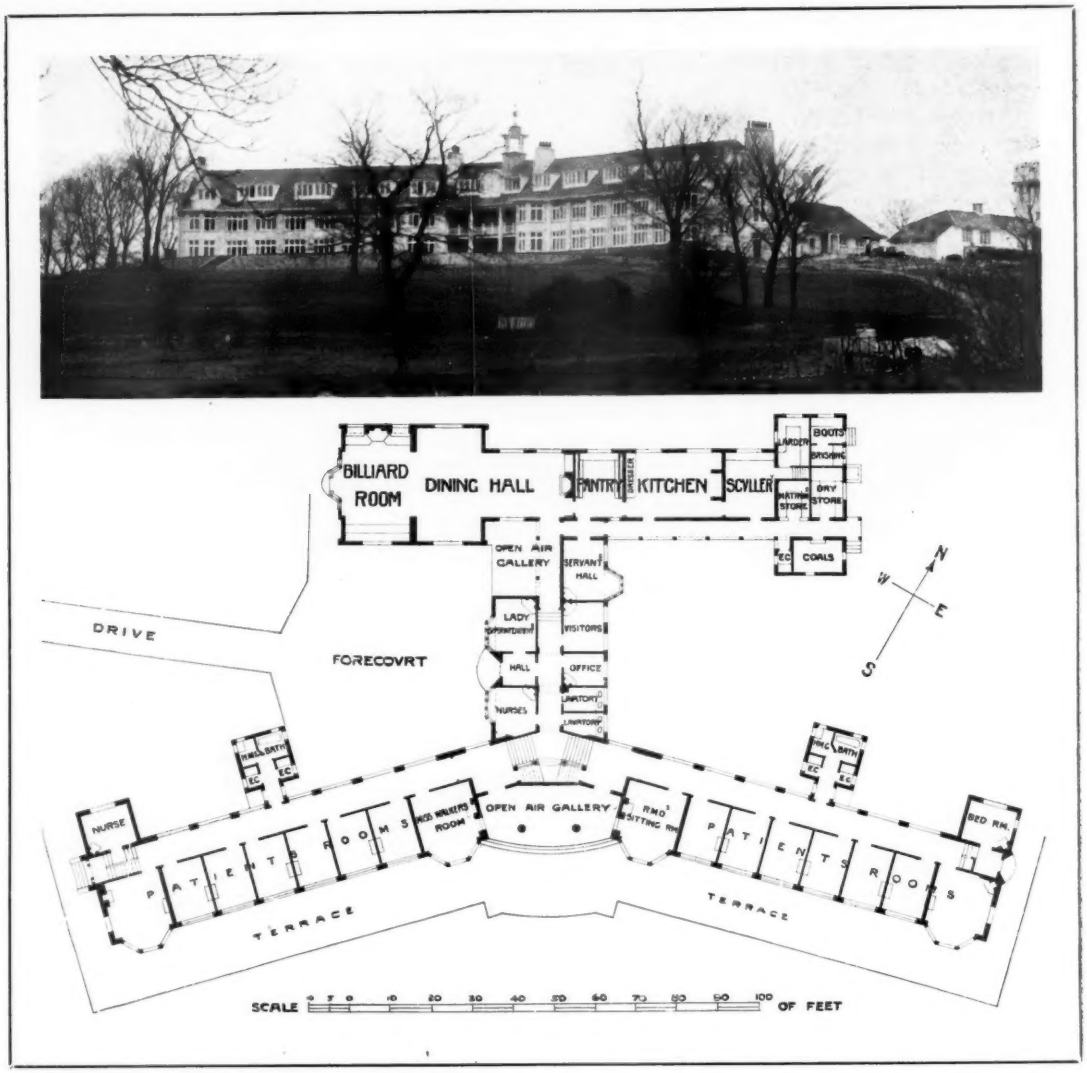
ENTRANCE TO "STOCKS" FARMHOUSE
NEAR TRING, HERTS

Another old house which has been added to at different times by Mr. Brewer is "Nower Hill," Pinner. There is much interesting work in this house, the character of which may be judged from the view of the drawing-room chimneypiece here reproduced (see page 335).

As illustrating another phase of work the East Anglian Sanatorium may be referred to. This is one of Messrs. Smith & Brewer's earlier designs, though a chapel has been added recently by them. The sanatorium is in Suffolk, at Nayland, Colchester, and occupies a rising site facing south-east. It was built by Dr. Jane Walker, and provides accommodation for about forty patients, each in a separate room.

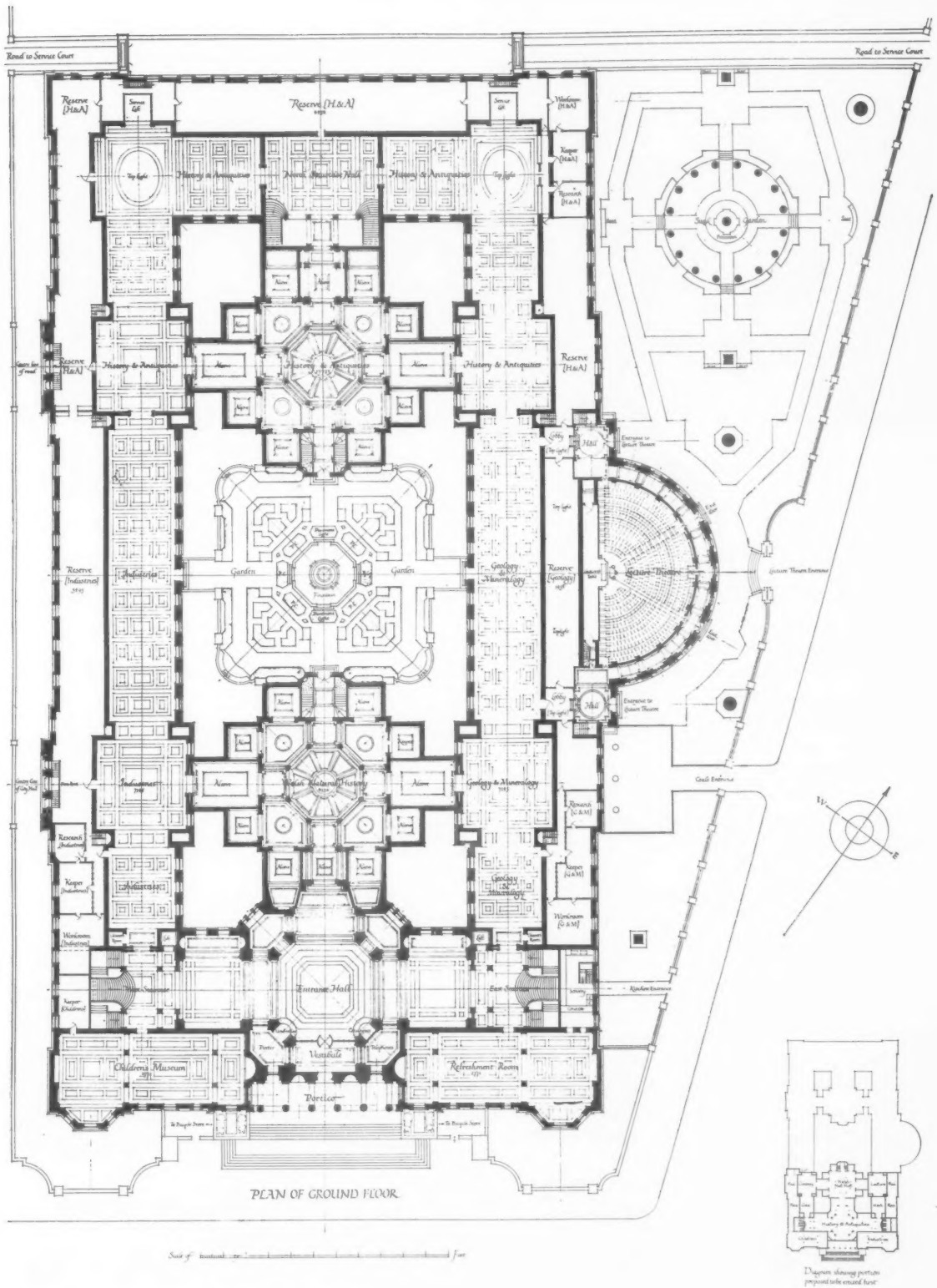
It is often urged against an established architect that he works too much in one vein, with the consequence that there are no surprises for us, no new features to look for. We may appraise beforehand what we shall find, and, being able to do so, are to that extent deprived of interest in the work. In pursuing this line of thought, however, it is well to bear in mind that an architect is very much the tool of circumstance, governed by practical necessities and by the claims of his client. Moreover, the present is essentially an age of competition: the architect has to fight his way to the front, and in that endeavour he discovers what, in his own particular sphere, is the most successful manner. "Success," of course, may have a variety of meaning. One calls to mind, for instance, the names of architects who certainly are "successful," though in the majority of cases that term indicates work which has most appeal to the general public; it is the line of least resistance; the architect has found that a certain thing "goes," and accordingly he repeats himself. If he were in a world where no such claims of subsistence existed as they do here, if he always had a free hand to produce what he wished to produce, things might be otherwise; but now, first and foremost, he has to earn a living, and that is a factor which should not be forgotten in forming an estimate of his work. Besides, one particular treatment may be the perfect solution of the problem in hand, and every repetition of the problem calls forth the same treatment—as may be seen very clearly in the case of hospitals; but there is a limit to such repetition, and in the work of some well-known men that limit has been exceeded to such a degree that their buildings do not possess a tittle of fresh interest. Especially is this the case with architects who have acquired so large a practice that the incentive to strive after new achievement is moribund, if not quite

"THE MALTING-HOUSE," CAMBRIDGE



EAST ANGLIAN SANATORIUM, NAYLAND, COLCHESTER

SELECTED DESIGN FOR THE NATIONAL MUSEUM OF WALES
TO BE ERECTED IN CATHAYS PARK, CARDIFF



SELECTED DESIGN FOR THE NATIONAL MUSEUM OF WALES
TO BE ERECTED IN CATHAYS PARK, CARDIFF

dead. These are the favoured souls who tread the primrose path of financial affluence. No side-turning attracts them. The quest is one of comfort, not of fresh accomplishment; and so they are well on the way to degenerate into "respectable" architects, who, as one writer puts it, go impressively to church on Sunday mornings with their wives, their families, and their silver-knobbed umbrellas, returning, none the less impressively, to a terrific smell of cooking at one o'clock. For newer treatment we must look to the younger men, architects to be, or men already establishing themselves and gaining attention by the vigour of their work. They have all the faults of youth; they are dominated by an enthusiasm which carries them to extremes; but, after all is said, their work has life in it—the life which some of the older men had before comfort and ease smothered their energies. It is to these younger men that the future of architecture belongs, and where no such youthful vitality and freshness exists we may be certain that the succeeding generation will be barren of good architecture.

Among architects in practice will be found a certain number who unquestionably possess ability, but who are obsessed by the idea of doing something fresh. They wish to proclaim emphatically that they are not of the Ephraimites. In the secret of their own judgment they place themselves in the van. They are content to regard with very mild approval the efforts of those who work within the prescribed limits of any one style. Some of them abandon precedent, cast aside all design by rote. They take the Orders, elongate and compress them, cut off cornices and mouldings, and then, with an infusion of their own ideas, they produce a new style—the Ugly Style. This is the true cult of beauty! With thanks be it noted, the influence of these men is not very great. They may be a law unto themselves, but they do not count for much. Without question, the architects of widest influence in England today are men of moderation who look back to the great models of our own Renaissance. They have no desire to throw over the past *in toto*, yet they see very clearly that modern work, if it is to be worth anything at all, must be imbued with modern feeling. They believe in an English Renaissance carried on in the spirit of our own times and in conformity with the needs of the present day. There is no cant about them. They show a genuine appreciation of what constitutes good architecture, acknowledging the essential importance of convenient planning, making frank use of the work of craftsmen, giving due consideration to the newer methods of construction, and abandoning utterly all Art shibboleths.

"DITTON PLACE," BALCOMBE, SUSSEX: DETAIL OF DRAWING-ROOM WINDOW AND OVAL NICHE

DRAWING-ROOM AT "NOWER HILL," PINNER

We may now turn to what is, perhaps, the best and most important of Messrs. Smith & Brewer's executed work, the Albemarle Club. This club, the earliest of its kind (being both for men and women), was founded in 1874. New premises being desired, the club acquired, a year or two ago, No. 37, Dover Street, W., formerly the Bishop of Ely's house—a house designed by Sir Robert Taylor and built in 1768–1774 (see THE ARCHITECTURAL REVIEW for February last). It was desired to convert the building for use as a club with as little alteration as possible to the best portions of the original house. For this reason, and because of the pleasant outlook over the gardens of Devonshire and Lansdowne Houses, three of the larger rooms were placed on the site of the former stables fronting Berkeley Street. The shape of the site necessitated a long corridor to these rooms, and in order to obtain this, unobstructed, the old stone staircase from the ground to the first floor was removed and re-fixed above on the first floor. Owing to adjoining lights, it was not possible to connect the front and back portions of the building above the first floor; so the main staircase, which is placed half-way along the corridor, is only carried up one floor, and east and west staircases are continued above. A billiard-room has been placed in the roof of the Dover Street portion, and, by setting back the front behind the parapet, is scarcely visible from the street.

ALBEMARLE CLUB: ENTRANCE CORRIDOR

Photo: E. Dockree

The accompanying illustrations of the chief new work may be left to speak for themselves. Here, especially, is seen that delicacy of detail, combined with general vigour and good proportion, which has already been referred to as characteristic of the architects' work. The dining-room particularly, with its delightfully arranged chimneypiece set in one of the wall bays, and the west and main staircases, call for notice, as also does the softly

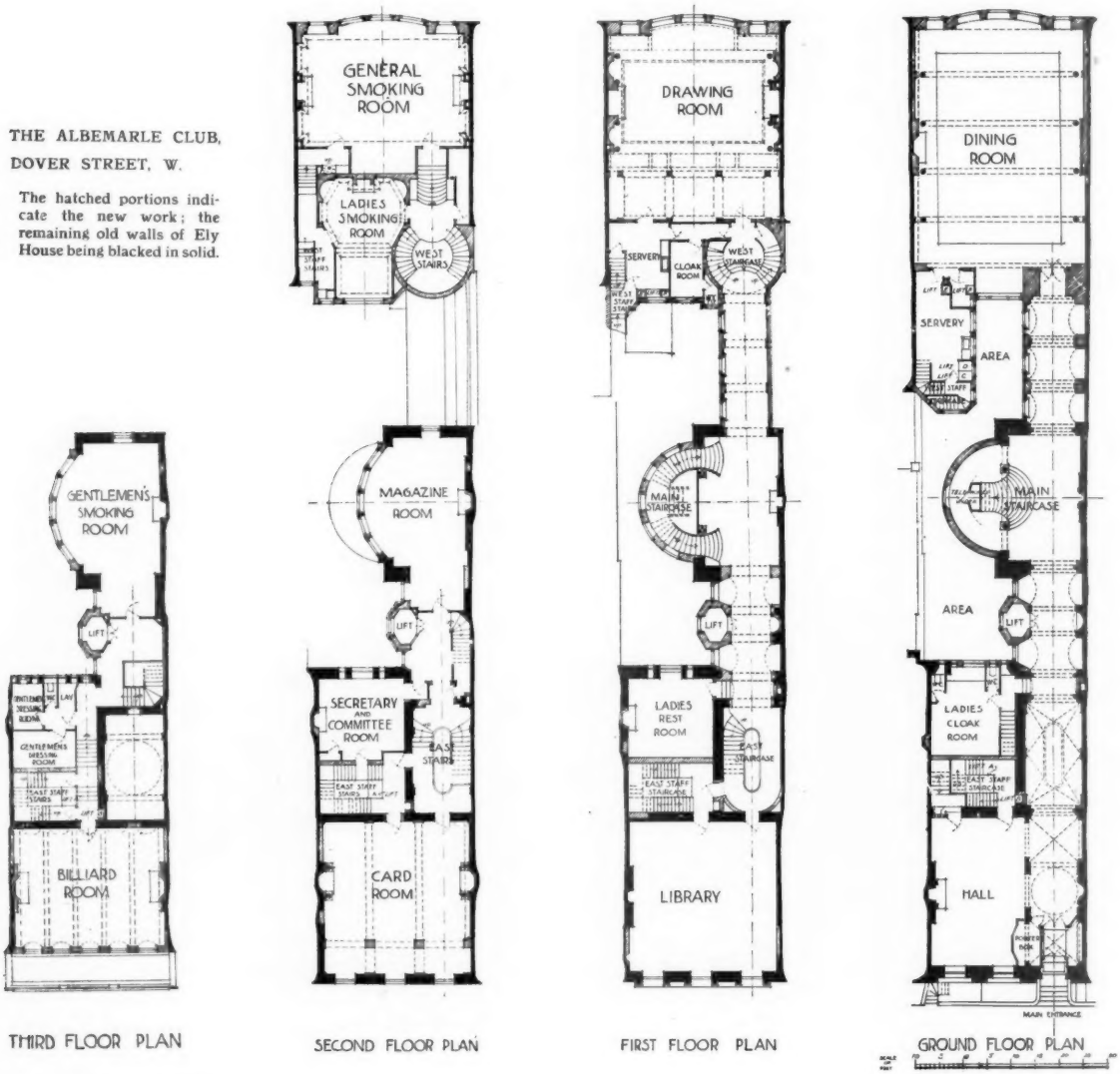
modelled plasterwork, which is exquisite alike in its general arrangement, in its detail, and in its execution.

There remains now to mention, in conclusion, what is by far the largest work which Messrs. Smith & Brewer have yet undertaken—the National Museum of Wales, to be built in Cathays Park, Cardiff, at a cost of £250,000. Their design for this important building was selected in competition in March last, and is notable for its excellent plan. The Museum will occupy a site to the east of the new City Hall, and it was a specific condition of the competition that the design of the exterior should be in harmony with this centre block, and with the Assize Courts that form an adjacent block on the west side. Hence the similitude of the main exterior features of the Museum with those of the City Hall and the Assize Courts (which were erected from designs by Messrs. Lanchester & Rickards). Within the building, however, all similitude ends. The Museum purposes find expression in their own particular arrangement of galleries planned around the building and enclosing a large central garden, the façades to which will be treated in a thoroughly architectural manner. A central garden-court of this character is always an attractive feature, as may be seen at the Victoria and Albert Museum in London, the Petit Palais and the Musée Carnavalet in Paris, and elsewhere.

The plan was first tried of setting back the west front of the Museum block to line with the University buildings which have been erected from Mr. Caröe's designs, making the distance between the Museum and the City Hall nearly equal to the distance of the latter from the Assize Courts. But this arrangement was subsequently abandoned, as it cramped the Museum accommodation and reduced the length of the south front more than seemed desirable. The west front,

THE ALBEMARLE CLUB, DOVER STREET, W.

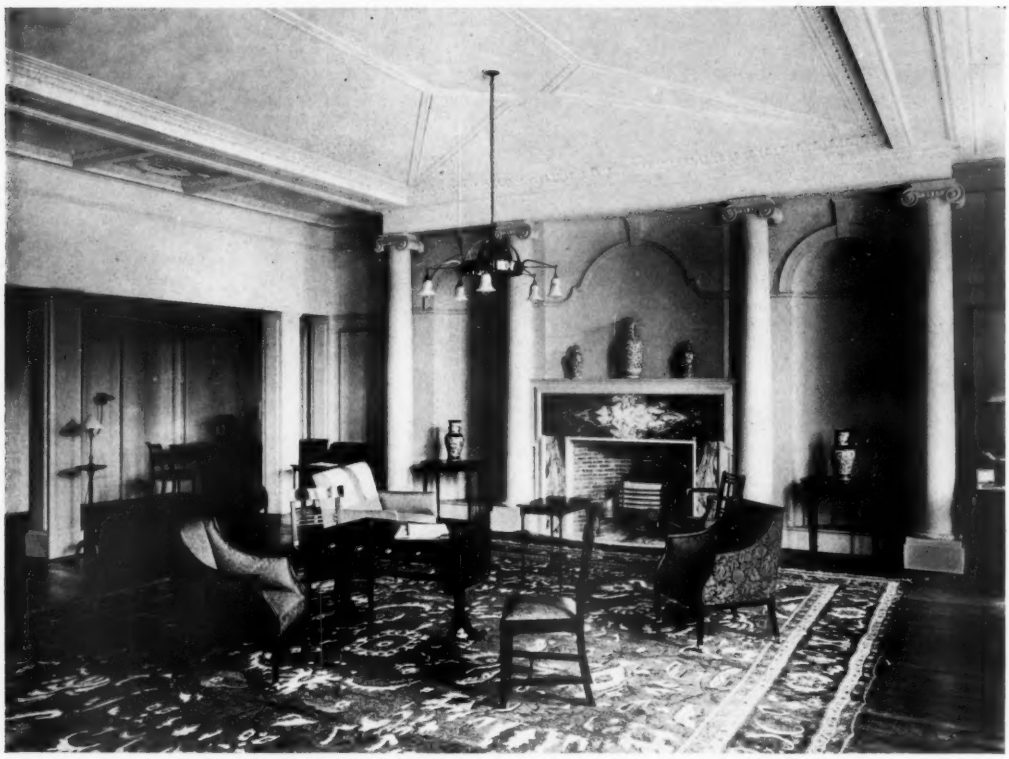
The hatched portions indicate the new work; the remaining old walls of Ely House being blacked in solid.



THIRD FLOOR PLAN — SECOND FLOOR PLAN — FIRST FLOOR PLAN — GROUND FLOOR PLAN

ALBEMARLE CLUB: THE DINING-ROOM. SMITH AND BREWER, ARCHITECTS

Photo: E. Dockree



ALBEMARLE CLUB: THE DRAWING-ROOM

ALBEMARLE CLUB: THE GENERAL SMOKING-ROOM

Photos: E. Dockree

therefore, was advanced as far as possible, and the large interior court formed. The public galleries are arranged on two floors grouped around this court, giving free circulation on the ground floor and enabling use to be made of the garden.

The building will be of fire-resisting construction—roofs and floors of reinforced concrete, skylights and windows with steel or bronze frames, large doors of iron dividing the various departments, and smaller doors of teak. It is assumed also that the fittings will be, for the most part, of bronze, with glass shelving, so that, apart from the fixed and portable seats, there will be little of an inflammable nature in the structure—a very important matter in a large public building of this kind.

One of the special problems which competitors had to face was concerned with the provision of reserve space. Messrs. Smith & Brewer provided for this by arranging the space on the outside of the main galleries, a most admirable plan. A simplicity bordering on severity has been observed throughout the design, though the angle pavilions will be relieved by sculpture groups in keeping with those on the City Hall, and there will be figures in the niches under the colonnade and on pedestals in the garden court, as well as large figures of lions on either side of the main entrance. Altogether, the scheme is one of commanding interest, and its realisation in actual building should afford the architects an opportunity of carrying out, on a large scale, the refinement of design and sound architectural quality which is observable in all the houses that have arisen out of their hands. X.

ALBEMARLE CLUB: THE MAIN STAIRCASE

Photo: E. Dockree

[The general contractors for the Albemarle Club were Messrs. Patman and Fotheringham, Ltd., of Islington. Among the sub-contractors were the following (all of London, except where otherwise stated): Fireproof floors, Messrs. the Kleine Patent Fire-Resisting Flooring Syndicate, Ltd.; Wood-block floors, Messrs. Bassant Bros., Ltd.; Marble staircase, marble paving to corridors, and some of the chimneypiece work, Messrs. Fenning & Co., Ltd.; Fireproof partitions and columns, Messrs. Ames & Hunter; Plasterwork, Mr. G. P. Bankart, Messrs. G. Jackson & Sons, Ltd., and Messrs. G. & A. Brown, Ltd.; Plumbing and sanitary work, Messrs. J. Bolding & Sons, Ltd.; Lead downpipes and rainwater heads, Mr. G. P. Bankart; Casements, gates, etc., Messrs. the Crittall Manufacturing Co., Ltd.; Door furniture and locks, Messrs. Hart, Son, Peard & Co., Ltd., and Mr. James Gibbons (Wolverhampton); Stoves, grates, etc., Messrs. Thomas Elsley, Ltd., Messrs. the Carron Co. (Carron), and Messrs. Ames & Hunter; Passenger lifts, Messrs. Spagnoletti, Ltd.; Hand lifts, Messrs. James Ritchie & Sons; Lift cage, Mr. John P. White (Bedford); Heating, Messrs. Richard Crittall & Co.; Cement, Messrs. the Portland Cement Manufacturers, Ltd.]

ALBEMARLE CLUB: THE WEST STAIRCASE

THE COMMITTEE FOR THE SURVEY OF THE MEMORIALS OF GREATER LONDON

THE title of our Committee is explicit as to the practical nature of the work in which its members are engaged, and too much stress cannot be laid upon the necessity for its vigorous continuation. And the wider the net is cast to secure everything worthy of record the more interesting will become the kindred and complementary work of research, both in seeking every trace of historic buildings that have perished and in bringing to light the documentary history of which so much is still in existence ready to the hand of the discoverer. As an example of the fine work that is possible we can do no better than mention what has been recently achieved at Lesnes Abbey, near Woolwich. The site of this Augustinian abbey, founded by Richard de Lucy in 1178, and filled by him with canons from Holy Trinity, Aldgate, has long been known, and indeed the walls of the cloister and one of its doorways have survived the ruin of the church. Mr. W. T. Vincent, president of the Woolwich Antiquarian Society, who started excavations on the site a year or so ago, welcomed the help of one of our members, Mr. A. W. Clapham, who has already distinguished himself in the field of research. Under Mr. Clapham's skilful guidance, the walls, piers, and vaults of a church 230 ft. long have been uncovered, with, in many parts, the plinth mouldings, bases of shafts, and other features in beautiful preservation. The church consists of nave, transepts, and choir, the north transept having three eastern chapels and the south transept a large Lady-chapel flanking the choir. The chapter-house has also been located and part of the stone benches uncovered. Quite recently a fine recumbent effigy of a member of the family of Lucy (of Newington, Kent) was unearthed, dating from about 1320. It was found to be in Reigate stone, but the chain mail is of gesso work, gilt.

It was Mr. D. G. Hogarth who, in his recent book, "Accidents of an Antiquary's Life," described the work of research as identical with that of the gambler who risked much for the chance of a fine haul. But patient work, and not a little skill, is needed to obtain so exciting a find as this at Lesnes, and to lay bare the walls (and with them much of the history) of this interesting abbey. Nor has Mr. Clapham stopped here. He has unearthed many forgotten manuscripts which tell of the inner life of the abbey—bills for repairs and for furniture, and even a record of the loan of books from the abbey library.

Photo: F. W. Nunn (Survey Committee)

BASE OF EAST RESPOND OF SOUTH-WEST PIER OF TOWER, LESNES ABBEY

The abbey was suppressed in 1525. Its lands went to Christ Church College, Oxford, and its buildings to Henry Brereton, who held them for two years. Subsequently the abbey was occupied by Sir Ralph Sadler. The discoveries will form a valuable addition to the topography of Greater London, as well as increase the general store of architectural and historical knowledge.

WALTER H. GODFREY.

RECENT RECONSTRUCTION WORK ON THE ATHENIAN ACROPOLIS

II.—THE TEMPLE OF ATHENA NIKE AND THE PARTHENON.

BY LIONEL B. BUDDEN, B.A.

(*Continued from page 264, No. 162*)

AS early as 1835 the principle of reconstruction was established in Athens, when Ludwig Ross, on his appointment to the newly-created position of Chief Conservator of Antiquities, with the assistance of the architects Schaubert and Hansen undertook the restoration of the little temple of Athena Nike.

(Following on the establishment of the Bavarian Dynasty in the previous year, the systematic excavation of the Acropolis had been at once commenced. The difficult task of identifying the material brought to light was complicated by the necessity of removing the buildings and accumulated debris of the Mediæval and Turkish periods; moreover, during the Moslem occupation great quantities of earth had been conveyed to the top of the Acropolis for the formation of artificial gardens. At the east side of the Propylæa, soil had been banked up to a height of 12 ft. or more, and only the upper drums of the columns belonging to the portico facing the Erechtheion appeared above the level of the ground.)

Till toward the end of the seventeenth century the temple of Athena Nike seems to have remained practically untouched. There is no evidence of its ever having been used for religious purposes in the Byzantine period or tampered with at a later date. About 1687, however, it was razed by the Turks to provide material for additional defences to the Acropolis, and its stones built into the new ramparts erected in front of the Propylæa. The destruction of these fortifications in the 'thirties, therefore, rendered the rebuilding of the temple a comparatively simple matter.

As might be anticipated, the restoration lacks the absolute accuracy and perfect finish evident in the reconstruction of the Erechtheion, where the work is the product of skilled artisans under expert direction. An imperfect acquaintance with the contours of the individual stones is responsible for the patchy appearance of the masonry in several parts. There can be no doubt that had all the marble fragments originally available been compared with sufficient patience and ingenuity, most of the unsightly gaps existing at present would have been filled. The introduction of unfluted blocks to supply the missing portions of the shafts of three of the columns in the west portico, and the replacing of the south angle capital by a crudely finished piece, suffice to give a botched appearance to the work. Yet the general effect of the structure is satisfactory, in spite of the absence of the cornice and pediment stones and the substitution of four of the frieze slabs by terracotta casts.

Bronze grilles closed the south and north side intercolumniations, and similar grilles formed the infilling between the side walls and antæ.

TEMPLE OF ATHENA NIKE: EAST PORTICO
RESTORED BY ROSS, SCHAUBERT, AND HANSEN IN 1835

As restored to-day, the west portico of the temple stands on the verge of the pergos defending the western slope of the Acropolis, and can be most effectively appreciated when viewed from below close to the base of the bastion. That this was the intention of the original design has been proved by Bohn's researches. The famous sculptured balustrade crowning the bastion and cutting off a considerable portion of the columns, as seen from the approach below, was a later introduction, and one never proposed in the original scheme.

False joints are cut into the limestone blocks of the bastion to bring the masonry into scale with the architecture of the temple. The north face of the bastion (shown above) needed to be brought into alignment with the main axis of the Propylæa: before the construction of the latter it ran approximately parallel to the southern face. No sheathing of Pentelic marble ever appears to have been applied to the bastion.

Note the crude restoration of the shafts of the columns and the angle capital. The recesses at the base of the bastion, divided by a central pier, were originally flat niches designed to take either tripods or statues.

THE TEMPLE OF ATHENA NIKE ON THE ACROPOLIS AT ATHENS

This wall was used during the erection of the substructure to retain the ballast in place. By constantly raising the level of the latter as the courses of the substructure gradually rose, expensive scaffolding was dispensed with.

POLYGONAL RETAINING WALL ON SOUTH SIDE OF PARTHENON

The Parthenon

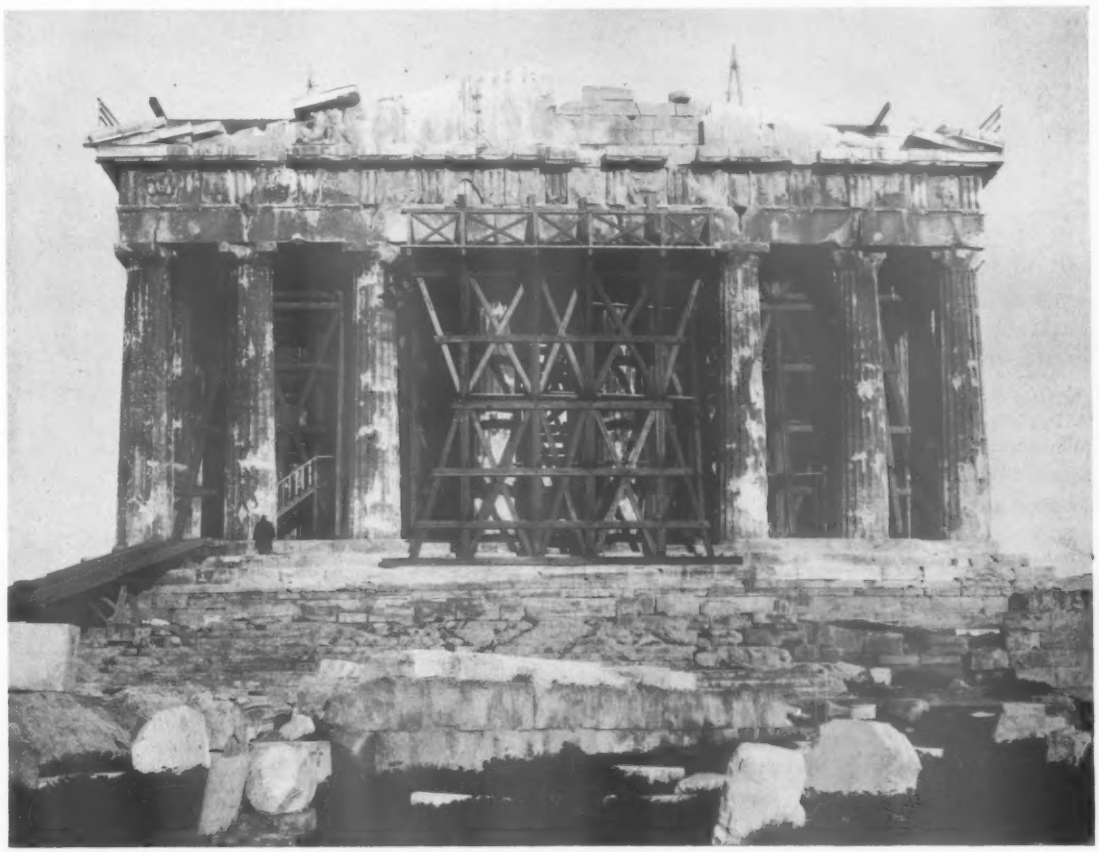
The work so far undertaken on the Parthenon has been, for the most part, one of disencumbrance and conservation, though, from the beginning of the period of scientific archæological study, various schemes have been brought forward for the reconstruction of the fabric. In 1834 Leo von Klenze, the architect of the Ruhmeshalle and Glyptothek at Munich, was entrusted with the direction of the operations on the Acropolis, and forthwith conceived the idea of rebuilding the Parthenon. Two columns only of the north peristyle were re-erected when the project fell through. The clumsy fashion in which the restoration was attempted forms an extraordinary contrast to the work executed on the structure of the Erechtheion immediately opposite. In the following year, Friedrich Schinkel proposed the re-modelling of the entire Acropolis and the reconstruction of the Parthenon as the dominating feature of the scheme. This plan, however, failed to obtain any support.

Meanwhile the task of removing the superincumbent debris was pushed on, and the site gradually cleared.

An appreciation of the difficulty of the undertaking is only possible in the light of the later history of the temple. The period of spoliation initiated by Nero continued on through the fifth century under Theodosius II. Toward the close of the latter's reign all temples and shrines within the Roman Empire were converted into Christian churches, and by the eleventh century the Parthenon had become the cathedral of Greece, a position which it maintained till 1205, when the Frankish invaders supplanted the Metropolitan by a Latin bishop. During this period of transformation, *i.e.* from A.D. 435 to the beginning of the thirteenth century, considerable alterations were effected in the structure of the Parthenon. The orientation, in accordance with the requirements of the new cult, was reversed, and this necessitated the provision of a means of communication between the east and west cellas. The west door now became the main entrance, and direct access to the eastern cella was obtained by the introduction of a central door in the cross-wall. At the east end the old main entrance was widened, and the increased span taken by a semi-circular arch finishing on two columns, one at either side. Behind this opening an apse was

THE PARTHENON: DETAIL OF ARCHITRAVE OF OPISTHODOMOS IN PROCESS OF REPARATION

built out, the exterior face of which was polygonal and projected sufficiently far to enclose the two central columns of the pronaos within the thickness of the wall (these latter may have been entirely removed). To what extent the roof was injured by the construction of the apse it is now impossible to say. Bötticher discovered a cornice block of the east pediment built into its fabric, and it is known to have broken into the central slab of the Panathenaic frieze on that side. The sculpture in the tympana of the east and west pediments was left intact, with the exception of columns and roof were replaced by an entirely different arrangement. Supports were provided for a gallery running round the north, west, and east sides, and the whole area was (according to Michaelis) covered over by a vaulted ceiling. From the existence of a rough gutter sinking in the pavement of the west and side porticoes it seems probable that the space between the cella walls and the peristyle was uncovered. A vestibule was added to the building by removing the grilles originally existing between the opisthodomos columns and walling up the



THE PARTHENON: RESTORATION OF WEST FRONT IN PROCESS

the central figure of Athena, which was removed in each case and replaced by niches designed to receive images of saints.

Windows of translucent marble were inserted in the walls of the apse, and the interior of the semi-dome was decorated with gilt and coloured mosaic, remains of which were discovered during the removal of the debris in 1835. A bema was raised in front of the apse and partitioned off from the rest of the cella by a screen. A baldachino supported by four pillars of porphyry covered the altar.

At a later date even more extensive changes were made in the eastern cella or "nave." Both intercolumniations. The central and southernmost were left free, the former serving as the main entrance to the church and the latter giving access to a small chapel built at the south end of the opisthodomos. The great west door was reduced in width by the addition of jamb-linings. These were constructed of blocks of ancient marble, in many cases bearing inscriptions. In the western cella —the first "nave"—immediately behind the door stood an altar to St. Dionysius. Probably the last alteration carried into effect in the Byzantine period, and one which survived till the eighteenth century, was the erection of a wall linking up the columns of the peristyle and enclosing the whole

On the left-hand side of the doorway an opening was cut through the wall during the Turkish period, to give access to the chamber at the base of the minaret that had been erected over the south end of the opisthodomos. On the right-hand side the pavement has subsided where the marble platform is not directly supported by an internal wall of the substructure.

THE PARTHENON: INTERIOR LOOKING TOWARD WEST END

structure. A number of openings, approached by small steps roughly hewn in the stylobate, were pierced in this wall, and two side entrances, in the north and south walls of the western cella respectively, were provided.

No further changes of any moment appear to have been made on the supersession of the Roman faith. Those carried out by the Turks, in adapting the building to the requirements of a Mohammedan mosque two and a half centuries later (1458), relate as much to the Byzantine introductions as to the original fabric of the Parthenon. The screen partitioning off the bema from the nave was removed, and the crude paintings on the walls were obliterated by whitewash. A minaret was erected over the opisthodomos chapel, and the latter was connected direct with the cella behind by a small opening cut in the west wall.

Up to 1687 the exterior, with the exception of the roof, remained entire. In September of that year occurred the supreme and irretrievable disaster to the temple—a bomb from the Venetian artillery at that time investing the Acropolis ignited a Turkish powder magazine, temporarily stored in the east cella. The greater part of the north and south walls and peristyle were blown out, together with the east wall. The Byzantine apse served to protect the east portico and two of the columns of the pronaos from ruin. In a similar fashion the cross-wall dividing the cellas preserved the west end and portico. In the fall of the cross-wall the roof and inner columns of the Parthenon proper were destroyed. The minaret over the south end of the opisthodomos, by some extraordinary chance, remained uninjured.

During the brief Venetian occupation which followed further damage was wrought through a clumsy endeavour to remove some of the figures from the west pediment. Six months later, on the withdrawal of Morisini's forces, the Turks erected a smaller mosque within the temple itself. During the eighteenth century, when Athens had become the resort of antiquarians and connoisseurs from all parts of Europe, the fabric suffered constant disintegration. Fragments of sculpture were chiefly prized, and in the process of acquiring them the architecture was often more or less seriously injured. Thus portions of the cornice were torn down and the south angle of the east pediment damaged by Lord Elgin in 1802.

This practice of plunder was interrupted by the War of Independence, at the close of which the Acropolis finally passed from Turkish into Greek hands. In the course of the struggle, begun in 1821 and extending over twelve years, the Parthenon was again subject to cannonade. The Turkish guns, however, did no great harm beyond scarring and splintering the columns of the west portico. On the establishment of the Greek Kingdom there followed the era of systematic

research, to the initiation of which we have already referred.

In 1842 the mosque erected inside the Parthenon and the upper portion of the minaret were removed. The investigations of Cockerell and Bronstedt made some thirty years previously, and the later discoveries of Pennethorne, Hoffer, and Schaubert, were now followed up by Penrose, Paccard, Knowles, Ziller, and other students of the building, and sufficient material was obtained to justify the production of minutely detailed restorations of the entire structure. The beauty of the polychromatic decoration and the subtle refinements in mass and line which were found to exist are too well known to require any explanatory digression here.

In 1885 M. Cabbadias and Dr. Kawerau undertook the excavation of the whole of the Acropolis, having obtained for this purpose the liberal support of both the Greek Archæological Society and the Government. In the course of the work, which on its conclusion in 1890 left the Acropolis a cleared site, the substructure of the Parthenon was examined to its foundations. (During the removal of the breastwork in front of the west portico in 1835 the upper courses of the substructure, originally intended to take the older "Vorparthenon," were revealed, but the discovery was not followed up at the time.) On the south side this great basis of masonry was found to be between 30 ft. and 40 ft. in depth, and the displacement of the accumulated earth led to a number of interesting discoveries relating to its construction. A wall, constructed of polygonal limestone, running parallel to the substructure, at a distance of about 35 ft. from it, indicated the manner in which the latter had been built. With a view to economy in scaffolding, ballast consisting of earth and rubble had been banked up as the courses rose one upon another. The purpose of the wall was to keep this material in place. A second temporary retaining wall, some 15 ft. to the south of the first, was built at a later period, and the whole terrace was ultimately raised to the level of the base of the stylobate by increasing the height of the outermost or Cimonian wall and filling in the area between it and the euthynteria of the Parthenon with rubbish from the Persian period. This last stratum was removed by Ross in the 'thirties. On the conclusion of the latest excavations the surface of the terrace was levelled up to its original height in the fifth century.[1]

THE WEST DOOR OF THE PARTHENON: DETAIL SHOWING BYZANTINE JAMB-LININGS CONSTRUCTED OF ANCIENT MATERIAL

In order to determine the interior construction of the basis the pavement within the cella was taken up in several places and a number of Christian tombs found. Pits sunk to the foundations of the substructure showed the construction to be of the usual type—an arrangement of walls carrying a heavy marble platform. (A settlement of the infilling under the north ambulatory of the cella has led to a slight subsidence of the pavement at this point.) These foundation walls were disposed in relation to the require-

[1] Opposite the middle of the south front, and about 12 ft. below the base of the stylobate, remains were found of a building of rough construction, in the foundations of which were incorporated drums from the "Vorparthenon." From the marble fragments found within its wall it is concluded that the building was a workshop—possibly the *atelier* of Pheidias.

ments of the narrow superstructure of the "Vorparthenon," and the design of the later Periclean temple was of necessity largely controlled by their position.

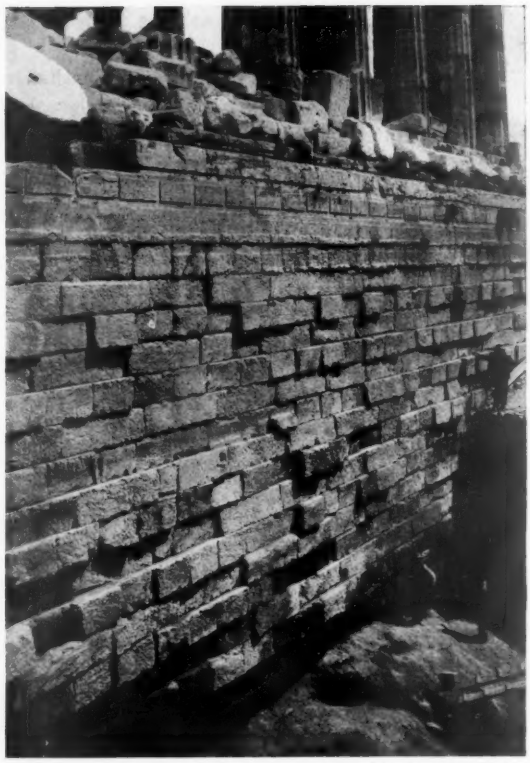
During the progress of the excavations, the tower which had supported the Turkish minaret at the south end of the opisthodomos was removed. At the same time it was proposed to replace the ruined architrave of the west door by a sound block, and so render possible the removal of the unsightly brick arch and the mediæval lining which narrowed the width of the door by nearly two feet on either side. Difficulties, however, arose to prevent the execution of the project, and it still remains unaccomplished.

Five years later—in 1894—an earthquake occurred which seriously threatened the remaining part of the fabric of the Parthenon, and necessitated the formation of a committee of architects and engineers to report on the means to be taken to prevent the possibility of further ruin. This committee concluded its report in the spring of 1896, and the work of repair was begun during the summer. The war with Turkey in the following year temporarily suspended all activity on the Acropolis, and further delay was caused on the resumption of the work by the difficulty of obtaining sufficiently large blocks of marble from Pentelicus to replace the shattered parts of the architrave. Several blocks when brought were found to be useless. A new company was formed, and by quarrying on the Marathon side of the mountain was able eventually to supply stones of the requisite size and strength. The whole of the west part of the Parthenon was obscured by a solid screen of scaffolding which was not entirely removed till 1902. The work of conservation was found to be exceedingly costly, and involved the Greek Archæological Society in a large expenditure each year.

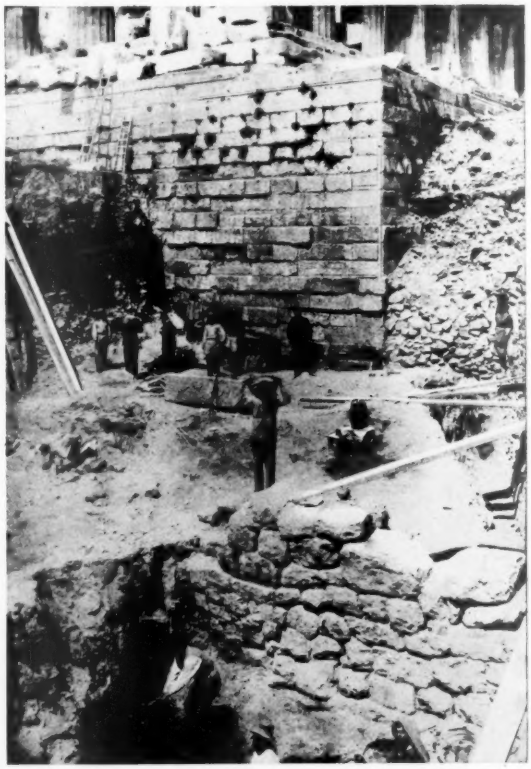
The process of replacing damaged architraves and cementing minor cracks was finished, so far as the western portico was concerned, in 1900, and the scaffolding was extended along the north side for the purpose of restoring the abaci of five capitals, which were so far broken as to afford insufficient support to the entablature. (An incident of the repairs was the recovery of a pot of red paint which had been forgotten and immured behind the tympanum of the west pediment during the construction of the temple.)

So far, no attempt has been made to carry into effect the most recent proposals to restore the peristyle of the Parthenon, though the undeniable success of the work undertaken on the Erechtheion is convincing proof of the practicability of such a project.

(To be concluded.)



This photograph (taken during the excavations of 1888, on the south side) shows the limestone substructure originally designed for the Vorparthenon. This substructure is not a solid block of masonry internally, but an arrangement of heavy walls designed to carry the great marble platform from which the columns rise, and is disposed with special reference to the positions of the cella walls and peristyle.



Photograph of south-east angle (taken during excavations in 1887) showing overlap designed to receive the east portico of the narrower Vorparthenon.

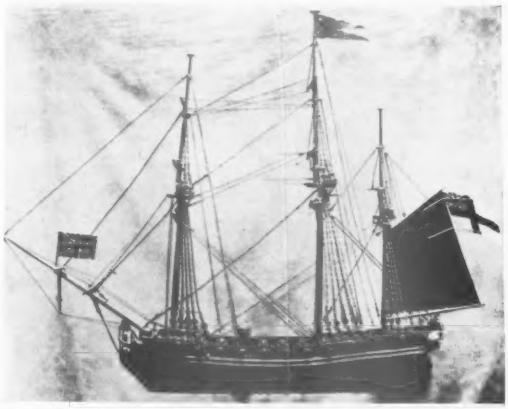
THE SUBSTRUCTURE OF THE PARTHENON

THE PRACTICAL EXEMPLAR OF ARCHITECTURE. XLVI

WREN and the architects who were contemporary with him, while endeavouring to build in a "good Roman manner," were not misled to disregard necessity and convenience like their successors. Their attitude was the sanest, and nothing surely could be more reasonable than the view Wren took of architecture. However irksome, he accepted given conditions as no other architect has done: witness the plans of his City churches. In his domestic work he expressed our kindly English life, even in his palaces. His hospitals possess a grave dignity—a quality quite as worthy as pure utilitarianism, which alone is considered in these days. And in his great work, St. Paul's, he aimed at a repose like that of Eternity. Having said this, one feels how inadequate reason alone would be to compass these qualities without having an added and consummate artistry. If we consider Wren's buildings in their manifold diversity, how little in them is to be found of the text-book or academical rule. To each problem he brought an open mind and found a reasonable solution, which he dressed out in terms of architecture.

Messrs. Belcher and Macartney, in their well-known book on "The Later Renaissance in England," say that if the Guildhall at Rochester is not by Wren it is at least by one of his pupils. It possesses many of Wren's characteristics. The façade is not academic; it presents a front to the street consisting of four bays, an arrangement at once unusual, and one that is condemned by scholars. It brings a solid in the middle of the front—an obvious disadvantage, and is not recommended to the amateur. Architecture, however, is composed of divers parts which must be in relationship with one another, and the width of the front and the distribution of the windows on the first floor necessitated the arrangement of an even number of bays. Five windows might have been inserted, but how much would the façade have lost in breadth and scale! The difficult distribution being accepted, it became necessary to give it centre or point, without in any way belittling the composition. The placing of the circular pediment over two windows effected this, and the finely-carved shield placed in its midst gave further accentuation. The beautiful cupola also, it is true, helps the arrangement, but this in itself would have proved insufficient.

The colonnade on which the upper part of the building stands is composed of coupled Doric pillars, the external angles being strengthened by square Doric piers with attached columns. It should be pointed out that the wings are additions, and that originally the building stood free, as shown on the drawing. The colonnade bears up an oaken entablature decorated simply with triglyphs and a cornice. On this is built what is perhaps one of the finest pieces of Renaissance brickwork in England. It is an admixture of ordinary bricks with rubbed brick quoins, window arches, and aprons. A few pieces of stone are introduced for sills and keyblocks, and the cornice and pediment are of painted wood. A reference to the drawings will show how skilfully the details of the brickwork are worked out. The two inner windows have moulded brick architraves with quoins breaking through them; the arches are also rusticated, and by this means acquire the additional strength necessary to carry the pediment. The brickwork of the jambs of the outer windows is flush with the wall. Quoins again are used to strengthen the corners. All the windows are built on projecting aprons.



This is a perfect model of Sir Cloudesley Shovel's frigate—the "Rodney"

THE WEATHER-VANE ON THE GUILDHALL AT ROCHESTER

Scarcely less charming than the brickwork is the woodwork. A moulded wooden architrave immediately frames the sash-windows, which are divided into panes about 15 in. by 12 in. wide, a curiously happy proportion. It is strange how much architecture gains by consideration of an apparent trifle like the subdivision of a window, but there can be little doubt that wooden astragals by a just disposition help to give interest and scale to a building.

A vigorous cornice, with a slight break to take the pediment, finishes the façade. The tile-roof springs from the fillet of the cymatium and stands up very boldly in perspective. The cupola set

THE GUILDHALL, ROCHESTER: DETAIL OF FAÇADE

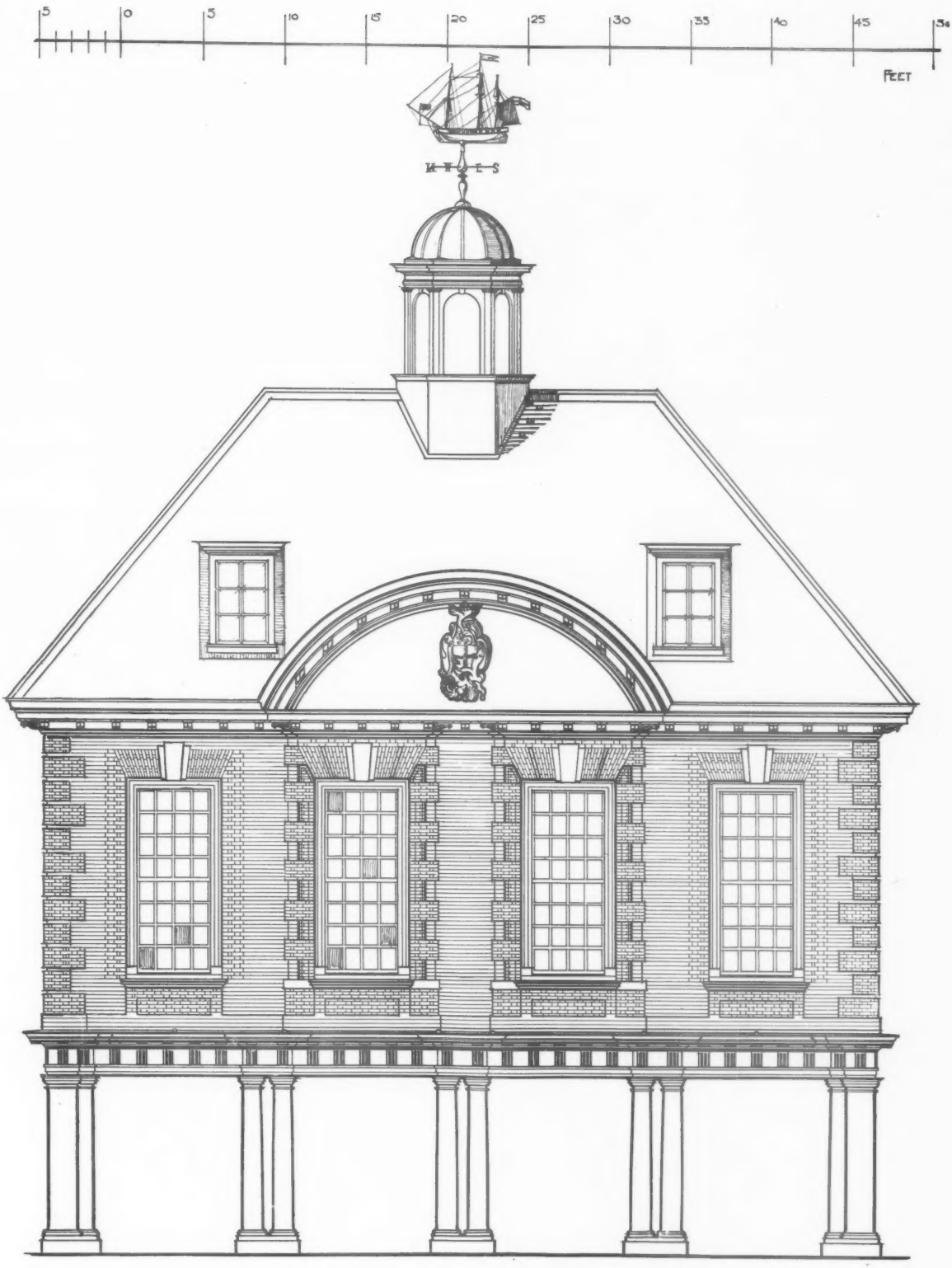
upon its ridge is perfectly simple, yet very effective. Of the weather-vanes I have seen, I know of none more perfect than the model of Sir Cloudesley Shovel's frigate—the *Rodney*—which sails above the summit of the Guildhall, like the *Flying Dutchman*, in the teeth of all winds. It is a suitable memorial to an intrepid sailor, and at the same time a beautiful example of a seventeenth-century craftsman's work. It is a complete model of a frigate, with guns, rigging, yards, masts, etc.; and the story is told that on its completion the councillors refused to take it off the artificer's hands on account of its price, the Council having intended a much simpler model. However, it was bought by some public-spirited citizen and presented to the Council.

Scarcely less interesting than the exterior is the oak staircase leading to the Council-chamber on the first floor. Its design is extremely simple, consisting of two flights of steps arranged on an open newel. The newels, handrails, and balusters are all of large dimensions, and excellently detailed. The strings are solid, instead of being cut, and are enriched with carved spandrels, as was the customary practice in the following century. Wren was fond of the straightforward arrangement. The staircases in the Temple are of similar pattern, solid and strong like the sides of a ship, and characteristic of the sturdy oak from which they were taken. The strings of the Rochester staircase are detailed like an entablature with architrave, pulvinated frieze, and cornice, on which the heavy turned balusters are placed.

The walls of the staircase are panelled in oak, and a dado is formed by a handrail and low raking panels; the upper panels are very large, and are finished with a fine cornice. The floor shown on the top of this cornice is modern, and detracts from the importance of the staircase, which originally was much higher and was ceiled in with a fine plaster ceiling of bold design having an *amorino* hanging from the centre. This ceiling graces the rather low room formed by the new floor.

The colonnade is a feature less used in this than in more Southern countries. Its effectiveness in England can scarcely be doubted. It was a feature much affected by Wren, with invariable success. Colonnade and brickwork, tile roof and wood cornice—the whole is eminently reasonable and sane, and at the same time extremely beautiful.

J. M. W. HALLEY.

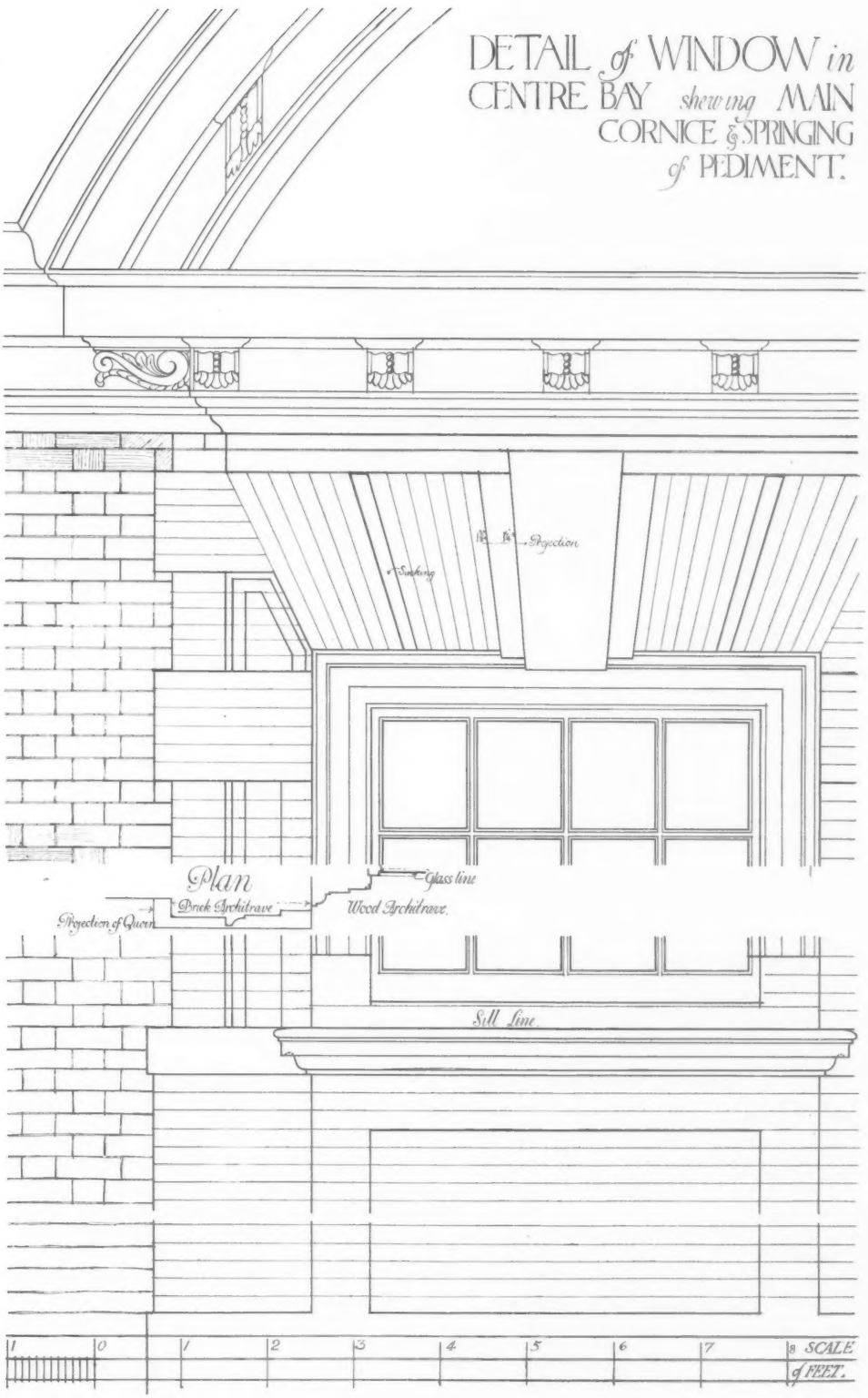


THE GUILDHALL, ROCHESTER (A.D. 1687)
MEASURED AND DRAWN BY ERNST V. WEST

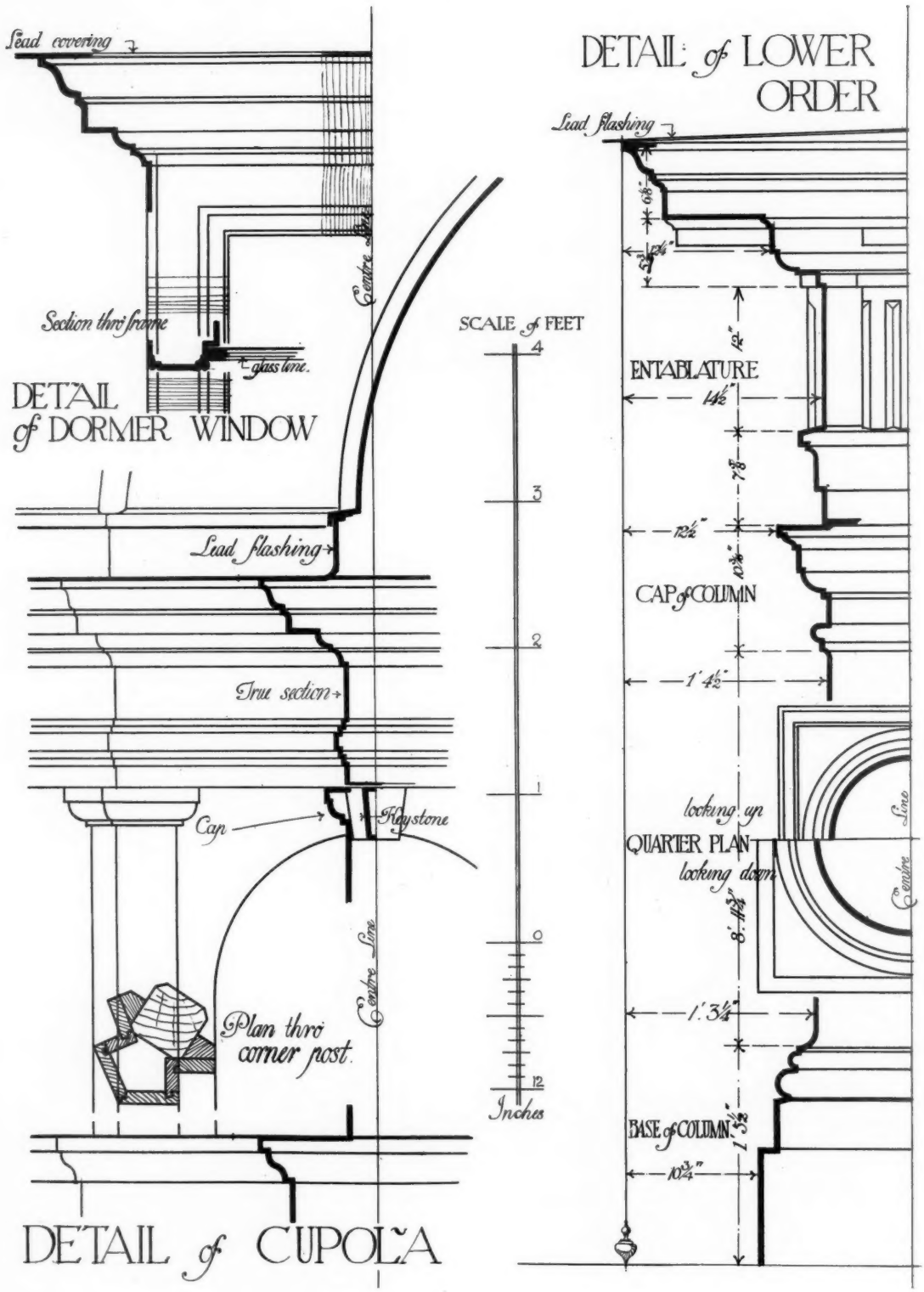
The Cupola and Weather-Vane

THE GUILDHALL, ROCHESTER

General View

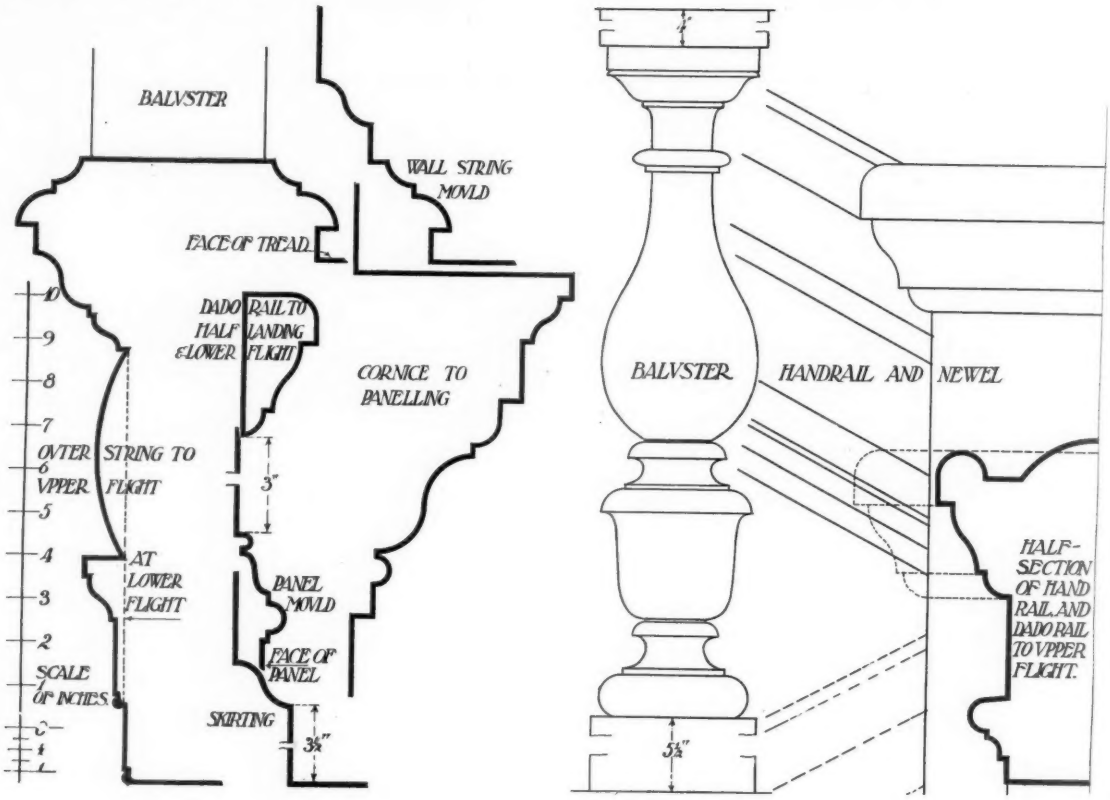


THE GUILDHALL, ROCHESTER
MEASURED AND DRAWN BY ERNST V. WEST

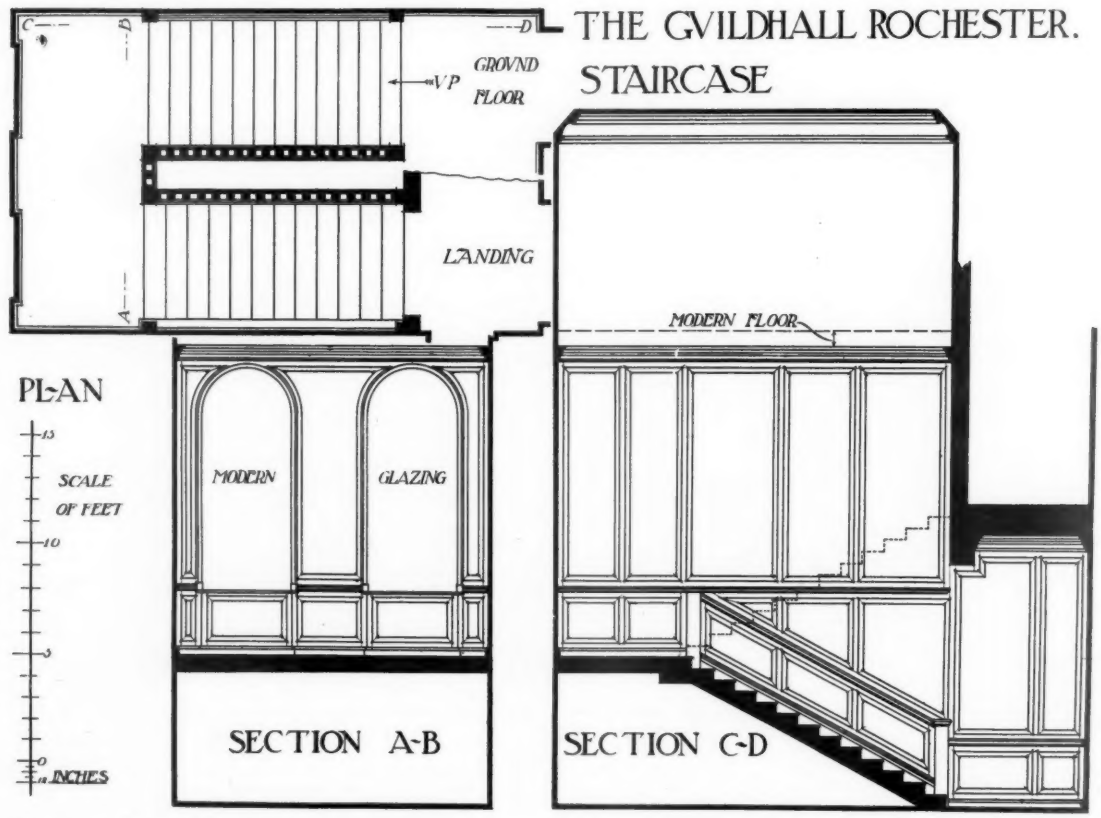


THE GUILDHALL, ROCHESTER
MEASURED AND DRAWN BY ERNST V. WEST

THE GUILDHALL, ROCHESTER
STAIRCASE LEADING TO COUNCIL CHAMBER ON FIRST FLOOR



THE GVILDHALL ROCHESTER.
STAIRCASE



MEASURED AND DRAWN BY ERNST V. WEST

HISTORICAL TOWN HOUSES

NO. 9 CLIFFORD STREET, W.

JUDGING from the entrance hall, which, with its staircase, is the only portion that remains in anything like its original form, No. 9 Clifford Street must have been a house of some importance. Its exterior singularly belies the feature of the interior, for it has been plastered over and metamorphosed to a nondescript style of which the streets of London offer innumerable examples. The entrance doorway might, to some extent, escape such criticism and be classed as belonging to the eighteenth century, but beyond that it possesses little individuality. There is, however, one point about it which is worthy of mention, namely, that it has been placed as the centre one of five bays, of which the front is composed—an arrangement at least suggestive of some originality in plan. In this respect the house is noteworthy. The usual "cabin'd, cribb'd, confined" hall gives place to a fine spacious room extending the full width of the front, with a depth of about 15 ft. It is divided into three parts by screens formed of Ionic columns with pilaster responds on the wall, the columns carrying beams that mark the subdivision of the ceiling. To the right hand, on entering, in the centre at the end, is the chimneypiece, a quiet though vigorous piece of stonework, unfortunately painted over, and defaced also by a modern stove which stands in front of it. At the opposite side of the hall the stair rises in a short flight between the two pillars of the screen, turning by a few steps to right and left to small landings, then returning on both sides and finishing with the soffits of the two flights against the entablature of the screen. This symmetrical type of stair is extremely unusual: it requires generally the adoption of a greater scale than would be used for the ordinary type, and in its nature takes up more room—a serious consideration in confined sites. The usual form for stairs of the seventeenth and eighteenth centuries consisted of two parallel flights of steps, or, where the space was less precious, they followed the walls in three flights.

Although on a fairly small scale, this symmetrical staircase at No. 9 Clifford Street is entirely successful. In date it belongs probably to the middle years of the eighteenth century, and still preserves the robustness and vigour of the great architects of the preceding century. It is interesting to compare it with the stair in the

DETAIL OF STAIRCASE AT No. 9 CLIFFORD STREET, W.

The design may be attributed to Isaac Ware

THE STAIRS LEADING OUT OF THE ENTRANCE HALL
AT No. 9 CLIFFORD STREET, W.

Guildhall at Rochester, which is delineated in the "Practical Exemplar" this month. The various parts of which both these examples are composed are of brobdingnagian dimensions. The balusters, newels, etc., might well have been cut in stone. Wren had such splendid oak that it was both traditional and easy for him to contrive his strong woodwork, but the introduction of deal and paint altered this, and it became easy and cheap to imitate stone. The staircase here shown seems to have been painted stone-colour. It will be remembered that Gibbs in the Radcliffe Library at Oxford has used very similar painted balusters in the gallery recesses around the dome.

The details of these two stairs (at the Rochester Guildhall and at No. 9 Clifford Street) are in many respects alike. In both cases the heavy strings are treated as entablatures of an Order, with architrave, pulvinated frieze, and cornice, but on the whole the earlier stair (at the Guildhall) is the more obvious. Its handrail is designed as a handrail. It gives the impression of strength and simplicity, and its huge framework brings to mind the strong ribs of an antique ship. The other appeals as an extremely conscious effort completely realised and made precious by much rich carving. Its handrails are not designed for convenience, but for architectural effect; indeed the mere fact of introducing an extra and unnecessary flight of steps is alone sufficient evidence of this. Yet, however that may be, the work follows the manner of Inigo Jones or Wren rather than anticipates Adam. It bears no relation to the contemporary work of unknown men whose light airy stairs, with their spindly balusters and delicately carved spandrels, make such delightful features in the architecture of the time. Isaac Ware belonged to the generation of the older architects, and the whole design of this Clifford Street house (or rather that part of it which remains—for it is now in the occupation of a business firm, Messrs. M. Feetham & Co.) suggests his hand.

The capitals of the Ionic pillars forming the screens are of great delicacy; the volutes are especially beautiful, the eye projecting boldly at the end of the spiral; and the other ornaments are scarcely less fine. These columns are very much like those forming a similar screen in the hall at No. 5 Hart Street, another work of Isaac Ware's.

The door-frames on the landing at No. 9 Clifford Street are bold and simple, and in perfect scale with the rest of the work. Another feature is the ceiling, marked in a bold geometrical figure, and of a projection like that of beams. It is extremely like a published design of Ware's.

After all, perhaps the most interesting point about this house is its planning. Ware was very much alive to this aspect of architecture. As already noted, the sacrifice of the whole front for a hall is unusual, but it was worth doing, for few houses in London of dimensions many times greater than this one have an entrance hall of equal dignity and stateliness.

J. M. W. HALLEY.

UPPER FLIGHT OF STAIRS AT No. 9 CLIFFORD STREET, W.

DETAIL OF IONIC CAPITAL IN ENTRANCE HALL, No. 9 CLIFFORD STREET, W.

DETAIL OF CEILING OVER STAIRS AT No. 9 CLIFFORD STREET, W.

SOME NOTES ON FORD MADOX BROWN

FORD MADOX BROWN was one of those men whose virulent personality lives on after their death, providing a fund of anecdote that draws each succeeding generation unto them. There was an out-and-out vigour about the man which at once claims attention; an unabashed *ego* which made him hold out so pertinaciously against "those damned Academicians"; and it is well to bear that fact in mind when looking at his work.

The leaders of the pre-Raphaelite movement were anything but æsthetes. That quality was left to their followers. Millais was full-blooded and William Morris ate roast beef and Christmas pudding all the year round! While, as for Ford Madox Brown, he was, perhaps, the most anti-æsthete of them all. It is not the writer's intention, however, to enter into that side of his character, but to set down a few notes on half a dozen of his most important achievements, as one who was his pupil during three or four years of the period when Madox Brown was occupied in painting the famous Manchester series of frescoes in the town hall of that city.

The Expulsion of the Danes out of Manchester

This is one of the most spirited of the Manchester Town Hall series of frescoes, and finely typical of the mood and genius of the painter at this period. The first thought of the artist has been the springing line of the composition running through it and indicating the irresistible and headlong outrush of the Danish foes, who, however, give defiant appearance of return at a slightly later date. The baying dogs (securely chained), the thatched sty of the old sow set aflame, the miniature mediæval pig, ruthlessly crushed beneath the contorted form of a well-known Manchester philanthropist who was induced to pose for this figure—all is intended to indicate the domestic confusion attendant on the scene. The mediæval pig, I remember, was serving as model within the little tent erected around this fresco which concealed everything but the artist, and set up a most disgraceful squealing during a rehearsal on the great organ from the master-hand of the far-famed Mr. Best, who had come over from Liverpool to try the then new instrument, and was sadly put out by what he had at first regarded as a deliberate practical joke. The colour of this fresco is extremely fine, and the flesh-painting of the wounded prince, who is just still alive, is a masterpiece of the painter's idiosyncrasy. Madox Brown's intense sense of humour and mischief, and his appreciation of well-placed malice, find ample play in the various avocations of the three figures at the windows, and, with a fine instinct for the ancestral tendencies of the districts immediately surrounding Manchester at the present day, there is present in the atmosphere no lack of brick-bats to greet the unwelcome visitors.

The Last of England

This great oil picture, now in the permanent gallery of Birmingham, portrays the emigrants' departure from their native land. Sir Edward Burne-Jones used to say he considered this one of the greatest pictures of all time, and a testimony from such a quarter comes with peculiar force. I can only remember that, long before my acquaintance with Madox Brown, this picture (exhibited at a loan exhibition at Manchester about thirty years ago) was my first introduction to these realms of the master's genius, and that I felt more moved by its pathos and poetry than I have ever been before or since that occasion. The two chief figures are very excellent portraits of the painter and his wife at this period.

The Entombment

This is one of the most characteristic and noble examples of the painter's genius. The influence of Titian's great picture in the Louvre of the same subject is, however, apparent, though this has in no degree interfered with the intense originality of the treatment. There is a more vivid expression of passionate grief and various phases of dramatic emotion under this predominent idea than in any representation I know of this subject, and standing before it for any length of time the spectator cannot but become deeply impressed with the profound pathos emphasised by the very beauty of low-toned, glowing, rich colour. The colour, indeed, would be difficult to surpass. The rose-coloured over-garment of the figure partly concealed by the tomb, the deep-toned ruby hue of the Magdalen's robe, and the whole of the right-hand corner of the picture where the little girl is telling her infant sister what has happened, is as beautiful as anything that can be pointed out in the entire realm of the pre-Raphaelite brotherhood; to which body, however, Madox Brown never actually allied himself, though the original meetings which decided the formation of this body were held at his studio.

The glowing morning light on the body of the dead Christ and on the white garments is worthy of Titian's most sumptuous essays, and in the beauty of the hair of the Magdalen one can feel

Madox Brown's influence from or on some of Dante Rossetti's glorious and luxurious treatments of this human adornment. There is gentle pathos, too, in the sheep bleating for their lost shepherd, an incident to which the three crosses on Calvary's Hill in the distance give special meaning. The tiny infant has picked up one of the cruel thongs as a plaything or a piece of seaweed, which imparts a fine touch of realism to the innocence pertaining to its youth. Madox Brown's work is full of these Shakespearian touches of truth to nature, which gilds his work with what one must call an intense spiritual realism, to be found only in the work of the greatest masters of any art. I remember Madox Brown telling me the lady who first purchased this work wished shortly afterwards to have the "halos taken out." But the painter told his client that this would spoil his design and got her permission to paint her something else in its place.

Wycliffe on Trial

This composition gave Madox Brown a great deal of thought to work out. He arrived at the composition by an elaborate arrangement of books and a miniature scaffold for Wycliffe, and then he modelled or cut out some of the figures to scale, looking at the whole through a little oblong frame of the proportions of the fresco to be painted—after the manner of the Venetian, Tintoretto, when he used to look through a peep-hole at his figures suspended in a box and lit up with a candle, for the purpose of arriving at the effects of chiaroscuro. This plan was adopted to secure exact proportion in the matter of scale.

There are several interesting portraits in this composition. Madox Brown himself served, through the looking-glass, for the Archbishop of Canterbury; Dr. Kendrick Pyne, the famous organist, was studied for the Bishop of London; his then pupil was made to sit for the impetuous John of Gaunt; whilst Mr. Frederick Shields, the painter, stood for the Earl Marshal. The fight going on at the back among the crowd is as full of invention as can be, and was, I remember, painted almost entirely from the artist's inner consciousness—a method he used severely to deprecate and disapprove of.

Waiting

This little work is replete with the very genius of domesticity, the poetry of tender maternity and babyhood, expressed with an epic simplicity and with a flow of sweet colour and tone worthy of the great Jan van Eyck himself. It is an historic treatment of an apparently commonplace subject; for when a scholastic tenderness in the study of details contributing to the main theme is dignified in artistic expression in the matter of distribution of line and charm of colour, it is simply these qualities which separate a work of distinction and style from an everyday production. The accent of scarlet in the mother's necktie, the glowing crimson of the chair against the dark olive shade of her dress, once more recall the fact that Madox Brown was a great admirer of the picture known as "Arnolfini and his Wife" in our own National Gallery.

The Traveller

This strange little theme is illustrative of a minor poem of Victor Hugo's, and Madox Brown has here proved how entirely he at this period shared his friend Swinburne's well-known appreciation for the romantic genius and love of mystery of the great French poet and dramatist.

The restless wayfarer (in eighteenth-century attire) will not quit his horse and his duty for the enticing allurements of the domestic hearth, not even for the pretty daughter of the hostess nursing her babe, who gazes out with a longing look after the clattering hoofs over the rough cobble stones by the door of the inn. The shadows of the figures seen drinking through the red blind, the splash of the water from the pump, the starlike light from the crucifix at which the horse seems inclined to start (though it is indicated by the presence of an evil-looking withered tree farther up the road that the rider will receive comfort to support him through his lonely and terrible ride), all are details of a wonderful composition. This little picture appeals to the deepest cells of the human imagination, recalling as it does the works of Hugo, Edgar Allan Poe, the Brontës, and Oliver Madox Brown's romance, called "The Black Swan." It also shows a certain influence of Rembrandt's art—the colour being subdued to the night effect.

Work

These few discursive notes may be concluded by a brief reference to the above well-known picture—a study in the streets of Hampstead, overflowing with sly humour and playful satire. Here are swarthy navvies, beggars, daintily-dressed ladies, and, looking casually on, Carlyle with a sardonic grin on his face, and Maurice at his side. It is a picture typifying what has been well said of Madox Brown's distinctive manner—"a vigorous invention carried out with a great regard to individuality in the personages, expressions, and accessories of incident and detail, not excluding the familiar, the peculiar, and the semi-grotesque, when these seem to subserve the general intent": an estimate as true of those pictures already referred to as of the artist's many other great works, including "Christ Washing Peter's Feet," "Cordelia at the Bedside of Lear," and "Cromwell."

TOWN·PLANNING AND HOUSING·

Supplement to

The Architectural Review

THE PLANNING OF BATH

ON the mind of the architectural observer the impression that Bath seems to produce most strongly is that of its complete sincerity and its individuality. There is an atmosphere of obsolete aristocracy which pervades the whole city and which manages to harmonise with the high-speed conditions of the present time and to impress itself upon the observer at every street and corner. There is nothing vulgar, nothing overbearing or pretentious; and though Bath may be said to have passed through a phase of comparative oblivion, so far as its architectural character is concerned, during a period in which a meaner fashion governed the taste of the day, it has emerged quite triumphantly at the present time to a perhaps greater public appreciation than was ever before bestowed upon it. This present appreciation seems to prove, more than anything else, the purity and sincerity of its architecture.

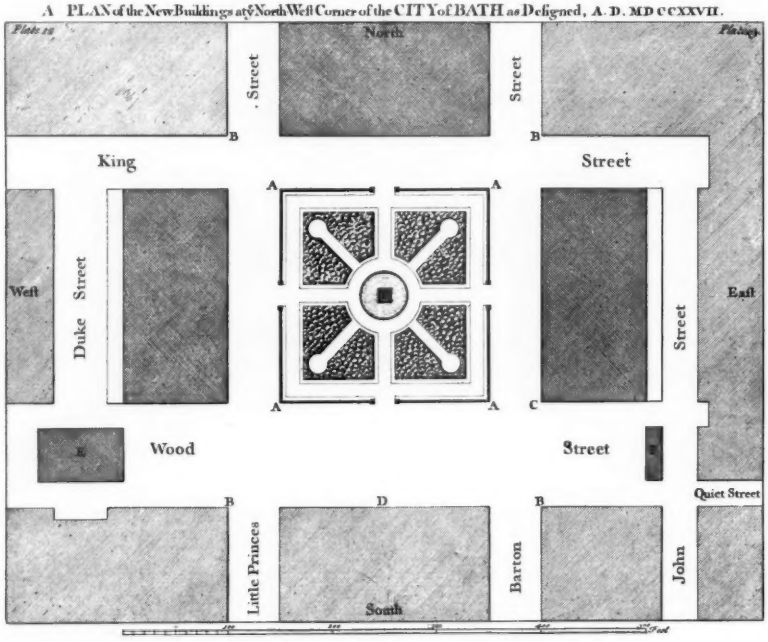
It is the intention in this article to deal with the architecture of Bath from a collective rather than an individual point of view, and to trace as far as possible the street-planning of the city, which affords valuable illustrations such as no other city in England can produce. I say "street-planning" advisedly, because the architects who created Bath had never heard or thought about "town-planning" as we now know and un lerstand it, and it must add greatly to our admiration of their work when we consider that there is no evidence whatever to show that the Woods, Adams, Baldwin, Eveleigh, Masters, or any of those engaged in laying out the various estates, had ever travelled outside England or seen anything of foreign town-planning. Certainly there is no trace of any foreign influence, and all their work has a marked British character. It is evident, too, that no ideas of "town-planning" entered into their schemes, for they bear no particular relation to the town, and none whatever to each other; they were designed and executed at different periods, and were considered as purely local or estate problems, though the Bathwick Estate scheme as designed by Robert Adam covered an area of about 200 acres, an area of much the same extent as the city as it then existed (see Donne's plan of Bath in 1810 on p. 367).

Though these architects had no experience to help them, and each was working according to his own ideas, they had advantages which in these days of Acts and regulations would be denied them. They appear to have been unfettered by any municipal anxieties, and to have acted quite independently, being employed by wealthy patrons

who do not seem to have had any overbearing views as to what was right, but who recognised the capability of their agents and were wise enough to leave them to work out their own ideas. They were, in fact, their own surveyors, engineers, and architects.

The incompleteness and practical abandonment of the large Bathwick Estate scheme, which was the last scheme undertaken, is a forcible illustration of the value of co-operation such as is now secured by the new Town Planning Act, which would no doubt have ensured the fulfilment of this scheme as well as the many smaller schemes which were begun and never completed owing to their personal interest having passed away or changed.

The advent of the railway also appears to have



ORIGINAL PLAN OF QUEEN'S SQUARE, FROM WOOD'S BOOK

partly frustrated a small scheme dealing with the south-east corner inside the bend of the river formerly known as "The Ham" (see Donne's plan, p. 367) now intersected by the Great Western Railway and occupied by the railway station. This scheme included a large rectangular "square" called Kingston Square, with the South Parade at its northern end, and with one side fronting on what is now Manvers Street, and running north and south, while Manvers Street was designed to lie east and west, or at right angles to the street as it has been carried out. A suggestion for altering the course of the River Avon at this point seems also to have been a reason for abandoning the scheme.

The one scheme that appears to have been fully completed, and which certainly includes the most beautiful work in Bath, was the area designed in 1727 by Wood, comprising Gay Street, Queen's Square, Alfred, Bennett, and Brock Streets, and The Crescent. Wood, however, did not live to see the whole scheme completed, and the supervision of the scheme was, on his death, taken in hand by his son.

Queen's Square (1729) comprises four façades of domestic buildings grouped around a square open space. As a piece of planning it is somewhat faulty, owing to the large number of wide street-openings, eight in all, which break its continuity and considerably depreciate its effect as a whole. Wood had not learnt the art of closing his street-openings. The situation is in fact only saved by the beauty of its architecture, the north side particularly, which is so admirably illustrated in Mr. Mowbray Green's book on "The Eighteenth Century Architecture of Bath"—one of the finest records of the architectural history of a town. There is an academic atmosphere about Queen's Square which suggests the possibility of Wood having visited Oxford and having been influenced by some of the eighteenth-century college quadrangles.

The Crescent (see p. 369) hardly comes within the category of street-planning, being a monumental erection of Palladian design of exceeding beauty and situated in a crowning position overlooking the town, but bearing, perhaps, a somewhat too independent position for a crescent, and appearing to need more support. The crescent form is

LAURA PLACE AND GREAT PULTENEY STREET, BATH

Photochrom

admirably adapted to the contour of the site, which probably suggested this form of building. Whether any "lay out" within the arc of the Crescent and in front of it was ever intended is not clear; but so classical a building needs and certainly deserves a more classical setting than is afforded by the depressed area of lawn in front of it. Certainly, there are all the natural elements at hand for a very fine formal treatment, with terraces on segmental lines.

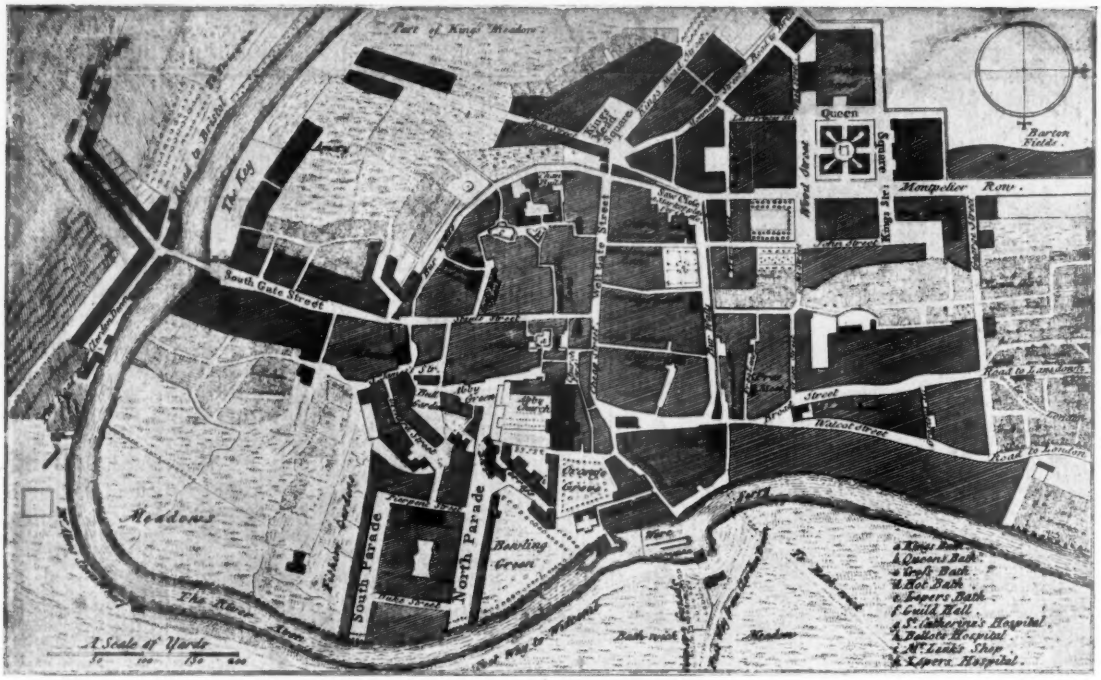
The Bathwick Estate scheme was undoubtedly the most important piece of street and estate planning in Bath. The estate, which belonged to Earl Pulteney, is approached by a bridge known as Pulteney Bridge, which was designed by Robert Adam, who also made a design for the whole estate (1777); this, however, was not carried out, owing, it is supposed, to political reasons, and Thomas Baldwin, a local architect, was employed by the Town Commissioners to carry out the scheme.

It includes an octagonal place known as Laura Place, which forms a sort of introduction to Great Pulteney Street, the widest (100 ft.) and most important residential thoroughfare in Bath. The architectural design, though impressive and quiet, lacks the brilliancy and grandeur of the work of the Woods, and in spite of its fine proportions Great Pulteney Street suffers from the incompleteness of the Bathwick Estate design, and seems to want more support, and to be on almost too important lines for its purpose and position. It is purely residential, and leads to nowhere in particular, finding a climax in Sidney Gardens and some modern villas. There are practically no features in the street, and no effect is made out of the intersecting streets, which hardly break the strict and somewhat oppressive formality of the lines of the frontages.

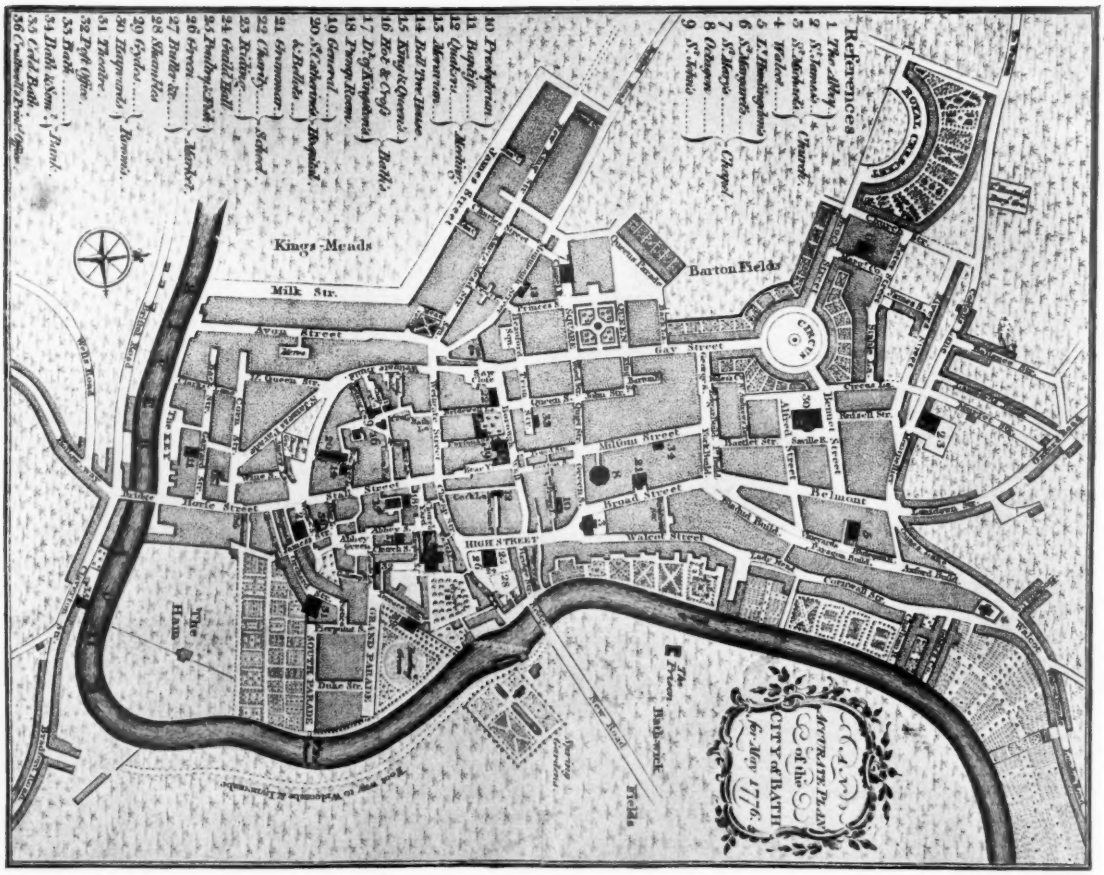
On the other hand, the trees which were intended to form a rather important feature in the general effect give a ragged appearance to the street, owing to their irregularity of size and their lack of formality.

Laura Place, though fine in its detail, being of the same design as Pulteney Street, loses much of its effect as a "place" owing to the fact that, though octagonal, only four of its sides are comprised by buildings, the other four being wide street-openings. The somewhat dreary effect produced by this arrangement is rather increased by the fact that the two intersecting streets have not been completed, and add a comfortless feeling to the general effect.

That the Bathwick Estate will ever be completed in the grand manner intended by Adam or Baldwin is unlikely, seeing that, during the interval of over a hundred years, domestic conditions



PLAN OF BATH ABOUT 1730, SHOWING COMPLETION OF QUEEN'S SQUARE AREA

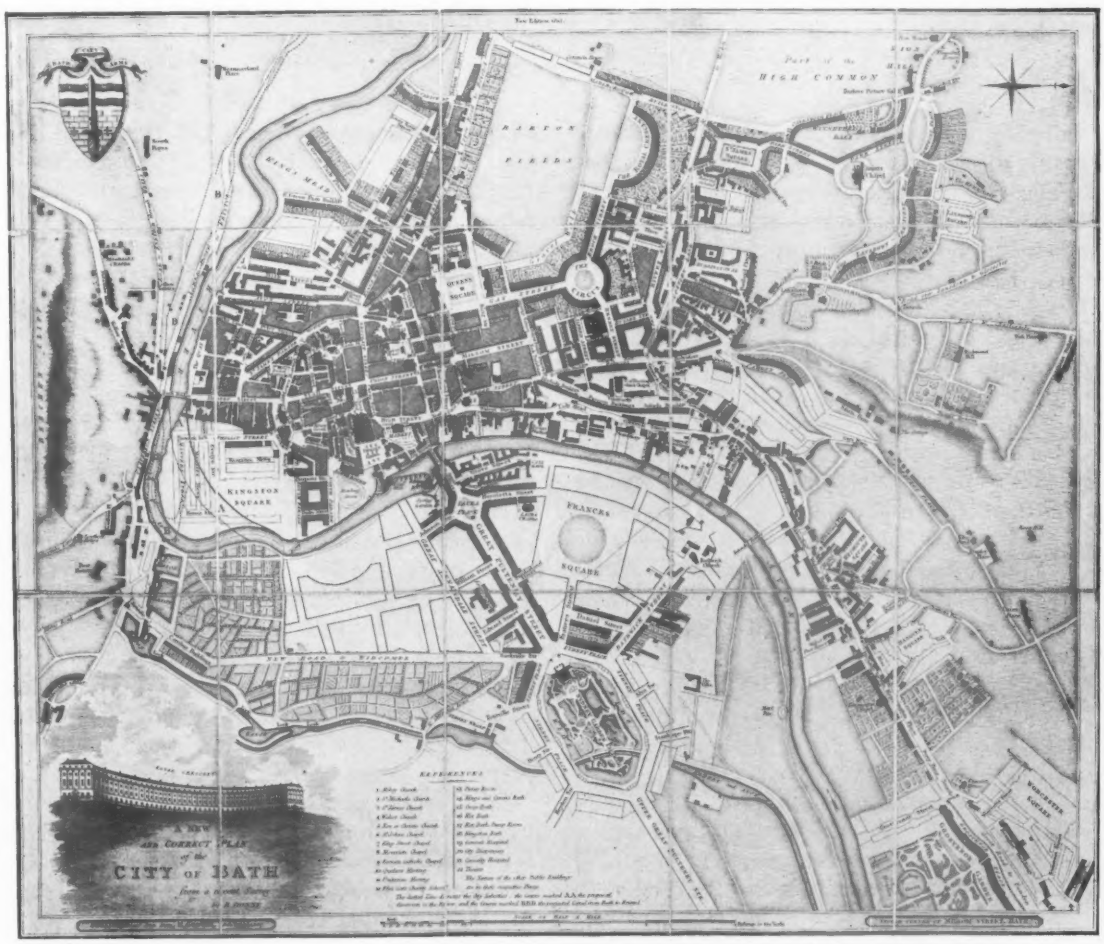


PLAN OF BATH IN 1776, SHOWING THE COMPLETION OF THE GAY STREET AREA (WITH CIRCUS AND CRESCENT) AND THE NEW PULTENEY BRIDGE

and taste have so altered that no landlord would to-day build stately terraces of domestic buildings which no one at the present day would occupy; the natural preference for "detached houses standing in their own grounds" has destroyed anything resembling academic treatment of small or grouped residences, and in this respect the planning of the Bathwick Estate affords no practical lessons: nevertheless, it is a valuable example of planning eminently suitable and consistent with the magnificence of contemporary life in Bath. That such stately architecture should have been accepted and admired at a period when social frivolity and extravagant tastes were in fashion, reflects much honour to the residents and visitors to Bath.

Baldwin also designed the beautiful little area which comprises Bath Street, with its Doric colonnade, rather in the style of the "Piazza" at Winchester, but more delicate. It is now a somewhat derelict area, and is but little used for traffic. It has been threatened with demolition, and will probably fall a victim to commercial "enterprise," unless some effort is made to preserve it.

South Parade, as I have already pointed out, was evidently intended to form part of a larger scheme (Kingston Square) and to face an open space. Though but a short street, about 130 ft. long and ending abruptly on the top of the river bank, it is worthy of special notice, not merely on account of its architecture, but because of its very satisfactory "lay out" and the fine vista obtained (probably quite accidentally) at the end of the street. The roadway is some 30 ft. wide, with a row of trees between it and the footway in front of the houses. The footway is also 30 ft. wide, and this open paved space between the houses and the trees is particularly effective. It has the double advantage of securing a sufficient distance between the street and the houses and of getting the trees far enough away to prevent their overshadowing or obstructing the circulation of air about the houses. The street ends with a fine view across the river to the hills on the other side of the valley. This is one of the few instances in Bath where Nature plays any part in the street effect, and one cannot but feel that the beautiful natural conditions, which are one of the most



DONNE'S PLAN OF BATH IN 1810, SHOWING LAY-OUT OF BATHWICK ESTATE AND KINGSTON SQUARE AREA

Photochrom

SOUTH PARADE, BATH

striking features of Bath, were not sufficiently recognised, and certainly were not taken full advantage of, in the planning of the streets. Any effects which the views and surroundings have produced seem to be the result of accident rather than design.

There is but little in the planning of the residential areas of Bath which affords a model for modern use. Changes in conditions and tastes have made this impossible. Nor would it be possible to utilise these areas as the basis of a modern town-planning scheme. Bath in the eighteenth century was a specially favoured city endowed with natural advantages and patronised by a wealthy and fashionable society. The landowners fully recognised the advantages of developing their estates in a style suited to the character of their prospective tenants, and employed men of understanding to carry out their schemes. Their work is consequently dignified, simple, and unaffected, and quite free from the somewhat self-conscious affectation of simplicity which seems likely to become a danger to our modern housing and estate-planning schemes. Nor is there any cheap pompousness of municipal glorification about the municipal architecture, but everything *comme il faut* and unpretentious.

Whether the formal style of development was really suited in all cases to the peculiar contours of the land is open to doubt, but the period was one of formality, and the style of architecture unsuitable for an informal treatment. What might be termed the collective execution of large building schemes was favourable to the formal style of the period, and had the land been in the hands of a variety of owners, or had the properties been utilised for a less important class of residences, the fitness of the formal planning might have been considerably prejudiced. Problems of housing the working classes do not seem to have come within the scope of the schemes, and though Bath is almost unique in the fact that it contains practically no slums, many of the streets which were erected for residential purposes of a comparatively well-to-do class of tenants are now used for housing the working population, for whom a combined occupation of the houses is necessary, and for whom such houses are eminently unsuitable. The Town Council, however, appear to be fully alive to the need of improved housing arrangements, and have prepared schemes for housing on modern lines.

Bath will always retain the honour of having been the first city in England to work out definite schemes of development, and she will always afford us a valuable object-lesson well deserving of careful study.

B. K.

THE NORTH PARADE

Photochrom

THE ROYAL CRESCENT, BATH

Photochrom

A RECENT EXAMPLE OF TOWN PLANNING: ALKRINGTON

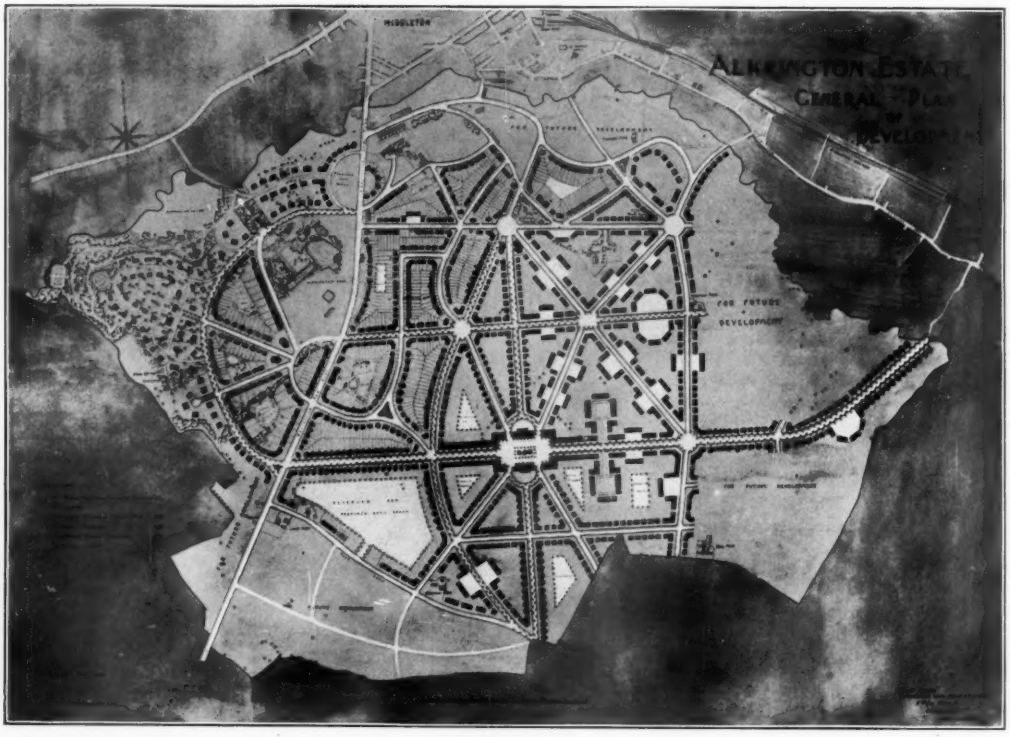
THE Alkrington Estate of 700 acres comprises the greater part of the unbuilt-upon land between Manchester and the industrial town of Middleton, and is intersected by the Manchester main road with its excellent tramway service. A plan has been prepared for the lay-out of the whole of this estate, notwithstanding that it may be fifty or more years before it is fully developed.

The initiative was taken in the matter by the owners, Mr. James Lees, of Biddulph, and his brothers, who are desirous of securing the development of the property on satisfactory lines. A careful survey of the ground has been made, and consideration given to the proper direction of main traffic routes between the surrounding centres of population.

Alkrington is surrounded with moderate-sized towns on three sides, and is being gradually encroached upon by Manchester on the south. It adjoins the Blackley Estate of the Manchester Corporation. The Corporation recently decided to invite competitive plans for the lay-out of their estate.

It would seem desirable that the various authorities and owners concerned in the control and ownership of these large suburban areas should act together in securing the preparation of comprehensive plans. The main features should be settled with regard to the lay-out of the whole of one or more sides of a city like Manchester, especially with regard to the main traffic routes. This should form the basis of the site-planning of areas like the estates of Alkrington and Blackley. Without having a skeleton town-plan as a basis for site-plans, it must be impossible to get the best results.

On part of the Alkrington Estate there is an interesting example of the advantage which might be secured under a town-planning scheme in the way of providing narrow residential roads or drives instead of the usual 36 ft. by-law streets. On the illustration of the Alkrington plan it will be observed that an area on the western extremity is laid out in park-like fashion, with narrow drives leading to the houses. In this case the width of the proposed roads is only 24 ft., but no projected house stands in an area of less than a third of an acre, and the buildings are proposed to be set back about 40 ft. from the road. The fact that no through traffic is possible through this area renders it unnecessary to have more than a pleasantly laid out rural drive leading to the houses erected on this land. The result of this method is that the large gardens shown can be provided at less than half the price they would cost if the ordinary by-law streets were insisted upon. To double the cost of the land would be to render the development so expensive



This is a wooded area on the western extremity of the estate, on which drives 24 ft. wide are proposed. The construction of the ordinary 36 ft. streets on this area would involve the destruction of nearly all natural features. This would be all the greater calamity because there is scarcely any timber in the surrounding district.

VIEW ON ALKRINGTON ESTATE

that double or treble the number of houses would have to be erected per acre. It would also involve the destruction of the timber on the whole of this area, which is pleasantly wooded. On the same plan it will be observed that provision is made for main thoroughfares from 50 to 60 ft. wide, where these are considered necessary for through traffic. By enabling authorities to permit the construction of roads or streets to meet the requirements of each building area, and not according to a hard and fast rule, it will be possible under the Town Planning Act to secure the more economical development of the land and the preservation of natural features.

As the Alkrington Estate is practically all within the area of the Middleton Borough, it would seem to be most desirable that the Middleton Town Council should consider whether the plan is one which they could adopt under the Town Planning Act. If the plan is generally acceptable to the Council, they should enter into an agreement with the owners to carry out the development on the lines laid down. Both parties would no doubt gain considerably from the adoption of a scheme. Under the Act the Council could agree to a give-and-take arrangement regarding the width of streets, or the provision of open spaces by the owner in lieu of some advantage conferred by the authority. Provision should be made for linking up the tramway lines at Middleton Junction, or at a point nearer Manchester, with those on the Manchester New Road, by providing for the construction of a new main thoroughfare running across the estate from east to west, as indicated on the plan. It is, perhaps, too early to incur any expenditure in this direction, but the time will assuredly come within the next thirty years when a main road in this position will become almost essential.

Manchester is a rapidly growing city, and it is surrounded on all sides by prosperous but badly planned industrial towns and villages. A glance at any map of the district will show how unsatisfactorily these industrial centres are linked up by main roads, which are becoming more and more important for transport purposes. There is no district in England in which it is more urgent or important, on purely commercial and economic grounds, for the various authorities to combine in preparing a great town-planning scheme. If they can secure the co-operation of the large owners of land in this work it should not prove too expensive, even though it is one of those improvements which will yield more advantage to posterity than to the present generation.

SOME GERMAN LESSONS IN TOWN PLANNING

BY T. C. HORSFALL. (*Concluded from p. 320, No. 162*)

GREAT danger exists that the evil which would be caused were the wrong use of town-plans in this country to promote the building of tall houses, and the raising of rents and of the price of land, may be much underestimated: for many of those English people who study the condition of the inhabitants of German towns, finding that the poorer inhabitants are much better clad, and much cleaner both in their attire and their persons, than the corresponding classes in our towns, and seeing, too, that the German tenements are much cleaner and neater than English town cottages, may easily attribute all this superiority to the influence of the German method of housing, and therefore indirectly to the German method of using town-plans, or may at least suppose that the evils of that method are far less serious than they are alleged to be. But this would be a great mistake. It must be remembered that Germany was nearly a century in advance of England in bringing the influence of systematic day-school training to bear on the mass of the people, and that Germans have many other educational advantages which our people do not possess, and that therefore German workpeople are far better prepared to contend with the evils of tall houses, insufficient space, and overcrowding, than our English workpeople would be. In spite of their better training many of them suffer much from lack of cleanliness; and the effects of bad housing on health are so bad that Dr. Thiele of Chemnitz stated last year that over 90 per cent. of the children presented for vaccination show signs of more or less severe rickets.

It is quite certain that if the populations and the municipal governments of a large English and a large German town were interchanged, say those of Hamburg and Manchester, the new English inhabitants of Hamburg placed in the tall German houses would live very miserably and die very rapidly; while the new German rulers of Manchester, by clearing small open spaces for playgrounds and training children to use them, by creating numerous town gardens and planting with trees all streets and squares where it was possible to find space for them, would soon make the poorer districts of Manchester much healthier and much less hideous than they are at present.

Two of the uses made of town-plans in Germany are wholly good, and should certainly be adopted here. On German town-plans, every street through which it is believed that much traffic will pass is laid down of sufficient width for the expected amount of traffic, so that the inhabitants of German towns are spared that most useless kind of expenditure (on which in this country millions of pounds have been wasted), the purchase at very high prices of property on one side of a street only a few years old, for the purpose of obtaining the width which everyone of experience knew from the beginning would soon be necessary.

In the case of streets which it is believed will have much traffic through them eventually, but which are not likely to be very much used for some years, the street is laid down with sufficient width between its two lines of building for the needs of the largest amount of traffic expected; but only the width of road immediately needed is paved, and the builders of houses have to provide front gardens, and surrender them for incorporation in the street when the first-paved portion is found insufficient for the developing traffic.

The chief lessons which we have to learn from the good and from the bad examples of other nations are, I think, that by the use of town-plans we must make the new parts of our towns as beautiful as possible by giving the best form to all streets and open spaces, by reserving well-placed sites for the schools and other public buildings which will be needed as new districts develop, by leaving space for abundant vegetation, accepting in making all these arrangements the help of Associations of Architects, who would thus be encouraged to study the arrangements of the most beautiful ancient and modern towns; we must make the new parts of our towns wholesome by providing beforehand for an adequate supply of playgrounds and planted open spaces, and by ensuring that all dwellings shall have enough light and air; we must ensure the convenience of traffic by making all streets through which there will be much traffic wide enough to receive tram-lines, and, in the business parts of towns, railway lines to connect warehouses, etc., with goods stations; we must ensure that life in the new districts of towns shall be pleasant by reserving some districts for dwellings and others for business purposes; we must keep down the price of land by rigorously restricting the number of persons who may be housed per acre; we must keep down rents, not only by preventing land from being dear, but also by supplying the streets and other forms of open space needed in residential districts at the lowest prices which are compatible with good quality, and by leaving building unhampered by regulations not needed for the protection of health, convenience, and amenity.