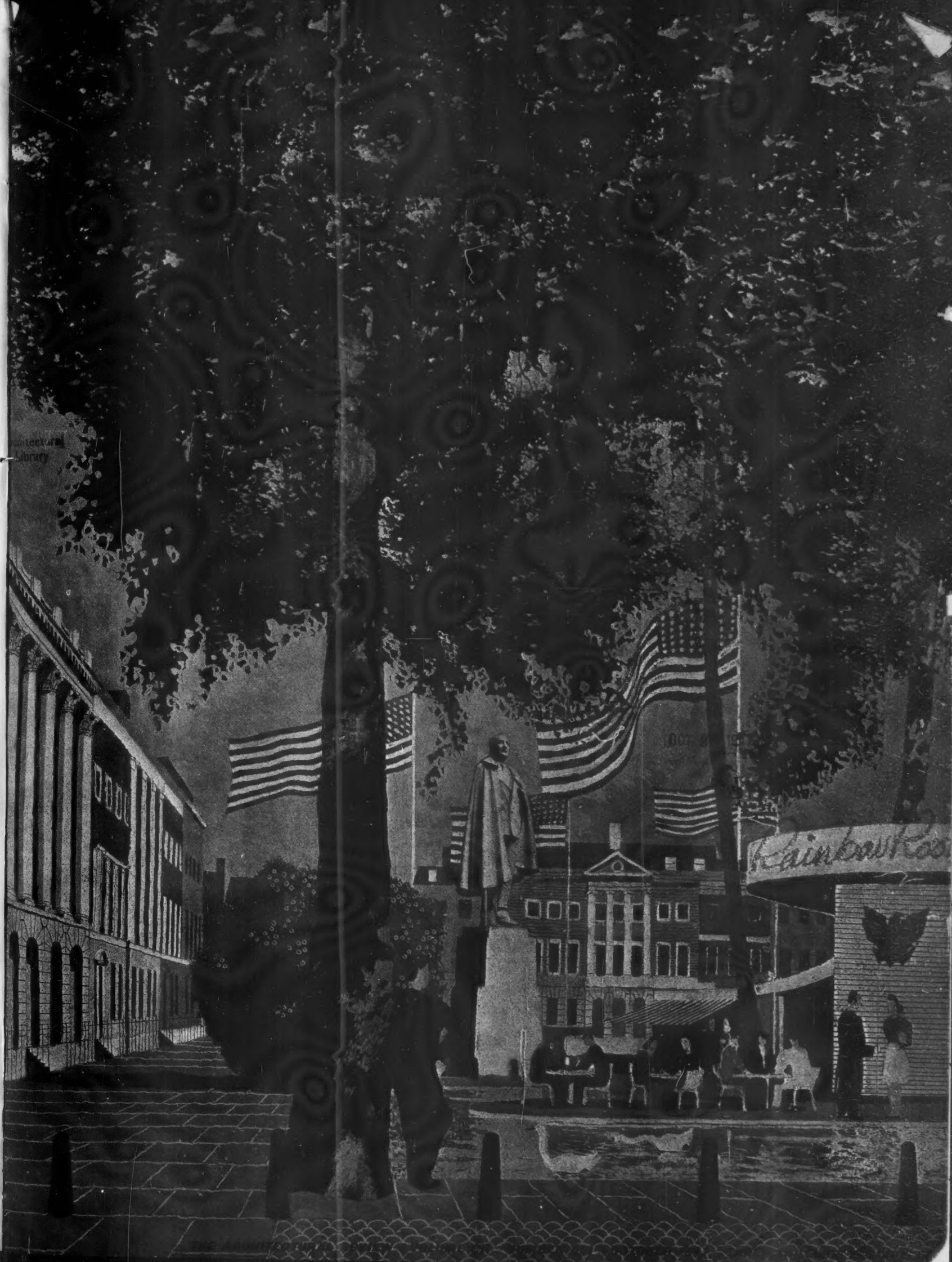




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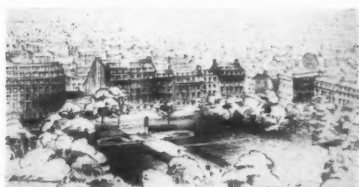
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THE ARCHITECTURAL REVIEW

VOLUME CII NUMBER 610



The Cover shows Grosvenor Square re-landscaped as a corner of America in London. The focal point is the statue of President Roosevelt. At present this memorial is planned as part of an ornamental garden within a square reverting, except for this new, formal note, quietly and respectfully to its pre-war appearance (see the illustration below). Such a proposal ignores two great opportunities which will never again present themselves. The first concerns squares all over the country, which are now about to be landscaped under new conditions and for another age than that which gave them their original character. How this particular opportunity might be met is shown in *Squares for all Tastes* on pages 131-134. In the case of Grosvenor Square, apart from the chance to make it a living part of a twentieth century town landscape, there is an added opportunity in the widely supported scheme for the Roosevelt memorial. If the British want to signalize all that America has done for them in the war, why not dedicate the whole square to America? Its war-time associations, and the permanent presence there of the American Embassy, make the site particularly appropriate. This and the Mayfair location suggest the atmosphere of Washington rather than Broadway, with the best food, drink and entertainment served in the American manner. The cover and the sketch on page 133 show what London's American Corner might be like.



The Roosevelt memorial: Architect, R. W. L. Gallanaugh

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THREE SHILLINGS AND SIXPENCE





Louis Sullivan's Architectural Ornament*

by Henry R. Hope

LOUIS SULLIVAN is now generally acknowledged as one of America's great architects, perhaps the greatest of the nineteenth century. Yet it is doubtful if we are ready to admire his architecture, without reservations. This is not a paradox; it is the result of an incomplete standard for the judgment of his work. We have admired Sullivan for that part of his theories and architecture which most conforms to the taste of the twentieth century. Although he has thus gained fame, this twentieth century preference has ignored a part of his work that Sullivan himself considered highly important—his ornament.

During his last years Sullivan fell into oblivion, his theories apparently a lost cause. Then the interest in the Chicago school as the birthplace of the skyscraper gave belated credit to Adler and Sullivan along with the other architects of the school: William Le Baron Jenney, Leroy S. Buffington, Burnham and Root, and Holabird and Roche. But this was largely a structural question in which each new development was seen as a step in the progression toward skeleton construction, and the buildings themselves were not considered as works of art.

Sullivan's theory that form follows function began to attract attention in the 1920's, when the principles of a rational and functional architecture that was to be called the international style were being formulated. He seemed to predict the new style not only in his writings but in some of his buildings. Soon he gained fame as his name appeared in critical discussions of modern architecture. But there were certain disadvantages in comparing his work to the twentieth century. There was a tendency to single out from his total work those buildings or parts of buildings which most resembled the abstract shapes of the international style. Thus we have praised the Walker Warehouse (1888-9) and the Meyer Building (1898), structures which are bold in mass but almost entirely without ornament, and which were doubtless considered of secondary importance by Adler and Sullivan. We have admired the wall of glass on the Schlesinger and Mayer Store (to-day Carson Pirie Scott & Co.), although many of us have been embarrassed by the highly ornate main entrance to the store.

Hugh Morrison, Sullivan's biographer, has given a very complete account of the architect's life and works, but it is significant that the book bears the title, *Louis Sullivan, Prophet of Modern Architecture*,¹ and there are several observations in the text which reveal the author's preference for the more unadorned and prophetic works. For example, of the Dexter Building (1887), a mediocre but undecorated structure, he wrote: "Sullivan has here finally eliminated the Egyptoid ornamental forms of the earlier buildings, and attained a new simplicity and monumentality growing directly out of the problems of the commercial office building."

We are all familiar with the ancient critical principle that a work of architecture should be judged in the measure of its structure, its use and its beauty. In the case of Sullivan this should mean that in addition to the studies of the evolution of the skeleton frame, and of the functional principle, we should give fair consideration to his decorated as well as his plain structures.

Before approaching the question, there is a problem to be faced, even if the solution may not be at hand.

Sullivan, like most members of his profession in modern times, worked in a partnership and with the help of an office staff. The partnership of Dankmar Adler and Louis Sullivan was apparently a happy one while it lasted. It is generally acknowledged that Adler contributed great skill in the science of construction and engineering, and that Sullivan was the designer. Yet a

moment's reflection on this method of work will reveal that there can be no line drawn between these operations in the actual creation of a building. The design is the construction, the construction is the design, if the building is to have any true unity.

Perhaps the partnership's duality of function has some bearing upon certain variations in their work. Apparently the firm was willing, in its early years, to turn out a building with or without ornament according to the needs and the pocketbook of the client. For example, the Knisely and Dexter Buildings and the Selz Schwab Factory were almost entirely without ornament, while the Rothschild Store and the Revell and Ryerson Buildings in the same period were heavily decorated. The Auditorium itself was redesigned with a vastly simplified exterior surface partly as a measure of economy.

It is this take-it-or-leave-it attitude towards decoration that has made our generation suspicious of the role of ornament in architecture, and encouraged the belief that the true beauty of a building was to be found not on its surface but in the plan, the structure and the mass. Sullivan would not have denied this but he had a deeper belief in ornament than we are aware of. His theory that form follows function has become a weapon that is used against him to-day, but this is because it is misunderstood.

As Hugh Morrison has carefully pointed out, "the rule that form follows function sounds simpler than it really is. The word 'function' meant to Sullivan the whole life that would go on in a building . . . that a building must be organic, unitary, that it must have life . . . that a building must express intellectual and emotional and spiritual realities."²

What were the intellectual, emotional, and spiritual realities as Sullivan understood them? One can get some hints about these by reading his *Kindergarten Chats* and *Autobiography of an Idea*. Sullivan was no purist, nor functionalist in the twentieth century sense of the word. He was deeply imbued with the mores and manners of his generation. When Sullivan came to Chicago, American architecture had begun to emerge from the ugliness of the Victorian Gothic and the French renaissance revival of the seventies. He hated the disorderly eclecticism of this period, but in spite of what Sullivan wrote in later years he was not averse to the Queen Anne style of the early eighties. Like the other young architects practising in Chicago between 1880 and 1890, Sullivan attempted to blend the Queen Anne with the heavy masonry and bold massing of Richardsonian romanesque. He admired the designs of many of his contemporaries, and they helped him in the formation of his own style. He was in no sense out of key with his generation.

Sullivan had received a superior intellectual training, first at English High School in Boston under Moses Woolson, later in Paris under Clopet, his mathematics tutor, and in the ateliers of the Ecole des Beaux Arts. Perhaps it was this training which caused him to seek a rational formula for the design of architecture. But his spirit of rationalism, about which so much has been written, was tempered by a great love of life, of nature, of Michelangelo, of Walt Whitman, of Richard Wagner, of the rich exuberant poetry that Sullivan found in Chicago (he likened the city to Paris in his autobiography).

In 1886 he read an essay entitled *Inspiration* to the convention of the Western Association of Architects. It was in three parts: "Growths: A Spring Song"; "Decadence: An Autumn Reverie"; "The Infinite: A Song of the Sea." The poem was filled with an expansive and occasionally sentimental love of nature that suggests the "Song of the Open Road,"

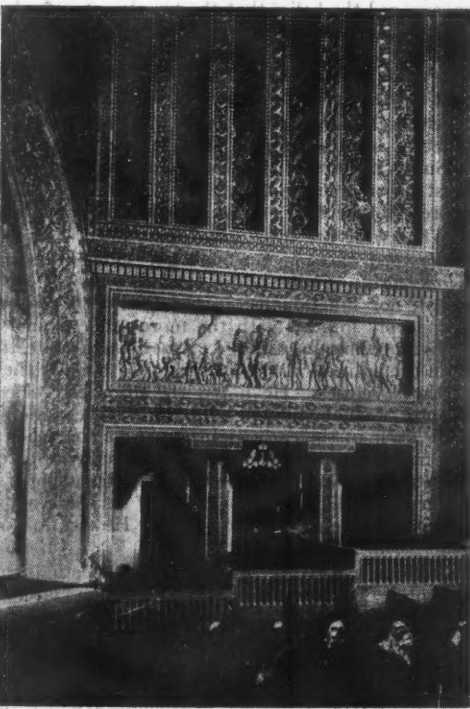
* Reprinted from the *Magazine of Art* for March, 1947.

¹ The Museum of Modern Art and W. W. Norton Co., New York, 1935.

² *Op. cit.* pp. 251-255.

A danger in modern town planning is that it tends to miss out one of the most exciting characteristics of the city—its complexity.

Current planning practice is well-devised to isolate problems and provide separate solutions to them, but to re-create a city as a whole and to express in visual terms the complex organism that it is, demands an understanding which goes much deeper. Stockholm is a city whose planners possess this understanding. In the square on the facing page, which is near the famous cloverleaf crossing, two contrasting factors have been handled with exceptional success—dynamics and statics. Far from traffic disturbing contemplation over the coffee cup, by the skilful use of awnings, sun-shades and pots of flowers, together with a monument to the dead, an oasis of stillness is created with a circumference of mobility, which serves to heighten rather than destroy the sense of isolation. A traffic-enclosed space for which a less imaginative man than Holge Blom (Stockholm Parks Superintendent) might have found it hard to conceive a use, has thus become not only one of the most successful of Stockholm's incidental open spaces, but also provides visual counterpoise in an area which would otherwise be devoted exclusively to movement. In *Squares for All Tastes* on pages 131-134 the REVIEW tries to demonstrate how squares could serve multiple needs now that railings are down and the amenities they jealously guarded are no longer the preserve of the few. The renaissance square can, like this one in Stockholm, provide that variety of functional accents which is a true reflection of the varied life of a democratic city.



In its early years the firm of Sullivan and Adler was apparently willing to turn out a building with or without ornament as the client desired. 1, the Walker Warehouse, Chicago (1888-9), which although greatly admired by modern critics was, being without ornament, probably not very highly esteemed by its authors. 2, interior of McKim's Theatre, Chicago (1890-1).

or in its form, a Wagnerian trilogy. Far from being a theorist who foresaw a new architecture of the future, Sullivan was a man of his period, loving the luxury, the display, the good food and drink, the outdoor sports, the music and the poetry of that generation of American life.

As for the place of ornament in this theory, Sullivan expressed his views in one of the *Kindergarten Chats*:

"The decoration of a structure is in truth, when done with understanding, the more mobile, delicate and sumptuous expression of the creative impulse or identity basically expressed in the structure; it is the further utterance, the more sustained and delicate rhythmical expression thereof. For the new architecture a new decoration must evolve to be the worthy corollary of its harmonies, a decoration limitless in organic fluency and plasticity, and in inherent capacity for the expression of thought, feeling and sentiment. And when this power of plastic modulation, of rhythmical fluency, shall characterize your expression, throughout the entire being of a structure, you will have arrived at the heights of that art of expression I wish you to attain."

Adler's attitude towards Sullivan's ornament was stated in a contemporary article concerning the Auditorium Building: "It is to be regretted that the severe simplicity of treatment rendered necessary by the financial policy of the earlier days of the enterprise, the deep impression made by Richardson's Marshall Field Building upon the Directors of the Auditorium Association, and a reaction from a course of indulgence in the creation of highly decorative effects on the part of its architects, should have happened to coincide as to time and object, and thereby deprive the exterior of the building of those graces of plastic surface decoration which are so characteristic of its internal treatment."⁴ This is a curiously significant statement, for although Adler defends his partner's ornament, he also refers to it as surface decoration, and the twentieth century reader feels an uneasy suspicion that perhaps the building is better without it.

We seem then to be at this point: that for Sullivan himself, ornament

was an integral part of the expression of his architecture, but that twentieth century taste, thus far at least, has excluded this ornament as a superficial grace and prefers its buildings straight.

Is this attitude perhaps a survival of the series of artistic revolutions of the early twentieth century—of the fauves, cubism, futurism, expressionism, de stijl, Bauhaus and the neue sachlichkeit?

There is no doubt that Gropius, Le Corbusier, and the group of architectural critics who have supported them in their demand for a pure functional style have cast an air of disgrace over all ornamental excesses. And it is equally true that these purist theories of the 1920's are rooted in the architectural developments of the 1880-1895 period in Chicago, as well as in Europe. Sullivan was a prophet of modern architecture, as were Voysey and Mackintosh, the youthful Van de Velde, Horta and Hankar, and Berlage. But for several years we have been emerging from the heroic period of the unadorned architecture of the 1920's. The machine for living did not satisfy our needs, neither functionally nor esthetically. The transplanted Bauhaus (at Harvard, at the Chicago School of Design, and the Illinois Institute of Technology) has been turning out a crop that looks as much like Taliesin as Dessau. Frank Lloyd Wright, Louis Sullivan's greatest disciple, never did abandon ornament altogether, and now, as we enter a less frugal, less puritanical period of contemporary architecture, the younger men and the critics seem to be turning towards his teachings.

Perhaps, then, we are nearing a period when Louis Sullivan's ornament may be studied without a feeling of heresy and distaste.

Sullivan entered the office of Dankmar Adler as head draftsman early in the year 1879. He was then 28 years old, and had been drafting for various Chicago firms since 1876 when he had returned from the Ecole des Beaux Arts. John Edelman, an old friend and fellow draftsman when both were in Jenney's office during the winter of 1873-4, had introduced Sullivan to Adler, and the position was arranged after Adler had dissolved his partnership with Burling and was in need of a good designer. On May 1, 1879, Sullivan accepted an offer of a one-third share in the business and a year later the firm adopted the name of Adler and Sullivan, with the partnership on an even basis.

The work of the firm during the seven years before the Auditorium can be divided roughly into three classes: (1) several medium-sized commercial buildings, average height six stories, best of which were the Borden Block, Rothschild Store, Revell Building, Ryerson Building and Troesch Building; (2) about thirty residences, more or less Queen Anne in style; (3) a number of theatre interiors, for which Adler had a special talent. The firm did not have the prestige of Burnham and Root, which had been established since 1873 and under the suave salesmanship of Daniel Burnham had won commissions for the ten-story Montauk Building (1881), first tall building in Chicago, the equally tall Counselman Building (1883), and the Rookery (1885). Nor did the firm's early commercial work equal the size of S. S. Beman's Pullman Building (1888). However, they gained rapidly in prestige and were the envy of the profession when the Auditorium commission went to their office, in the summer of 1886.

Sullivan's architectural design before the Auditorium Building was in a trial and error phase. He claims in his autobiography (written some forty years later) to have been determined to avoid any of the historic styles taught in the schools, but like most of the other Queen Anne designers, both in England and America, he drew upon a wide range of architectural detail and attempted to use it eclectically in an effort to create a new style. Pediments, columns, pilasters, capitals, colonnettes, arcades, corbels, panels, cornices, practically the whole grammar of architecture was at his ready command. Except for a sense of order in his clean lines, flat walls, and cubic masses, his buildings of this period, both commercial and residential, are hard to distinguish from those of his contemporaries in Chicago and elsewhere.

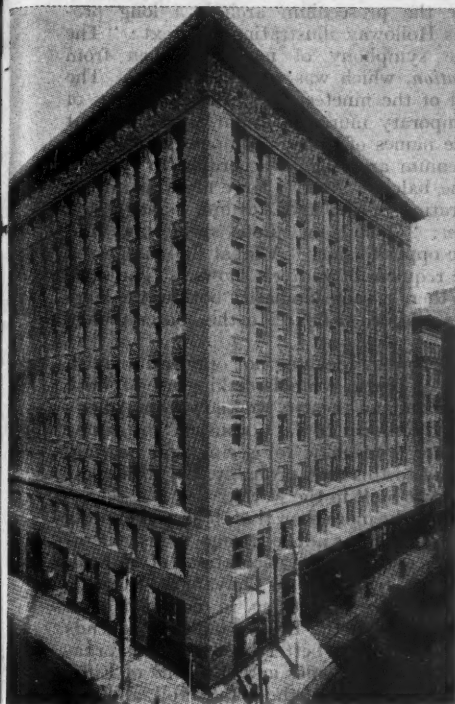
Sullivan's first big job when he became head draftsman of the firm was the design of the Borden Block, which came into the office in 1879 and was finished the next year. The ornament of this building is made up of rectangular and semicircular panels filled with terra-cotta relief. This ornament is used with considerable restraint, and in a nice harmony with the apertures and supporting elements of the two facades (the Borden is a corner building). The motifs are not particularly original; similar floral pattern can be found in many Queen Anne buildings of this period, especially in those of Burnham and Root. It appears to be quite similar to the winding rose vines and other all-over scroll surfaces used by William Morris, Burne Jones and Selwyn Image in England during the same general period (1875-85), and is found in America in the ornament of Richardson, Austin Hall (1882), McKim, Mead & White, various residential designs (1881-84), and thus may be called a characteristic of American Queen Anne ornament.

The Rothschild Store, built in 1880-81, is his first work as a partner. Sullivan had a wild fling in the display of ornament above and around the top floor windows. This is in cast iron and lacks both the refinement and the all-over patterns of the terra-cotta panels. There are rosettes, lotus flowers, wreaths, foliate crosses, thin colonnettes above the mullions, remarkably complex pier endings deeply gouged at the angles with rosettes placed in the gouges. A small pediment crowns the upper central window in each of the two bays. Lower down the facade are indented panels, blind arcades, and more rosettes. Some of these ornaments can be found on other Chicago buildings (for instance, the rosettes on Boyington's Board of Trade, 1882), others are drawing board inventions of a facile pencil. The spirit of the whole design is one of extravagant independence, so extravagant that the reliefs along the top look as if they had been spattered on.

The Auditorium Building was planned as a huge opera house set into the heart of a masonry shell with an hotel on the lake side and offices on the city

³ Quoted by Morrison, *op. cit.*, p. 255.

⁴ Quoted by Morrison, *op. cit.*, p. 89.



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side. Its promoter was Ferdinand W. Peck who had staged the successful Opera Festival in the spring of 1885. Dankmar Adler had an uncanny gift of building theatres with almost perfect vision and hearing. His success in putting up the temporary opera hall for the Opera Festival, in the Old Exposition Building (on the site of the present Art Institute), had probably insured the firm the commission of the great permanent Auditorium.

Sullivan's preliminary design was a huge romanesque building, with angle towers, pavilions, dormers, projecting oriels and a pitched roof tower rather like that on Ware and Van Brunt's Memorial Hall in Cambridge. It seems to a large extent to have been inspired by John W. Root's design for the Rookery that had just been finished and perhaps by S. S. Beman's Pullman Building (1888).

A later design of the same year shows a higher and handsomer tower capped by a pyramidal roof. The pitched roofs, dormers, and angle towers have disappeared and the flat cornice is marked by a beautiful broad band of over-all floral relief, perforated at each bay by small oval windows (the origin of the Wainwright cornice). In the final design this cornice, the pyramidal roof and many of the oriels have been eliminated, and the general cubic mass, the lower story rustications, the rhythms of the window spacing, all suggest very clearly the influence of Richardson's Marshall Field Wholesale Store, which was being completed during the year 1887. There is a story, vouched for by Paul Mueller, Adler & Sullivan's chief engineer, that John Root, seeing the preliminary design, remarked that Sullivan was about to smear another building with ornament. Sullivan, on hearing of this, is said to have called in the plans and redesigned the building. However, it is also known that Ferdinand Peck greatly admired the Field Building and that the directors of the Auditorium Association had insisted on economies in the exterior decoration.

On the interior Sullivan was allowed a free hand and he used ornament on a lavish scale in the hotel lobby, the main dining room, and the theatre. The young Frank Lloyd Wright had come into the firm as a draftsman towards the end of the year 1887. Wright tells in his autobiography how he soon

caught on to Sullivan's ornamental style and could draw it with great skill. He was placed in charge of thirty draftsmen and he himself detailed from Sullivan's original designs most of the ornament in the Auditorium.

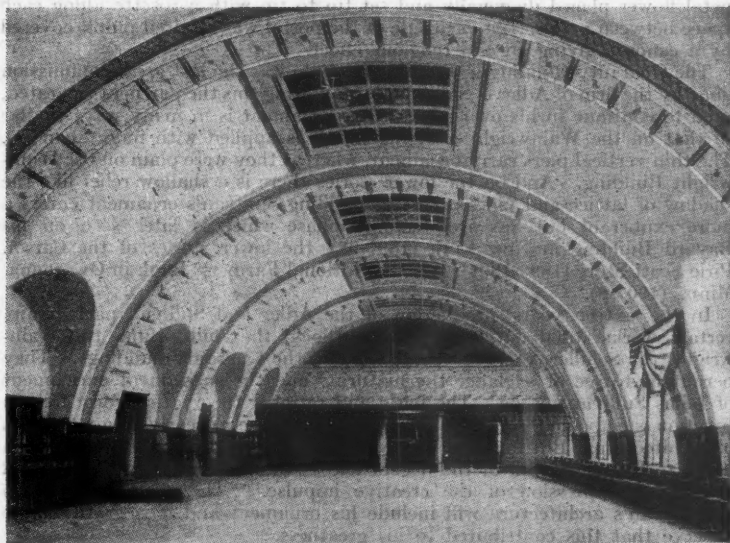
The ornament of the interior is used in two general ways: (a) as an enrichment of the working architectural elements: columns, capitals, corbels, lintels, entablatures, spandrels, archivolts, and trusses; (b) as a covering of the flat neutral surfaces of floors, walls and ceilings. The character of this ornament is mainly the low relief floral pattern, both of the winding leaf scroll and the central motif repeated at regular intervals along an axis. The low reliefs are executed in gilded plaster.

The hotel lobby, for example, has a marble mosaic floor, with an inlaid border, based on the floral scroll, but in its flat surface much more abstract. The dados are covered with polished onyx. This onyx continues on the staircase together with wrought iron rails. The general effect of this room is heavy and over-adorned. Perhaps to another age it will have the charm of certain Italian baroque palace rooms, but for this writer it is too similar to the metropolitan movie palaces of the 1920's to be viewed with anything but discomfort.

The main dining room on the tenth floor is a work of such formal beauty that it is surprising that the functionalist critics have not praised it. The room is covered by a barrel vault supported by five arched trusses which begin at the floor, with huge windows opened in each bay and overlooking the lake, and overhead is a continuous row of large skylights. The spatial character of this room is strikingly similar to Cottancin and Dutert's great *Galerie des Machines* which was being built almost simultaneously for the Paris Exposition of 1889. Each truss is decorated by a row of square soffit panels with plaster relief radiating like petals from an electric bulb in the centre. Wide bands of relief frame the skylights. The surface of the ceiling was stencilled with a flat pattern floral motif in parallel rows (since painted out) between each soffit relief. At each end wall was a huge lintel covered with leaf scroll in high relief and undulating outward from the centre toward the two extreme ends. Between the lintel and the vault at each end is a long narrow lunette. These are the settings for two mural paintings by Fleury, representing naturalistic landscapes in the Barbizon tradition.

The decoration of the theatre, like that of the dining room, is concentrated on the supporting trusses and the wall surfaces. The motifs have a more abstract and staccato character because they are framed in a series of geometric shapes: hexagons, diamonds, triangles, and rows of circles joined together in straight bands along the trusses and around the ceiling panels. Electric lights are set along the trusses as in the dining room. The skylights here are in stained glass.

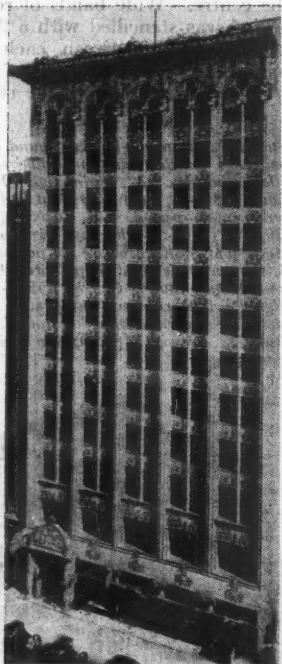
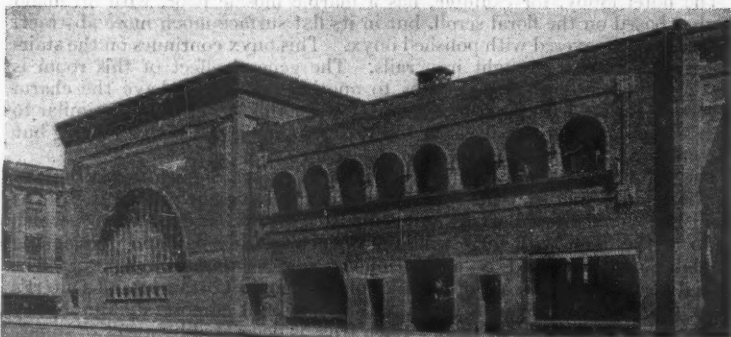
The ornament is most emphatic around the proscenium and in the organ grilles which flank it on both sides, the latter hidden by huge semicircles of a perforated



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8, detail of the doorway of the Getty Tomb, Graceland Cemetery, Chicago, designed by Adler and Sullivan in 1890, a work in which their use of ornament is to be studied in exceptionally pure form. 9, National Farmers' Bank, Owatonna, Minnesota (1907-8), designed in Sullivan's own office after the partners had separated. 10, Bayard Building, New York (1897-8), also due to Sullivan alone and illustrative of his conviction that "for the new architecture a new decoration must evolve... limitless in organic fluency and plasticity, and in inherent capacity for the expression of thought, feeling and sentiment."

pattern like rattan work. Above the proscenium arch is a long processional mural painting by Charles Holloway illustrating the text: "The utterance of life is a song, the symphony of nature," taken from Sullivan's long prose poem, *Inspiration*, which was written in 1886. The figures and composition are typical of the nineteenth century allegories of culture, and rather like the contemporary murals of John Singer Sargent at the Boston Public Library. The names of famous composers appear in panels on either side of the proscenium arch, again according to custom. On the side walls at the level of the balcony are two large mural paintings by Fleury in arched frames, illustrating Spring and Autumn as suggested in lines from Sullivan's *Inspiration*: "O soft melodious springtime, first born of life and love." And on the opposite side, "A great life has passed into the tomb and there awaits the requiem of winter's snows." The style of painting is again naturalistic, but there is some similarity both in the large arched composition and in the white allegorical figure to the contemporary murals of Puvis de Chavannes.

Sullivan intended this ornament to convey meaning not only in its lavish and intricate covering of surface but as poetic symbols making use of both the word and the sign. This dining room and theatre, we know from Adler's superb engineering, would adequately conform to Le Corbusier's principle: the one a machine for eating, the other a machine for seeing and hearing. Of the theatre Wright has said: "and to this day, probably, [it] is the best room for opera, all things considered, yet built in the world."

Yet Sullivan felt that a building should be more than that, it should express the spirit and life of its time. This principle was not so strange in his generation as it has seemed in ours (until recently). The decorations of McKim, Mead & White's Boston Public Library, by Puvis de Chavannes, Sargent, Abbey, and Augustus Saint-Gaudens have something in common with Sullivan's, except that the prevailing spirit of the Boston building depends on historic style, while Sullivan's is original. A better likeness to his ornamental motifs can be found in Paris. The balconies and skylights of Eiffel and Boileau's Bon Marché Store (1876) make use of the floral scroll, and this appears in abundance in the metal ornament on the Eiffel Tower (1889). The idea of a skyscraper restaurant also is found in both Sullivan's and Eiffel's structures. The *Galerie des Machines* was built strictly as an engineering problem to provide a large covered space for the exposition room. It may be compared to the bare walls of Adler and Sullivan's Walker Warehouse of the same year. The Eiffel Tower, like the Auditorium, was built as an ornamental structure, to please and delight (although it also shocked and irritated). The two monuments have much in common.

III

In the five years of the firm's existence following the completion of the Auditorium, i.e., 1890-95, Sullivan entered his richest and most mature ornamental period.

The floral cornice with window openings, which Sullivan first used in the second design for the Auditorium Building, attained a magnificent development in the terra-cotta frieze of the Wainwright Building in St. Louis (1890-91) with minor variations along the edge of the projecting cornice and in the evenly spaced spandrels. Variations of the Wainwright ornament are to be found in the Schiller Building (1891-92) and the design for Fraternity Temple (1891).

The lovely little Wainwright Tomb, St. Louis (1892), is marked by rectilinear additions of relief bands somewhat similar to those in the ceiling panels of the Auditorium. However, the richest display of ornament in these years was on Sullivan's Transportation Building of the World's Columbian Exposition (1893).

The main entrance was known as the Golden Door. At either side of the triple entrance were two long rectangular panels carrying a gilded bas-relief representing modes of transportation. The archivolt and the huge rectangular portal and projecting cornice were each heavily outlined by broad bands of relief. Each is based on repetition of the central motif. These motifs have become more intricate and forceful than those in the Auditorium. The largest occur at the edges of the portal and consist of huge circles six feet in diameter filled with a winding stalk and huge scroll leaves, rather crisp and abstract. The motif used for the cornice is a four-petal flower placed diagonally and set tip to tip with a rosette filling each space between petals. At each side of the portal was a raised pulpit covered by a canopy, giving an odd religious effect.

The Guaranty Building in Buffalo (1894-95) was the last great commission done by the firm of Adler & Sullivan, for following this the partners separated, each to continue in his own office. The ornament is in many ways similar to that on the Wainwright Building but it is applied with more abandon. The thin vertical piers carry ornament, whereas they were plain on the Wainwright Building. And on the lower stories there is a shallow relief like the shadow of lattice and vines. In this building Sullivan's ornament enters a more exuberant but less architectonic phase which is later seen on his Bayard Building in New York (1897-98), the lower stories of the Carson Pirie Scott Store (1899-1904), and the National Farmers' Bank in Owatonna, Minn. (1907-8).

In the sixteen years' production of the Adler and Sullivan partnership, certain works stand out: the Borden Block, the Auditorium, the Wainwright, the Schiller, the Transportation and the Guaranty buildings. They permit us to see at a glance the maturing and the subsequent enrichment of Louis Sullivan's style. The basic and rational theory that form follows function is embodied in these buildings as it must be in nearly all great works of architecture. But for Louis Sullivan form continued to fulfil its function down to the last detail of the decoration—"the more mobile, delicate and sumptuous expression of the creative impulse." The proper evaluation of Sullivan's architecture will include his ornament and it is gratifying to observe that this contributed to his greatness.

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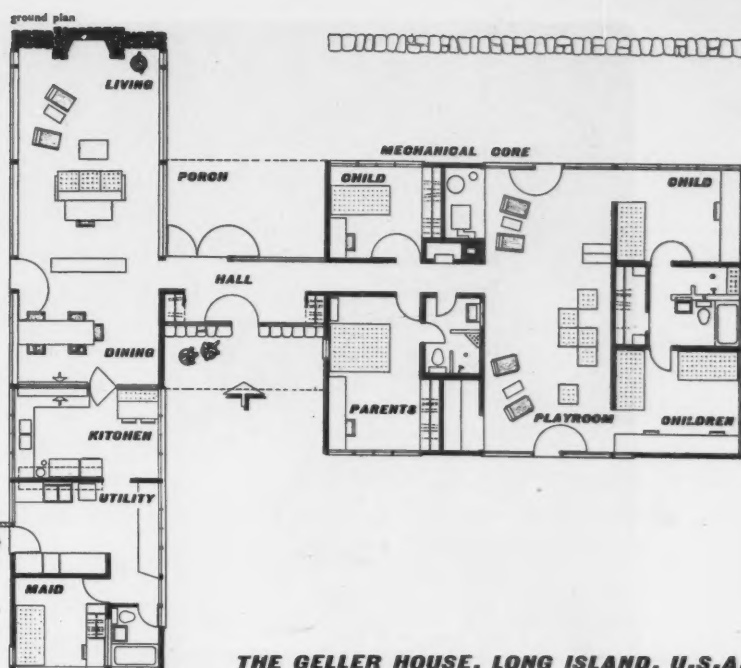
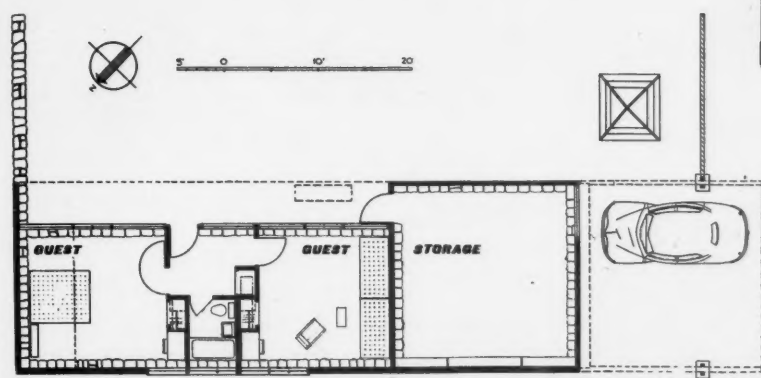
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TWO HOUSES BY MARCEL BREUER



THE GELLER HOUSE, LONG ISLAND, U.S.A.

This house was designed in 1944, started in 1945, and finished, after an interruption of five months due to a glass strike, in 1946. One of the chief factors influencing its design was the need to provide independent quarters for the three children in the family. Another was a desire to centralize things as much as was compatible with the afore-mentioned consideration. The solution was found in a bi-nuclear plan with the children's and bedroom quarters linked to the main living portion of the house by hallway and covered porch. Garage, storage room and guest quarters constitute an entirely separate unit. The living-dining room forms a single space of about 16 by 24 ft., sub-divided by a free-standing bookcase, set up on masonry piers; the two longer walls of this room are mainly of glass,



1, the house from the south-west. The landscaping, which of course has not had time to come to maturity, is to the design of the architect.



2

while the fireplace wall is of solid masonry. The largest room in the house is the playroom. In common with the front hall and kitchen and laundry section it has a stone floor. Walls are finished with waxed natural birch plywood. Heating throughout the house is from coils embedded in the floor construction. These coils are grouped in four zones, each with its own thermostat, so that the heating adjusts itself according to the varying sun and wind conditions in the different parts of the house. The heat source is a gas-fired boiler in a closet off the playroom.



3

2, from the north-east, with living room to left, guest house to right. 3, children's quarters, with living room beyond. 4, interior of the living room.



4

THE GELLER HOUSE, LONG ISLAND, U.S.A.

5, one of the guest rooms; note the storage shelf under the ceiling to the left.



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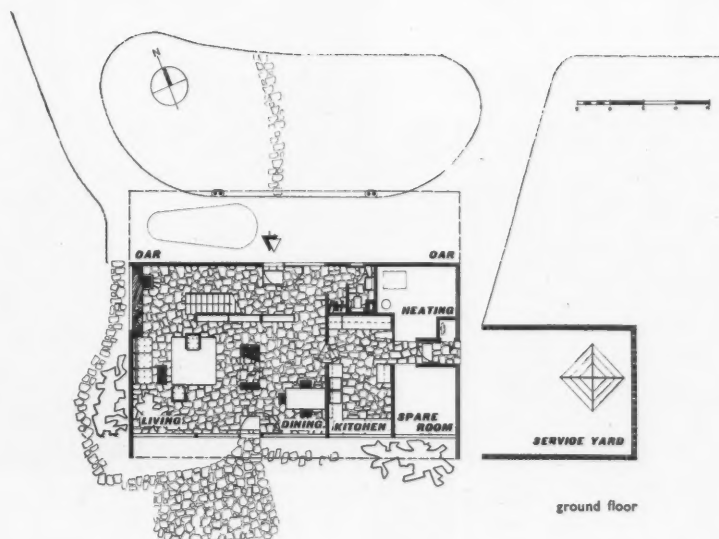


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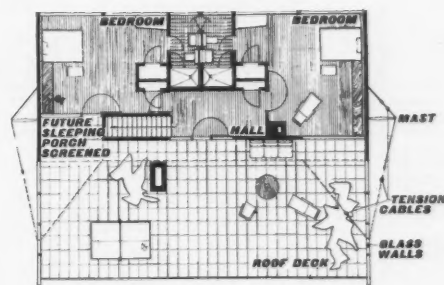
1, the house in its seaside setting, from the north-east; bedrooms above, car-port below.

THE TOMPKINS HOUSE, LONG ISLAND, U.S.A.

The whole of the area on which this house is built is utilized for outdoor functions; above the living-room-kitchen part is an open roof-deck, below the bedrooms a car-port. Apart from the foundations and ground floor slab in concrete, the house is entirely of dry construction. The cantilevered corners of the upper floor overhang their base 10 ft. to 12 ft. both ways. This is achieved without steel or concrete beams or even heavier wood members than 2 by 6's, by considering the walls themselves as trusses. The east and west parapets of the roof-deck are to be supplemented by glass walls, braced on a tension



ground floor



upper floor



cable system, for protection against the wind from the sea. External walls alternate an intense cobalt blue, white, three shades of grey, light umber and light cadmium yellow. There is radiant floor heating to the ground floor, convectors on the upper floor. Lighting is indirect throughout, with fixtures made by the carpenter and fluorescent tubes concealed behind plywood strips and convector covers.



THE TOMPKINS HOUSE, LONG ISLAND, U.S.A.

2, the living-dining room, showing the free-standing fireplace which separates the two areas and warms each division equally. 3, exterior from the south. 4, the stairs from the entry.



The Mechanization of the Bath*

by Sigfried Giedion

TYPES OF REGENERATION

external ablution or total regeneration?

The bath and its purposes have held different meaning for different ages. The manner in which a civilization integrates bathing within its life, as well as the type of bathing it prefers, yields searching insight into the inner nature of the period.

Some periods have viewed bathing as part of a broad ideal: total regeneration. Other periods have seen it as a mere ablution to be performed in swiftest routine. One age may weave bathing into the well-being of the whole man. Another age may see it as an isolated act, or neglect it almost altogether.¹

The ancient world, like Islam, and to some extent the Middle Ages, too, regarded human regeneration as a basic social responsibility. This concept decayed during the Renaissance, while bodily care in the seventeenth and eighteenth centuries sank to the point of almost total neglect. But during the eighteenth century the culture of earlier ages slowly came back to remembrance.

The nineteenth, that century which looked so much to other cultures, awakened to the idea of regeneration. Bathing appeared around 1830, in the guise of a back-to-nature movement laying much stress upon cold-water treatments (hydrotherapy). Around 1850 the Islamic concept gained recognition. And the home vapour bath had many advocates from around 1830 down to the end of the century. These types, together with the shower and the sun bath, appeared successively and existed side by side. Long and uncertain was the battle, but finally the tub bath remained the type unchallenged in popular choice.

The present-day type of bath, the tub, is actually a mechanization of the most primitive type. It belongs in the category of external ablution. The tub is understood as an enlarged washbowl. No period before ours has so unquestioningly accepted the bath as an adjunct to the bedroom. Each of its components was the outcome of a slow, tedious mechanization; hence the bathroom with running water emerged only toward the end of the last century, while not until the time of full mechanization between the two World Wars was it taken for granted. The fact nevertheless remains that the tub is a primitive bath type, found in Crete, for instance, from around 1800 to 1450 B.C., before the Greek gymnasium was conceived.

regeneration in antiquity

The Greek bath is indivisible from the institution that gave it meaning. It cannot be divorced from the gymnasium, the educational centre of the Hellenes.² The Greek bath was most simply performed. It consisted mainly of cold showers and ablutions. The marble trough with running water, and the simple hollows for foot baths—as found in the Hellenistic gymnasium of Priene—reveal how simple was the process, and how it was woven into a wider purpose. The bath forms but one link within the gymnasium; its place is between strenuous gymnastic sport or pentathlon in the palestra, and philosophical discussion in the semi-circular exedra. It lies on the divide between the hours of strong physical effort and of contemplative discourse. No other period more organically fused the bath into human regeneration.

Only with the Roman Empire did the thermæ take on a sovereign significance, such as they

attained neither before nor later. Their thermæ became the monuments of a nation that controlled the material wealth of the world. Within their walls, the best in Roman technical, architectural, and sociological thought was united.

The aqueducts through which water came from the Alban hills were already a century-old institution by the time the thermæ arose. Now they were multiplied. The enormous swimming pools of the Roman frigidaria and their lavish consumption of water were nova in human civilization. Abundance of water and heat give the Roman thermæ their unique stamp. What makes them impressive are not the quantities of water and amounts of heat they consumed, but the way they served total regeneration.

With the advent of the technified hot-air bath and its variously heated rooms (*tepidarium*, warm; *caldarium*, hot; *laconicum*, very hot), the function of the fifth-century Greek bath was definitively altered. The bath proper now becomes paramount. The individual parts of the gymnasium are retained, and likewise the palestra for sports and wrestling. The space of the open palestra in the Roman Imperial thermæ, such as the baths of Caracalla, could have held more than one gymnasium like that of Priene. The form of the exedra also reappears, but its hemicircle is now a place for repose. It is no longer culture for the few, as in Athens. No Plato or Socrates could have developed amid the noise and crowds of the Roman palestra. The function of the exedra, instruction and discussion, is now shifted to the outer zone of the thermæ, where it is more peaceful and where there is room for assembly and for a library.

Light flooded the high-vaulted bath halls, above all, that of the *tepidarium*. Daylight poured through the great half-circle windows, with their two jambs. The *tepidaria* of the thermæ are, so far as we know, the first monumental interiors into which full daylight could enter through extensive window apertures.

The sociological invention lies in having made the place set aside for regeneration into a social centre. The Romans spent a great part of their leisure in the thermæ, and the baths arose wherever the Romans settled—on farms, on estates, in cities large or small, and in the military camps of Africa and Britain.

The obstinacy with which Rome and Byzantium, until their decline, and Islam, until the onset of mechanized life, clung to their total regeneration shows how deep-seated in human nature is the need for such institutions.

With the growth of the thermæ a new social factor entered history: Each individual was recognized as endowed with the same right to regeneration—moreover, to regeneration within the twenty-four-hour cycle.

The cutting off of the Roman water-supply when the nomads destroyed the Campagna aqueduct at the wane of the Empire has told upon our cultural life down to the present day.

regeneration in Islam

The development took a fresh turn when Islam first encountered the Roman thermæ in Asia Minor. Islam adopted and assimilated the thermæ, reshaping to its own needs the Roman pattern it had found in Syria. The wise caliphs could thus compensate their subjects from the alcoholic joys forbidden by their faith.

What differentiates the *hammam*³ or bath of Islam from the Roman bath?⁴

³ *Hamam* or "Dispenser of warmth." The word derives from the Arabic *hamma*, to heat, and the Hebrew *hamam*, to be warm. Cf. Edmond Pauty, *Les Hammams du Caire*, Le Caire, 1933, p. 1 (Institut Français d'Archéologie Orientale du Caire; *Mémoires*, vol. 64).

⁴ The various phases of the Islamic bath, especially its beginnings in Syria, are treated in monographs. For Damascus, see Ecochard and LeCœur, op. cit., indispensable for its precise architectural plates. For Constantinople,

The palestra and its gymnastic games, together with the swimming pool in the frigidarium, disappear. So do the facilities for intellectual exercise, the Greek exedra, or Roman library. As Islam finds its own architectural expression, the high-windowed, light-flooded *tepidarium* gives way to cupolas sparsely pierced by the glow of coloured bullions, or to stalactite cupolas in the smaller rooms. Half light, quiescence, seclusion from the outside world are preferred. In the cupolas' near-darkness the spirits, *djinn*s, are said to meet. Here the active bather of the classical world yields to the passive repose of the oriental. A refined technique for loosening, cracking the joints, and a shampoo massage with special penetrative power supplant athletic sports. Rest beds enter in the place of the Greek exedra. Musicians play in the galleries of the rest hall. The buildings become smaller and less conspicuous. The technical equipment is simplified.

The focus of the Roman bath was the *tepidarium*, or luke-warm hall. In the *hammam* the *tepidarium* dwindles to a mere passageway. The decline of the *tepidarium* is generally attributed to the warmer climate; yet this explanation hardly seems sufficient, for throughout North Africa the Roman baths retained their *tepid* hall.

Now the hot-air room becomes central, the *beit-al-harara*, the *caldarium*, which in Rome never rivalled the *tepidarium* in importance. Later on, other chambers will radiate crosswise from it. Large marble troughs of hot and cold water stood in the Roman *caldarium*. Now, in the *beit-al-harara*, a polygonal couch occupies the centre, where limbering and massage, a substituting for the Roman palestra, are performed by an attendant.⁵

When the Mohammedans shaped their own baths in the eighth century,⁶ they instilled new life into the Syrian institutions. The builders of the earliest Islamic baths were Omayyad caliphs, who still preserved a half-bedouin way of life. They despised the shut-in and ordered life of cities. This trait was common to the Arabic conquerors everywhere: in Mesopotamia, in Egypt, and likewise in Syria. The bath of Kusair' Amra, near the Dead Sea, stands isolated in the desert wastes like an hotel among the glaciers. The initial chamber (*apodyterium*, *maslak*), for all its modesty of size, becomes a social hall with a gallery and delicate murals. The actual bath chambers, on the other hand, lose some of their importance. The dominant mood is one of undeniable intimacy, an atmosphere that was not lost even when, as time went on, the Islamic bath grew in scale. As in the Syrian prototypes the rooms form a continuous sequence. The caliph's bath in the Alhambra at Granada (fourteenth century), still follows this pattern. Alongside these, cruciform ground plans develop, as in the *hammams* of Cairo, which a French archeologist has so precisely revealed to us.⁷ Here the domed *caldarium* (fig. 3) (*beit-al-harara*) becomes the architectural centre.

Setting aside the athletic and intellectual framework, Islam makes regeneration a religious matter. Thus the *hammam* is regarded as complementary to the Mosque. Here the great ablutions are performed.⁸ The endowment of *hammams* was regarded as an act of piety. The baths were open to the poor, payment being left to the bather's dis-

Heinrich Glueck, *Die Bäder Konstantinopels und ihre Stellung in der Geschichte des Morgen und Abendlands*, Wien, 1921; Karl Klinghardt, *Türkische Bäder*, Stuttgart, 1927. A general survey of the bath's development is not available. Without such a work true insight will hardly be possible.

⁵ A short but still classical description of this process is given by E. W. Lane, *Manners of the Modern Egyptians*, London, 1836; p. 346 in Everyman edition, London, 1923. Edward Lane (1801-76) lived in Egypt during the years 1825-8 and 1833.

⁶ Cf. Pauty, op. cit. p. 17. Ruins of Kusair' Amra, built by an Omayyad caliph before 715. Also As-Sakari, discovered in 1905.

⁷ Pauty, op. cit.

⁸ Ibid. p. 7.

* Condensed from Dr. Giedion's forthcoming book, *Mechanization Takes Command*, shortly to be published in America and England by the Oxford University Press.

cretion. "I leave it to the bather," says a caliph in the *Thousand and One Nights*, "to pay according to his rank."⁹ This custom was conscientiously observed to the end of the nineteenth century, for the gratuity given to bath attendants was considered a religious deed. And to promote the *hammams*, Islam made bath attendants tax-exempt subjects.

As in Antiquity, the bath was a place of social intercourse. To women, it meant the one opportunity to visit outside their home.

Like the *thermae* of the Roman Empire, *hammams* developed in all cities and city quarters, in villages and on highways, wherever Mohammedan influence reached. Lands in which fuel was very scarce burnt straw or cow and camel dung, and, to the present day, refuse from the native quarters—a rather neat mode of garbage disposal.

Hammams were to be found in the Balkans, in Persia, in Asia Minor, in Africa, from Egypt to Morocco, and in the Spain of the Moors. Cordova is said to have had about 900 baths at the peak of its development, around the year 1000.¹⁰ In Budapest several hot-sulphur baths still stand today, their springs spanned by vaults dating back to Turkish times.

The most flourishing period of the Islamic bath coincides with the Romanesque and Gothic in the West. The *hammam* attained the height of its refinement in the fifteenth century. In other words: the Arabs had carried its organization to full maturity just as the Turks came upon it.

With the awakening of interest in things Oriental around 1830, the "Turkish" bath impressed itself upon the notice of European travellers. An English diplomat, David Urquhart, was foremost in recognizing its human significance. He dreamed of bringing such baths to the industrial towns of mid-nineteenth-century England, as regeneration for all classes. When Urquhart first encountered the *hammam*, in Greece in 1830, it still flourished under the patronage of the well-to-do. Around 1850, its decline under Western influence could be foreseen, although there were as yet no bathrooms in the apartments. It seems to have been finally doomed when the mechanized bath began to penetrate the Oriental world. The *hammams* lost their wealthy patrons. Only the poorer classes, Pauly reports, now use the baths. Stripped of their ornaments, their carpets, their mosaics, the *hammams* have lapsed into dirtiness. The upper classes have adopted our habits and are now content with bathrooms in their own living quarters.

THE STEAM BATH AS A SOCIAL INSTITUTION

Bathing in steam-saturated air is at once the simplest and the cheapest type of bath that will cleanse the body with desirable thoroughness. The moist heat stimulates the skin and sweat glands, promoting the elimination of waste products. A pile of heated stones and a pail of water is all the equipment needed. Such bathing is on record from the time of Herodotus on; it existed in the classical world, much as in any village of Russia or Finland today. The vapour bath's popularity begins with the twelfth century and perhaps even earlier. But, in keeping with its trend, the nineteenth century produced no inventor who, with an eye to human needs, might have shaped the mediæval vapour bath into an institution adequate to our period.

From Russia and Finland the archetype of the steam and hot-air bath continued its march toward Western Europe. Its full development occurs in the late Middle Ages.

In the West no less than in Russia, the mediæval vapour bath was thought of as a social institution.

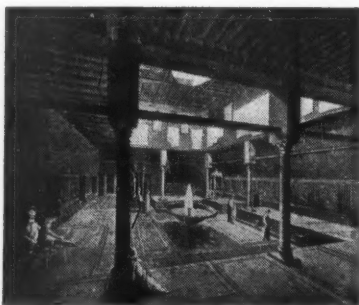
Few differences exist between a Finnish *sauna*, a Siberian bath hut, and the late Gothic vapour bath, "sweat-house," "stew," or "stove," which we see depicted in Albrecht Dürer's "Woman's Bath" (1496). Dürer had just returned from his first journey to Italy. In this drawing, he wished to portray various postures of the female nude. He sought his models where they were most naturally to be found, in one of the thirteen vapour baths of fifteenth-century Nuremberg. Like Ingres for his "Turkish Bath" (1859), Dürer used the bath moment as his pretext.

Mediæval bath customs varied but little throughout Europe. When David Urquhart campaigned to introduce the Turkish bath among the English, he learned, in 1856, that the Isle of Rathlin, on the Irish coast, still possessed mediæval sweating houses, and that "especially at the Fair of the neighbourhood the people get themselves bathed."¹¹ In Switzerland, in the Zürcher Oberland for instance, communal vapour baths remained in use even later. The abundant steam, generated in breadmaking, was often used for this purpose. Having introduced a tube into the oven, the company might bathe in the vapour so generously given off in the baking process. Conflicts arose from time to time between the bakers' guild and that of the bathmen, who resisted this injury to their trade.

THE DECAY OF REGENERATION

regeneration in the middle ages

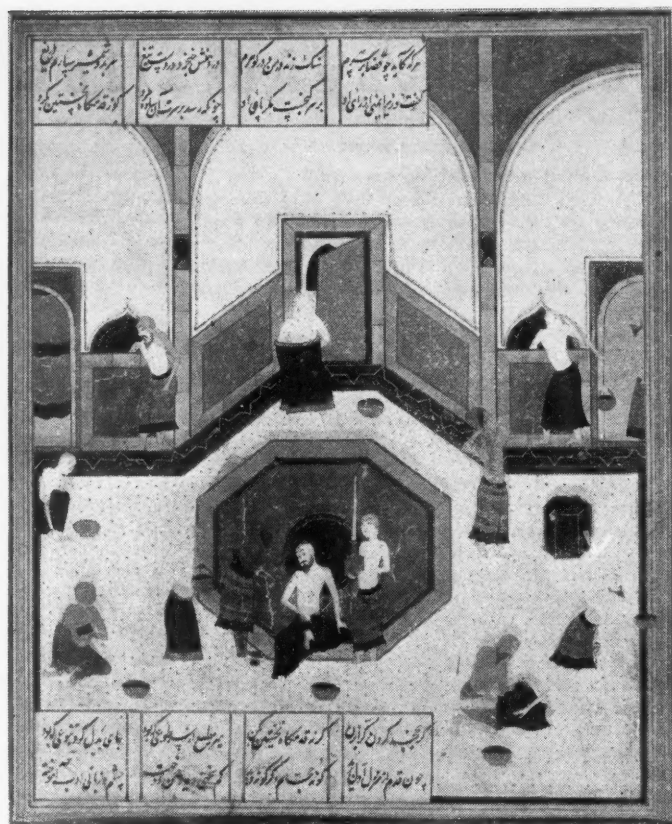
Under the influence of the Reformation and the Counter-Reformation, mediæval regeneration habits began to decay. The Middle Ages had by no means been hostile to the idea of regeneration.



2, Rest Hall of the Islamic Bath (*Maslak*, *Apodyterium*). Here Islamic regeneration begins and ends. In contrast to the twilight of the bathing chambers, a brighter room is favoured. The bather dozes, smokes, sips coffee. In the time of the caliphs, musicians played in the galleries. (Pauly, *Les hammams du Caire*). 3, Hot-Air Room of the Islamic Bath (*Beit-al-Harara*, *Caldarium*). The hot-air room is a dim vaulted chamber. On a polygonal divan in the centre massages are administered. (Pauly, *Les hammams du Caire*).

Swimming was a common sport. And tub baths also were widely used. Mediæval accounts bear witness to the important role of the bath in social life. Sometimes the stress falls on its erotic aspect (fig. 4), as in the late fifteenth-century miniature, where the naked guests are gathered around a table in an enormous wooden tub.

The picture of mediæval streets as pest-ridden alleys, without any form of sanitation, is being given up. It has long been known that mediæval castles were far better off in the matter of drains and privies than Versailles, whose builders paid little heed to such facilities. Fourteenth-century



1, Vapour Room and Pool in a Persian Bath, Sixteenth Century. "Caliph Al-Ma'mum and the Barber," Persian miniature, 1548. The caliph sits on the edge of the pool having his hair trimmed. Servants draw water to pour over the bathers. A massage is taking place in the foreground. (Courtesy of the Freer Gallery, Washington).

London, more recent research has shown, possessed ground sewers, cesspools, and public latrines.¹² The cleanliness of their streets was a point of especial pride with the Florentines of the fifteenth century.¹³

Hygienic precautions were habitual, and included free hospitalization, as well as measures for the checking of contagious diseases, concerning which the Middle Ages were better informed than Antiquity.¹⁴ Among these institutions were numerous public baths under the supervision of barber-surgeons.

The Saturday bath of apprentices was provided for by a regular allowance. These baths, of which no example remains, were as frugally furnished as Gothic living quarters. Albrecht Dürer, in "The Woman's Bath," shows what a public bathhouse looked like. Exceedingly primitive, it is true, but the whole room with its fireplace, hot-water vessels, and various levels, immediately suggests how far these installations were everyday things.

A common trend links the mediæval bath with the ancient and the Islamic: It was a place of social intercourse. In the bath, the men talked politics as in the taverns. The baths are also said to have been places where conspiracies were knotted during the Reformation. Instead of the Islamic massage expert came a remarkable combination, the barber-surgeon. After the bath he would cut hair, shave beards, perform cupping, blood-letting, and minor operations. Thus the late mediæval bath was also connected with the practice of medicine. In the wane of the Middle Ages, the habit of regarding the bath as a social institution died out.

the seventeenth and eighteenth centuries

Every period has its contradictions. The seventeenth and eighteenth centuries manifested a sublime feeling for space, music of the greatest distinction, acute and systematic thinking. They were acquainted with the refinements of living.

¹² Ernest L. Sabine, "Latrines and Cesspools in Mediæval London," *Speculum*, vol. ix (Cambridge, Mass., 1934), pp. 306-9.

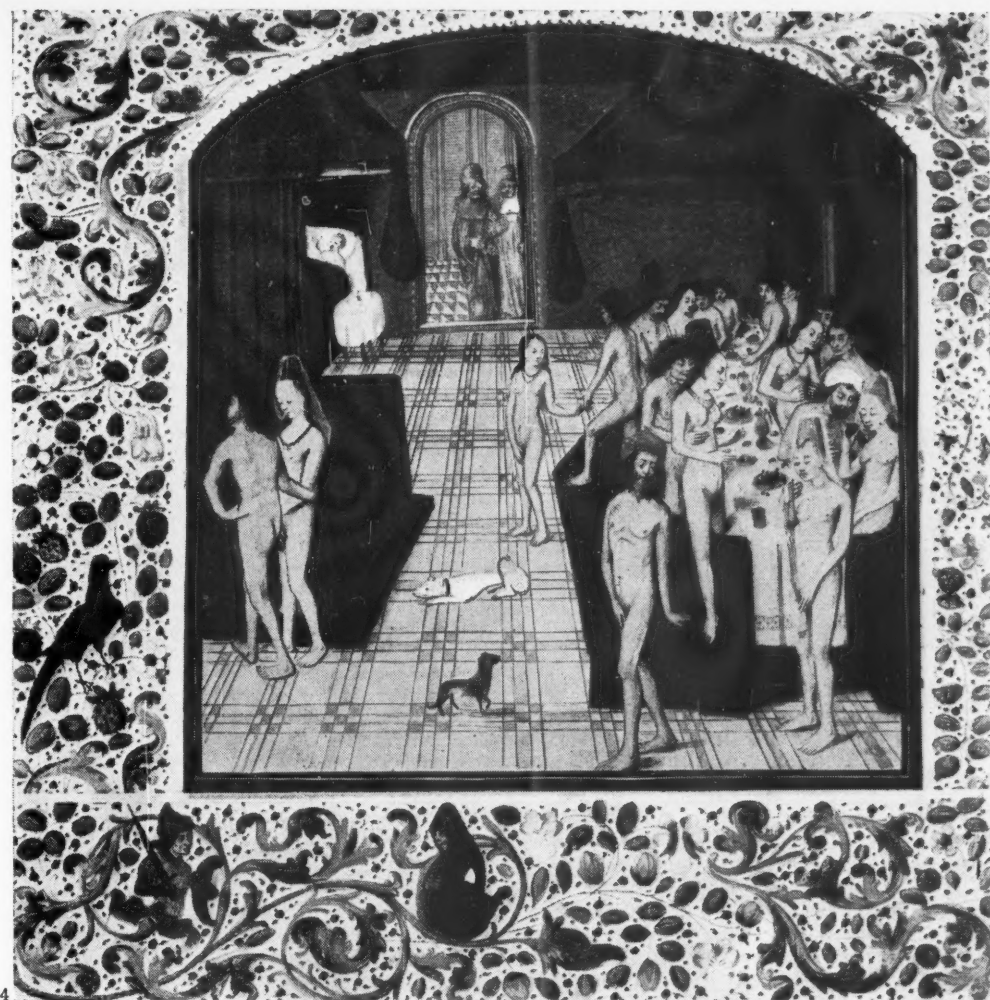
¹³ Lynn Thorndike, "Baths and Street Cleaning in the Middle Ages and the Renaissance," *Speculum*, vol. iii (1926), p. 201.

¹⁴ Ibid.

⁹ Quoted *ibid.* p. 7.

¹⁰ Such indications are not confirmable; in some cases they seem to have been exaggerated.

¹¹ Descriptive Notice of the Rise and Progress of the Irish Graefenberg, St. Ann's Hill, Blarney, to Which is Added a Lecture . . . by the Proprietor, Dr. Barter, on the Improved Turkish Bath, London, 1858, p. 15.



But they stopped short in the matter of caring for the vessel that holds all these: the body. Our accounts may exaggerate in detail, but there is no doubt that the most elementary sense for cleanliness was lacking.

How can we explain this contradiction?

Among other causes the effects of the Counter-Reformation and Reformation are responsible. Both regarded nakedness as a sin. Whenever a bath appears in eighteenth-century French engravings, it is disguised as a chaise-longue, a *baignoire*. The *baignoire* in such cases opens up, and a curved, shallow tub is placed in its frame. Cleanliness of the body could hardly have been its purpose. It forms the background for a scene between a gallant, a young woman, and a procuress. Bath and sin were one.

The stunting of the sense for cleanliness and, in the broader sense, for regeneration in the seventeenth and eighteenth centuries is, so far as we know, a phenomenon without parallel in any other highly civilized period. In many ways we are still suffering the effects today. When such an attitude has eaten its way into society it easily becomes an almost unshakable prejudice, a part of life that resists removal even when its causes have withered away.

The seventeenth century, which laid the spiritual foundations for the following period, carried neglect of the body to its lowest state. Slowly, the eighteenth century began the change. A start was made along two directions: through medicine, and through the rediscovery of nature; that is, by therapeutics and by a new orientation of feeling. The two will become intertwined in the course of the nineteenth century.

THE BATH IN THE NINETEENTH CENTURY

The type of bath prevailing in our day is, as we have said, but a mechanized version of the primitive type, which superficially cleanses the body from the outside by ablation or immersion in water of a given temperature. This mode of bathing has its token in the bathtub.

The bathroom with running water, and its standard fixtures—tub, washbasin, and toilet—are the outcome of a long wavering. Which type was to prevail in our period hung in the balance through the nineteenth century as late as the 'nineties. This vacillation before the types:—hot-air bath, steam bath, tub, or simple shower—will form our subject here. To which type shall preference be given?

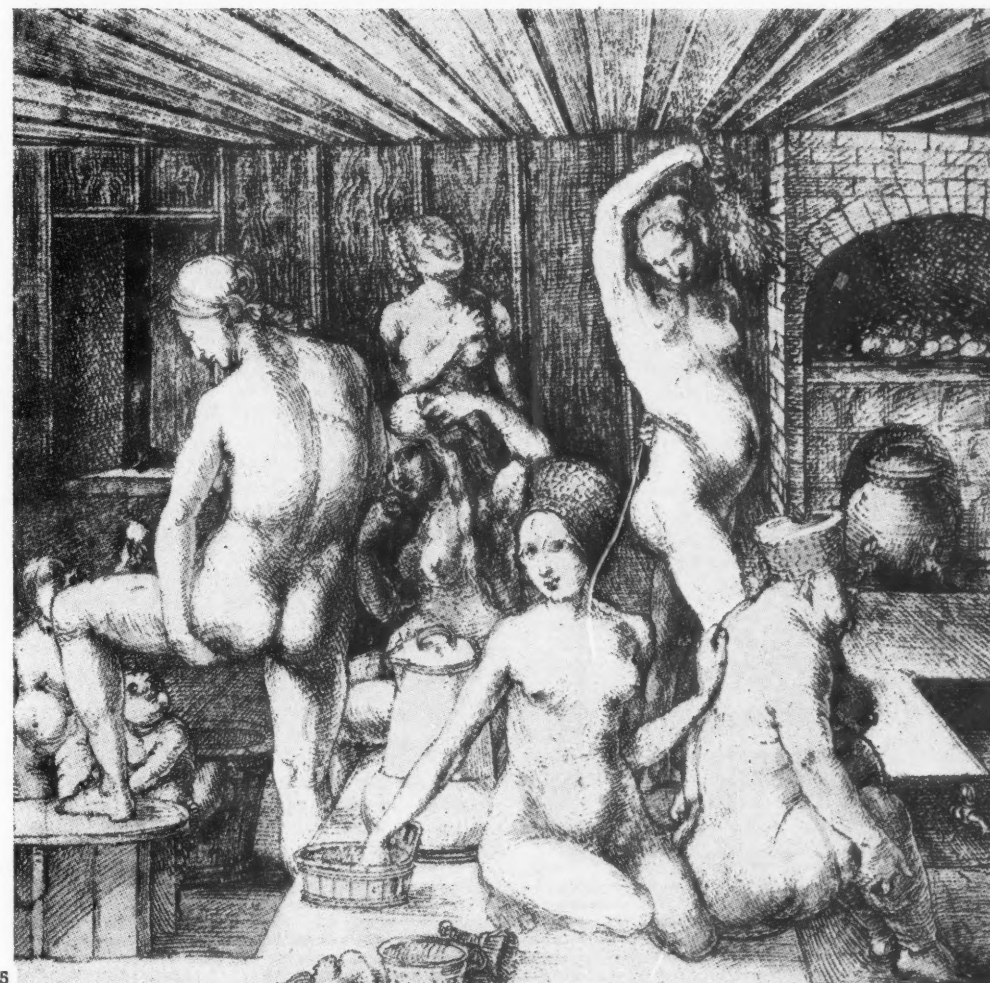
From 1850 to the early 'nineties, strong endeavours were made to introduce communal baths affording fuller regeneration—hot-air or steam baths aided by massage and gymnastics—rather than the primitive bath within the dwelling. Again, in the early 'eighties, the shower was advocated in preference to the bathtub for private houses as well as for the public baths of the working class.

It may not be superfluous to recall that even in America, which was later to surpass all countries in this sphere, the tub remained a luxury until the twentieth century. American tenements around 1895 had no bathing facilities. Such amenities were held desirable, but usually in the shape of showers rather than tubs:

A great step forward in the improvement of tenement houses would be made if they were provided with bathing facilities. As at present constructed, even the best of them have absolutely no bathing facilities. The reason therefore is . . . that tubs without hot water would rarely be used. . . . I am firmly convinced that the shower bath offers many advantages for the tenement houses. . . . It is not necessary to provide each tenement with a bath.¹⁵

The quest for total regeneration, which, in earlier cultures, gave rise to refined bath methods,

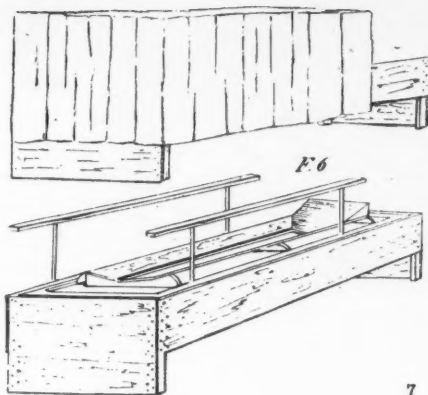
¹⁵ William P. Gerhard, *On Bathing and different Forms of Baths*, New York, 1895, p. 23.



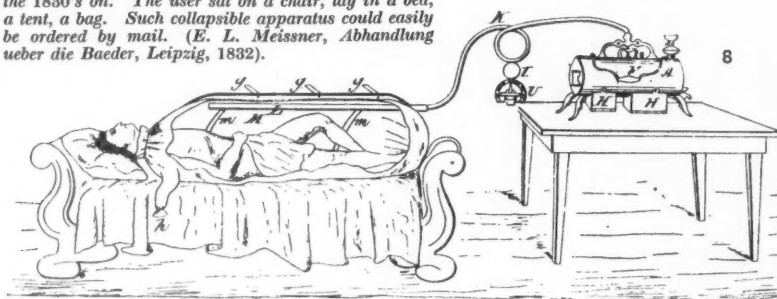
4, Interior of a Late Gothic Steam Bath, Fifteenth Century. Illuminated manuscript. (Courtesy Verve, Paris, Bibliothèque Nationale, Paris, MS. Frçs. 289). 5, Late Gothic Steam Bath. 'The Woman's bath,' drawing by Albrecht Dürer, Nuremberg, 1496.



6, American Steam-Bed Bath, 1814. The steam bath was regarded primarily as a medical treatment in the early nineteenth century—hence its frequent association with beds. Everywhere, from the beginning to the end of the century, apparatus generating steam in more or less complicated ways were invented. (U.S. Patent 2049x, 21 January 1814).



7, Recumbent Steam Bath, 1832. Portable steam baths were in use from the 1830's on. The user sat on a chair, lay in a bed, a tent, a bag. Such collapsible apparatus could easily be ordered by mail. (E. L. Meissner, *Abhandlung ueber die Baeder*, Leipzig, 1832).



8, Steam-Bath Apparatus, 1855. A bag channels the steam around the bather's body. 'The open end may be closed around the neck of the patient by means of tightening a cord strung in its edge.' (U.S. Patent 13467, 21 August 1855).

was doomed to failure in our period. The mechanized, mass-produced tub triumphed. It is a product of the industrial era. England and America, the two countries most closely bound up with industrialization, took the lead in formulating the present-day type of bathing. England held the fore during the nineteenth and America in the twentieth century, in the time of full mechanization. Although there are no sharp boundaries, differences clearly mark off the English from the American.

the vapour bath as a private cubicle c. 1830

In medicine, the vapour bath was never quite forgotten. An early English patent (1678)¹⁶ gives directions for building sweat baths useful in the cure of gout and other ills. Nor were proposals lacking in the eighteenth century,¹⁷ when medicinal baths in London and Brighton often furnished the pretext for amorous gatherings.

The early nineteenth century is ever bringing back accounts of the bathing practised by the Russians and the Tartars.¹⁸ Russian baths, according to a contemporary French source, were first opened in Germany in 1824,¹⁹ and their introduction to England is also mentioned at this time. They were called "Russian" and "Oriental" rather indiscriminately. Properly speaking, they were neither the one nor the other, for, significantly enough, everything took place in small private cubicles.²⁰ Economy of steam was quite secondary in these baths intended for leisured society or for invalids. Rather was it fear of nakedness that inspired this segregation. The bath becomes a private matter.

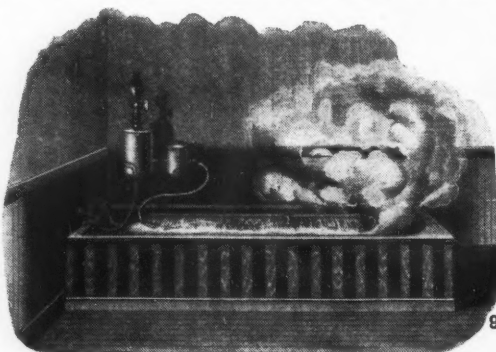
Home steam baths of primitive design were proposed in all countries then issuing patents during the early part of the century. In America (fig. 6)²¹ is found a steam-bed bath of the type

that was to be built throughout the period. Similar ones appeared in France.²² There is no doubt that various portable and collapsible home steam baths were constructed in Germany during the 'thirties. It was the time when the fame of Vincenz Priessnitz's water cure was so rapidly spreading, and when Sylvester Graham in America was preaching a return to nature through the agency of nutrition. Domestic vapour baths were much used during the second half of the century. And understandably so, for they called for no running-water supply. An inconspicuous spirit lamp, as in the model of 1832 (fig. 7), sufficed to generate the steam. From time to time, down to the end of the century, the popular magazines advertise further, and often grotesque, proposals. Normally these home vapour baths, like that of 1830, consist of a rudimentary steam unit and a shell to channel the steam around the bather's body. The inventors show dismaying helplessness as soon as their skill is applied to men instead of to machines. These devices have nothing of the century's technological refinement.

the people's bath in the 'eighties: the shower

The nineteenth century gradually acquired hygiene. It learned to control diseases that had formerly run unchecked. Even the year 1850 in England and Wales brought its 50,000 deaths

²² Boite fumigatoire, French Patent, 1816, 29 Nov., 1815.



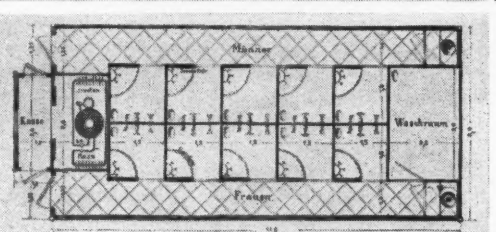
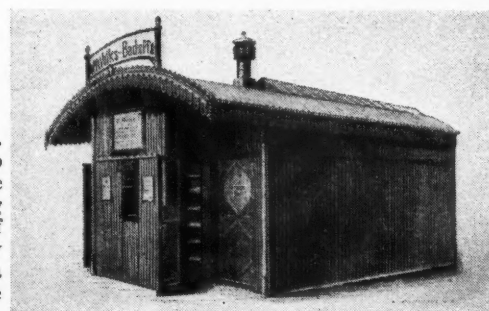
9, Apparatus for Vapour Bath, 1882. Rarely does the nineteenth century divert its mechanical skill from production to maintain equilibrium of the human organism. Here a young inventor exploits the fact that hot water turns to steam when divided into a fine spray. (New and Valuable Apparatus for Vapor Bath, pamphlet in New York Academy of Medicine).

from the cholera. Disease-bearing matter was to be eliminated at its source by disinfection and cleanliness.

But how were the masses to be won over to cleanliness? The public baths that appeared in England from the 'forties on, and in France under Napoleon III, were appendages to the public laundries, using whatever hot water was left after the clothes had been washed. But these never made much headway. The size of the populace was out of all proportion to the number of baths.

The axiom that sound finance should have the last word when it came to public regeneration left but a single choice: "cleansing stations" with shower baths. The belatedness with which the first acceptable scheme was proposed and carried out is indicative.²³ At the Berlin Hygiene Exhibition, in 1883, a Dr. Lassar set up his model bathing establishment, the People's Bath, of which he was the energetic propounder. The People's Bath was a corrugated-iron shelter partitioned into ten cubicles each containing a shower, five for men, five for women. At 10 pfennigs a head, soap and towel included, tens of thousands of visitors enjoyed a hot-water shower. At that time, Dr. Lassar's enquiries showed, the proportion in Germany was one public bath per 30,000 inhabitants (fig. 10).

A few words concerning the typological development of the shower. The shower, jet bath, rain bath, or douche, as it was called at various times,



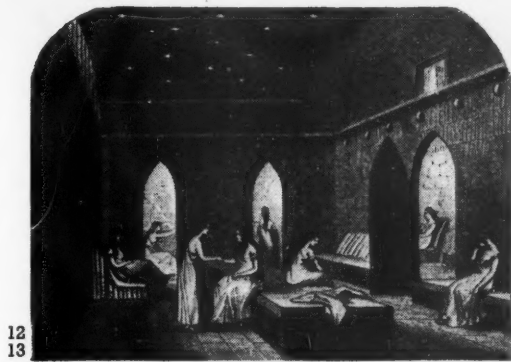
10, Thermæ of the Nineteenth Century: Showers in Corrugated-Iron Shelters, Germany, 1883. 'The baths most serviceable to the public generally are those which do not require a large supply of water.' This English opinion of 1850 was that held throughout the century. Even in the 'eighties, showers were contemplated as the only economically possible form of 'people's bath.' (Lassar, *Ueber Volksbaeder*, 2nd ed., Braunschweig, 1888).

11, These corrugated-iron huts were to be erected on the streets so as to encourage passers-by to use them. (Lassar, *Ueber Volksbaeder*, 2nd ed., Braunschweig, 1888).

risers with roughly the same curve of popularity as the tub. In the nineteenth century it may seem at times to enjoy an independent vogue, but even then it would often form a unit in symbiosis with the bath. Originally the shower used a stream of water flowing down from rocks or poured from vessels overhead. Priessnitz employs both of these modes in their most primitive form. Such solid streams are used for clinical purposes by water healers of the 'fifties. The French in particular, not generally the leaders in this sphere, devised various technical methods.

Usually the stream is broken by means of a perforated disk or other device. The Americans, when they sought to popularize it for working-class use around 1895, called it the "rain-bath." Its

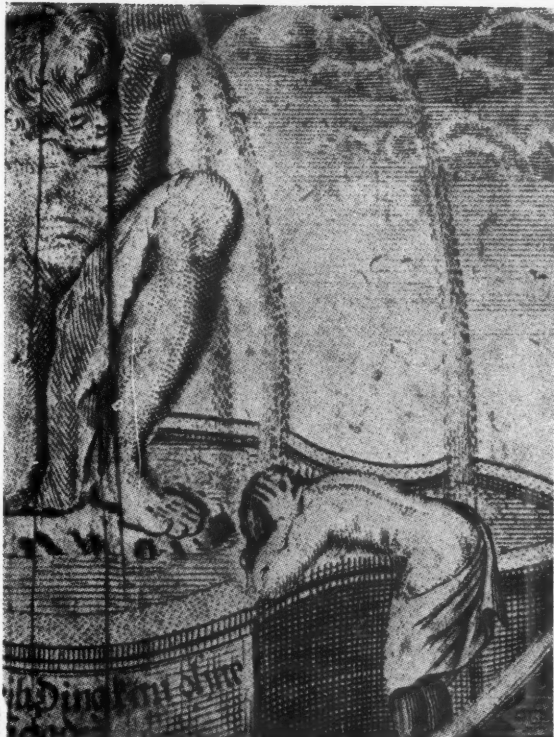
²³ A French doctor is said to have installed the first institutional showers in a military barracks at Marseille (1857). Later they were systematically introduced into German barracks. Like the school baths, showers were found only in institutions, inaccessible to the masses. The specifically popular type, or "People's Shower," originated with Dr. Lassar.



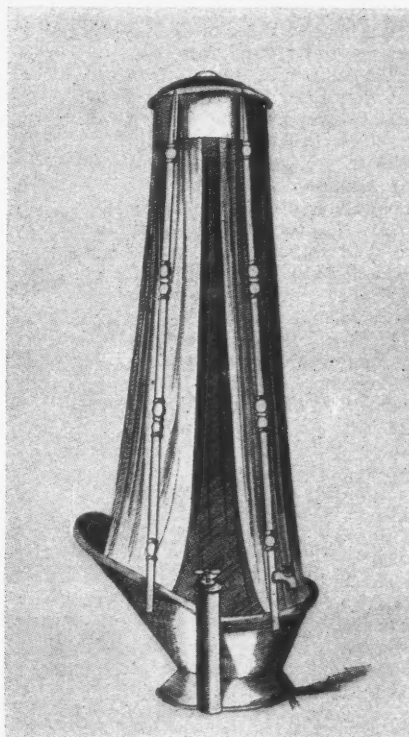
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12 and 13, First 'Turkish' Bath in Ireland: St. Ann's Hill Hydropathy Establishment, Cork Co., 1850's. 12, Sudatorium, or Hot Room (Beit-al-harara). 13, Divan, or Cooling Room (Maslak). In the 'Irish Graefenberg,' as its owner named it, the influence of the water doctor Priessnitz combines with that of the Turkish bath. Left: the hot-air room with massaging table in its centre. Right: the rest hall. Both are in restrained Gothic revival style. Note the rest bed moulding the shape of the body. Unfortunately the century's orientation did not allow fulfilment of these interesting beginnings. (Dr. Richard Barter, *On the Rise and Progress of the Irish Graefenberg*, London, 1856.) 14, Symbolical Representation of the Shower, 1738. The shower bath reappears in the eighteenth century in somewhat allegorical form. In the centre of a baroque fountain, Atlas pouring water over a bather's head. (Sigismund Hahn, *Psychrolupia Vetus*, Schweidnitz, 1738. Detail of the frontispiece.) 15, Hip Bath with Shower, Birmingham, England, 1847. With the demand for hygiene growing in an industrial civilization, solutions were attempted before plumbing was available. The water is raised by means of a hand pump, much as in Catherine Beecher's kitchen of 1869. (Catalogue, Victoria and Albert Museum, London.)



14
15



finely divided stream allows more imaginative directing of the jets: from either side, from above, from below, through perforated tubes spirally or horizontally disposed. Around 1880 the rain-bath, as already mentioned, often merges in symbiosis with the vapour bath for home use. A rare catalogue of a Birmingham firm (1847), preserved in the Victoria and Albert Museum, illustrates such a standard model (fig. 15) that was to be used for decades, with minor variations, on each side of the Atlantic. A compact hand pump drives the water from a hip bath or other vessel into a higher tank. The bather draws a curtain around him. Not until plumbing brought running water into the house was this pump type displaced. In mid-century, the London Great Exhibition, where in so many respects the century's future was written, displayed a wide range of showers. The bathtubs shown, on the other hand, were quite primitive. As time went on this contrast became even more marked.

The catalogues of the 'eighties give less space to the bathtubs than to an astonishing selection of showers.

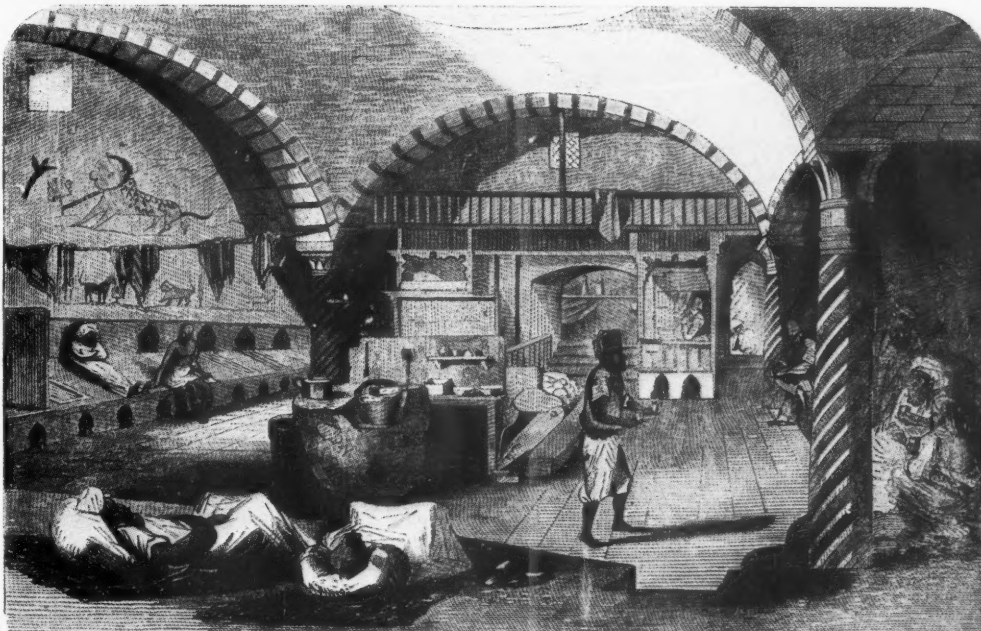
Whether we consult the sources of 1850 or those of 1890, we find popularization of the shower advocated for identical reasons: showers consume less water, less space, less time, require fewer repairs. In use, moreover, they are more hygienic than the tub bath. Dr. Lassar, proponent of the People's Bath, is right again, for in large establishments the outlay and upkeep increase in geometrical proportion.

Only by economic proof could Dr. Lassar hope to make the shower bath attractive to the authorities. Dr. Lassar's efforts were doubtless prompted by an ethical purpose, yet the spectacle also has its pitiful side: a century of mechanization able to offer nothing better than iron huts for the regeneration of the masses. No small gap lies between the outlook that produced the thermæ of Rome and that for which iron huts seemed a solution. And the inspiration for these was apparently owed to the public urinals that sprang up on the street corners of Haussmann's Paris as soon as the city obtained a more adequate sewer system.

THE BATHROOM BECOMES MECHANIZED

Around 1900 it became clear that the bath cell with hot and cold running water was the type upon which our period had set its mind. Bathroom and bedroom eventually formed a unit, just as the apartments of the Baroque palaces were fused in inseparable unity of plan with their dependencies, wardrobes, toilets, or pantries.

But even in 1900, after the long period of indecision, the bathroom was still an amenity of the privileged classes. The essential elements of its popular diffusion were lacking. No bathtub comparable in serviceability and appearance to the luxury porcelain tub had yet reached standard form. Nor was the hotwater system satisfactory. Well-thought-out accessories were likewise lacking.



16

16, A 'Moorish Bath' seen by an Englishman at the Time of the Islamic Bath Movement, 1858. The rest hall (maslak) is portrayed. The author thus describes his experience in the *Illustrated London News* (April 24, 1858): 'The day was hot, the narrow streets were burning in the glare of noon. The prospect of the hot bath was not very inviting. I opened the door of the first apartment. . . . All around it was a raised platform covered with mats on which lay several bathers in the state of profound repose. I was mounted on a pair of wooden clogs. The bath attendant rubbed and pinched and pulled every limb and joint of my body. He knelt upon my stomach so that I could hardly breathe, wrenched my arms and legs. . . . Having been pinched and poked and pressed sufficiently, this genius of the bath lathered me from head to foot and took in hand a huge glove, with which he proceeded to thrub me with the most lively animation. The amount of matter he managed to peel off the crust of the body is certainly surprising. Having been well soused in cool water, I was softly wiped and dried by another attendant. This done, he wrapped me up from head to feet in soft towels and led me to the outer apartment (maslak), the air of which seemed very much like that of an ice-house. I sank exhausted on a divan. And now it was ecstatic enjoyment, it was elysium, nothing seemed wanting to perfect bliss.'

It is not difficult to trace the clear-cut trends of such complex mechanisms as the automobile or the locomotive. But in tracing the development of the present-day bath, one wanders through a maze of quaint stories and anecdotes. The reason for this is invariably the same: Inspiration failed when it was needed for human requirements. The outcome was a technical lameness depressing to survey and unrewarding to dwell upon. We shall turn our attention to the last decades, when the period was beginning to see more clearly what it wished. Then the indispensable inventions were made. The bath cell rapidly attained its standard form, especially in the country that was the most eager for a democratized comfort. This was in the time of full mechanization. Straightway the two foci of mechanization, the bathroom and the kitchen, come to dominate, perhaps even to tyrannize, the plan of the house.

from the nomadic to the stable

A few words concerning the type's morphological evolution.

Furniture in the Middle Ages passed from a nomadic to a stable condition. And in the nineteenth century this happened to the bath. The portable bath turned into a fixed bath anchored within a complex network of piping and ventilation. In mediaeval times, nomadicism was the result of the instability of living conditions; in our own period, of the instability of our orientation.

The bathroom could not become a component of the middle-class dwelling so long as one element was lacking: water. Water sellers drove their carts with tubs of hot water through the streets of Paris. They carried the tub and the water up to the user's apartment. This was known as the *baignoire à domicile* as against the fixed tub of the public establishments. In 1838, Paris had 1,013 of these *baignoires à domicile*, and 2,224 of the fixed baths.

The Englishman of the 'sixties would carry a folding gutta-percha tub with him when he travelled on the Continent. At home (fig. 15), he would be likely to use a small hip bath, the shower in this case being more important than the tub. The combination of tub and heater was often portable too. In 1850 Henry Cole recommends a tub and heater that might be used in any room having a stove pipe.

This type, like the American folding bath already mentioned, starts from the assumption that no running water is available. It was to be found in American city houses during the last quarter of the century. Like the folding bed, it assumed the façade of a wardrobe when not in use. Later it gained considerable favour among the farmers. It is a most persistent type, appearing in the mail-order catalogues until well into our century. In the mid-'nineties its price and execution gave it an advantage over the fixed types.

running water

The seventeenth and eighteenth centuries cast a shadow behind them. In 1800 the large cities still had no regular water supply.

In Paris Napoleon sought to remedy this situation. A plan, dated 1812, upon which we chanced in the Bibliothèque Nationale, shows what was the state of canalization after Napoleon's enterprise: only the well-to-do districts such as the Faubourg St. Honoré had water laid on. The popular quarters still had to rely upon occasional street fountains, water sellers, and particularly upon water from the Seine.

During the second half of the century, cities everywhere were to be supplied with water throughout. Running water entered first the basement, then the storeys, and finally each apartment. Words are too static. Only a moving picture could portray water's advance through the organism of the city, its leap to the higher levels, its distribution to the kitchen and ultimately to the bath.

The same applies to the hot water supply. The nineteenth century—like Homeric times—drew its hot water from the kitchen in buckets. From the 'forties on, America began to use copper or iron boilers connected with the range. Running hot water is another prerequisite of the mechanized bathroom. We may roughly trace the following

phases: tub and heater forming a portable set; tub and heater permanently affixed to the bathroom plumbing; hot water supplied from a single point in the house²⁴ or, in our century, supplied to the apartment house from a central plant.²⁵ Running water was brought to the various fixtures in this general order: the kitchen sink, the washbasin, and, lastly, the bathtub. Piping water to the washbasin was an important labour-saving device. This may explain why America was foremost with this innovation.

Washbasins fitted with faucets are to be found, it is true, in the catalogues of the 'fifties, but they drew their water by hand pump, like the sink in Catherine Beecher's kitchen of 1869. Here, too, the sleeping-car produced a technically adequate solution at an early date. In the 'seventies, as we shall see, a sensation was created when a Boston hotel provided running water in every room.

With full mechanization, in the early 'twenties, almost lavish consumption of hot water became an everyday thing in America. One can almost exactly date this change. It corresponds to the sudden expansion of enamelled sanitary fixtures, which almost doubled in number between 1921 and 1923.²⁶

The bath's transition from a nomadic to a stable condition took place instantaneously, as soon as running water and sewers became available for the fixtures. Prior to that time it would have been useless to set aside a room devoted exclusively to the bath.

Now the problems begin, for the bathroom forms a new element in the organism of the house. Fresh questions thrust themselves to the fore.

What shall be the bathroom's importance in the household? How related to the other rooms?

What do we wish with regard to size, plan, disposition? Do we wish to bathe in a spacious room, or shall we tuck the bath into the smallest possible space?

The choice between the bath as a room among other rooms or the bath as a cell just large enough to hold the fixtures does not depend only on economic means. It corresponds to two stages of development, the first of which we may call the English, the second the American.

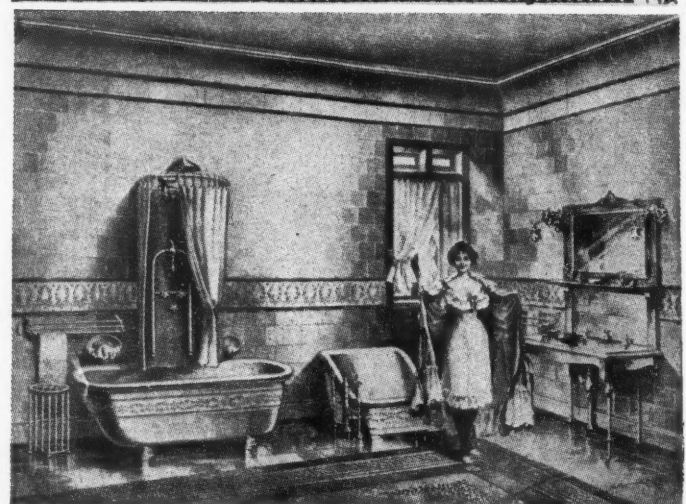
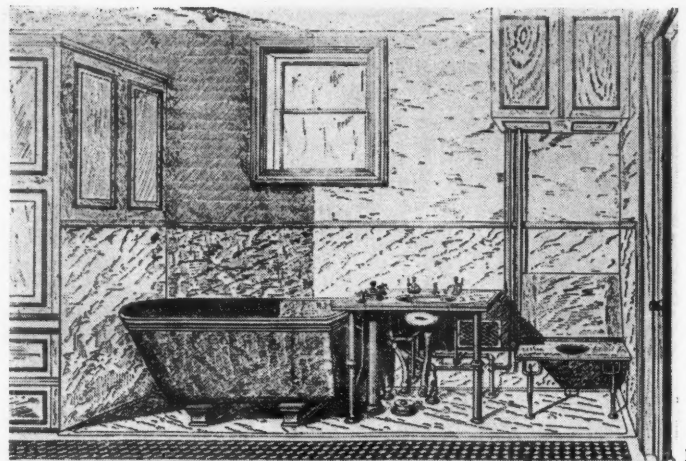
the English bathroom around 1900

England fashioned the luxury bathroom of the world. No other country equalled the quality and distinction of English sanitary articles between 1880 and 1910. The culmination of the room was its heavy, double-shell porcelain tub. It was to be found wherever means permitted: in St. Petersburg, in the palaces of Indian Rajahs, no less than in George Vanderbilt's Fifth Avenue house (fig. 17). In English middle-class homes or lodgings, of course, there were also plain zinc tubs, standing in small cubicles partitioned off within a room.

²⁴ Coke-fired iron boilers were used in the 'eighties. Cf. Catalogue of the L. Wolff Mfg. Co., Chicago, Ill., 1885, p. 219. For "Instantaneous Gas Water Heaters," cf. Catalogue of the Crane Co., Chicago, Ill., 1898.

²⁵ The heating of city blocks by steam was operating in New York in the 'seventies.

²⁶ In 1921 the production of enamelled sanitary fixtures (washbasins, bathtubs, etc.) was of 2.4 million pieces, almost the numbers of the pre-war year 1915. It then rose to about 4.8 million a year, reaching a temporary maximum of 5.1 million in 1925.



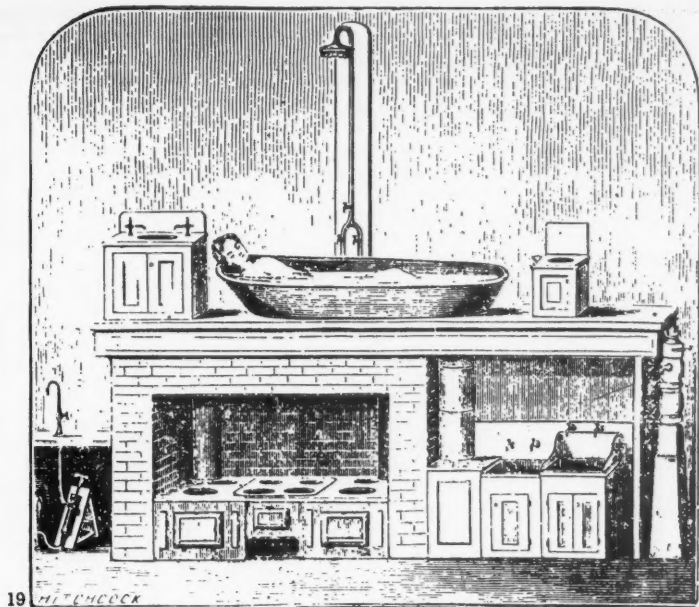
17, George Vanderbilt's Bathroom, Fifth Avenue, New York, 1885. In contrast to the principles of the ruling taste, the nickel-plated pipes and even the lead plumbing are left unconcealed in the Vanderbilt bathroom. Its compact arrangement seems to announce the future American bath cell. (*The Sanitary Engineer*, New York, 1887.)
18, English Bathroom, 1901. Emerging from its nomadic and semi-nomadic phases, the bathroom has become a permanent part of the well-to-do English household. It is a large, windowed room, on which luxury is not spared. One such bathroom usually served the entire household. It is conceived as a room with furniture, not as a mere annex to the bedroom. (W. E. Mason, Catalogue.)

The heavy double-shell porcelain tub, individually built like a Rolls-Royce, is as typical for this phase as the American double-shell enamel tub built on the production line was to become for a later one. Luxury did not end here. Complex shower facilities, combined with the tub or independently of it, hip baths, bidets, toilets, washbasins, marble-topped and painted to order, completed the setting. This was luxury, such as could not be compressed into a cubicle.

The bath of 1900 calls for a spacious room possessing a number of windows. The expensive fixtures were placed at dignified distances from one another (fig. 18). The central space was ample enough for moving freely about, even for exercising. It was this English bathroom, no less than its porcelain tub, which supplied the stimulus for an equally comfortable yet less expensive model. Even the larger houses had but one such room, serving all the members of the family.

During the first two decades of this century the well-to-do European middle class adopted the English bathroom. Each might simplify its equipment according to his means. Normally one bathroom served all the occupants.

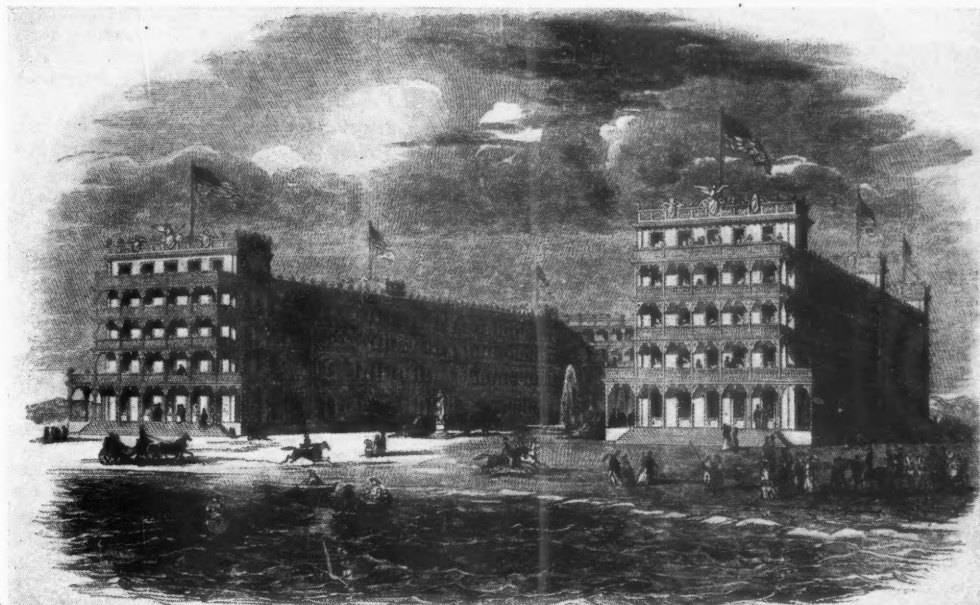
How were the individual fixtures to be arranged? There was space enough for variety, which explains the lack of a fixed ground plan for the English bathroom. Where the bathroom was to be located and how it was to be arranged fell to chance or to taste. Even in the most modern European buildings today, there is some uncertainty in the ground plan. The bathroom became smaller, but the question still remained: Is the bathroom a room in itself, or is it, even if walled off, a unit with the bedroom?



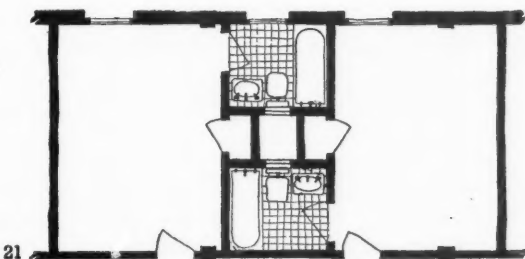
19, *Plumber's Advertisement, Boston, 1850. It was necessary to stress that 'the custom of frequent bathing finds strenuous advocates among the medical professors.' Normally there was no running water in the mid-century; the supply was generally raised by means of a hand pump, illustrated at the left. (Boston Directory, 1850-51.)*

PLUMBERS,

And Manufacturers of Barrows' Patent Cooking Range,



20, *Mount Vernon Hotel, Cape May, New Jersey, 1853. A bath with running water was installed in every bedroom, according to the Illustrated London News (1853). 'Each room is complete in itself and contains all the conveniences for the comfort of the inhabitant.' This was half a century before the bathroom became an appendage of each hotel room.*



21, *Each pair of rooms forms a unit with common ventilation and plumbing shaft. The compact bathroom is already fully developed. (Courtesy Hotels Statler Co.). 22, Statler Hotel, Buffalo, 1908 (now Hotel Buffalo). 'A bed and a bath for a dollar and a half' was the slogan for the cheap-renting unit of bedroom and bath in 1908. (Courtesy Hotels Statler Co., New York.)*



THE AMERICAN BATH CELL c. 1915

the influence of the hotel

America piloted the development from the moment the bath became democratized; that is, from the middle of the second decade and in the time of full mechanization. Standard layouts now make their first appearance, for a clear stand has been taken: the bath shall be an appendage to the bedroom. This was not a matter of chance.

The American type had its origins outside the home: in the hotel. The hotel, it has been recognized, "gave the Americans an opportunity to scrape their first acquaintance with the bathtubs, cold and hot running water, water closet and steam. . . . Among the many things that entered American life through the hotels, of all the many ways in which American domestic life has been influenced by hotels, the influence of the hotel bathroom stands pre-eminent."²⁷

In his comprehensive *Greek Revival Architecture in America*, Talbot Hamlin mentions a Boston hotel, the Tremont House, 1827-9, which had "an elaborate battery of water closets and bathrooms with running water in the basement. In this building, for the first time in America, if not in the world, mechanical equipment became an important element in architectural design."²⁸ The location, underground like Scipio's bathroom, is typical for this phase of the development, when running water was not yet piped to the floors.

We have but an exterior view (fig. 20) and a half-ironical, half-admiring description of an American hotel that had equipped all its rooms with a bath and running water within the room. This was the Mount Vernon Hotel at Cape May, New Jersey, a sea-bathing resort (1853).

In 1877 a Boston hotel had running hot and cold water in all rooms, but only for wash-basins.²⁹ A family hotel in Kansas City (1888) and another in Boston (1894) added bathrooms to their suites but not to their individual rooms.³⁰ At a time when Pullman was running his private sleeping-cars, these bathrooms must have represented a similar luxury.

Democratization of the hotel bath cannot truly be spoken of before a bath became available at slight cost with every room. In 1908 Ellsworth M. Statler built a new hotel in Buffalo (fig. 22) on the motto "A Room and a Bath for a Dollar and a Half," with immediate success.³¹

Like Pullman's sleeping-car *The Pioneer* (1865), this marked an important step toward the democratization of comfort, when a middle-class hotel was built around a standard living unit of bedroom, bath and closet. In Europe, even today, the combination of a room with private bath borders on luxury. Putting into practice the maxim "a bath to every bedroom" immediately influenced the whole plan (fig. 21), proving as decisive for the hotel as the organization of the bath and kitchen for the plan of the private house. At once the standard American layout had appeared: The bath is a cell and an appendage to the bedroom.

the compact bathroom

The rigid layout of the bath, basin and toilet, and their compression within a minimum space,

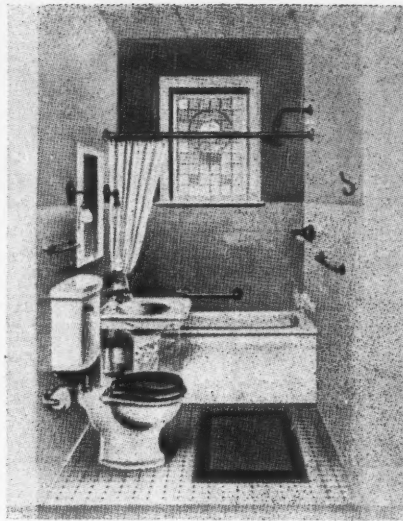
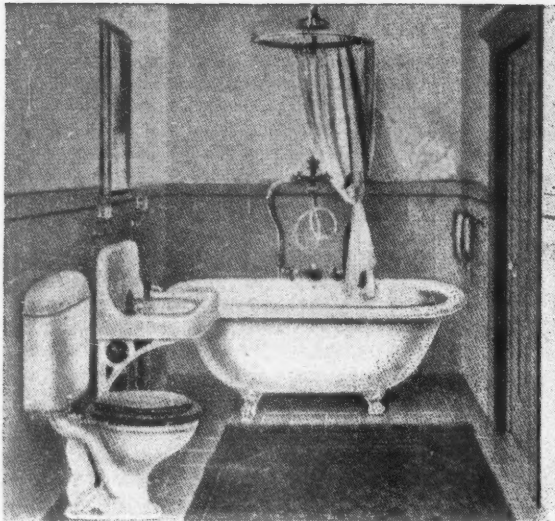
²⁷ Jefferson Williamson, *The American Hotel*, New York, 1930, p. 55.

²⁸ Talbot Hamlin, *Greek Revival Architecture in America*, New York, 1944, p. 129, with illustration of the ground-plan. The next step was "the private bath as a fixed part of hotel service," which, says Jefferson Williamson (op. cit. p. 55), "first appeared in 1844, when the aristocratic New York Hotel was opening." This, incidentally, was the year London founded its "Society for promoting the cleanliness of the poor."

²⁹ Jefferson Williamson, op. cit. p. 54.

³⁰ Ibid. p. 62.

³¹ The president of the Hotel Statler Company reports that the archives of his firm, which dates from 1908, contain no advertisements or pamphlets of that time. We quote from Mr. F. A. McKowne's letter (13 Oct., 1944): "The first hotel to have a bath in every room was planned by the late Ellsworth M. Statler (founder of our company), and was completed and opened in Buffalo in 1908. It was the first of the Statler Hotels. The original portion of the hotel contained 300 rooms. Of these about two-thirds had tub baths and showers over each tub. The remaining rooms—small rooms on the court side—each had its bathroom but only with a shower bath stall. The hotel was immediately successful and the following year Mr. Statler added 150 additional rooms."



23, American Compact Bathroom, 1908. Around 1908 catalogues show the compact bathroom as the new hotels were beginning to install it. Fixtures are still supplied from different walls; the tub is still raised on feet. Its position along the short wall contrasts with what was hitherto norma. (Catalogue L. Wolff Co., Chicago). 24, American Compact Bathroom, 1915. Before the one-piece double-shell tub could be mass produced leading American firms were already propagating the compact bathroom with recessed tub. (Catalogue, Crane and Co., Chicago.)

was what America called the compact bathroom. The prerequisite for this, the aligning of all fixtures along one wall, had long been anticipated in the United States. The bathroom of George Vanderbilt's Fifth Avenue house, 1885 (fig. 17), with its proudly displayed pipes and small intervals between the fixtures, already seems to announce the compact bathroom.

Chicago, in so many ways America's boldest testing ground of the late 'eighties, was also at the forefront in the comfort of the dwelling. Its apartment houses—a still unexplored development—with their triple "Chicago windows," no way betrayed the fear of light that darkened European houses at that time. Here the immediate fore-runners of the compact bathroom are also to be found. As one might expect, the skyscrapers and their sanitary equipment grew up together. The arrangement of toilet, basin, and tub along one wall is already achieved. To complete the compact bathroom, there remained only to turn the tub 90 degrees into a transversal position. All the fixtures are now concentrated on one wall.

What was the layout of the bathroom in the private house? The English bathroom, as we have mentioned, was scaled down to suit more modest circumstances, its fixtures being reduced in number, but the English layout being retained in its principle: loose arrangement of the fixtures.

Consider as many houses as one will, they exhibit one regularly recurrent feature: the tub is free standing and runs parallel to the long wall. Around 1908 the catalogues of the leading firms already show plans for the compact bathroom such as the new hotels were installing. Yet the fixtures are still distributed on different walls (fig. 23).³² The cast iron, enamelled tub is still raised on feet.

Around 1915 the domestic bathtub appears in its now familiar recessed form (fig. 24). But only around 1920 could the double-shell enamelled tub be made in one piece and put out in mass production. Its price was thus cut by some 20 per cent. Soon the five-foot tub established itself as the standard; it amounts to 75 per cent. of the present output. The tub became a module determining the breadth of the cell, while the basin and toilet at minimal distances determine

the long wall. The five-foot bathroom unit became standard. Private dwellings preserved these dimensions set by the hotels. The larger houses prefer to own six or seven standard-size bathrooms rather than one or two bathrooms of the 1900 English type. The bathroom now serves one person, or, as is still most commonly the case today, interconnects two bedrooms. American architects criticize nothing in the European ground plans so sharply as their separation by a passage of the bathroom from the bedroom. The compact bathroom attained its standard form around 1920.

The concise lines of this white bathtub will perhaps bear witness to later periods for the outlook of ours as much as the amphora for the outlook of fifth-century Greece. It is a luxury article, which the combination of refined metallurgical and technical skills transformed into a democratic utensil. In its own way, this double-shell tub, which on the other side of the Atlantic still smacks of luxury, numbers among the symbols of our time.

the shaping of the standard type, c. 1920

From the chaos around 1900 the present-day standard type finally emerged around 1920. Its technical development had required close to half a century.

It made its appearance in America around 1870: Output of the leading manufacturer, one tub per day.³³ The mid-'seventies saw a slow rise in production. Down to 1900, all sanitary fixtures were hand-modelled.³⁴ Then partial mechanization set in, raising productivity to ten baths per worker per day, or five times the rate of the 'nineties.

The enamelled bathtub came to the fore around 1910. The first patents for built-in tubs were granted in 1913. These types were enamelled on the inside only. The outside surface was painted over or tiled in (as is still the European practice) or concealed by a separate one-piece enamelled apron.³⁵

³² Information concerning the early development will be found in John C. Reed, "The Manufacture of Porcelain Enamelled Cast Iron Sanitary Ware," an address delivered at the annual meeting of the Eastern Supply Assn., New York, 14 Oct., 1914. Manuscript in possession of the American Standard and Radiator Co., Pittsburgh, Pa.

³⁴ Reed, op. cit.

³⁵ Separate enamelled apron or front plates were made by the Standard Radiator Co. in 1909, by others in 1912.

Not until 1916 did it become possible to manufacture the one-piece, double-shell, cast-iron, enamelled bathtub in mass production. Made-to-order examples of this type are said to have first been used in private Pullmans before 1900—being as elegant as the porcelain tubs, and much lighter.

If the bath and its equipment passed from a nomadic to a stable condition in the course of the nineteenth century, the growing popularity of the built-in tub meant its passage from the status of furniture to its incorporation into the organism of the house.

Its incubation period at an end, the bath merged into this organism with surprising speed. Around 1900 the triumph of the present-day bathroom became clear. Around 1920 it established itself as an appendage to the bedroom in the private house.

It may be said without exaggeration that this standard, the double-shell enamelled tub, attains a degree of comfort that had been pursued for thousands of years. By long technical training our age acquired the facility to solve almost any problem it cared to tackle. When the present-day standard type was called for, it too sprang into being.

REGENERATION A GAUGE OF CULTURE

Our aim throughout has been to trace the two basic types of bathing: the bath as an ablution and the bath as total regeneration. Both types are often found together, one usually dominating the other. Closely connected with the type of bath is its social significance. The ablution bath, by its very type, easily leads to the position that bathing is a private matter. Of this view, the tub bath, especially in its present-day mechanized form, is the chief exponent.

The regeneration bath, by its very type, favours social intercourse and almost automatically becomes a focus of communal life.

Periods have developed various types of regeneration just as they developed various types of comfort.

This century, in the time of full mechanization, created the bath-cell, which, with its complex plumbing, enamelled tub, and chromium taps, it appended to the bedroom. Yet the fact cannot be lost from sight that this convenience is no substitute for a social type of regeneration. It is tied to the plane of simple ablution.

A culture that rejects life in stunted form voices a natural demand for the restoring of the bodily equilibrium of its members through institutions open to all. Whether as Roman marble halls or as Siberian log-cabin is unimportant. Neither, as so often claimed, is finance the decisive factor. Financial considerations are often no more than pretexts.

A period like ours, which has allowed itself to become dominated by production, finds no time in its rhythms for institutions of this kind. That is why the nineteenth century failed in its efforts to revive the regeneration of former ages or to devise new types shaped to our specific needs. Such institutions stood in contradiction to the period.

Regeneration is something that cannot arise in isolation. It is part of a broader concept: leisure. Jacob Burckhardt found in the word *ἀπέρη* the key to Greek conduct. Leisure, in this sense, means a concern with things beyond the merely useful. Leisure means to have time. Time to live. Life can be tasted to the full only when activity and contemplation, doing and not doing, form complementary poles, like those of a magnet. None of the great cultures has failed to support this concept.

³³ Catalogue of the L. Wolff Mfg. Co., Chicago, Ill., 1908, p. 391.

HOTEL AT HILVERSUM

1. view from one of the upper floor balconies on to the roof garden and the tree-bordered street beyond.

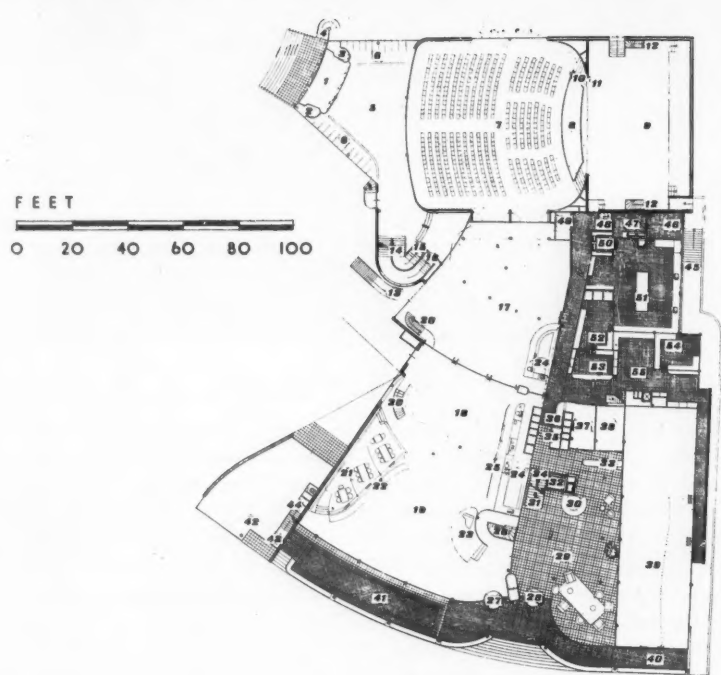


THE INTERPLAY OF LANDSCAPES

A work of the thirties, the hotel Grand Gooiland at Hilversum was conceived as a piece of landscape as well as a piece of architecture. Now that it has had the time to mature, the attention which was directed in the design of the building to surface finishes and minor details has been repaid by that absence of streaks and cracks which unfortunately are only too frequent an indication of the architecture of that decade. But what is more rare and more significant, and these new photographs by F. E. Kidder Smith emphasize it particularly clearly, is the success with which the architects have grasped the dramatic possibilities of modern architecture as urban scenery in a given urban setting. They have handled brilliantly one of the more subtle visual problems, the interplay of the private with the public landscape, the imaginative handling of which is the basis of successful urban scenery. Here is a building that, as it were, opens its arms to a typical street scene, while enclosing at the same time a private landscape of its own. In the photograph above, the suggestion, in the glass wind screens to the terrace tables, of a proscenium box is not fortuitous, for that is exactly what they are, and the enjoyment of the changing street scene which they overhang is heightened by the effect of the separateness of another if adjoining world which the private roof garden embodies, with its water, its informal planting and its path mysteriously disappearing into deep shadow below a second floor balcony. This interior world is an "ideal" world, in complete contrast to the "real" world of the street with its shops and suburban houses. Instead of, as is usual, being consciously set apart or else left to fend for themselves, these two worlds are here made to impinge on each other with results that yield a high visual dividend.



2



ground floor 1, entrance to theatre. 2, cash. 3, telephone-box. 4, vestibule. 5, vestibule. 6, cloakroom. 7, theatre. 8, orchestra. 9, stage. 10, curtain. 11, fire-screen. 12, stairs to dressing-room. 13, fire-escape balcony. 14, stairs to theatre. 15, stairs to lavatory (ladies). 16, stairs to lavatory (gentlemen). 17, foyer. 18, billiard-saloon. 19, cafe. 20, stairs to bar. 21, auditorium. 22, seat. 23, platform. 24, bar. 25, waiter. 26, stairs to cafe lavatory. 27, entrance to cafe. 28, entrance to hotel. 29, hotel hall. 30, hall-porter. 31, staircase to hotel. 32, elevator. 33, reception. 34, staircase to hotel lavatory. 35, telephone-box. 36, safe. 37, manager. 38, administration. 39, restaurant. 40, terrace restaurant. 41, terrace cafe. 42, shop. 43, to upstairs flat. 44, cellar-stairs. 45, purveyors. 46, store section. 47, vegetable section. 48, stairs to pantry. 49, storage. 50, scullery. 51, gas-range. 52, cold kitchen. 53, coffee kitchen. 54, washing-up. 55, service.



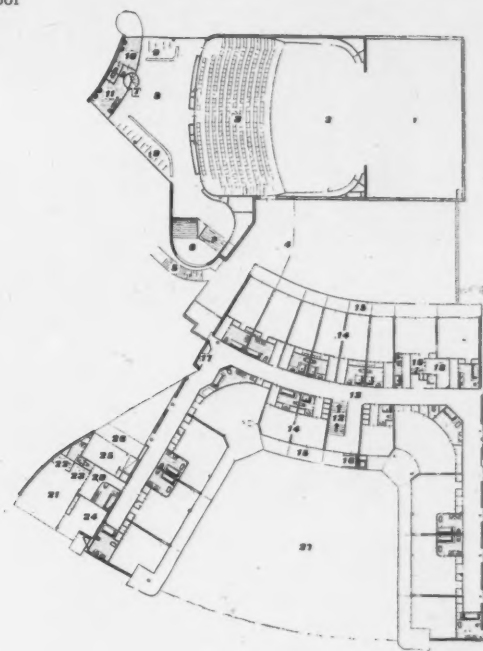
mezzanine 1, upper part of stage. 2, upper part of hall. 3, space under balcony. 4, smoking-room cuisine. 5, vapour-channel cuisine. 6, wall. 7, light-space. 8, small terrace. 9, fire-rail. 10, fire-escape. 11, staircase to theatre. 12, staircase to auction room. 13, auction room. 14, conference room. 15, sideboard. 16, awning. 17, storage. 18, staff rooms. 19, travellers' rooms. 20, elevator. 21, corridor. 22, hotel staircase. 23, upper part of bar. 24, upper part of mezzanine hotel hall. 25, upper part of cafe. 26, terrace. 27, pond. 28, tea-room. 29, upper part of restaurant. 30, landing. 31, living-room. 32, kitchen. 33, bedroom. 34, balcony.



2. on opposite page, the hotel from the tree-bordered Groest; the building is faced with dull-glazed Czechoslovakian tiles. 3, the roof garden over the café and entrance hall, from one of the upper floor balconies. 4, the roof garden, from the same view point as 3, looking inwards. 5, the roof garden pool from eye level.

FEET

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first floor 1, upper part of stage. 2, upper part of theatre. 3, balcony. 4, theatre wall. 5, fire-escape. 6, staircase to theatre. 7, staircase to operator's cabin. 8, cloakroom balcony. 9, wardrobe balcony. 10, ladies' lavatory. 11, gentlemen's lavatory. 12, staircase to hotel. 13, corridor. 14, hotel accommodation. 15, balcony. 16, elevator. 17, lumber. 18, servants' room. 19, staircase-servants. 20, landing. 21, living-rooms. 22, kitchen recess. 23, storage. 24, parents' bedroom. 25, child's bed-sitting-room. 26, balcony. 27, terrace.

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HOTEL AT HILVERSUM

J. DUIKER: ARCHITECT

This hotel, with the adjoining theatre, was designed in 1934 by J. Duiker and after his death in February, 1935, executed by his friend and collaborator B. Bijvoet, who followed the original plans as closely as possible. It was the first building in Holland to unite hotel, café, restaurant and theatre into a single complex. It has not before been illustrated in any English publication. The café and the restaurant are on the ground floor, facing the street, on either side of the main entrance hall. The foyer of the theatre lies between the latter and the café; kitchen and service section is centrally placed between café, restaurant and foyer. The foyer and the café can be thrown into one by pushing aside the sliding walls, as can also the theatre vestibule and auditorium. Between the ground floor and the first floor of the hotel is a mezzanine with meeting-room and tea-room, the latter opening on to the terrace over the café. The rooms



6. general view from the north; the café is to the left of the entrance, the restaurant to the extreme right. 7. second floor corridor along the eastern side of the building.

HOTEL AT HILVERSUM



on the two floors above, where they do not look out on the sunny side of the building, have balconies over the terrace. Foundations, basement and ground floor are of reinforced concrete; the rest of the building is of steel frame construction. The exterior in general is faced with Czechoslovakian tiles, of a light beige colour and a dull glaze. Columns are plastered. Wooden floors rest on the steel joists; they are laid with fixed carpets—as are also the concrete floors. In the entrance hall columns and walls are covered with copper. In the theatre panelling and balcony front are covered with artificial leather. The whole building is heated and ventilated by a ceiling radiation system evolved by J. Duiker and J. J. de Ridder. This comprises a central boiler-house whence air ducts lead to various shafts which in turn are connected with the ceilings and utilizes the heat from the sun to some extent. Air for ventilation is drawn from high above the street. In the theatre the vitiated air is drawn through grilles under the seats, and elsewhere through the ceilings, to allow for natural ventilation.



A SQUARE FOR EVERY TASTE

Town squares, once the preserve of privilege, have since the war-time salvage of railings become public spaces. It is unlikely and undesirable that they should all return to their old use, but so far no definite proposals have been put forward for bringing them into line with the needs of a changed society. These pages demonstrate, with examples chosen from London, how Britain's squares could be made to serve life as it is lived in our towns today. The drawings illustrating some of the new uses suggested for the old squares are by Gordon Cullen.

THE PRIVATE SQUARE: ENCLOSED

The English squares have a big future as well as an illustrious past. What is also clear is that they have a mediocre present. The authorities do not know what to do with them under the changing circumstances of a society which objects to being kept out of anything, objects to signs of privilege, yet by its impatience of restriction tends to destroy what it touches.

The particular squares named are taken ones merely used for the purposes of illustration. The aim is to put forward principles which may be applied anywhere. Right at the start let it be pointed out that where function and architectural unity still march together no change is advocated.

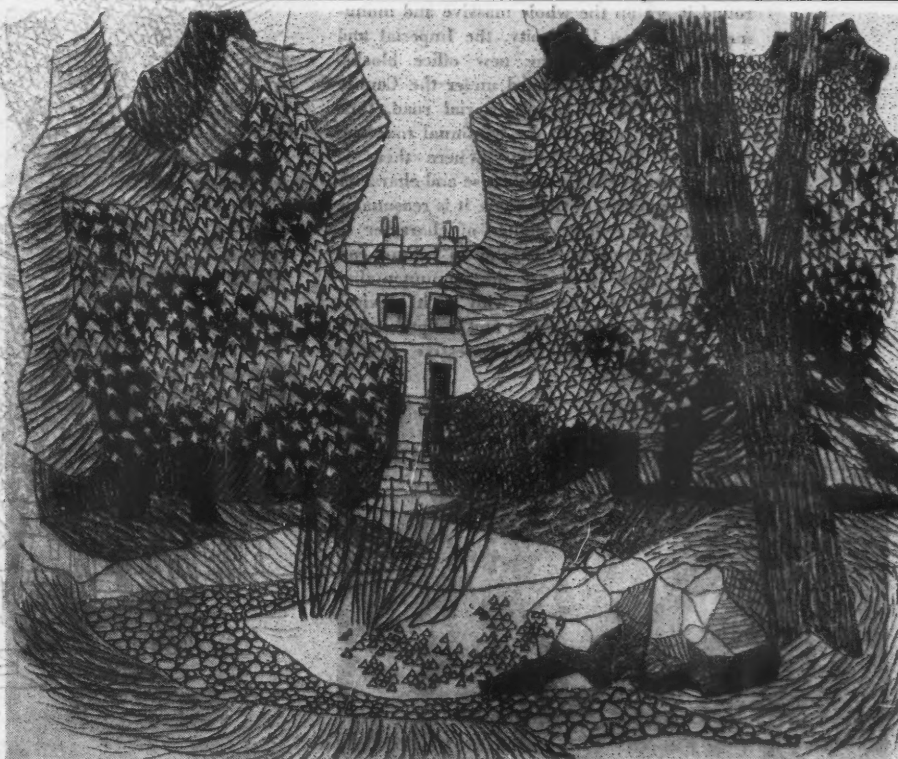
Thus where the square is still residential it could well remain a private or communal garden, enclosed and screened from passers-by by the usual railings.



THE PRIVATE SQUARE: OPEN

A variation on the private enclosed square is the private open square, which is guarded only by hazards such as those of judicious planting and changes of level. In quiet neighbourhoods such squares do not need further protection, and this immunity encourages a freer excursion into urban landscaping in the technical meaning of informal non-academic layout.

With justification we may assume the precinctual organization of cities and a more equal distribution of privileges. Put together in terms of town planning, the result will be the square as quadrangle protected from all but local traffic. In the words of the Interim Report of the Committee on Road Safety, published in December 1944, "In the two decades before the war the accepted policy for reducing traffic congestion was to spread the traffic into more and more roads, whatever their character. That policy, justified if one thinks only in terms of reducing congestion, is bad from the point of view of safety: it increases casualties because it spreads the traffic which causes injury to more and more where people are mostly found. We think it necessary therefore to do just the opposite, and to concentrate and canalise traffic to the utmost in suitable roads where it can be prevented from causing harm."



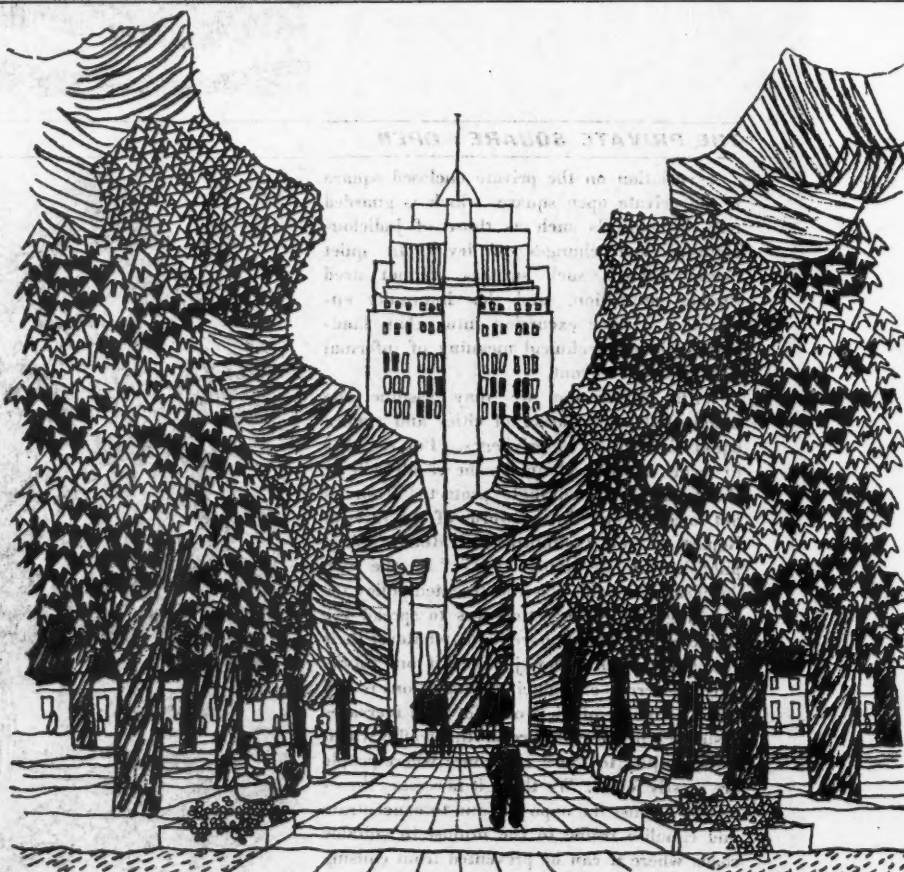
THE SQUARE AS QUADRANGLE: THE COLLEGIATE SQUARE

With the re-organization of traffic and the formation of precincts the flow of vehicles will be reduced to those which have business in the area. Even so in certain squares there should be pedestrian priority—that is to say, if there is a pedestrian and a taxi, the taxi gets out of the way of the pedestrian. The attempt to preserve a few square feet of cat-ridden, sooty turf in the smaller public squares is surely hardly worth the trouble. Rather pave the whole area as in the Temple Courts, which will emphasize the collegiate atmosphere and the pedestrian priority; it will also emphasize the fact that these squares have become the property of all. The quadrangle is the basis or neutral pattern which will vary as local conditions change. It may have municipal character as it has in the example of Russell Square, exclusive as in Grosvenor Square, popular as in Leicester Square, or quietly collegiate as in this example of Manchester Square.



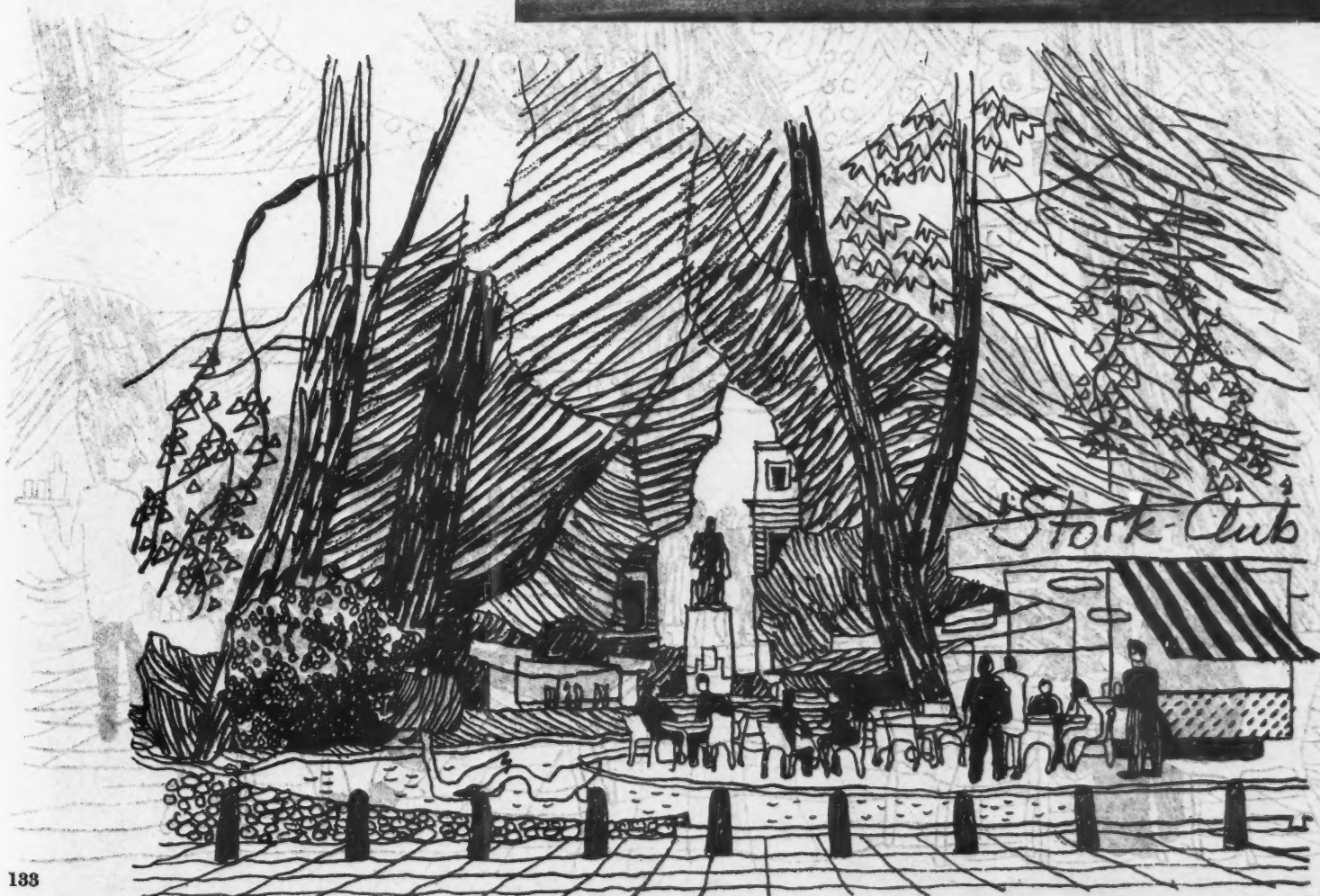
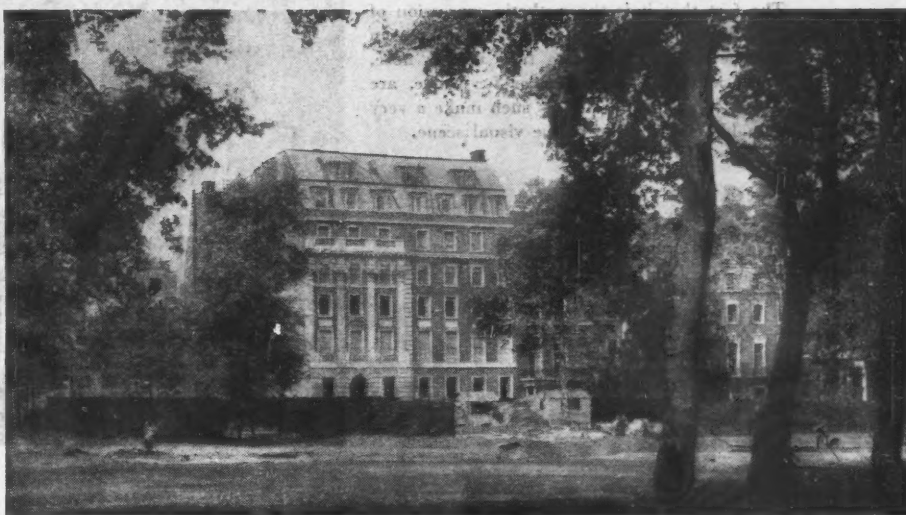
THE SQUARE AS QUADRANGLE: THE MUNICIPAL SQUARE

In a complete squares policy there should be a place for everything—even the undiluted monumental. The existing buildings and proposals for the future of Russell Square suggest that its character should be municipal and monumental. The buildings which surround it are on the whole massive and monumental, London University, the Imperial and Russell Hotels and the new office blocks. Woburn Place is scheduled under the County of London Plan as a sub-arterial road, thus exposing the square to the continual roar and movement of fast traffic. Where there is such a marked change in the use and character of the boundaries of the square it is reasonable to suggest a general change of character to utilize the drama which traffic in volume can produce. That is to say the monumentality should flow right through with all its devices of the axis, fountains, seats and sculpture, and so produce an unsubtle yet impressive effect of metropolitanism.



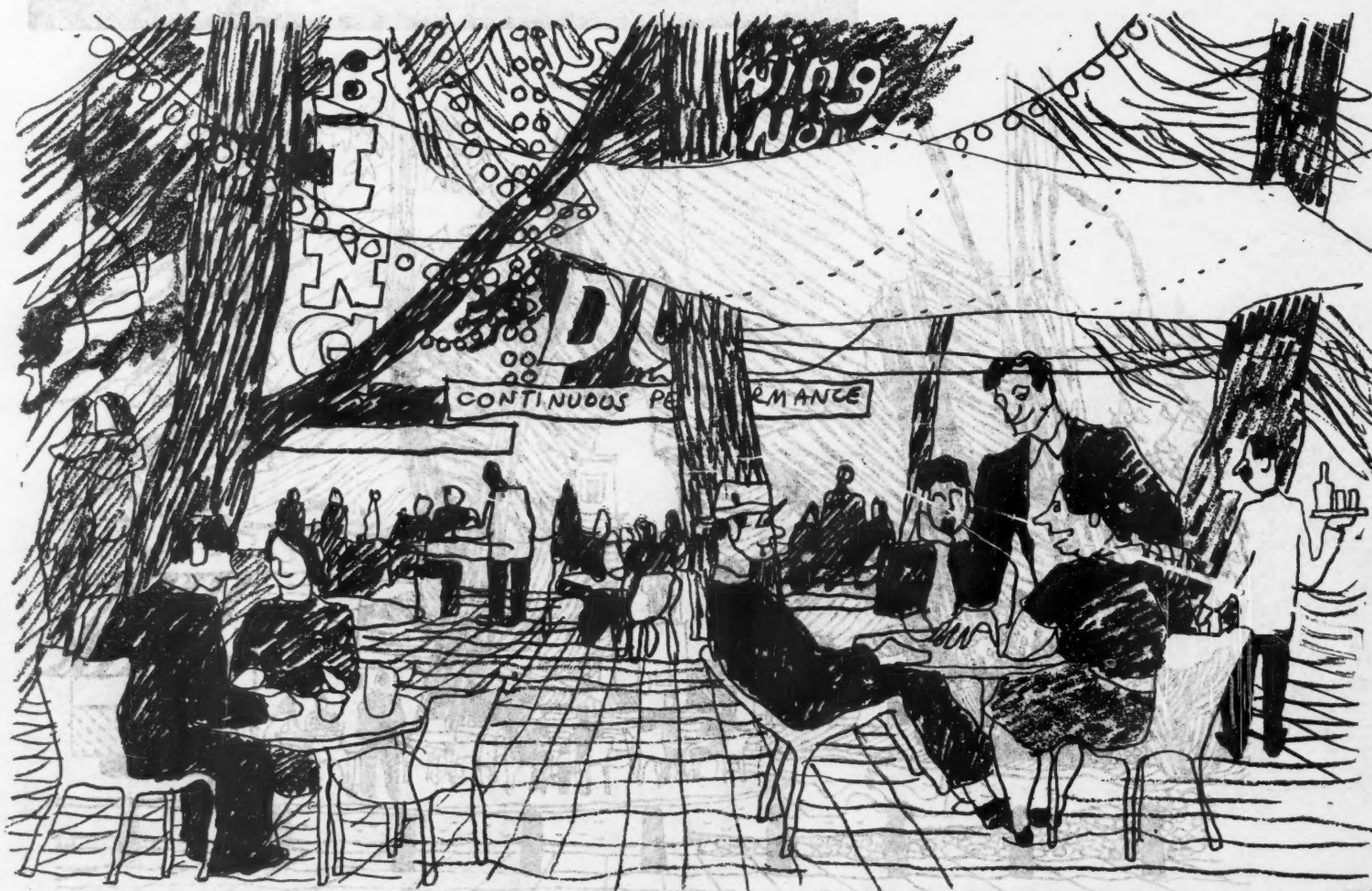
THE SQUARE AS QUADRANGLE: THE EXCLUSIVE PUBLIC SQUARE

This heading may seem paradoxical when read in conjunction with an earlier remark on the more equal distribution of privileges. But while the metropolitan square is an amenity which should not remain barred to all but the few who happen to overlook it, that does not imply the obliteration of all distinctions. As Mayfair happens to be expensive and exclusive, then this should determine the character of Grosvenor Square in its nascent public form. The presence of the American Embassy, together with the square's wartime associations as moral G.H.Q. of American troops in England, has prompted the authorities to make of it a memorial to President Roosevelt, a scheme which has had wide public support. From the details published it appears that the layout will be "beaux arts" in character, with a purely formal arrangement of lawns, paving and ornamental trees. Why? If the British want to signalize all that America has done for them in the war by a memorial to Roosevelt, why not make Grosvenor Square a real American Corner? Not the America associated in the eyes of Europeans with vulgarization; the connection is with Washington rather than Broadway, with the Rainbow Room rather than Rainbow Corner. The best American food, exclusive underground cinema, swans and fountains (but not a soda fountain). On great occasions the American Embassy could hold garden parties in the square. A corner of London that is America for both Londoners and Americans.



THE SQUARE AS QUADRANGLE: THE POPULAR PUBLIC SQUARE

The view of Leicester Square in 1753 is virtually impossible to reconcile with its present condition, a boisterous jungle of traffic, changing signs, vivid lettering and garish posters. The desperate pre-war attempt to preserve a be-railed garden, although a pleasing evidence of official grit and determination, was always a flop. It simply induced a depressing feeling of prohibition, the feeling that one was being inhibited for the wrong reason. Far better to obtain the feeling of space and openness by sweeping away the railings and laying down a paved floor throughout. There are sufficient cafés round the square to rent space for tables, as is done in France, and gaily coloured velariums suspended between the trees would give protection from birds and rain. What is most important, however, is for the landscapist to understand the vital and popular visual appeal of the Leicester Square type of landscape, well illustrated in the photograph on the right. The fact that it is the aesthetic expression of the dive and pin-table saloon, is no reason for the urban planner to turn up his nose. These activities, for better or for worse, are a part of urban life, and as such make a very valuable contribution to the visual scene.





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Brute Fecit

a vernacular art of the Welsh Border examined by

JOHN P. HARTMAN and M. WIGHT

English memorial tablets are best studied on a regional basis which allows for differences of material and technique. A vigorous school of monumental masons is usually found where stone is plentiful and easily quarried, but an exceptionally strong tradition of craftsmanship may take root even in a district where suitable material is lacking. A striking example of this independence of local conditions is the work of a family with the blunt name of Brute whose coloured slate tablets are found in a number of churches in the southern districts of the Welsh Marches. The Brute "country" includes most of north Monmouthshire with the valleys of the Black Mountains, extending eastward into Herefordshire and westward as far as Brecon. Members of the family are still living at Llanbedr, near Crickhowell, and continued working in the traditional family craft of stonemasonry until very recently, though the production of slate memorial stones apparently ceased about 1850. Slate headstones are of course found in other parts of England, particularly in Leicestershire and Cornwall where the material is quarried on the spot.¹ There is no similar local supply however in Monmouthshire, where the Black Mountain moorlands, forming a border country between Wales and England, rest upon gigantic plateaux of old red sandstone. All the slabs from which the Brute tablets were made had to be imported from north Wales and then cut in local workshops. Many examples of this prolific school of stonemasons still remain but have hitherto attracted little attention even from antiquarians of the neighbourhood. The information in the present article records all that has been so far collected during visits to churches and in personal conversations with the Brute family and others in the district around Crickhowell and Abergavenny.²

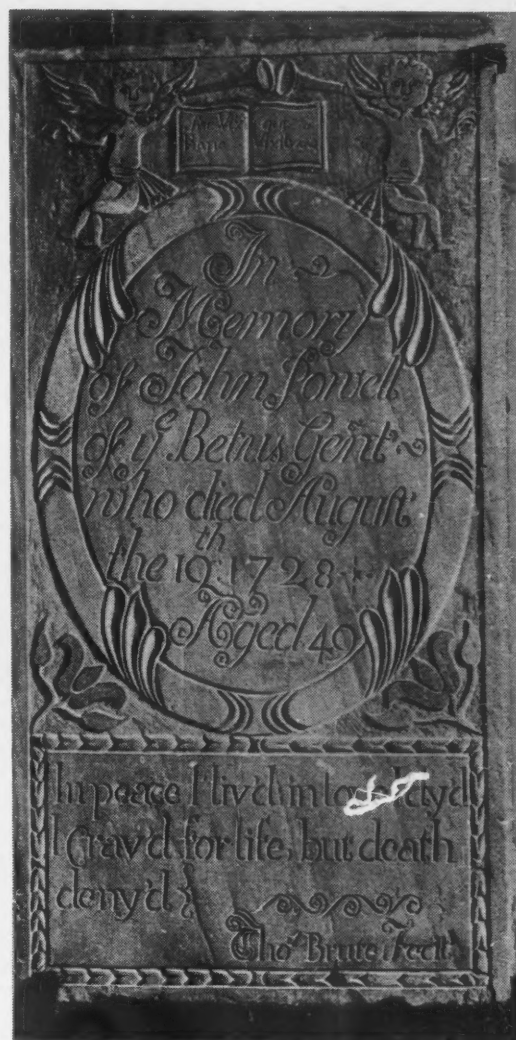
It is worth noting that the claim to ancient Welsh descent is partially confirmed by the curious family name. "Brut" was a term frequently used to describe the descendants of Brutus, the first mythological king and founder of Britain. By the sixteenth century the variants of this word (Brut, Brute, Brit, Biet) had come to signify a man of Welsh or Celtic descent as opposed to Anglo-Saxon or Danish, and could be used as proper names. The original meaning is preserved in the mediæval rhymed chronicles of British history by Wace and Layamon and there is no reason to doubt that the Brutes are of very ancient Cambrian stock reaching back through many centuries.

The earliest signed tablet recorded up to the present is at Llantilio Croesenny (Mon.) in memory of John Jones, and his wife Mary, who both died in 1721. This is signed by "T. Brute." Later in the century an improvement in technique may be noted, but the vigorous, if primitive, interpretation of baroque ornament, which is the chief characteristic of the Brute tablets, remains unchanged. The lettering is usually incised and the decoration raised in

relief. Favourite decorative motifs are cherub-heads, flowers, especially tulips and daisies, garlands, sprays of foliage, angels blowing trumpets and rococo scroll-work. A typical example is the tablet to William Sanders (ob. 1757) at Partrishow, Brecon. Symbolism is little used but another tablet at Partrishow is decorated with butterflies, perhaps to represent the resurrection. The cherub-heads are spirited creatures with round, chubby faces and cheeks like apples from a Herefordshire orchard. At Crickhowell (St. Edmund's) there are two little angels naked except for a loin cloth rakishly tied in a bow, blowing trumpets on a slab, in memory of John Ash (ob. 1727) and signed by "T. Brute." An identical pair reappear at Llantilio Pertholey, near Abergavenny, on a tablet to John Powell (ob. 1728), 1, with the signature "Thos. Brute Fecit," almost certainly the same man. A similar spirit of drollery is found on some of the tablets by Aaron Brute later in the century. The monument to Peter How (ob. 1787) and family at St. Margaret's, Herefordshire, shows an amusing variation of the cherub-head, one wing being folded in the conventional manner, the other raised as if to attract the attention of the passer-by. The most interesting feature however of this delightfully naive decoration is the colouring, which unfortunately cannot be reproduced in photographs. The colours were made from local vegetable dyes and lichens according to a secret recipe written down in the family Bible. This Bible was unhappily lost about the middle of the last century and the present representatives of the Brute family no longer possess the secret of their ancestors. Favourite colours for the slabs are red, yellow, green and blue. Gilding is also extensively used and occasionally the incisions are filled with a white cement. Some of the Herefordshire tablets are further decorated with a thick black paint which is also found on inferior tablets (e.g., Rowstone, Hereford) instead of incised lettering. At one time it was a common custom for memorial headstones to be gilded and coloured, as we learn from *A Tract on Tombstones* published by the Rev. Francis Paget of Rugeley, Leicestershire, in 1843. His opinion of cherub-heads on tombstones is worth quoting: "I

suppose there are some persons who admire those conventional forms of ugliness, with puffy faces of pink and white, black (often squinting) eyes, gilt hair and wings, which are intended as representations of one order of the Holy Angels." This passage may well refer to some of the slate headstones of Swithland, Leicestershire, which have a certain resemblance to the Monmouthshire tablets and still retain traces of gilding. The Brute tablets are peculiar in preserving their tints to the present day. This brilliant colouring poses a problem which as yet remains unsolved. On the authority of the Keeper of Botany of the National Museum of Wales, it is stated that no known vegetable or lichen dye is capable of retaining its colour for a period of up to two hundred years. Further investigation including chemical analysis may provide the answer to this riddle and, it is hoped, confirm the local tradition.

Mr. Basil Brute of Llanbedr states that the secret recipe was probably lost during the lifetime of James Brute whose latest tablet, so far discovered, is dated 1840. He had two brothers, Thomas and John, the latter living at Grwynne-Fechan, in 1887, both of whom were stonemasons.³ Basil Brute claims to be the great, great grandson of this James Brute who so unluckily lost the family Bible. To compile a family tree showing even the approximate relationship of the sculptors of the slate monuments is, however, too ambitious a project, though a detailed search in the parish registers would no doubt provide much information. The same names and initials appear in each generation of this prolific family. The three most

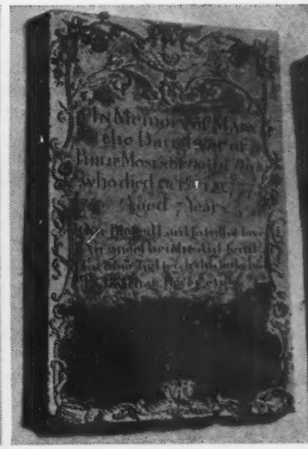
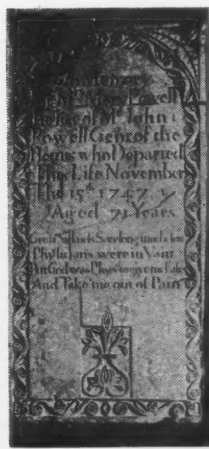


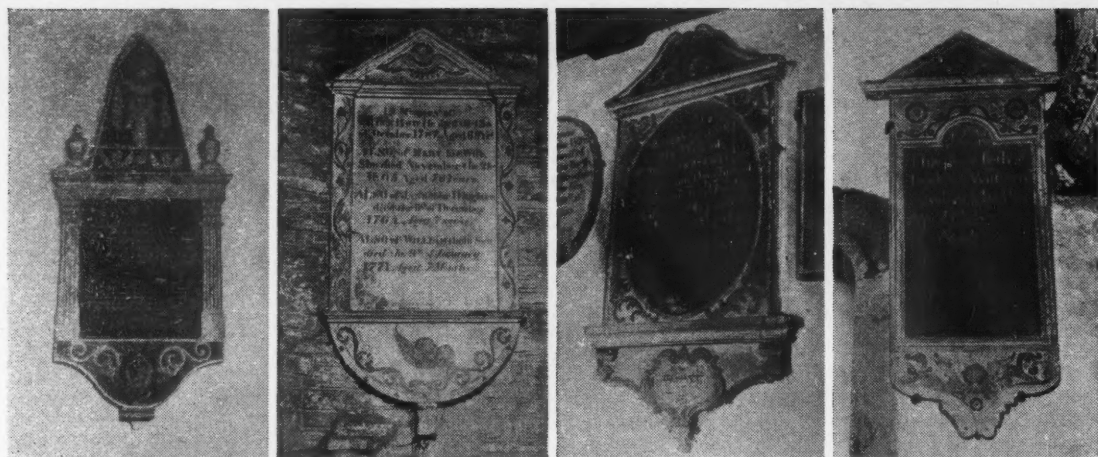
A particularly fine slate tablet at Llantilio Pertholey, near Abergavenny. Thomas Brute, who signs it, is the earliest member of the family of masons here discussed to be known by his work.

common signatures are those of "Thos." or "T. Brute" (fl. 1721-1782), "Aaron" or "A. Brute" (fl. 1754-1783) and "J. Brute" (fl. 1773-1840). The signatures of "Pr. T. Brute" (fl. 1734-1768) and "Pr. J. P. Brute" (fl. 1752) are also occasionally found. It cannot be assumed that tablets bearing one of these signatures are necessarily the work of the same man, and from the number of unsigned and inferior tablets it is probable that a number of assistants, or sons, were being trained at different periods to carry on the family tradition.

Most of the tablets are plain rectangular slabs pegged on to the walls of the church, 1, 2, 3, 4. In more

Three of the rectangular slabs, pegged to the wall, which constitute the commonest form of slate monument in the Welsh Marches, and an architecturally treated stone tablet. 2, at Llantilio Pertholey (c. 1747); 3, at Llangaddock (c. 1746); 4, also at Llangaddock, signed "A. Brute" (c. 1777); 5, at Llanbedr, to the infant son of Thomas Brute, who died in 1724.





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Upper row, four slate tablets showing a rustic mingling of rococo and classical elements: 6, at Llanvetherine (c. 1813); 7, at St. Margaret's, Herefordshire (c. 1805); 8, at Partrishow, Brecon, signed "J. Brute" (c. 1804); 9, also at Partrishow, signed "T. Brute" (c. 1757). Lower row: 10, tablet at Llantilio Pertholey (c. 1765); 11, arms of the Price, or Price-Davies, family at Cwmyoy, Monmouthshire; 12, headstone, perhaps by Giles Dukes, at Walterstone, Herefordshire, with 1899 in mistake for 1799.

elaborate versions the inscription is enclosed within a frame which is often given an architectural character by the addition of a pediment above and an apron below, 6, 7, 8, 9. The tablets in the chancel of Walterstone church are of special interest in showing the different styles used together. The monument of Philip Price (ob. 1803), a former incumbent, is set in an architectural frame with pilasters, pediment and base, the latter decorated with urns, rosettes and an open book, while the adjoining tablet to Nicholas Price (ob. 1775) is a plain slab with the inscription enclosed in a rococo scroll-work frame, with an elaborate pattern of garlands arranged in a basket beneath a cherub-head. This is signed "Aaron Brute sculpsit." A third tablet on the same wall to Philip Price (ob. 1803) is stylistically very similar to the Brute tablet but is signed "Edmond Seaborn sculptor," a common Herefordshire name. The cartouche form of mural tablet so common in the eighteenth century is seldom found; it may have been difficult for a country mason to cut the slate into the necessary oval shape.

The Brutes worked in other materials besides slate. At Llanbedr, where many of them are buried, there is a stone tablet "In memory of Thomas, y^e son of Thomas Brute Vide Mason, who died y^e 5th day of February A.D. 1724, Aged 2 yrs. and 10 months. Vivit post funera virtus Mors Janua vitae." The decoration of the rounded pediment and base is more symbolical than usual, traces of colouring still remaining on the cherub-head with folded wings, palms, wreath and flowers. In

addition to this occasional use of local stone there is a signed tablet in marble at Brecon cathedral. Unfortunately this stone is directly behind the altar in the Havard Chapel and is impossible to photograph.⁴

The finest collection of Brute tablets is at Llangaddock church, near the Beaufort estates, where nine tablets arranged in triple rows hang on the vestry wall. The most flamboyant are signed by "Aaron Brute" in a cursive, italic type of lettering. If it be assumed that "A. Brute" and "Aaron Brute" are the same man it is interesting to note that on his more classical tablets he contents himself with the simple signature of "A. Brute" in Roman lettering. His style is easily recognized. The crinkled, twisted borders festooned with garlands, the gilded cherub-heads and coloured sprays of flowers represent one of the few examples of "peasant rococo" to be found in England, 3, 4. The influence of the classical revival, when it reached Monmouthshire, does not appear to have modified the Brute tradition. Cherub-heads and garlands are not replaced by draped urns, broken columns and weeping willows, nor does the lettering of the tablets develop in sympathy with the fashionable calligraphic patterns of the eighteenth and nineteenth centuries. Contemporary Herefordshire masons, especially John Pritchard and Thomas Roberts of Longtown and Cloddock, were cutting headstones and tablets which match the copper-plate pattern books of the period in elegance and finesse. But the Brute tablets remain boisterously baroque. Without the evidence of dates it

would be difficult to determine which tablets belong to the reign of George I and which to Victoria.

For at least three generations the Brutes preserved their family secret and followed their craft uninfluenced by aristocratic patronage or changes in taste. Their greatest talent undoubtedly lay in the making of these slate memorial slabs, but even when the recipe for colouring the slate was lost the family continued to work as masons into the present century. Llanbedr church, for example, was provided with an entirely new chancel arch by one of the Brutes during the restoration of 1897. Today, though the family remain, the old craft has gone. Basil Brute was trained as a mason, but now finds a car hire service more profitable; his son is a mechanic. Even the gravestones of the family reflect the standardization of our time. The memorials to William Brute, died 1931 aged eighty-two, and Margaret his wife, died 1944 aged ninety-two, are in white marble of the most stereotyped design. It is better, in this instance, to look back into the past and allow the eye to be delighted with the gaily coloured, lively tablets which commemorate so many generations of Monmouthshire yeomen.

¹ For an account of the slate headstones at Swithland, Leicestershire, see a paper by Albert Herbert in the *Trans. of the Leicester-shire Archaeol. Soc.*, vol. 20, pp. 211-40 (1943).

² Grateful acknowledgment is due particularly to Mrs. Katharine Esdaile, to Mr. Basil Brute and Miss Joan Williams of Llanbedr, and to Dr. Flood of Capel-y-Ffin.

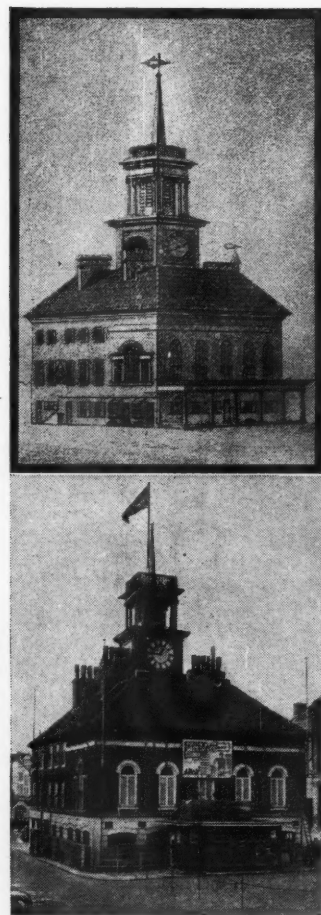
³ See letter by Elizabeth Jones in *Country Life*, April 5, 1946.

⁴ Information supplied by Mrs. Esdaile, and Mr. Albert Tilley of Brecon.

THE VISUAL SURVEY

The High Street of Stockton-on-Tees, originally laid out in Elizabethan times, acquired its present general elevation in the eighteenth century, when the parish church at the north end of the High Street and the Town Hall in the centre of the street were built in a style that reflected the influence of the Dutch traders who used the Port of Stockton. The Corporation Quay still handles vessels trading with the Baltic and North European ports, and is the original terminus of the Stockton and Darlington Railway, opened in 1825 as the first public railway in the world. A number of old prints of the High Street and its buildings have survived. Following a visit to the town by John Summerson, then Deputy Director of the National Buildings Record, the Town Clerk, Mr. Eric Bellingham, had these old prints photographed and paired by photographs specially taken from the same viewpoints. The result of this "then and now" series appears on this and the two following pages.

The historical interest of such a series is obvious. But its practical implications for the town-planner are even more important. The comparisons it makes possible, and the trains of thought it suggests, emphasize the necessity of taking visual considerations into account in any planning which seeks to make the most of local peculiarities and "atmosphere" instead of ironing them out. Economic surveys we have in plenty, visual surveys scarcely at all. This comparative series of pictures of Stockton High Street, limited in scope and intention and undertaken with the most limited means, is presented as a modest example of the kind of survey which, fully developed, would be of incalculable value.



The 1735 Town Hall, from a drawing of c. 1790 by L. Dunn and, below, a photograph of 1944. The "piazza" has been replaced; otherwise there is little change.



The east side of Stockton High Street from the south, 1785. From an engraving by Thomas Sheraton, the cabinet-maker.



The same view in 1944. Both scenes, despite the sober engravers technique of the first, are animated. The first has a vital unity unenforced, the second vitality without unity.



The west side of Stockton High Street from the south, 1785. From an engraving by Thomas Sheraton.



The same view in 1944. The weakness of modern street furniture is that it deflects attention from the street viewed as a whole.



Stockton-on-Tees High Street from the north, 1786. From an engraving by Thomas Sheraton. The church was built 1710-12.



The same view (though omitting the church) in 1944. Although nearly all the buildings here are the same, a few touches have completely transformed the scene (very much for the worse).



Church Row, Stockton-on-Tees, from the west side of the High Street, before 1900. From an old photograph.



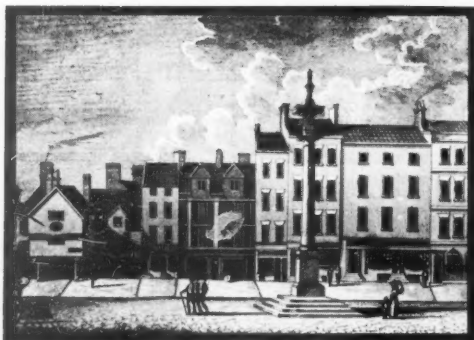
The same view in 1944. The pervasive unity of the earlier scene has been replaced by a concatenation of discords.



The Market Cross and Finkle Street, Stockton-on-Tees, in 1844. From a painting.



The same view in 1944. The character of the early view is retained, despite the addition of the bank on the corner.



The Market Cross and west side of the High Street, Stockton-on-Tees, circa 1796. From a drawing by L. Dunn.



The same view in 1944. The character of the early view is lost despite the fact that none of the buildings has gone.

An article by Joaquim Cardoso in **THE ARCHITECTURAL REVIEW** for December, 1946, described the contemporary revival of the coloured tiles known as *azuleijos* and the decorative use made of them in modern Brazilian architecture. The note on the opposite page summarizes the history of these tiles in Portugal and Brazil during the sixteenth to eighteenth centuries.

azuleijos of two continents

Left: an eighteenth century garden seat at the Palace of Queluz, Portugal. This is a modest but characteristic example of the decorative use of the *azulejo* in the land from which it migrated across the Atlantic. Below: eighteenth century Brazilian *azuleijos*, at the entrance to a Solar in Salvador, Bahia province. On the opposite page: modern *azuleijos*, by Candido Portinari, on the Chapel of St. Francis at Pampulha, Brazil.



THE ANCESTRY OF THE AZULEIJO

Azuleijo (pronounced "as you lay o") is a general Spanish word for tiles. Its origin is disputed; possibly Moorish. Etymologists have attempted to relate it to Arabic words for "blue," but blue tiles were not manufactured until a much later date than the first appearance of the word. It is definite, however, that, under Moorish influence, tiles early became as important an element in Portuguese as in Spanish decoration.

In the fifteenth century tiles were used in the Moorish manner, as abstract polychromatic mosaic—for example in the Palace of Cintra. Then, in 1504, an itinerant Italian artist, Francisco Niculoso Pisano, introduced into Spain pictorial panels of painted tiles. He had a great success, and was commissioned to execute the walls and altar of the Alcazar's chapel. The new fashion was taken up in Portugal; and the Palace of Baçalhoa, which has *azuleijos* everywhere—on pavilions, a porch, a fountain, walls, seats, and tubs for orange trees—also has descriptive panels. A typical pair represents the battle of the Centaurs and the Lapiths, and Suzanna and the Elders. They are painted in a range of colours which includes white, grey, yellow, blue and green; and they are dated, by the artist, 1565.

The beginning of the second period in the history of the *azuleijo* coincided with the sudden access of wealth

which poured in from Portugal's Brazilian goldfields. These were discovered in 1693: the first shipment from them arrived in 1699. From then until about the middle of the eighteenth century an enormous wealth was concentrated in the hands of the royal and ecclesiastical authorities; and one of its chief manifestations, especially during the reign of Joao V (1706—1750), was a great flowering of building. This was often under the supervision of French or German architects, but in one thing it was distinctively Portuguese: its use of the *azuleijo*. Sacheverell Sitwell says indeed: "The *azuleijo* is the typical thing of Portuguese eighteenth century architecture, and it is used on a scale that has no equal elsewhere, even in the mosques of Persia." (*Spanish Baroque Art*).

These *azuleijos* carried on, and developed, the Baçalhao scheme of large pictorial panels. Instead of being polychromatic, however, they were now almost always blue on a white ground or occasionally a rose ground. In using these colours they were perhaps under the influence of the Dutch makers of Delft ware, who themselves were copying from the Chinese. The Dutch had already, as early as 1630, used panels of blue and white as wall decorations, but not on any great scale. Presumably the Portuguese panels were made by the same process as the Dutch. A

cartoon with the outlines pricked through was laid over the moist clay, and the design transferred by sprinkling charcoal or pumice through the holes. The cheapness, the obviously gay and effective appearance of *azuleijos*, and the ease with which they could be cleaned—or, rather, were cleaned by every shower—made for a popularity so great that no less than thirteen factories were occupied in making them in Lisbon alone.

While Brazil was exporting gold and diamonds to Portugal, the latter reciprocated with shipments of *azuleijos*; and so they are to be found in Brazil almost with Portuguese frequency. Thus the Franciscan monastery in Salvador, Bahia province, follows the example of the Oporto Cathedral, with cloisters in which panels of Biblical and classical scenes are combined. Although after the death of Joao V, and the great earthquakes of 1755, a certain austerity descended upon Portuguese architecture, the blue and white *azuleijo* continued to flourish; as late as 1794 a chapel was built at Recife, Pernambuco, with a dado four to five feet high, in rare purple and yellow tiles, of Biblical scenes, one of them representing the building of the Tower of Babel.

After the decline of the blue and white *azuleijos*, a third period of *azuleijo* manufacture followed, during a revival of the taste for them in the nineteenth century, in the district around Oporto. These were printed or stamped (*estampados*) in a wide range of colours.

It is the second period which has inspired, both in scale and technique, contemporary Brazilian artists and architects in their revival of the use of the *azuleijo*.

BOOKS

Quaderni di Domus

1, I LIBRI NELLA CASA, by Vito Latis; 2, GLI STUDI NELLA CASA, by Vittorio Gandolfi; 3, CAMINI, by Mario Tevarotto; 4, LA CUCINA, by Marco Zanuso. Domus. Each volume, 300 lire.

THESE four books are the first of a series of twelve dealing with domestic furnishing and equipment. The introductions, rather flowery in form but simple in content, are written by various architects. They describe the changes in the requirements of man through the ages that have produced corresponding alterations in the appearance of his home and equipment, until these have acquired the expression shown in the illustrations. The photographs are selected with discretion from work based, it is claimed, on function and efficiency rather than on facile decorative forms, executed during the last fifteen years. Most of the designs are from Italy, also Germany, France and America; Britain is represented by a few examples of the work of "Frederic Gibberd," "Russel," "Well Coates," "Camer Ward and Lucas" and "Mawell Fry" which went the rounds before the war. Any lack of sparkle and subtlety of definition can be attributed to the publisher's decision to keep down reproduction costs to permit a selling price as low as possible. In the extent of ground covered and the variety of the illustrations, these books are remarkably good value.

Volume 1 deals with books in the home. The first part of the introduction, contributed by Sergio S. Ludovici who writes on the subject of collecting books, is followed by more technical information about housing them, whether in libraries or individual bookcases, their sizes and arrangement. As to materials to be used, hardwood still appears to hold its own for general use, although examples are shown of metal "tubular-scaffolding" and "cats'-cradle" types of a rather démodé functionalism. Photographs are grouped to show portable bookstands, informal shelving, bookcases in living rooms both against walls and used as screens, and finally libraries. The sloping shelf, necessarily restricted to journals laid flat or volumes of uniform size, if a ragged effect is to be avoided, tends to have a rather self-conscious air; this, however, applies to other examples of bookcases especially from Italy which, shown sparsely filled to expose the design and construction, seem also to suggest that an abundance of books is still seldom found as an integral part of the average middle-class home.

Volume 2 covers both studies and studios in the home, and necessarily overlaps to a certain degree the first volume. The introduction traces the historical development of books from incised tablets and papyrus rolls to rectangular books of parchment or paper; it is shown how, as books have become smaller, working libraries have become bigger, the character of the owner always being reflected in the room where he works. Useful information is given on such functional requirements as heating, lighting, ventilation, aspect and finishes, although concern about oxygen consumption and humidity seem somewhat overstressed. The illustrations are grouped to show studies, details of their furniture and equipment, down to a waste-paper basket which inclines its opening towards the aim, studies combined with living rooms, writing-table flaps and desks, and studios, both for technicians such as architects and for painters.

Volume 3 is devoted to fireplaces. The domestic fire, as pointed out by Vitruvius, is still the focal point of companionship. Each epoch has produced a characteristic fireplace form, from the stone on which wood is burnt to heat up food and warm the extremities, to the decorative and monumental designs around which large groups of friends can meet, and so to the more functional solution of to-day, still a symbol of friendliness unaffected by the introduction of central heating. The illustrations show fireplaces of various types: free-standing, as still favoured in certain parts of Italy, wall forms projecting, recessed or semi-recessed, with or without canopies, and finally those designed for the open-air. The fireplace of the Renaissance, with its high but shallow opening and its dependence on open-doors to overcome draught, has left little trace in contemporary practice. The normal section described, with back sloping forward to a narrow throat, is similar to that adopted in Britain. Details of various plans, elevations and sections are included.

Volume 4 deals with the kitchen, which in Italy until recently has been conceived as a living room, either for peasants or for servants. Haphazard in planning, it usually had a simple charcoal-burning cooker to be stimulated by frantic fanning with a feather fan. To-day, however, it is being designed as



part of an ordered life, with circulation, standardisation and equipment being studied and adjusted to accord with research at the Bauhaus, in America and elsewhere. The illustrations include various sizes of kitchens for town or country life, details of their fittings and mechanical equipment, and treatment of dining recesses.

R. E. ENTHOVEN

A Topographical Tragedy

RECORDING BRITAIN, Vols. I and II. Edited by Arnold Palmer. Oxford University Press. 105s. per set of 4 vols.

THE impact of war upon the visual arts in England was not, it must be admitted, wholly disastrous. The involvement of the artist in the controlled functioning of the total state proved, in certain cases, unexpectedly profitable both for the painter and the public; the latter was the richer by the launching and completion of various schemes which in the *laissez-faire* atmosphere of peace would never have been countenanced, while the former suffered less harm from a short interlude of rendering unto Caesar than the ancestral voices prophesying woe from their ivory towers might have led one to believe. Of all the schemes which were then devised the most successful, though far from the most ambitious, was that whereby a large number of painters of varying experience and skill were commissioned to record buildings and scenes of aesthetic merit and topographical importance that were likely to suffer from the ravages of total war, symbolized, perhaps, rather more frequently by the figure of the requisitioning officer from the Ministry of What-have-you than by the more immediately destructive though no more unpredictable secret weapon.

The result was encouraging without being dangerously over-exciting; an avowed topographical purpose had always proved at once a stimulus and a restraint, of which, since its practical disappearance, thanks largely to the advent of the photographer, in the middle of the last century, English painting has increasingly felt the lack. Moreover there existed a school of water-colourists, of which Mr. Kenneth Rowntree and Miss Barbara Jones are, perhaps, the most prominent members, with a tight, dry technique of drawing admirably suited to the purpose in hand, which was now provided with an opportunity for fuller development that in the normal way it was unlikely to have obtained. In most cases the painter loyally and satisfactorily fulfilled the purpose for which he had been engaged and was seldom led astray from the straight and narrow path of factual recording by the will-o'-the-wisp of conventional prettiness. (I do, however, recall an otherwise admirable painting in which the main street of Stockbridge had acquired a strangely romantic and unnatural appearance for those acquainted with the reality owing to the cowardice of the artist in refusing to confront the problem presented by the innumerable telegraph poles, petrol pumps, and miscellaneous standards with which that thoroughfare is so liberally adorned and which he had completely ignored.)

The announcement of the publication of a representative selection of these works by the Oxford University Press was, therefore, particularly welcome to all those who had visited the wartime exhibitions in the National Gallery and realized that the paintings were now irretrievably scattered up and down the country; it is all the more sad to have to state that such hopes as this project may have aroused have not been fulfilled by the achievement. Quite apart from the matter of the selection and arrangement, the whole object of the enterprise has been defeated by the process of reproduction employed. In the monochrome plates the darks are frequently so heavily over-charged that it is quite impossible to discern or appreciate any merits of drawing which large areas of the paper may conceal, and at first glance one is surprised that so many artists should have elected to record their impressions by the light of a rapidly waning moon; the colour plates, for anyone acquainted with the original works, are shocking travesties and likely to induce a belief in those who lack that advantage that the artists in question have abandoned the use of water-colours in favour of nursery crayons; of the remaining illustrations that are neither monochrome nor coloured but delicately tinted in pastel shades it is kinder not to speak.

In considering any ordinary volume such comments might be considered unnecessarily harsh and an icy silence sufficient criticism, but for various reasons these are not ordinary volumes. First, the Oxford University Press is a house to which we have all become accustomed to look to for the maintenance of the very highest standards of book production; second, the "Recording Britain" scheme was in a large measure a public enterprise; and third, this publication has obviously, indeed avowedly, been produced with one eye on the American market and therefore for a public unable to study the drawings in the original.

OSBERT LANCASTER

India Up and Doing

MARG, a magazine of Architecture and Art. Edited by Mulk Raj Anand. Bombay. 4 rupees 8 annas. Quarterly.

ANYTHING which comes out of India at this moment of history is, if nothing more, News. A magazine of architecture published in Bombay. . . . Your curiosity is aroused. MARG; what does that mean? In Sanskrit, you are told, "the way forward." But it also stands for the Modern Architectural Research Group, who are its sponsors.

When you learn that, your curiosity may perhaps ever so gently subside. For Groups, your experience has taught you, are more at home in manifestos than in magazines, and you begin to anticipate with disrelish that stock mixture of truisms and clichés which creates an impression that all literature issuing from Groups has been written by the same person. But for once you will be wrong. The Modern Architectural Research Group evidently realize that in the house of art are many mansions, and MARG is not only substantial in format but rich and varied in contents. How varied, a short selection of titles from the first three numbers, which lie before me as I write, will serve to indicate: from the first number, *The Story of Jamshedpur* (town of the Tata Iron and Steel Works, which though founded only in 1908 now has a population of 150,000), an article on Mohenjo-Daro (the lost city of the Indus Valley), by G. S. Gyani, another on the art of Amrita Sher-Gil, by Francis Watson; from the second, an admirable and timely editorial on the study of Indian art, a contribution from Frank Lloyd Wright called *On the Right to be Oneself, A People's Tradition*, describing and illustrating the peasant architecture of Ceylon, by Andrew Boyd; from the third a project for a demonstration farm centre in the Punjab, by John Terry, a fully illustrated article on the paintings of George Keyt, by L. C. Van Gezzel, another on some Southern Indian metal images from the Treasuryvala collection, by Karl Kandalavala.

"We have to be up and doing," writes the editor in the first number of MARG; "we have literally, and metaphorically, to build a new India." The foundations of the new India in a cultural and artistic sense exist in her tremendous past. The arrival of MARG, which is now available to English subscribers, makes it plain that the builders are there too—up and doing.

MARCUS WHIFFEN

Pot-Metal and Yellow Stain

STAINED GLASS IN SOMERSET, 1250—1830. By Christopher Woodforde. London: Oxford University Press. 42s.

ANYONE coming fresh to the study of English stained glass would probably be considerably surprised by the quantities even of pre-Dissolution glass which are listed in almost any of the standard books on the subject. But unhappily these long lists are deceptive: for the great majority of churches whose names are included can to-day show us ancient glass only in some of their tracery lights or, less frequently, in a few miscellaneous fragments worked into a Victorian window. The destruction of our mediaeval windows has been so complete that it would hardly be possible to write a volume on the surviving glass of any single county without including much that is of small account aesthetically.

In this respect Mr. Woodforde's book is no exception: his study of the stained glass of Somerset includes much that is of but minor artistic interest, and in a book so well produced and so generously illustrated one cannot help regretting that no detail from what is incomparably the loveliest glass in the county, the five early fourteenth century windows in the choir at Wells, is reproduced in colour. One hopes at all events that this glass has been fully photographed recently, before being put back after its war-time removal. Four windows in Wells Lady Chapel, now filled only with fragmentary glass, but of similar date and forming a veritable kaleidoscope of jewel-like colour, fare slightly better: but the one colour-plate cannot be called very good.

It is not, however, with the search for artistic quality that Mr. Woodforde is primarily concerned. "This book is written," he says, "for the student of mediaeval art and iconography and also for the local historian and topographer. It is a record of ancient glass in Somerset and a commentary upon it." These are just claims: the compiling of the record alone must have been a prodigious labour, and, not content with a most thorough survey of Somerset glass, the author has traced the influence of Somerset glaziers in adjacent counties too. One of the most attractive plates is in fact of a St. George from Dordiscombeleigh in Devon.

Those already familiar with Mr. Woodforde's other writings on stained glass will not be surprised at the remarkable breadth of learning which he brings to bear on his "commentary." Mediaeval history and

legend, heraldry, church vestments, local centres of glass painting—these are but some of the subjects on which he writes with authority. His book is also a mine of curious and interesting information on the by-paths of mediaeval art. For instance, a charming fifteenth century panel at Banwell, now incorporated into an ugly Victorian window, illustrates a little-known scene from the life of St. Nicholas. A young woman rushed off with such zest to his consecration service that she completely forgot that she had left her baby bathing in a cauldron suspended over a fire. But happily the saint came to the rescue. "The fire burned, the water waxed hot, and began to wallop and to roar; and the child, whose body was tender and new, sat within the boiling water and played with the bubbles at its will, and did not feel the smallest hurt." How one regrets that the other scenes illustrating this simple but dramatic little story have perished!

ALEC CLIFTON-TAYLOR

Out of the Shires

THE HERITAGE OF LEICESTERSHIRE. By W. G. Hoskins and F. L. Attenborough. Edgar Backus, Leicester. 6s.

TO people interested in art, design and such-like matters, Leicester has for nearly fifty years been known as a paragon amongst British industrial cities. Thanks to B. J. Fletcher and H. H. Peach, it enjoys an exemplarily close co-operation between its art college and its commercial day-to-day life. Now for a few years Leicester University College has set out in a similar way on a campaign to make its scholarly efforts fruitful for city and county. The *spiritus rector* in this case is Mr. F. L. Attenborough, Principal of the college, a man of uncommon energy and breadth of outlook, and besides an amateur photographer of the best in the country. Leicestershire knows all that, and the public outside the county was made aware of at least the last-named of his achievements by his splendid pictures of the foliage capitals at Southwell Chapter House, recently published as a *King Penguin*.

The little book now issued by an enterprising local publisher—and issued well with its 52 clearly printed pictures—will, for the first time, reveal the wider scope of Mr. Attenborough's campaign. His idea ever since he started it has been to show pictorially Leicester and Leicestershire in all their aspects—geological, geographical, historical, social, industrial and so on—and then make people see the interrelations between all of them. An exhibition held in Leicester just before the war, and opening up the campaign forcibly and successfully, will still be remembered by those who happened to see it as a new and most praiseworthy regional adventure.

Since then Mr. Attenborough has found on his own staff the ideal compeer. Mr. Hoskins's own subject is economic history, but he happens to be as keenly interested in the natural foundations of economic history and in its most lasting visual outcome, that is building. So a text has resulted which is a model for such guidebooks, neither textbookish nor antiquarian. The photographs comprise scenery, remains of mediaeval moats, bridges, churches (an admirable Melton Mowbray from the east), details of piers and tracery (few people know Stoke Golding), castles, country houses, country rectories, cottages and town houses. ARCHITECTURAL REVIEW readers will probably be especially interested in the Gothick interior of Stapleford, of 1783, and the fine classical corner house in King Street, Leicester, of 1836, "almost the last of the good buildings in the town."

PETER F. R. DONNER

Other Books Received

- OLD CHESHIRE CHURCHES. By Raymond Richards. B. T. Batsford. 12s.
- LE CORBUSIER, Vol. 4. Les Editions d'Architecture.
- GEMS OF THE WEST. By Jack S. Chambers.
- ENGLISH GOTHIC ARCHITECTURE. By P. H. Ditchfield. J. M. Dent & Sons. 2s.
- LOOKING AT PAINTINGS. By Michael Rothenstein. George Routledge & Sons. 8s. 6d.
- THE ARTS, No. 2. Lund Humphries & Co. 10s.
- CITY REGION AND REGIONALISM. By Robert E. Dickinson. Kegan, Paul, Trench and Trubner & Co. 21s.
- CONTEMPORARY COLOR GUIDE. By Elizabeth Burris-Meyer. William Helburn. \$10.00.
- TREES FOR TOWN AND COUNTRY. Percy Lund Humphries. 25s.
- RECONSTRUCTION IN THE NETHERLANDS. By Max Lock. Jason Press. 2s. 6d.
- NEW BEGINNINGS AND NEW TOWNS. By David B. Williamson. Town and Country Planning Association. 1s.
- L'URBANISME. By Gaston Bardet. Presses Universitaires de France.
- EDINBURGH. By George Scott-Moncrieff. B. T. Batsford. 15s.
- MEN OF TASTE. Martin S. Briggs. B. T. Batsford. 15s.
- THE ARTS AND THE ART OF CRITICISM. By Theodore Meyer Grene. Princeton University Press. (London: Geoffrey Cumberlege). 42s.
- PLANS OF THE CITIES OF EUROPE. Association for Planning and Regional Reconstruction. 5s.

[Inclusion of a book in the above list does not preclude its being reviewed in a future issue. Nor is the list necessarily complete up to the publication date of the current issue.]

ANTHOLOGY

An Early Romantic

In this Lent [1659] . . . A.W. went with Thomas Smith . . . on a certain morning to a private and lone house in or neare to Bagley wood, between Oxon and Abendon, inhabited by the lord of Sunningwell called Hannibal Baskervyle, esq. The house (called Bayworth) is an old house situated in a romancy place, and a man that is given to devotion and learning cannot find a better place. In this house A.W. found a pretty oratory or chappel up one pair of staires, well furnished with velvet cushions and carpets. There had been painted windowes in it, but defaced by Abendon soldiers (rebells) in the grand rebellion. He also found an excellent organ in the said oratory on which Mr. Smith perform'd the part of a good musitian and sang to it. Mr. Baskervyle . . . took delight to heare him play and sing. He was civil to them, but A.W. found him to be a melancholy and retir'd man, . . . And A.W. afterwards frequented the house, especially in the time of his son Thomas Baskervyle, to refresh his mind with a melancholy walk, and with the retiredness of the place, as also with the shady box-arbours in the garden.

ANTHONY WOOD (*The Life and Times of Anthony Wood*).

MARGINALIA

New Towns Appointments

The following is a list of all appointments so far made in connection with the New Towns project to the date of the REVIEW's going to press:

CRAWLEY: Chairman, Sir Thomas Bennett; Vice-Chairman, Lawrence Neal; Consulting Architect, Anthony Minoprio; Chief Architect, A. Shepherd-Fidler; General Manager, C. A. C. Turner.

HEMEL HEMPSTEAD: Chairman, Lord Reith; Vice-Chairman, R. H. Wilson; Consulting Architect, G. A. Jellicoe; Chief Architect, H. Kellett Ablett; Chief Engineer, J. W. Henderson; General Manager, W. O. Hart.

HARLOW: Chairman, Sir Ernest Gowers; Vice-Chairman, Maj.-Gen. R. P. Pakenham-Walsh; Consulting Architect, F. Gibberd; Chief Architect, N. Tweddell; Chief Engineer, O. W. Gilmour; General Manager, W. Eric Adams.

STEVENAGE: Vice-Chairman, Monica Felton.

The New Director of C.I.D.

The Council of Industrial Design have appointed Gordon Russell Director of the Council.

All readers of the REVIEW will be aware of Gordon Russell's long experience in the field of industrial design, and will welcome this appointment. On his return from the 1914-18 war, he developed the firm of Gordon Russell from its beginnings in the workshop opened by his father for repairing the furniture in the Lygon Arms at Broadway, which he owned. The first 500 furniture designs produced were Gordon Russell's work, while some of the best known industrial designers in Britain have received part of their training with his firm. The author of several books on industrial design subjects, he is a member of most of the organizations in Great Britain which are concerned with Industrial Design. In 1920 he joined the Design and Industries Association and was for some years a member of its Council. In 1926 he was elected a Fellow of the Art Workers' Guild and in 1927 he was elected a Fellow of the British Institute of Industrial Art and of the Arts and Crafts Exhibition Society. In 1940 he was elected a Royal Designer for Industry and, in 1947, Master of the Faculty.

In 1943 he was appointed Chairman of the Design Panel at the Board of Trade and a member of the Furniture Production Committee and Furniture Trade Working Party, and in 1944 he was appointed a member of the Council of Industrial Design.

He is a member of several committees of the Ministry of Education, and Chairman of the Furniture Design Committee at the Ministry of Works. He has acted as adviser on design matters to the Admiralty, Post Office and Colonial Office. In 1945 he was elected a First Fellow of the Society of Industrial Artists.

End of an Age

The Letchworth Museum has recently commemorated the death of Stanley Parker by a small exhibition of some of his work. Stanley Parker died last year at the age of seventy. He was one of the last of that inspired generation of all-round craftsmen following in the footsteps of William Morris. He learnt under Simpson at Kendal and also worked in his youth for Voysey. He made furniture, domestic and ecclesiastical, metalwork, leatherwork, book-bindings and toys, and also recorders and even a violin. At the time of his death he was working on a harpsichord. An example of his craftsmanship is the binding of the Codex Sinaiticus at the British Museum. He taught craft early in his career at Bedales, later at St. Christopher's, Letchworth—always with the enthusiasm of one who believes firmly in Morris's tenet that good art must be art created with joy. He lived most of his life at Letchworth, earliest of all garden cities, designed by his brother Barry Parker (who died this year), and his brother-in-law Raymond Unwin (who died in the United States during the war). So the ideal of craftsmanship as the late nineteenth century had endeavoured to revive it goes from us, and with it the ideal of garden-city and garden-suburb. The two belonged together and were the best that English art and architecture had to give fifty years ago. The problems of industrial design and city planning which have now replaced them had not yet appeared in the consciousness of artists and architects, and probably could not appear until the Parkers and the Unwins had done their work.

Acknowledgments.

Acknowledgments for photographs in this issue are due as follows: Frontispiece, page 110, Ian McCallum; *Two Houses by Marcel Breuer*, pages 115-118, Ezra Stoller; *The Interplay of Landscapes*, pages 127-130, G. E. Kidder Smith; *A Square for Every Taste*, pages 131-134, A. Cracknell; *Azulejos of Two Continents*, page 138, bottom left, A. Costa.

Christ Church Library

The photograph of Christ Church Library, Oxford, which appeared on page 91 of the September issue of the REVIEW, should have been credited to *Country Life*.

RÉSUMÉS

For the convenience of its foreign readers THE ARCHITECTURAL REVIEW now contains synopses of its principal contents in French, German and Russian. Other languages are used when the contents of any particular issue are of special interest to those speaking them.

Octobre 1947

Page 111: *L'ornement d'architecture de Louis Sullivan par Henry R. Hope*. Louis Sullivan, l'un des fondateurs de l'Ecole de Chicago est à présent généralement considéré comme peut-être le plus grand architecte américain du XIX^{ème} siècle qui ait prévu le style international, à la fois dans ses écrits et dans ses bâtiments.

Comme l'ornement est une partie intégrale de l'expression de son architecture, suivant sa théorie que la forme suit la fonction, il est impossible de le négliger plus longtemps, et si l'on veut faire une juste évaluation de son architecture, il y faut inclure une étude de sa décoration.

Page 115: *Deux maisons conçues par Marcel Breuer a Long Island, Etats-Unis*, décrites et illustrées.

Page 119: *La Mécanisation de la Baignoire, par Sigfried Giedion*. Le rôle joué par le bain dans une culture montre l'attitude qu'elle adopte concernant le relâchement humain. Le monde antique comme l'Islam et dans une certaine mesure, le Moyen-Age, considérait la régénération humaine comme une responsabilité sociale fondamentale. Le bain devenait en outre un lieu de rapports sociaux. Comme la Réforme et la Contre-Réforme tenaient la nudité pour un péché, l'avortement du sens de la propreté fut un phénomène sans exemple à aucune autre période de civilisation avancée. Grâce à la médecine et à la redécouverte de la nature, il se produisit au cours du XVIII^{ème} siècle une lente évolution. Le type de baignoire répandu de nos jours depuis 1900 est une version mécanisée du baquet primitif découvert en Crète entre 1800 et 1450 avant J.C.

Mais même en Amérique, pays qui allait dépasser tous les autres dans ce domaine, les habitations ne présentaient aucune installation à bains avant 1895.

Les bains de vapeur et d'air chaud, qui, de Russie et de Finlande furent introduits en Europe Occidentale, et les douches, sont d'autres modes passés en revue par le Dr. Giedion.

Page 127: *Le Grand Hôtel, Gooiland, Hilversum, Hollande conçu par J. Duiker*, décrit et illustré.

Page 131: *Une Place pour tous les goûts*. L'analyse des différents types de Place ou Square de Londres, square privé clos, square privé ouvert, place d'Ecole, place municipale, place publique "select" et place publique populaire—prouve que les Squares anglais, doués d'un passé

illustre, mais d'un présent médiocre, sont capables, s'ils sont réadaptés aux besoins du jour, d'un grand avenir.

Page 135: *Brute Fecit par John P. Harthan et M. Wight*. Dans plusieurs églises des Marches du Pays de Galles, on a trouvé des plaques commémoratives en ardoise datant de 1721 à 1850 et qui sont l'œuvre de membres de la famille Brute. Ces plaques, tumultueusement baroques comme dessin se font remarquer par leurs vives couleurs et par leur dorure. Le secret de ces teintes, obtenues avec des teintures locales à l'aide de plantes et de lichens a été perdu.

Page 136: *La Topographie Visuelle*. De vieilles gravures de la Rue Principale de Stockton-on-Tees, Angleterre, s'accompagnent de photographies récentes prises des mêmes points de vue. On suggère que les leçons visuelles qu'enseigne une telle levée de plans sont de la plus grande valeur pour l'urbaniste.

Page 138: *L'histoire de l'Azulejo*. L'Article de Joaquim Cardoso dans la Revue d'Architecture de Décembre 1946 décrivait la renaissance des tuiles de couleur appelées azulejos et leur emploi dans l'architecture moderne au Brésil. Cette note fait remonter l'origine historique de ces tuiles du XVI^{ème} au XVIII^{ème} siècle.

Oktober 1947

Seite 111: *Louis Sullivan's Ornament in seinen Bauten von Henry R. Hope*. Louis Sullivan, einer der Begründer der Architekten-Schule von Chicago, gilt jetzt allgemein als der wohl bedeutendste Architekt Amerikas im 19. Jdt. In seinen Bauten und in seinen Schriften hat er den internationalen Stil vorausgesagt. Da Ornamentik ein integrierender Bestandteil seiner Architektur ist, gemäss seine Theorie, dass die Form der Funktion folgt, kann sie nicht länger übersehen werden. Jede Wertung von Sullivan's Architektur muss sich daher mit seinem Ornament auseinandersetzen.

Seite 115: *Zwei Häuser in Long Island, U.S.A. von Marcel Breuer*. Beschrieben und illustriert.

Seite 119: *Die Mechanisierung des Bades von Sigfried Giedion*. Die Bedeutung des Bades innerhalb jeder Kultur zeigt die Haltung der Epoche gegenüber der Frage der Erholung. Für die Antike und für den Islam und bis zu einem gewissen Grade für das Mittelalter war die Frage der Erholung ein Teil der sozialen Verantwortung. Ausserdem war das Bad ein Treffpunkt für die Gesamtheit. Für Reformation und Gegenreformation galt Nacktheit als Sünde, infolge dessen verkümmerte der Sinn für Sauberkeit in einem Masse, der für jede höhere Kulturstufe unvorstellbar ist. Durch Medizinstudium und durch die Wiederentdeckung der Natur setzte im 18. Jdt. allmählich ein Wandel ein. Die seit 1900 gebräuchliche Badewanne, knüpft an den primitiven Badetrog an, der in Kreta zwischen 1800 und 1450 v. C. in Anwendung war. Aber selbst in Amerika, das allen Ländern in dieser Beziehung überlegen ist, haben Mietwohnungen erst seit 1895 Badevorrichtungen. Dampf- und Heissluft-Bad und Dusche werden gleichfalls von Dr. Giedion untersucht.

Seite 127: *Das Grand Hotel Gooiland, Hilversum, Holland, von J. Duiker*. Beschrieben und illustriert.

Seite 131: *Ein Square für jedermanns Geschmack*. Die Analyse verschiedener Typen von Londoner Squares: der private geschlossene und der private offene Square, der zu einer Studienanstalt gehörige und der Gemeinde-Square, der exclusive öffentliche und der der Allgemeinheit zugängliche öffentliche Square beweist, dass englische Squares, die eine glorreiche Vergangenheit aber eine bescheidene Gegenwart haben, eine grosse Zukunft haben können, falls sie den heutigen Bedingungen gemäss angelegt werden.

Seite 135: *Brute Fecit von John P. Harthan und M. Wight*. Gedenktafeln aus Schiefer zwischen 1721 und 1850 von Mitgliedern der Familie Brute gemacht, befinden sich in verschiedenen Kirchen an der Grenze von Wales. Die Form ist barock, Farben und Vergoldung auffallend reich. Das Geheimnis der Herstellung dieser Farben aus Pflanzen ist leider verloren.

Seite 136: *Vergleichende Schau*. Alte Ansichten der High Street in Stockton-on-Tees, England, werden mit Photographien, die vom gleichen Standpunkt aufgenommen wurden, zusammengestellt. Solch ein Vergleich kann für Stadtanlagen von grösster Bedeutung sein.

Seite 138: *Die Entwicklung der Azulejos*. In einem Aufsatz von Joaquim Cardoso in der ARCHITECTURAL REVIEW, Dezember,

1946, wurde die neue Verwendung farbiger Ziegel, Azulejos genannt, und ihre Bedeutung in der modernen Architektur von Brasilien geschildert. Diesmal wird die Entwicklung der Ziegel vom 16. bis ins 18. Jdt. dargestellt.

(Архитектурал Ревью)

Октябрь, 1947 г.

Стр. 111. ГЕНРИ Р. ХОУП. АРХИТЕКТУРНЫЙ ОРНАМЕНТ ЛУИ САЛЛИВАН'А

Луи Салливан, один из основателей Чикагской Школы, считается наиболее выдающимся архитектором XIX века, явившимся предтечей Интернационального Стиля как в своих литературных работах, так и в произведениях своего архитектурного творчества. В полном согласии с его теорией, по которой форма постройки должна точно отражать ее назначение, орнамент в его архитектуре является интегральной частью строения. Поэтому его архитектура не может быть правильно оценена без изучения его орнамента.

Стр. 115. ИЛЛЮСТРИРОВАННОЕ ОПИСАНИЕ ДВУХ ДОМОВ НА ЛОНГ-АЙЛАНД, САШ, ПО ПРОЕКТУ МАРСЕЛ'Я БРЮЭРА

Стр. 119. ЗИГФРИД ГИЕДНОН. МЕХАНИЗАЦИЯ БАНИ И ВАННЫ

Роль купания в общей культуре зависит от общего отношения к отдыху и развлечениям. В древнем мире, в магометанских странах и отчасти в средневековой Европе восстановление сил, вообще говоря, считалось предметом общественной важности. Помимо того, бани являлись местом встречи. В эпоху Реформации и Католической Реакции нагота стала считаться грехом, и в результате получилось притупление потребности чистоты, совершенно небывалое в предыдущие эпохи высокой цивилизации. Только в XVIII веке это отношение к чистоте начало изменяться, да и то весьма медленно, под влиянием развития медицины и нового приближения к природе. Тип ванны, превалирующий с 1900 г. по сей день, является механизированной версией ванны,

употреблявшейся в Крите между 1800 и 1450 гг. до Н. Э. Даже в САШ, которые в этом отношении стоят впереди других стран, квартиры для найма не имели ванны до 1895 г. Паровая и сухо-воздушная („турецкая“) бани были заимствованы в Западной Европе из России и Финляндии. В статье рассматриваются также души и другие формы омовения.

Стр. 127. ИЛЛЮСТРИРОВАННОЕ ОПИСАНИЕ ГРАНД-ХОТЕЛЯ (ГОЙЛАНД, ХИЛВЕРСАМ, ГОЛЛАНДИЯ) ПО ПРОЕКТУ ДЖ. ДУЙКЭРА

Стр. 131а. СКВЕР НА ВСЯКИЙ ВКУС

В этой статье рассматриваются различные типы лондонских скверов: закрытые частновладельческие скверы для частного пользования, открытые частновладельческие скверы для общего пользования, скверы, принадлежащие общественным учреждениям, муниципальные скверы, скверы, представляющие общественную собственность, но доступные ограниченному кругу лиц, и, наконец, общедоступные скверы, составляющие общественную собственность. Английские скверы имеют славное прошлое и весьма неприглядное настоящее. Они, однако, могут сыграть большую роль в будущем, если их переустроить, отвечая современным потребностям.

Стр. 135. ДЖОН ХАРТЕН И М. УАЙТ. БРЮТ ФЕСИТ

В нескольких церквях, в „Пограничной Области“ Уэльса были найдены асфидные мемориальные плиты работы членов семейства Брютов, изготовленные между 1721 и 1850 гг. Яркое барокко по стилю рисунка, они замечательны по богатству красок и позолоты. Секрет изготовления этих красок из местных овощей и лишав, к сожалению, потерян.

Стр. 136. НАГЛЯДНАЯ СЪЕМКА

Старые гравюры Хай Сприт („Высокой улицы“) в городе Стоктон-Он-Тиз, Англия, сопоставлены с нынешними фотографиями, снятыми с тех же точек наблюдения. По мнению автора, планировщик городов может извлечь из такого сопоставления весьма ценные для его работы данные.

Стр. 138. ПРОИСХОЖДЕНИЕ „АЗУЛЕЙХО“

В статье Иоким'а Кардозо („Архитектурал Ревью“, декабрь 1946 г.) были описаны вновь входящие в моду цветные плитки, известные под названием „Азулейхо“, и их применение в современной бразильской архитектуре. В заметке этой прослежена история этих плиток с XVI по XVIII столетие.

CORRESPONDENCE

The First Five Years

To the Editors.

THE ARCHITECTURAL REVIEW
Sirs,—May I correct and amplify in some respects an account of THE ARCHITECTURAL REVIEW's beginnings quoted, in the January number, from my friend Sir R. Blomfield's *Memoirs of an Architect*?

A minor point is that Norman Shaw did attend a committee lunch on one occasion, sitting beside me. Belcher was, informally, chairman; the secretary was J. H. Elder Duncan, who arranged and brought the drawings and was my highly efficient sub-editor and maker-up of text and illustrations.

A more serious omission is that of the first editor, Henry or Harry Wilson, a gifted architect who went off into minor crafts and was a Master of the Art Workers' Guild. He designed a finely imaginative cover for the REVIEW which was still used in our early days, and he followed what Blomfield calls the „*Gazette des Beaux Arts* lines“ in the matter he published. His REVIEW design was superseded, at Blomfield's behest, by an Inigo Jones cover, for which Muirhead Bone drew the medallion. I had already secured from that great artist, in spite of some shivering by Belcher, the first fine raptures of London's impact upon him by day and night.

On Wilson's role in the earliest development of the REVIEW Elder Duncan wrote me a letter in 1930. „The REVIEW,“ he said, „started I believe with a sort of triumvirate Editor, of whom C. E. Mallows

and F. Hamilton Jackson, both now dead, were two, but when I came on the scene, Harry Wilson was in the Chair and he was the first real editor.“

It is exact that Blomfield privately endeavoured to secure better terms for me from Percy Hastings before Macartney's unpleasant intrigue took effect, but he forgets that from the first I had pursued Wilson's line so far as the claims of current architecture left me space. I induced Prior to recount in a series of articles what I had once dreamed of undertaking, the history of English Gothic Sculpture. I have a bundle of letters from Herbert Horne dealing with projects from Botticelli to Inigo Jones; Langton Douglas, Arthur Strong, Vernon Lee are among the contributors I recollect (my file, unluckily, had to go in a house-flitting). The *Burlington*, after its lavish start under Dell, ran into difficulties. A member of the firm that printed the REVIEW was approached and sounded me about taking on the editorship. As friends were concerned I declined, and secured instead some further support for them.

„Bluff corsair“ does not seem to me a happy description of Blomfield over against Macartney. Both were inspired by Norman Shaw, and under Lethaby's lead they were partners in the furniture-making firm Kenton and Co. which immediately preceded their association with the REVIEW. Macartney was the author of an extremely dainty escriptoire on French lines which Blomfield took over along with his own excellent cane sofa on the firm's dissolution.

I may have been concerned in the adoption of Wilson's derelict REVIEW by the new Committee, but I cannot at present lay hands on Percy Hastings' letters or search for other correspondence.

Yours, etc.,

D. S. MACCOLL.

[The Editors are most grateful to Mr. MacColl for his letter, which set them on a track not previously explored. From ad-

[continued on page 144

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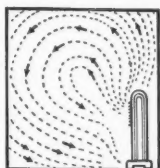
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27: FOR THOSE WHO MAY NOT KNOW

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of metal, plastic or even wood. The elements are usually in standard consumption loadings of 1 or 2 KW. Some models are fitted with coloured lights which shine through the air outlet grille to indicate that the heater is switched on and to give an appearance of "life."

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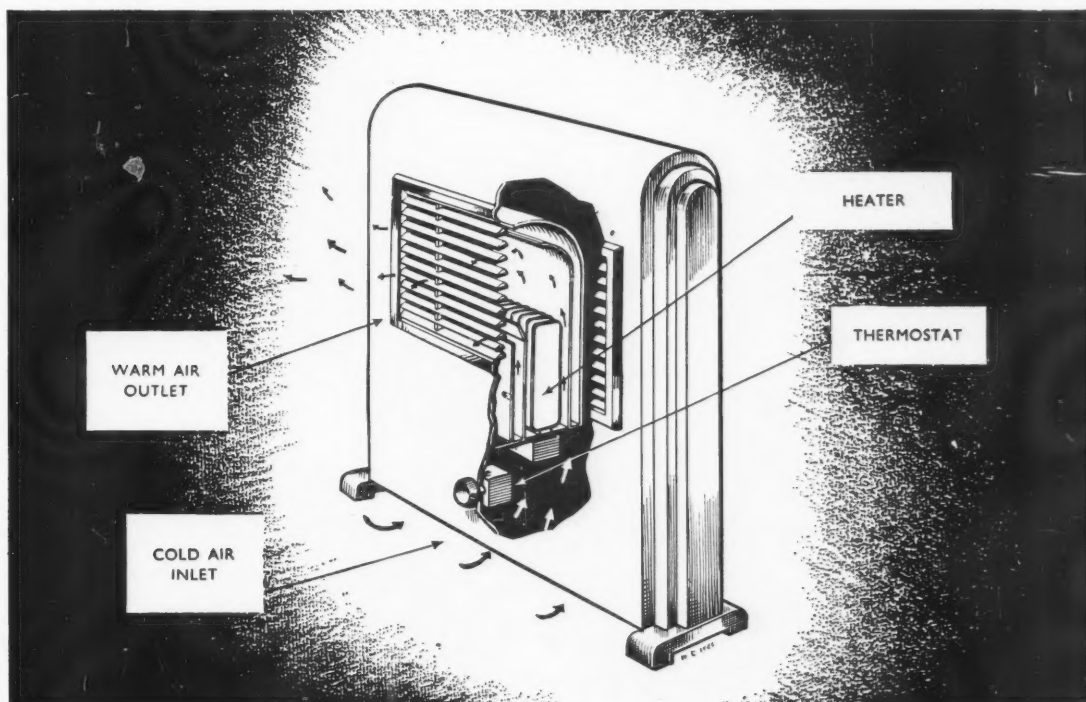
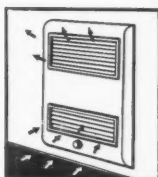
The convector consists of an electric element inside a cabinet or casing with two air openings. The lower opening forms an inlet for the cold air while the upper forms an outlet for heated air. To ensure economy in current consumption, a thermostat, fitted in the air inlet, controls the flow of current according to the temperature of the entering air.

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Convectors are either portable or inset in a wall recess. They are available in a wide variety of finishes, with cabinets

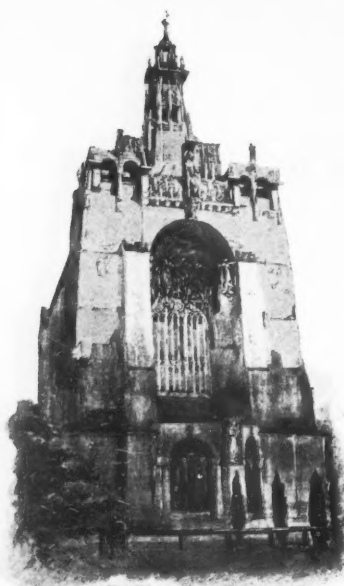
USES

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Issued by the British Electrical Development Association, 2 Savoy Hill, London, W.C.1.*

MARGINALIA



continued from page 142]

ditional information kindly supplied in the meantime by Sir Charles Nicholson and Mr. William Regan this is how the earliest history of THE ARCHITECTURAL REVIEW now appears.

It was started by a company called Professional and Trade Papers, the leading spirit of which was Mr. Edmund W. Abram. He spent large sums to establish the magazine as something of a higher general cultural standard and more scholarly interest than any of the existing architectural papers. Current buildings hardly appeared in it at all. Those were the years of the long articles on Pearson, T. G. Jackson, Burne Jones, Nesfield (vol. 1), Poynter (vol. 2), Pugin, Sedding (vol. 3), and so on, and of papers dealing with Byzantine architecture (vol. 1), Beverley Minster (vol. 3) and such subjects. But Mr. Abram's scheme was too ambitious for its date, and the company went into bankruptcy in 1900 or 1901.

Left, St. Andrew's, Boscombe, and below left, library at Welbeck Abbey, both by Harry Wilson, "the first real editor" of the REVIEW; below right, proposed new opera house, Bedford, by C. E. Mallows (from *Academy Architecture*, 1895, 1893 and 1896 respectively). See letter from D. S. MacColl and note on this page.



The business was sold to a group of three interests, and the name of the company changed to Technical Journals. Two of the three were paid out by the present owners after a time. Sir Reginald Blomfield's story belongs entirely to the first years after the change of ownership.

What is so misleading in his Memoirs is that he speaks of the events of 1901 and the role then played by C. E. Mallows as if concerned with the actual foundation of THE ARCHITECTURAL REVIEW, whereas the paper had then already existed for five years. Mallows moreover had been connected with the editing already in those earliest days, according to the letter written to Mr. MacColl in 1930 by Elder Duncan, the first assistant editor. Elder Duncan's statement that Harry Wilson was "the first real editor" is confirmed by Sir Charles Nicholson who says "H. Wilson was editor, I am pretty sure of this, and if he was not actually editor, he was at any rate the moving spirit."

Harry Wilson was one of Sedding's best pupils. It was at Sedding's office that Sir Charles Nicholson, who went on to Wilson after Sedding's death in 1891, met him. The style of both architects was modelled on Sedding's. Wilson actually designed the reredos and railings for Sedding's splendid church of the Holy Trinity in Sloane Street, London. Among his works the most important is beyond doubt the Library at Welbeck Abbey for the Duke of Portland. In Ladbroke Grove, London, there is a small Public Library by him, and he did churches at Ealing, Highgate, Boscombe and Brighton. He was one of the leading spirits in the Art Workers' Guild's early years and President of the Arts and Crafts Exhibition Society after Crane had died in 1915. In 1916 he arranged a memorable show of the Society for which wall

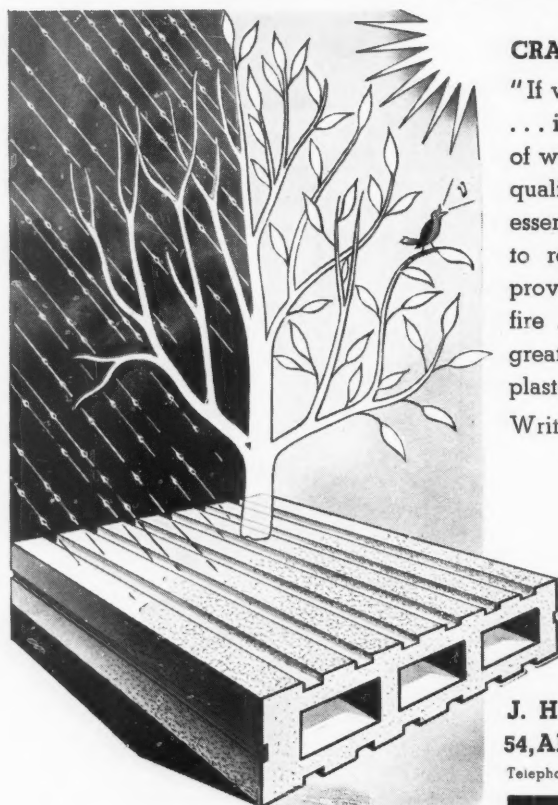
paintings were done by Professor Schwabe, Augustus John (the Galway now at the Tate Gallery) and others. Towards the end of his life Wilson lived in Paris. He died in 1934. His style was florid and very inventive, of that purely English trend of Art Nouveau which today is so little appreciated. The two illustrations on this page will give an adequate idea of his freedom of draughtsmanship and wealth of imagination.

A proposed opera house for Bedford by C. E. Mallows was illustrated in *Academy Architecture* for 1896. It is of a wildly Wilsonian or Townsendarian kind. *Academy Architecture* showed many of his works right down to 1910 and beyond—designs of a pretty and free, gradually mellowed and less dramatic treatment. At the time when he took a hand in the foundation of THE ARCHITECTURAL REVIEW he belonged to that enterprising group of young architects and draughtsmen which did so much to free England from the fetters of Victorian period imitation and which is now quite forgotten. For who, except for a few connoisseurs, remembers the refreshing naughtiness of work in the nineties by Maclaren, Hall, Cooper and Davis, Brewitt and Baily, Niven and Wigglesworth? And who remembers the brilliant, vigorous draughtsmanship of Mallows, Flockhart, Prentice? Fred Griggs is the only one of that generation whose drawings are still familiar and appreciated. It is from this group then, the Sedding school in the widest sense, that THE ARCHITECTURAL REVIEW started.]

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