



THE ARCHITECTURAL RECORD

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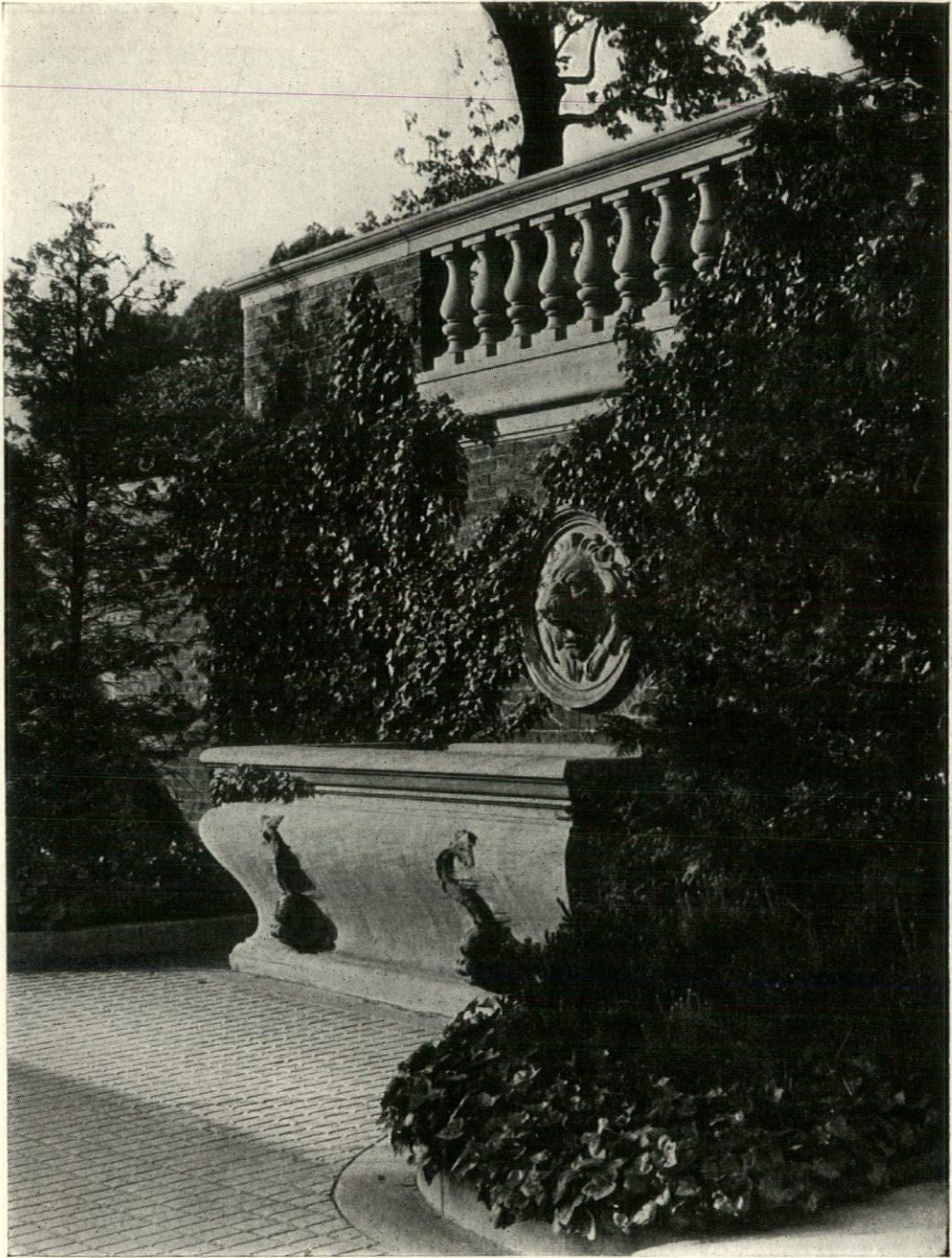
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FOUNTAIN OPPOSITE ENTRANCE GATE—RESIDENCE
OF THE HONORABLE HENRY WHITE, WASHINGTON,
D. C. JOHN RUSSELL POPE, ARCHITECT.

CHAS. B. LAMBERT
ARCHITECT-CONTRACTOR
WALLA WALLA, WASHINGTON

THE ARCHITECTURAL RECORD

VOLUME XLII



NUMBER V

NOVEMBER, 1917

The RESIDENCE *of the*
Honorable HENRY WHITE
WASHINGTON, D. C.
JOHN RUSSELL POPE ARCHITECT

By
John Taylor Boyd

A HOUSE that is a fit setting for the life of the diplomatic circle of our capital—such is the residence at Washington of the Hon. Henry White, former ambassador to France. To those who read in the architecture of a building the uses which it serves; who sense in its various unimportant details symbols of the life and of the personality of its occupants, this work of Mr. John Russell Pope is worth some attention. Since our interest in the matter is primarily architectural, we need not pry into the concerns of individuals, but nevertheless some reminder of the peculiar life of diplomacy is necessary to appreciate better the success of the architectural design in expressing so fitly the life of the family of Mr. White.

Only recently have Americans taken much interest in the ways of diplomats.

Theirs is a world of cosmopolitanism, of urbanity, of ease, of elegance, yet restricted at the same time by firm conventions of precedent, of traditionalism, of sophistication. Of its less fortunate aspects we are only too sadly aware; they need not be dwelt upon here. At its best or at its worst diplomacy is usually worldly. The spell of the brilliance of the French kings is still upon it, and the manners, somewhat anglicized, of the great Louis, "the most Christian of kings," still gives form to its activities. This is the keynote, the theme of Mr. White's house, and, it may be pertinent for architects to recall, this is also the theme for the decorative setting appropriate for many of our public buildings of executive residence in state and nation. It should be understood, of course, that we must take such generalization as

an indication and not as a formula, for as a formula it has the exaggeration that is bound to result when one sums up in a few words anything so complex as the field of the relationship of nations.

Everything about Mr. White's residence expresses its fitness for its purpose of a diplomat's residence. To begin with, its site was carefully chosen.

On a high ridge, in a new part of Washington, the house mounts up, its terraces skillfully adjusted to the difficult, irregular terrain, and so commands from its garden front and portico a beautiful view of the city below. It is an apt coincidence that the house and site correspond in dimensions to that portion of the grounds at Versailles set apart by Louis XV for the Petit Trianon. The first floor is twenty feet above the level of the adjacent streets, and much study was necessary to overcome, by means of retaining walls and ramps, the difficulty of approaching the house from the street. The photographs of the exterior show the high garden terrace above the street, resembling some of the palaces in the city of Rome, and reveals at the rear a bit of the ramp up to the porte-cochère. On page 402 is the fountain at the foot of this ramp of the driveway. Incidentally it should be said that on account of the different levels of the site there are no points of view to afford a good photograph, which is the reason why both house and terrace have in the pictures a blocky appearance that they lack actually.

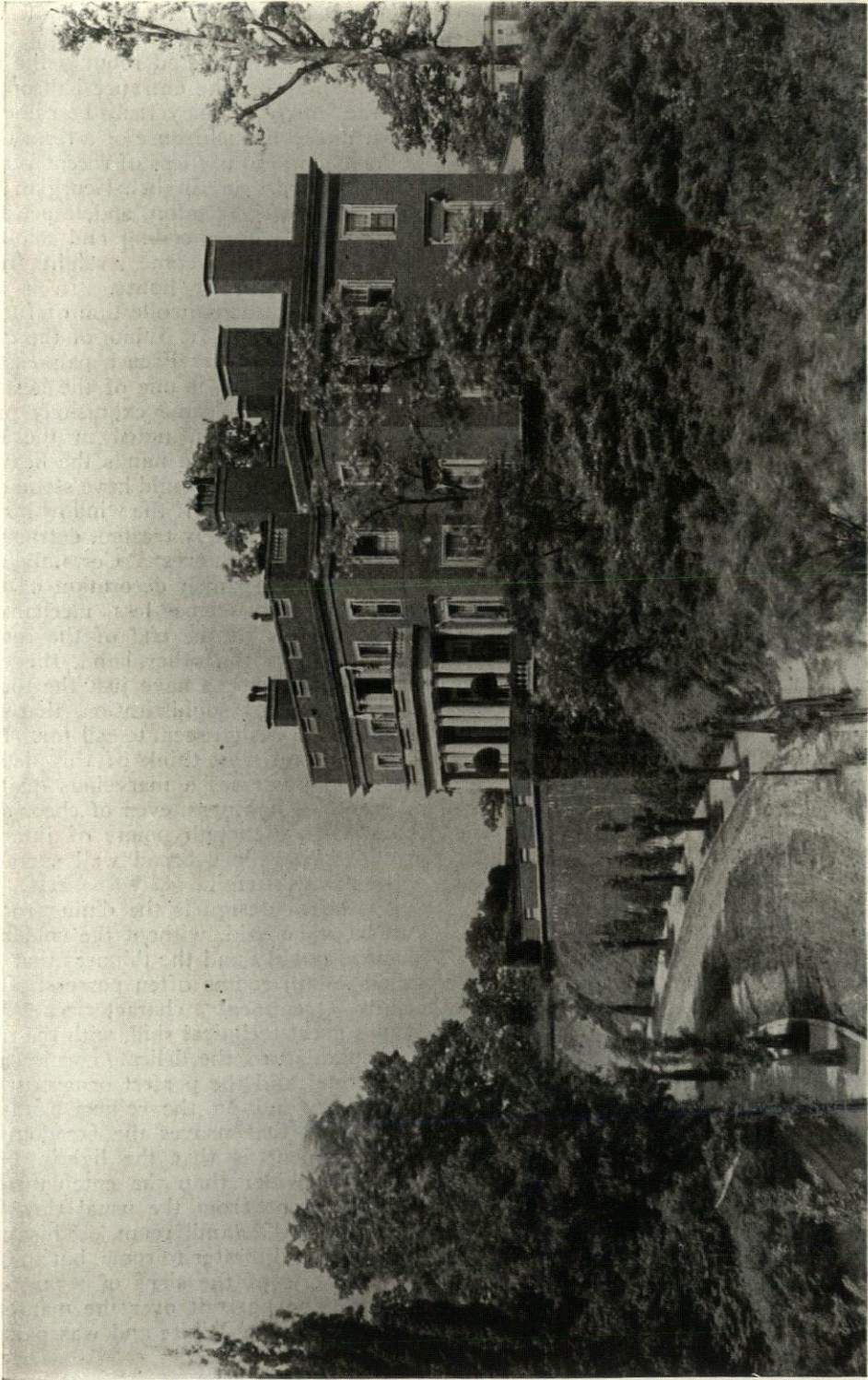
The exterior expresses a Georgian type of house, rather Italian in its extreme simplicity, in its monumental effect and in the finely perfect proportion and details of its architectural elements. The main reason for the monumental dignity is the high ceilings; the first floor is 14 feet 10 inches and the second is 11 feet 4 inches in the clear, which allows the columns of the porte-cochère and of the garden portico to be impressively tall. Mr. Pope paid great attention to the fenestration; wanted the first story to predominate over the second and yet keep the second one high. On this exterior the capitals and cornice of the order and the balustrade above

are exquisitely detailed. Not a line could be changed an inch without marring the effect of the whole—a supreme test of accurate proportions and perfected details. In their profiles they follow rather closely the order of the Massimi Palace at Rome. This striking effect of the exterior is emphasized and set out by the trees and shrubbery which are in turn relieved and emphasized by occasional bits of architecture—an urn or sculptured medallion. The design is carefully restrained, for there is no elaboration of garden furniture and, notwithstanding the monumental effect of the place, the garden has been kept intimate and charming. Fortunately, the design has determined the whole character of the neighborhood that is developing around it.

The plan of the house is apparent from the drawing on page 408. It is simple enough, with large monumental rooms carefully balanced on axes in the same impressive dignity of the exterior. They are evidently meant for entertaining, in the way in which they open up into each other, with absence of small breakfast rooms, isolated alcoves or lounging rooms. Instead of a small suite of dressing rooms, this necessity is provided under the landing of the large stairway, with the lavatory at hand, but placed in the service wing. By this arrangement the entrance hall and reception rooms are kept open and spacious and thus they attain the monumental effect common to the whole design. Indeed, in its extreme simpleness, with all appurtenances eliminated, the plan of the White residence resembles a fine school thesis rather than the usual office plan. Thus it comes nearer to being an ideal plan than is usually achieved in practice.

Upstairs are large bedrooms for the family; one guest room, and the usual appurtenances of dressing rooms, etc., to be expected in large houses. Two unusual features are the bathroom, enlarged to become a dressing room, with closets, and the loggia in the garden front overlooking Washington.

But the most distinctive aspect of the house is the interiors. It is in these that one discerns most clearly the atmosphere of the diplomatic circle. Stately, formal,



GARDEN FRONT—RESIDENCE OF THE HON.
ORABLE HENRY WHITE, WASHINGTON,
D. C. JOHN RUSSELL POPE, ARCHITECT.

sophisticated, sumptuous, yet with an exquisite classic spaciousness and absence of too much, they are some of the ablest designs that Mr. Pope has imagined. Some of the rooms are Georgian and some are French, especially in the lofty double doorways and in respect to much of the furniture.

The entrance hall is monumentally treated with large Ionic columns in deep relief carrying a strong entablature. In this motive the great technical skill of the designer is evident. He has skillfully omitted the frieze of this entablature and thus concentrated the banding of mouldings at the ceiling, which is exactly where they belong in an interior. The full entablature of complex parallel lines of cornice frieze and architrave—unless in the concentrated delicate forms of early American designs—is frequently too heavy, too mechanical for the inclosing walls of a room. In itself the motive omitting the frieze is a beautiful one, derived as it is from the Erechtheum at Athens. M. Gaudet advocates it warmly, points out that it is a functional form in its constructive logic, and is simpler than the full entablature. One wonders why architects do not use it oftener, for it is truly classic in its freedom from anything mechanical. In this entrance hall the effect of the fine cornice is slightly marred by the sinkage panels in the ceiling inside the oval moulding with sheaf decoration. They might better have been omitted. The more one sees of contemporary American architecture the more one is forced to conclude that it would not perish if the sinkage panel were forgotten entirely. For one case where it is effective there are ten others where it misses fire.

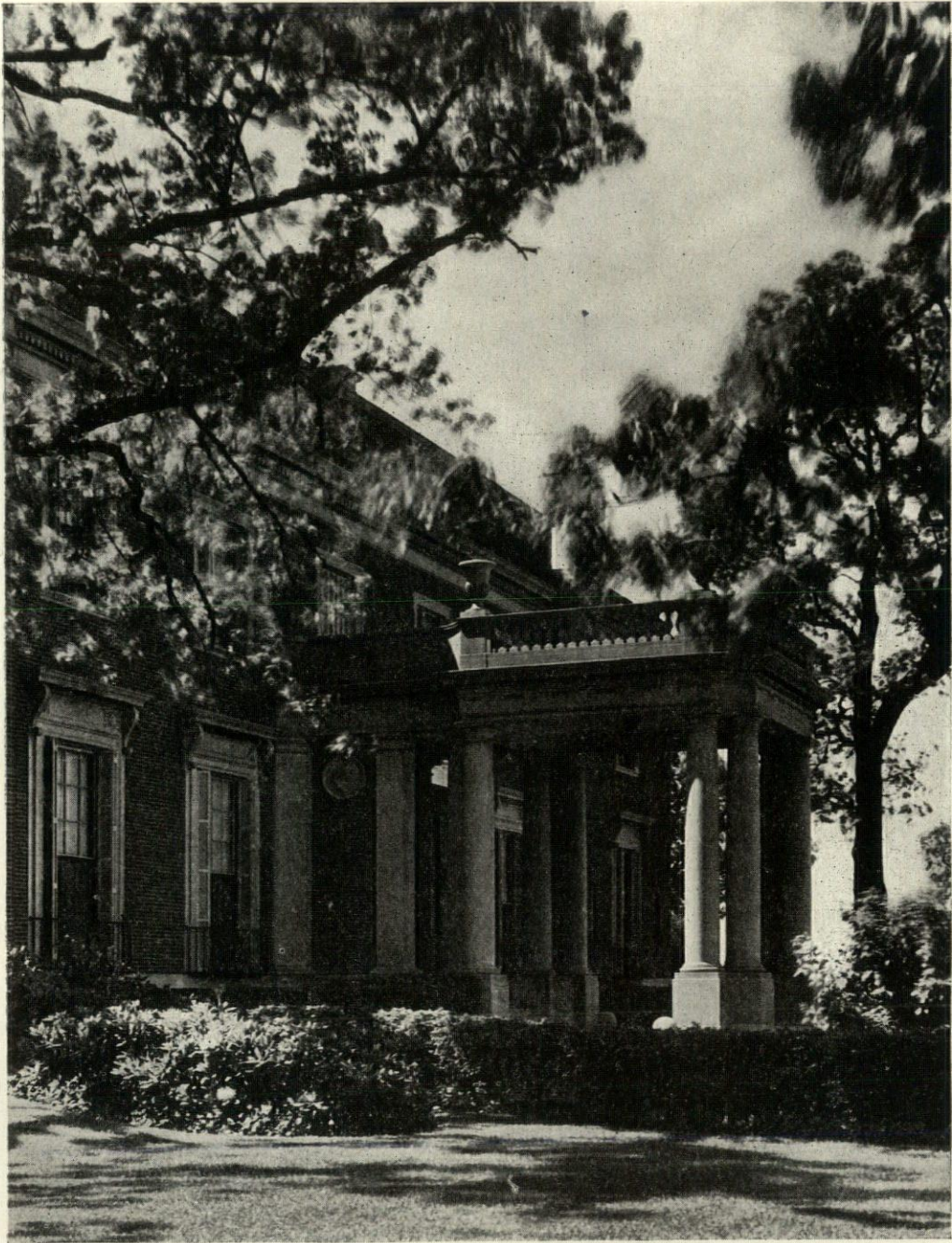
The furnishings of the hall are remarkable, especially the great tapestry enframed by the double columns and flanked by the busts of Washington and Franklin on the axis of the front door. In fact, the furniture and wall decorations—the mirror in the end wall, for instance—seem as perfectly proportioned to the whole room as the architecture is, and the frequent bare spaces of walls and floors provide fine contrast and enframement for them. This same classic purity

of decoration is characteristic of the main stairs.

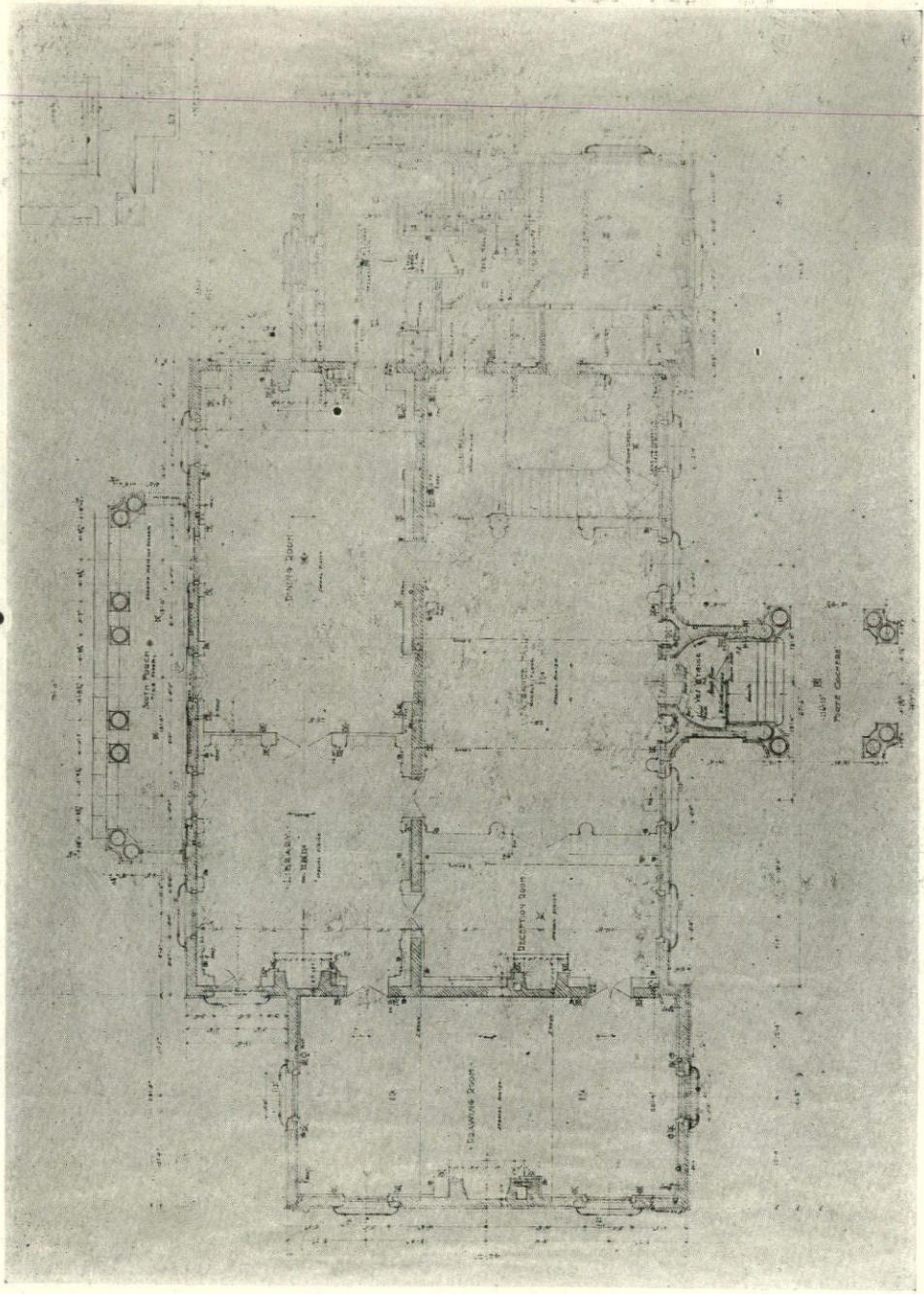
A more richly treated room is the reception room off the entrance hall opposite the stairs. It may truly be called a *salon*, in the French sense of a term that we have come to use less of recent years. It is, however, an English Georgian interpretation of the *salon*, and, especially in its walls, doors, ceiling and mantelpieces, might have come straight from some British manor house. In it are some pieces of a fine collection of furniture possessed by Mr. White of the type found in the smaller French palaces.

The living room is one of the best in the house, of the same exquisitely proportioned decoration noted in the entrance hall. To some minds the beautiful cornice banding would have stood out in more telling effect if the window heads had been more simply treated, detracting less from their interest. Certainly the vivid, almost Spanish decoration of the chimney-breast seems less mechanical than the view of the end of the room. To others, on the other hand, the end view might seem to have just the touch of formality, of sophistication, that the needs of the design seem to call for. But whatever one may think of this detail, the room possesses a marvelous quality of grace, of lightness, even of cheer and sparkle; just enough points of interest provided to relieve broad wall surfaces without any surfeit.

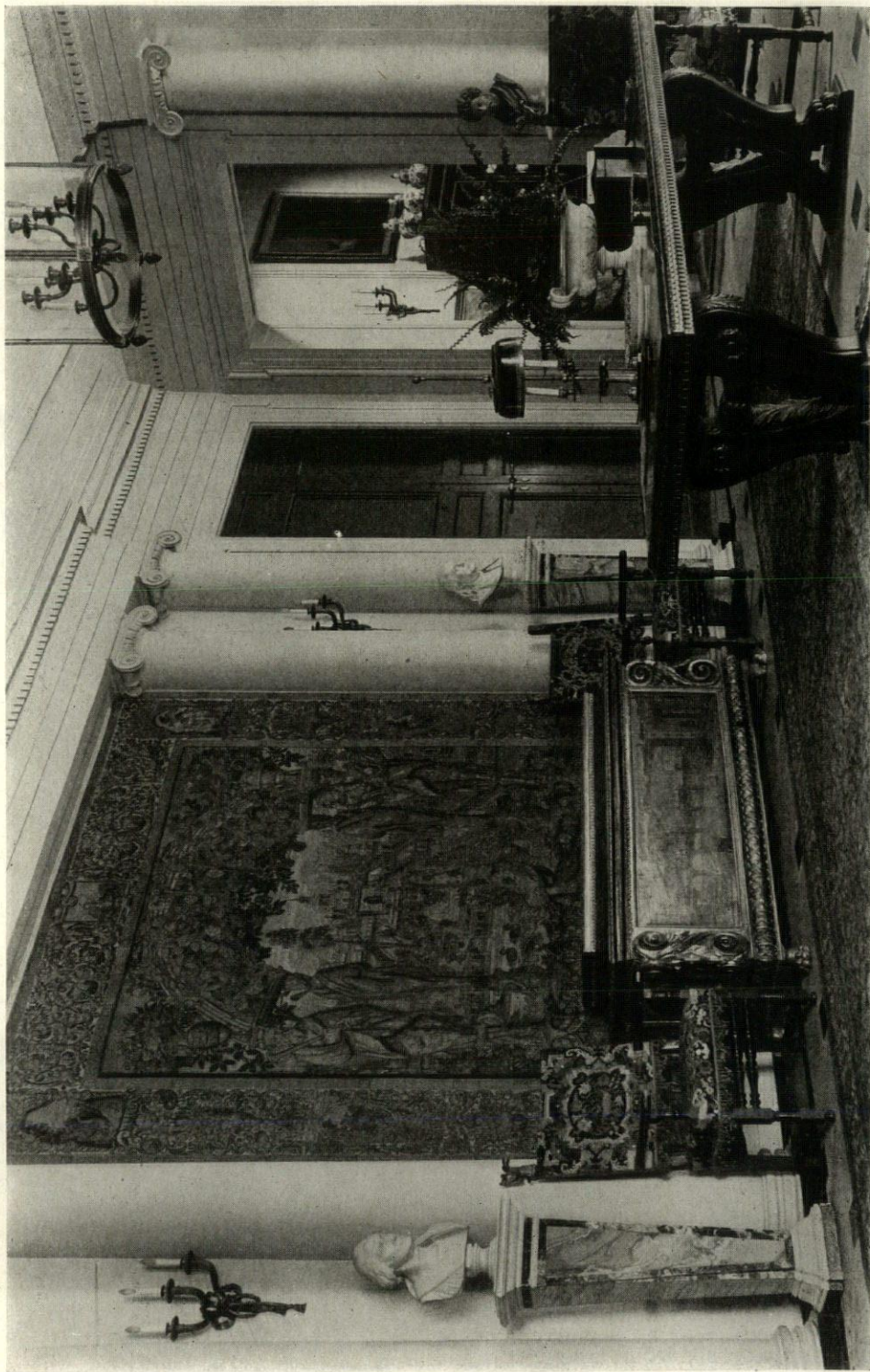
An Adam design is the dining room, but, let it be said, without the cold mechanical quality and the thinness that so-called Adam rooms often possess. The ceiling treatment characterizes Mr. Pope's great technical skill, with the narrow entablature, the delicate cornice and bed mould and the perfect ornament on the frieze and on the ceiling banding. One detail that proves the freedom of the treatment is that the lighting fixtures are wider than the entablature—very different from the usual tiny fixtures in an "Adam" room. This may seem a trivial matter to some, but to others it is one of the signs of a masterly hand. The portrait over the mantel is of the late Mrs. White and was painted by John S. Sargent.



PORTE-COCHÈRE—RESIDENCE OF THE HONORABLE HENRY WHITE, WASHINGTON, D. C. JOHN RUSSELL POPE, ARCHITECT.



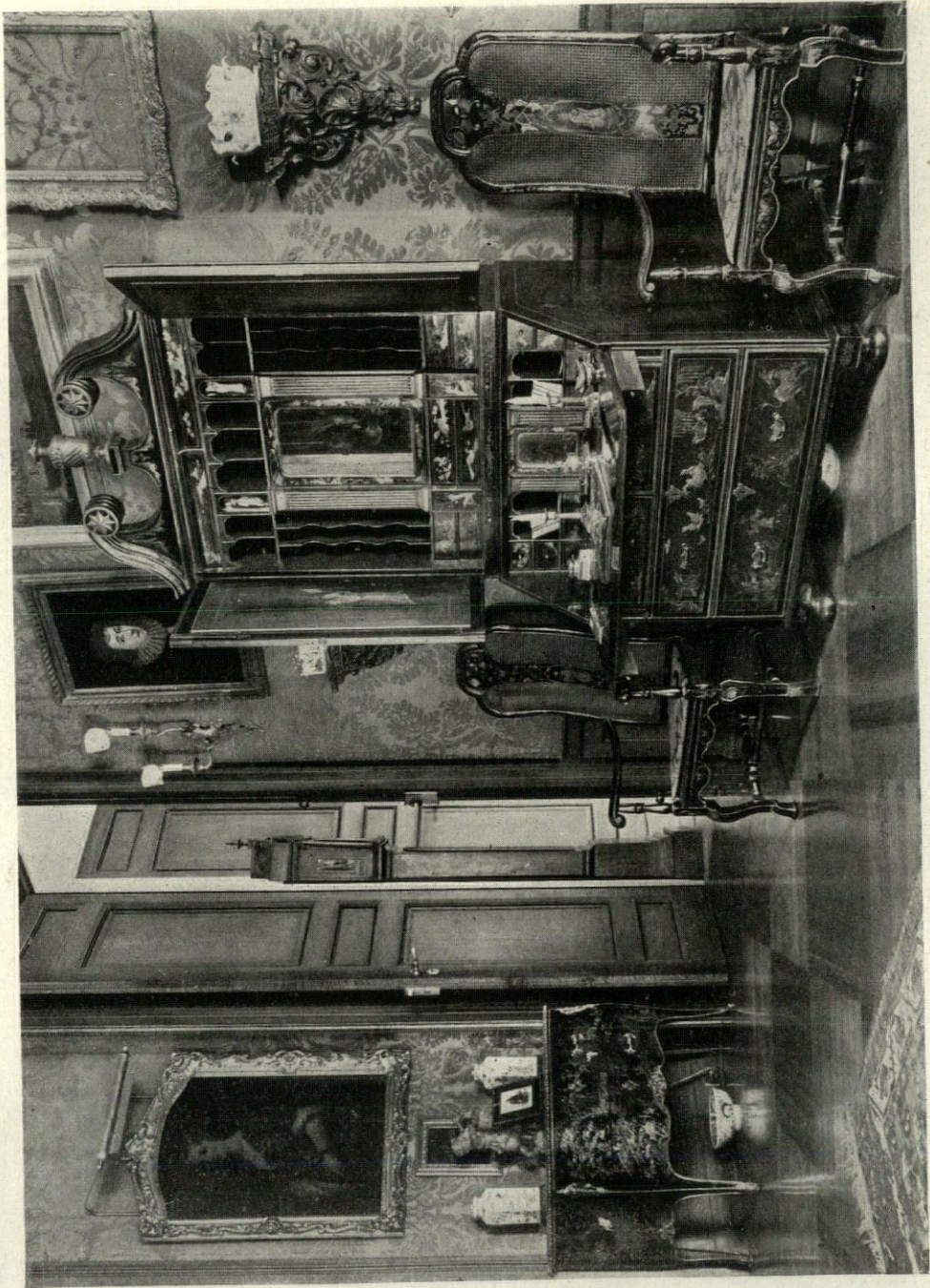
PLAN OF FIRST FLOOR—RESIDENCE OF THE
HONORABLE HENRY WHITE WASHINGTON



ENTRANCE HALL—RESIDENCE OF THE HONORABLE HENRY WHITE, WASHINGTON, D. C. JOHN RUSSELL POPE, ARCHITECT.



MAIN STAIRWAY—RESIDENCE OF THE HONORABLE HENRY WHITE, WASHINGTON, D. C. JOHN RUSSELL POPE, ARCHITECT.



RECEPTION ROOM—RESIDENCE OF THE
HONORABLE HENRY WHITE, WASHINGTON,
D. C. JOHN RUSSELL POPE, ARCHITECT.



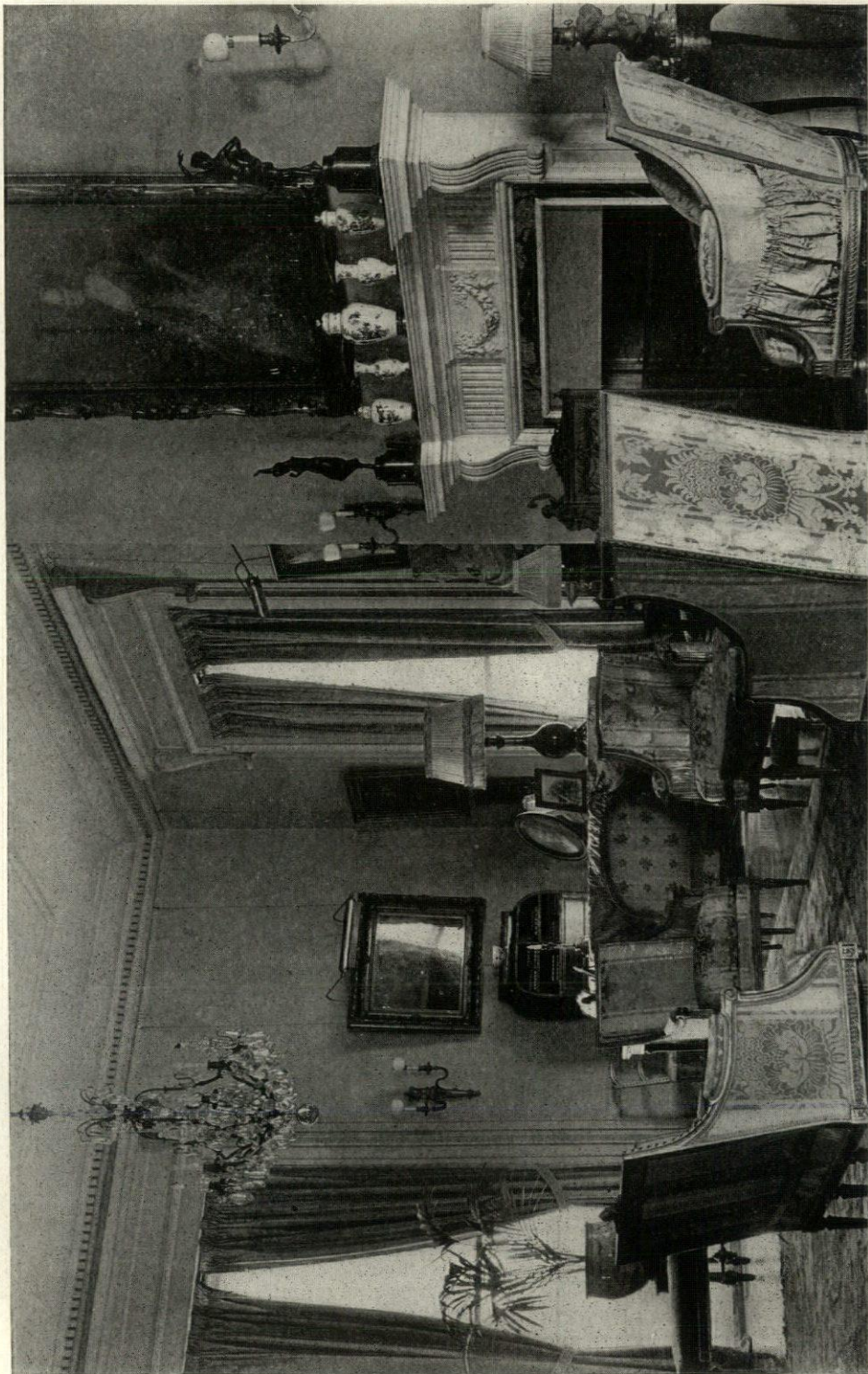
DETAIL OF RECEPTION ROOM—RESIDENCE OF
THE HONORABLE HENRY WHITE, WASHING-
TON, D. C. JOHN RUSSELL POPE, ARCHITECT.



LIVING ROOM—RESIDENCE OF THE HON-
ORABLE HENRY WHITE, WASHINGTON,
D. C. JOHN RUSSELL POPE, ARCHITECT.



LIVING ROOM FIREPLACE—RESIDENCE OF
THE HONORABLE HENRY WHITE, WASHINGTON,
D. C. JOHN RUSSELL POPE, ARCHITECT.



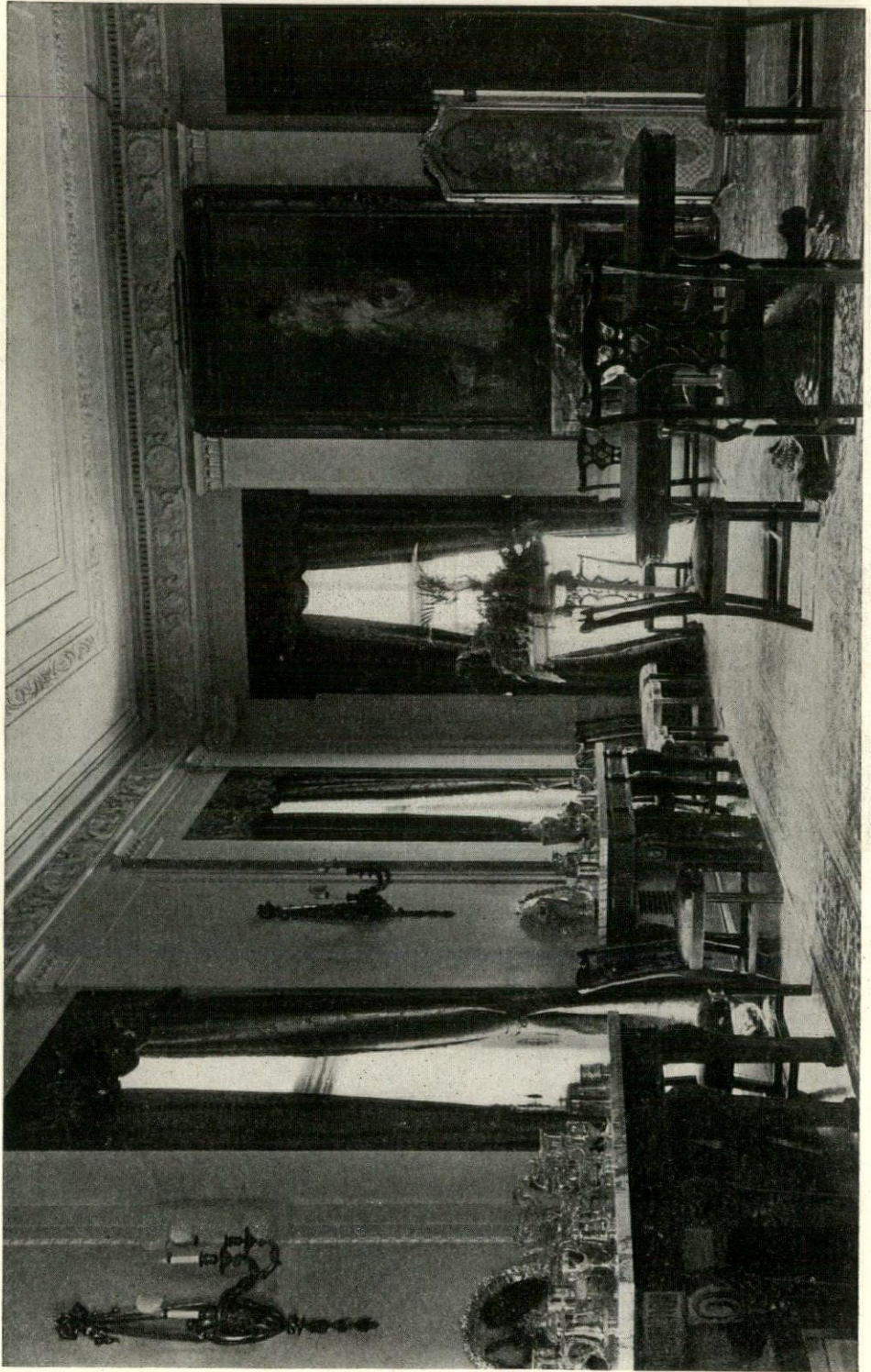
LIVING ROOM—RESIDENCE OF THE HON.
ORABLE HENRY WHITE, WASHINGTON,
D. C. JOHN RUSSELL POPE, ARCHITECT.



LIBRARY FIREPLACE—RESIDENCE OF THE
HONORABLE HENRY WHITE, WASHINGTON,
D. C. JOHN RUSSELL POPE. ARCHITECT.



LIBRARY—RESIDENCE OF THE HONORABLE HENRY WHITE, WASHINGTON, D. C. JOHN RUSSELL POPE, ARCHITECT.



Not the least achievement in the design of these remarkably well-detailed interiors is Mr. White's library, which holds his important collection of works on international law and politics. Here the atmosphere is not so formal, and the books themselves form the chief decoration, than which there is no better to be found. The simple detailing of the woodwork, only a few delicate mouldings, the comfortable leather furniture—all is subordinate to the serried rows of books in fine bindings.

Now what is the secret of such extraordinarily interesting and perfected design?



As nearly as one can judge it, the answer is: a sure grace both of architectural decoration and of "interior" decoration—that rather confusing term meaning largely the decoration of furniture, hangings and bric-a-brac. It is evident in Mr. White's residence that an architect's sharpened senses have attained the harmony between these two features of the design and that his ability to realize spaciousness and to emphasize it by placing sparkling bits of ornament in exactly the right spots, is the basis for the result. Unlike too much of the interior decorator's work, it is not overdone, it is not stagy, if it does not seem ready made. When our ablest architects lend their hands to decorating and fur-

nishing their houses they are pre-eminent. Stanford White and Charles F. McKim were masters in this work, and among their contemporaries none can surpass Mr. Platt, Mr. Wilson Eyre or Mr. Henry Forbes Bigelow, men who have maintained an unexampled standard over a long space of years. Mr. Pope is one of those who have continued the high level of the older men, as such decoration as this house of Mr. White proves. He typifies the formal school of contemporary American architecture whose forms are taken from a European past and then somewhat modified to suit our modern conditions and our taste. It will be long before we develop out of our civilization anything so perfect.

In Mr. White's house Mr. Pope has exactly and imaginatively grasped the characteristic needs of the ex-ambassador who lives in the political and international world at Washington, in the cosmopolitan atmosphere of French origin peculiar to diplomats. Is it surprising that *L'Illustration*, the French weekly, describing to French people in a recent issue the tour of the diplomatic mission sent by the French republic to the American people, termed Mr. White's residence, where General Joffre and M. Viviani were housed during their stay at the capital, "a little nook of France"—"un petit coin de France"?



CENTRAL FRONT PAVILION—CENTRAL
HIGH SCHOOL, WASHINGTON, D. C.
WILLIAM B. ITTNER, ARCHITECT.

 *The* EDWARD LEE M^cCLAIN 
HIGH SCHOOL, GREENFIELD, OHIO
AND THE CENTRAL HIGH SCHOOL,
WASHINGTON, D.C.—*William B. Ittner, Architect*

By MICHAEL A. MIKKELSEN

THE high school building is a particularly interesting study. It mirrors the evolution from simpler into more complex forms of that system of popular education which is the great plastic force in the democratic culture of America. Education is of necessity growing more varied in content and more intimate in its relation to the life of the people. The public school has found itself obliged to take over educational functions formerly exercised by the home and by industrial society—functions necessary to a balanced development of the capacities of the child, but fallen into disuse in consequence of fundamental changes in the organization of industry.

The traditional public school education is a discipline of books. It served its purpose so long as the hand industries of the small shop and of the home supplemented this training with the moral and practical discipline derived from sharing in varied home occupations or in serving an apprenticeship to a manual trade. With the displacement of the older industrial order by the factory system, the child lost contact with the materials and processes of industry, a contact which was of the greatest possible educational value when trades were not minutely subdivided and when the worker was perforce both artist and artisan.

The deterioration of the industrial arts in America during the last century, it will be recalled, was contemporaneous with the disintegration of the earlier industrial organization and the failure of education promptly to apprehend its new responsibilities. The rise of the factory system became an outstanding economic phenomenon in America during the second quarter of the nineteenth century; and the Civil War hastened the absorption by the factory of surviving household and small shop industries, besides

giving a tremendous impetus to the concentration of factory production in a relatively few industrial centres. Architecture being an industrial as well as a fine art, its history is particularly suggestive. The period of fifty years from 1835 to 1885 has been called the Dark Age in American architecture. But if architecture had its Dark Age, so also had art and industry in general, together with politics and business; ethics as well as craftsmanship suffered from the breakdown of the traditional discipline evolved by the older industrial and social order.

The recovery of architecture was due to the introduction of professional schools of architecture, which multiplied simultaneously with other specialized vocational schools; and presently non-specialized prevocational training was incorporated into the public school system primarily because of its value as a physical and mental discipline and as a help in character building. Theoretically, a non-specialized prevocational course of instruction appeared feasible enough; but as a matter of fact such instruction cannot be devised except for limited groups of vocations. However, if some groups are to have the benefits of prevocational training in the public schools, why not others? Today the tendency is strongly toward specialized prevocational courses and toward providing such courses for greater numbers of vocations.

This tendency is reflected in the recommendations contained in the "Vocational Education Survey of Minneapolis, Minn.," a report of an investigation made by the National Society for the Promotion of Industrial Education in 1915. The report is a document of 592 octavo pages and is published as a bulletin of the United States Bureau of Labor Statistics, Vocational Education Series No. 1 (Washington: Government Printing

Office, revised edition, 1917). The tenor of the recommendations is expressed in this summary:

"A clear pathway for merit of every kind in every citizen of the community might well be the fundamental ideal of organized society. The way should be open for the fullest expression of all the wit, energy, genius, dexterity, skill, taste, technique, and art of every man, woman, and child of every city and town and country place. . . . Not until a system of vocational education has given the mechanic and the artisan, the designer and the decorator, a chance, through training, to develop their peculiar interests and abilities can it be said that the city [of Minneapolis] has opened for them a clear pathway for merit."

The modern educational ideal, of which the paragraph just quoted is perhaps an extreme statement, involves a radical change in the relation of the public school to the community. It ceases to be an isolated institution intended for the child only. Its work is, on the one hand, correlated with that of other educational and child welfare agencies in the community; and on the other, the old principle that every child is "entitled to an individual seat and desk" is abandoned. The number of recitation rooms is kept down, each being used in succession by different classes during the day, in order to find space for workshops, auditoriums, gymnasiums, armories, athletic fields and other modern essentials. Through a schedule which utilizes simultaneously all the facilities for study, recitation, work and play, the number of pupils accommodated is greatly increased; and the per capita cost of education remains within bounds, despite increase in the total cost of the school plant. Furthermore, the school is used for night classes, and its auditorium and other facilities are opened out of school hours for a variety of purposes of a social or civic nature. The tendency toward intensive use of the school plant, both for school purposes and as a community centre, is notably exemplified by the system which William Wirt, Superintendent of Schools at Gary, Indiana, has worked out, an excellent account of which is given by

Randolph S. Bourne in "The Gary Schools" (Houghton, Mifflin Co., 1916).

Owing to administrative decentralization, there is no imposed uniformity in American public school education. State boards of education and local school boards within the State have large powers of initiative, which are often exercised with conspicuous ability; and a really astonishing volume of research work bearing on education is being done by public and private agencies, including notably the Department of Education at Washington.

All this freedom of initiative, coupled with widespread expert study, makes for rapid progress in education, a progress which is largely conditioned by the ability of architecture to devise school plants that will admit of extensive additions to the curriculum without a prohibitive increase in the per capita cost of education; and the high school is a particularly difficult problem, because it is upon this school that the largest demands in the matter of prevocational and physical training are being made.

The new high schools illustrated herewith represent architectural solutions of the highest authenticity for two very different sets of conditions. The school at Greenfield, Ohio, is in a small agricultural town and will house 500 pupils. It is the gift of a wealthy public spirited citizen, Edward Lee McClain, to the community; and no effort or expense was spared to adapt it to local needs, Dr. F. B. Dresslar, of the Department of Education at Washington, being called in as an expert educational consultant. The other school is at the seat of the Federal Government and was planned for 2,500 pupils under an appropriation from Congress. Both buildings were planned by William B. Ittner, who is known as one of the very foremost school architects of the country, and are notable examples of compact, economical planning, coupled with distinction of design.

The Central High School, at Washington, D. C., in addition to the traditional classrooms, contains numerous laboratories, shops and other special features of a manual training high school. Its

cost, exclusive of the site, was \$1,200,000. The site, at the crest of a hill between Florida and Clifton avenues and Eleventh and Thirteenth streets, has a ten per cent. grade from front to rear, which furnished an opportunity for banking the seats of the stadium, shown in one of our illustrations, against the terrace overlooking the athletic field at the rear of the building.

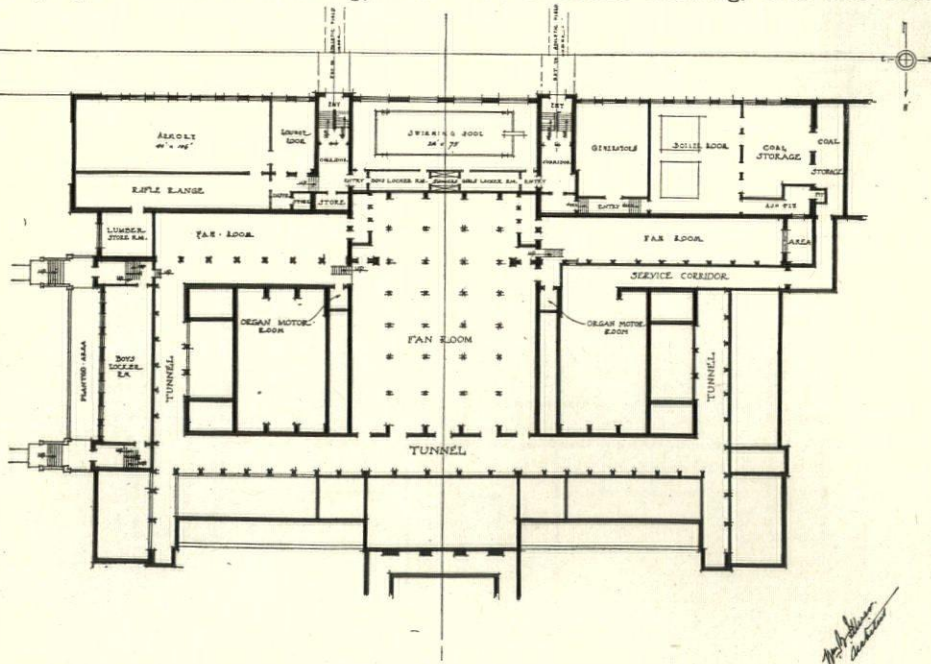
The shops are in one-story wings to the rear of the main building, which contains an auditorium, two gymnasiums, one for boys and one for girls, an armory and rifle range and a complete mechanical plant.

The auditorium seats 2,000 persons; and the stage is arranged as an overflow gymnasium for girls, being of adequate size to accommodate school games, as well as large choruses, and other school functions. The auditorium, upon the first floor, is opposite the main entrance, and is available for the largest community uses.

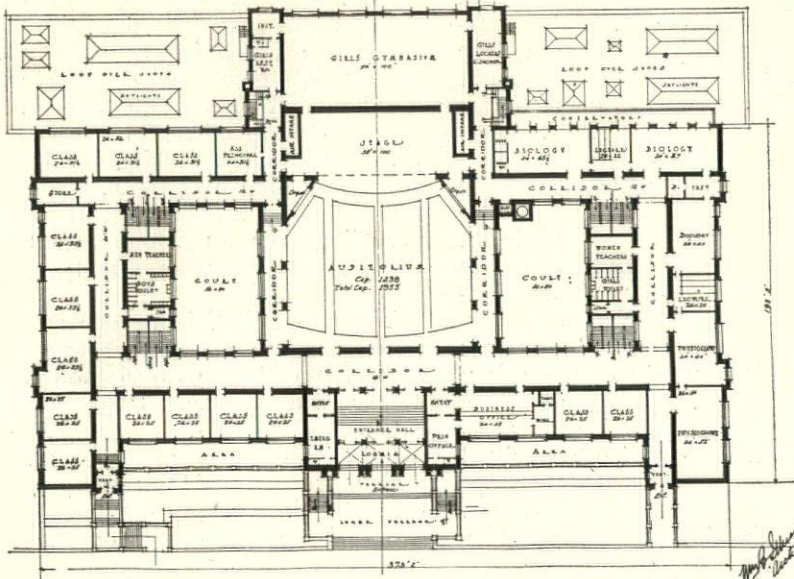
Each of the gymnasiums is 50 by 100 feet, and has a spectators' gallery and swimming pool. Side entrances and stairways give access from the gymna-

siums to an indoor running track and to the athletic field. A lunchroom, accommodating 800 pupils during one lunch period, opens out into the interior courts seen in the plan. Two of the largest shops are fitted for bench work, one containing twenty-four woodworking benches, and the other twenty-five electrically driven lathes. There is a room for special woodworking machinery, a glueing and finishing room, a large forge room fitted with down-draft forges, a moulding shop, a machine shop, two mechanical drawing rooms and a printing shop.

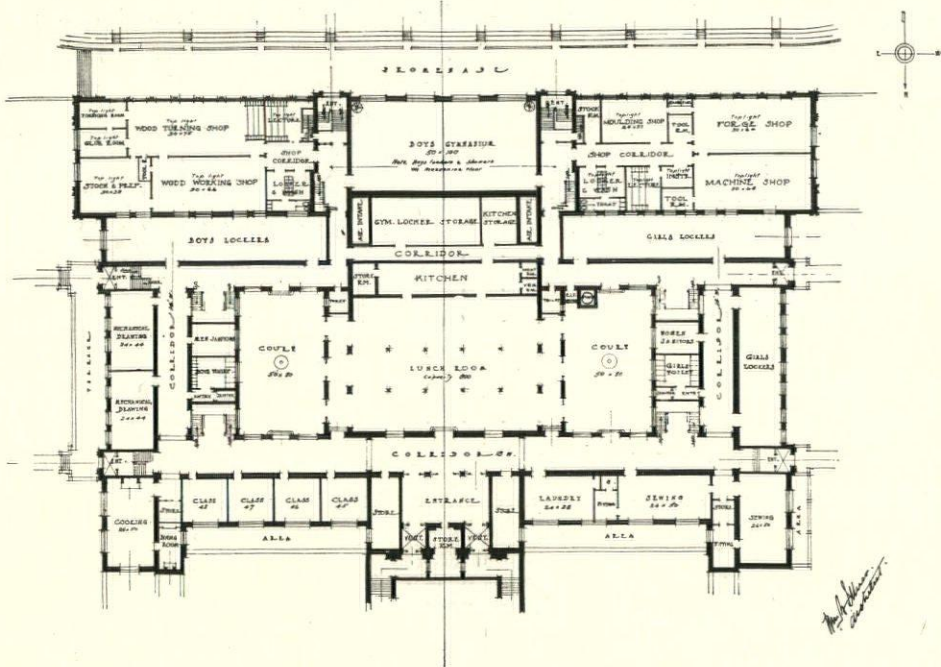
The Domestic Science Department has two cooking rooms and two sewing rooms, together with a housekeeping suite and a laundry. There are laboratories for physics, chemistry, botany, physical geography and biology, all of which are arranged in groups opening *en suite* with lecture rooms and instructors' private laboratories or workrooms. The Commercial Department has rooms for bookkeeping, stenography, typewriting and penmanship, and a large library; and the Art Department has two rooms for freehand drawing, and two rooms



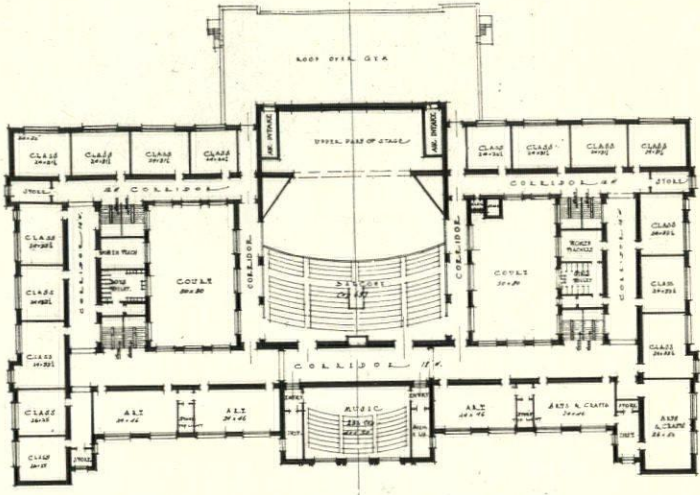
BASEMENT FLOOR PLAN—CENTRAL HIGH SCHOOL, WASHINGTON, D. C.
William B. Ittner, Architect.



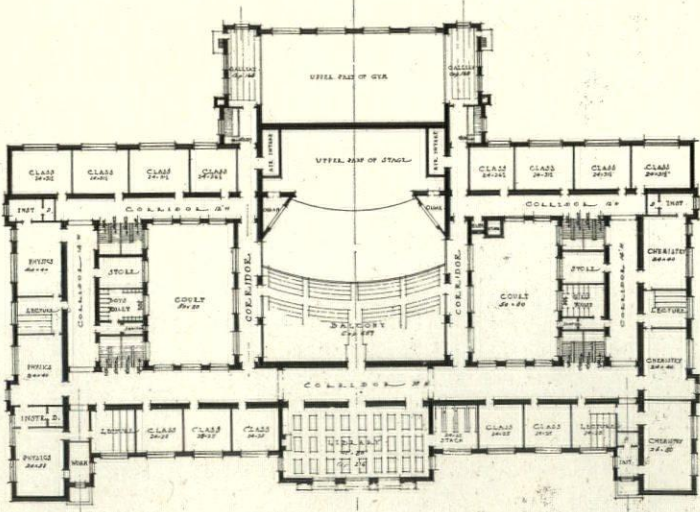
FIRST FLOOR PLAN—CENTRAL HIGH SCHOOL, WASHINGTON, D. C.
 William B. Ittner, Architect.



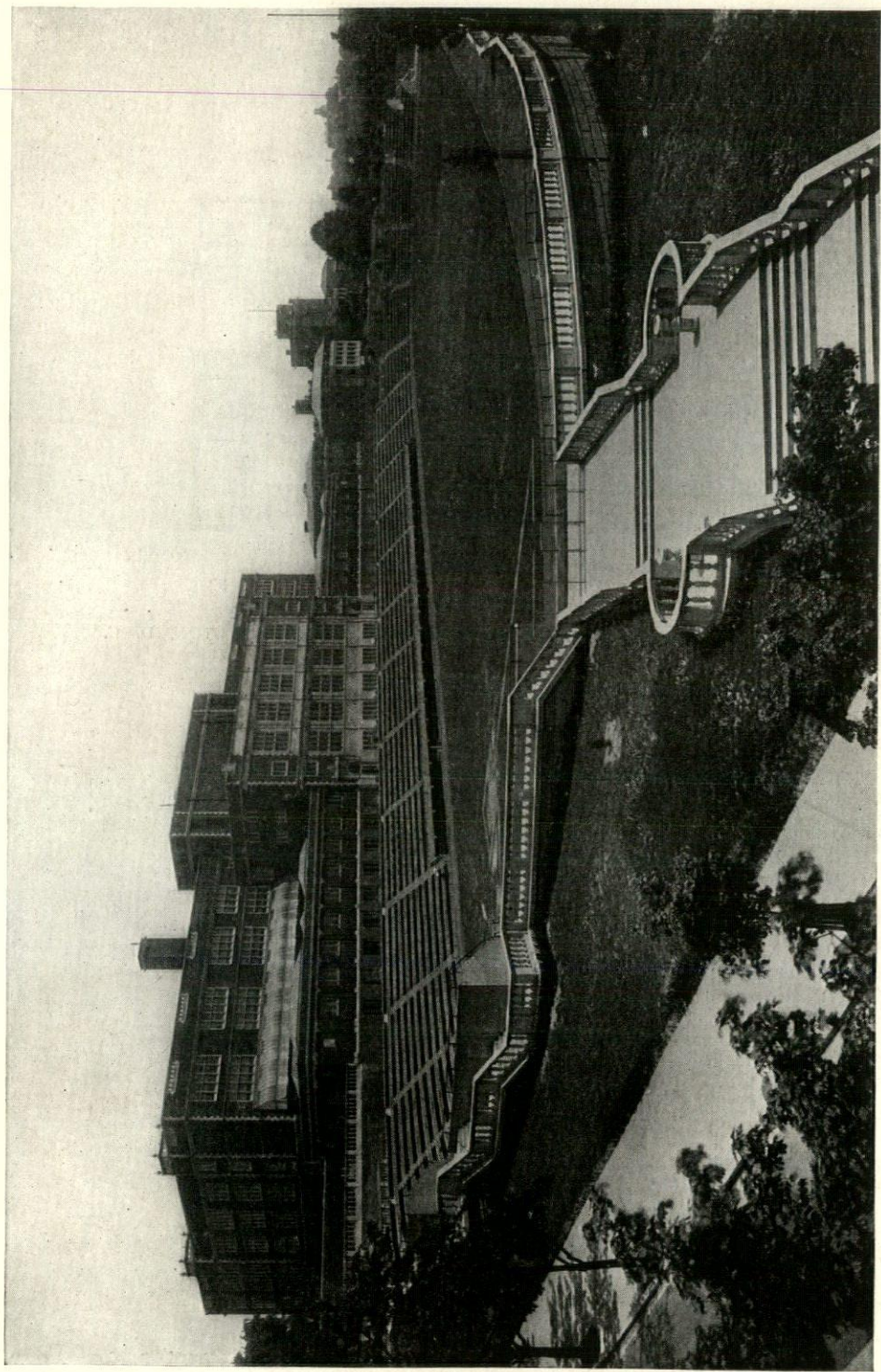
GROUND FLOOR PLAN—CENTRAL HIGH SCHOOL, WASHINGTON, D. C.
 William B. Ittner, Architect.



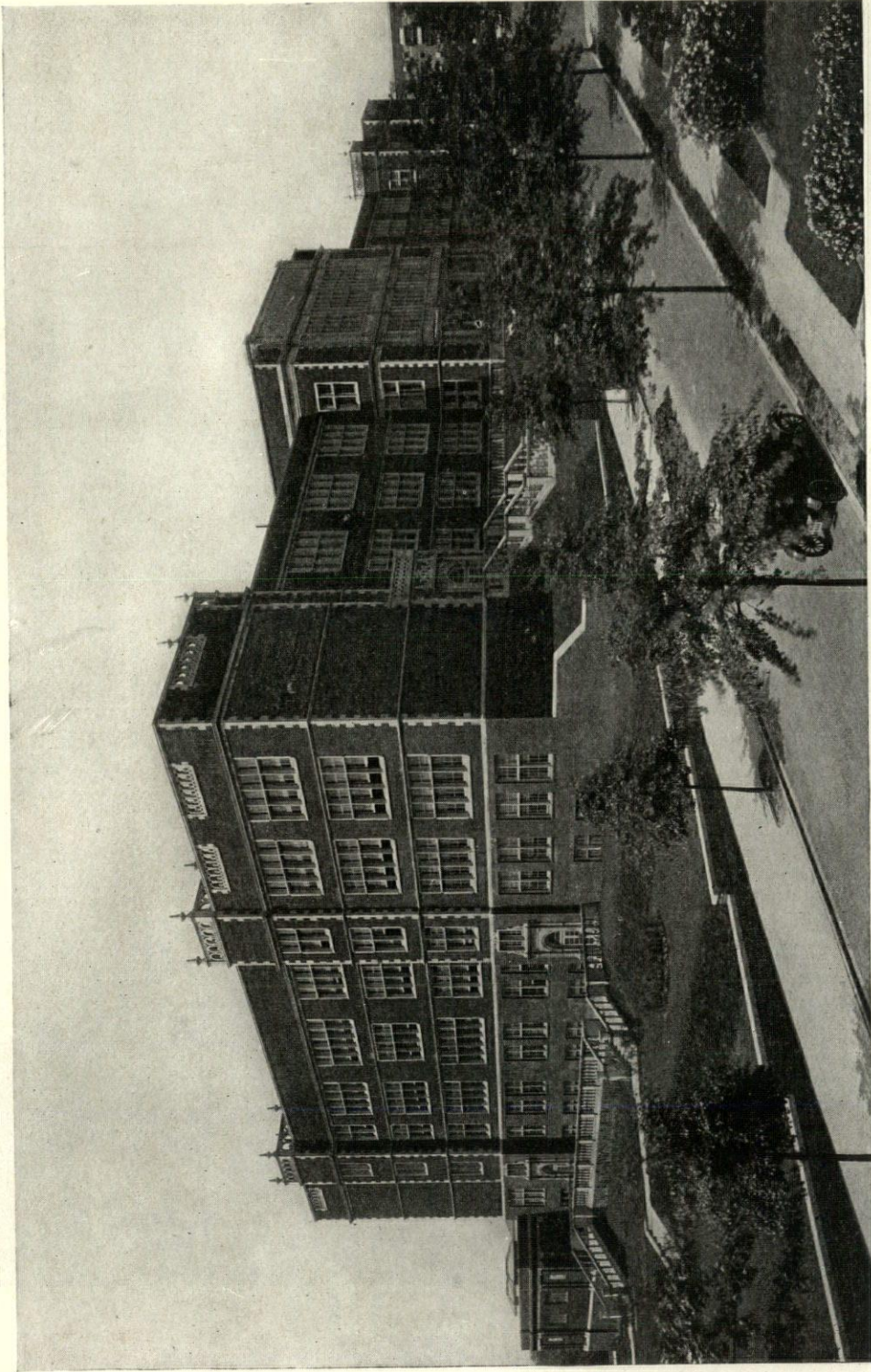
THIRD FLOOR PLAN—CENTRAL HIGH SCHOOL, WASHINGTON, D. C.
William B. Ittner, Architect.



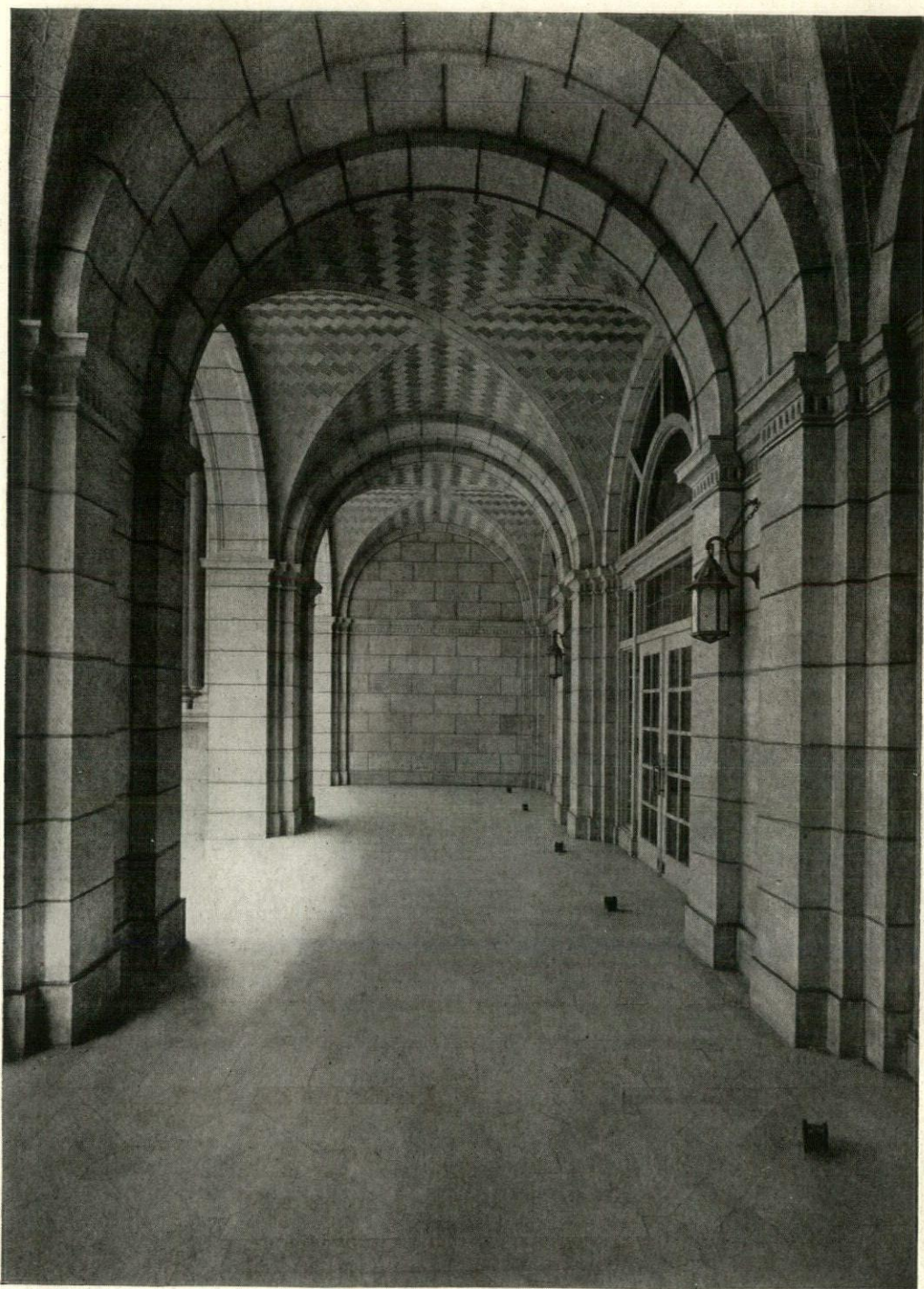
SECOND FLOOR PLAN—CENTRAL HIGH SCHOOL, WASHINGTON, D. C.
William B. Ittner, Architect.



REAR VIEW, SHOWING ATHLETIC FIELD—
CENTRAL HIGH SCHOOL, WASHINGTON,
D. C. WILLIAM B. ITTNER ARCHITECT.



GENERAL VIEW—CENTRAL HIGH
SCHOOL, WASHINGTON, D. C.
WILLIAM B. ITTNER, ARCHITECT.



LOGGIA AT MAIN ENTRANCE VESTIBULE
—CENTRAL HIGH SCHOOL, WASHINGTON,
D. C. WILLIAM B. ITTNER, ARCHITECT.



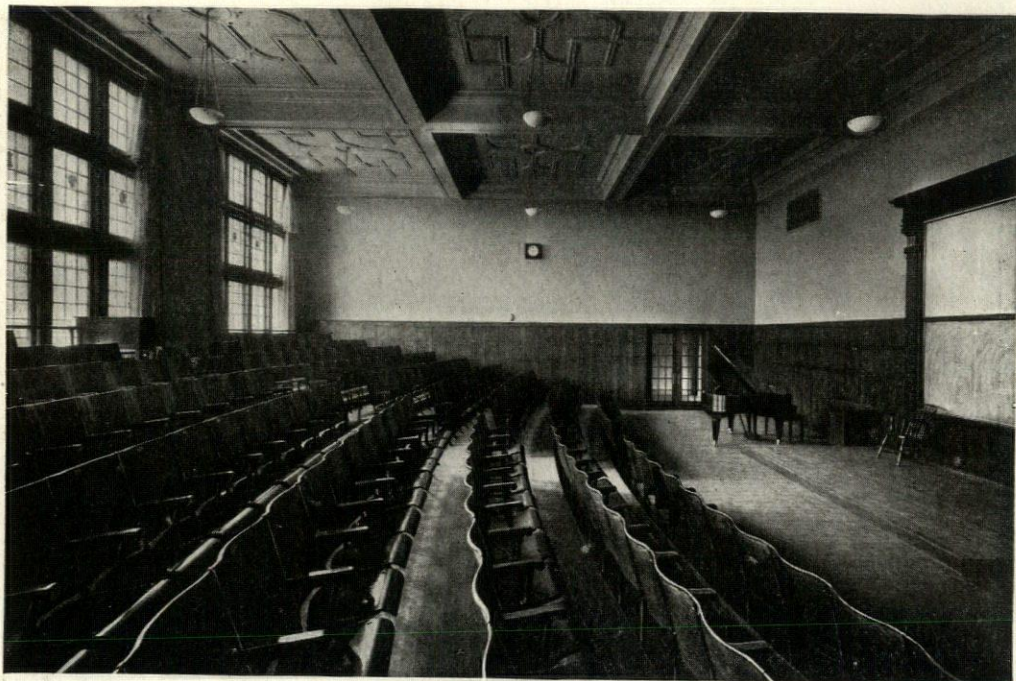
MAIN CORRIDOR—CENTRAL HIGH SCHOOL, WASHINGTON, D. C.
William B. Ittner, Architect.



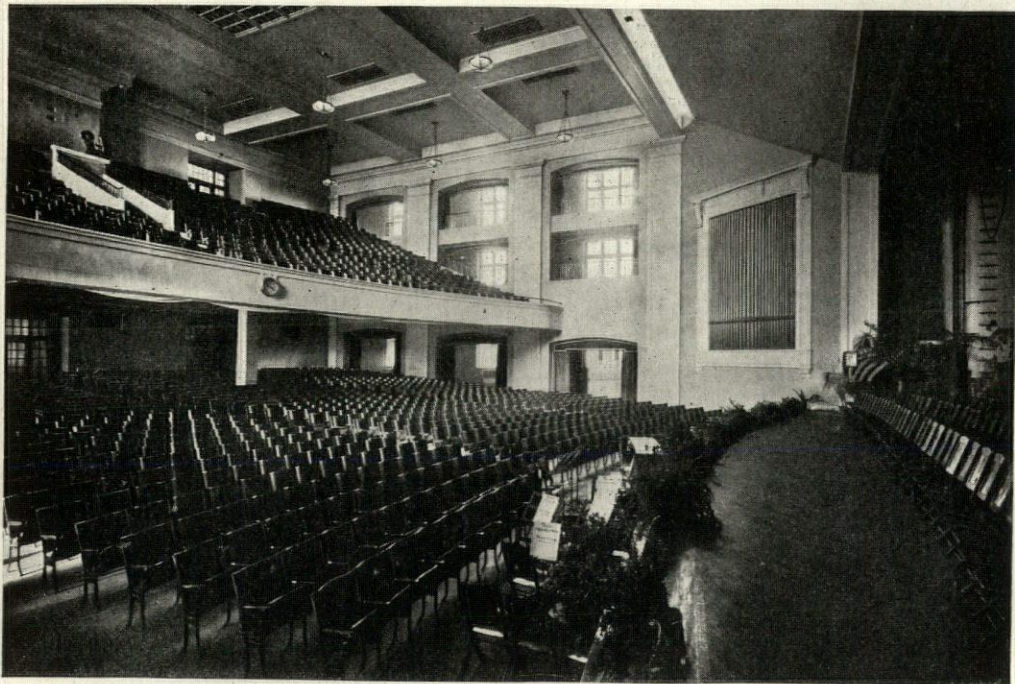
LIBRARY—CENTRAL HIGH SCHOOL, WASHINGTON, D. C.
William B. Ittner, Architect.



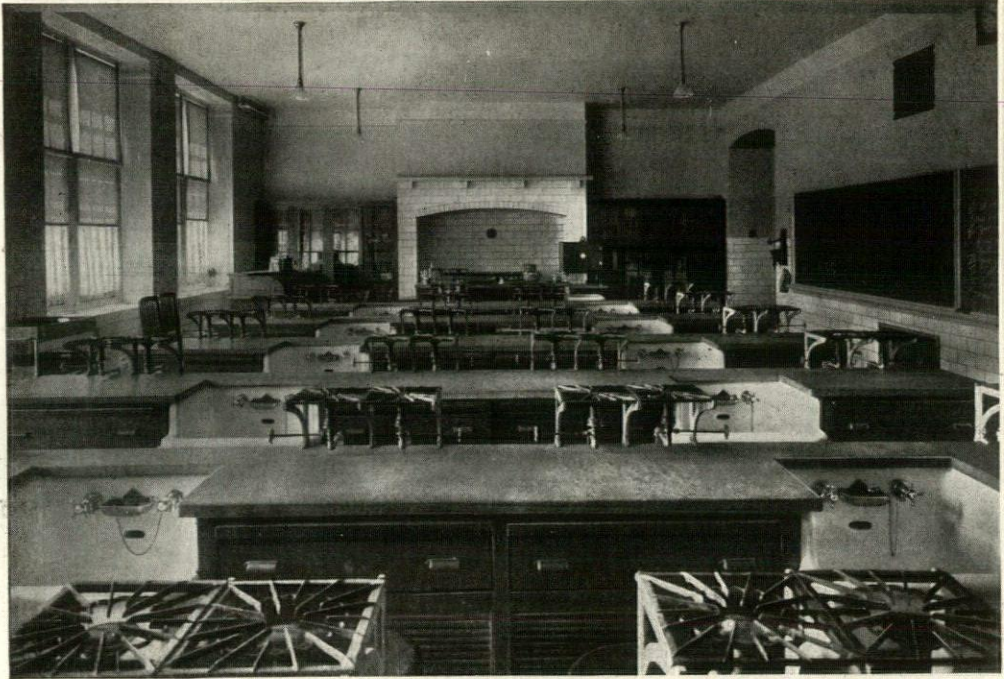
MANTEL IN OFFICERS' QUARTERS, ARMORY
—CENTRAL HIGH SCHOOL, WASHINGTON,
D. C. WILLIAM B. ITTNER, ARCHITECT.



MUSIC AND LECTURE ROOM, SEATING 350—CENTRAL HIGH SCHOOL, WASHINGTON, D. C.
William B. Ittner, Architect.



AUDITORIUM—CENTRAL HIGH SCHOOL, WASHINGTON, D. C.
William B. Ittner, Architect.



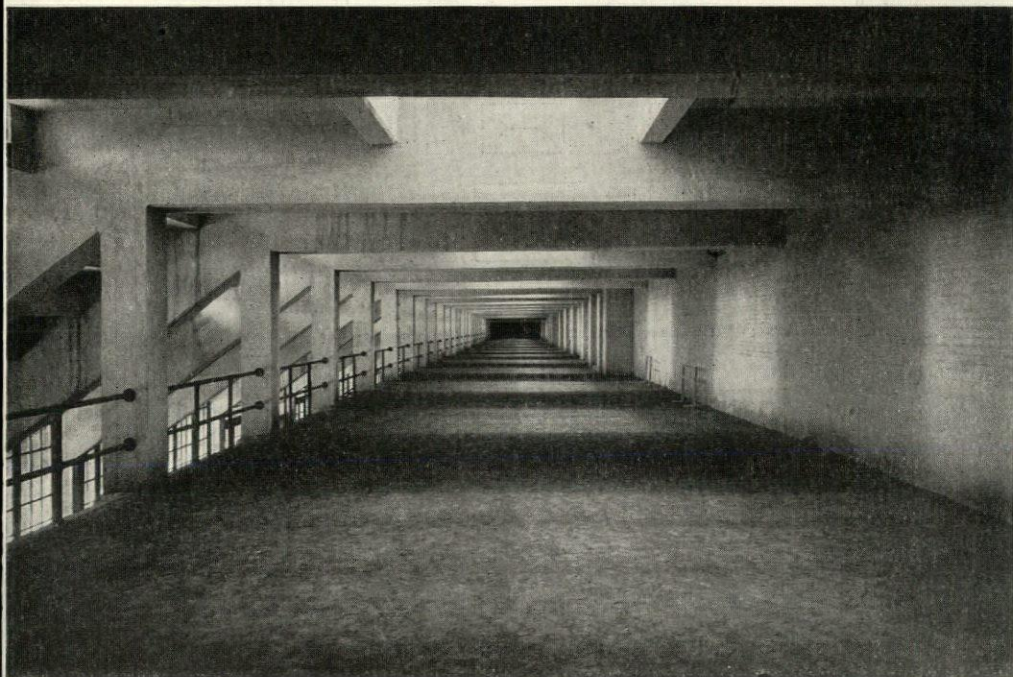
DOMESTIC SCIENCE ROOM—CENTRAL HIGH SCHOOL, WASHINGTON, D. C.
William B. Ittner, Architect.



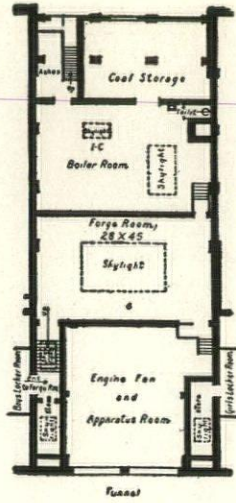
CONSERVATORY IN CONNECTION WITH BOTANY LABORATORIES—CENTRAL HIGH SCHOOL,
WASHINGTON, D. C.
William B. Ittner, Architect.



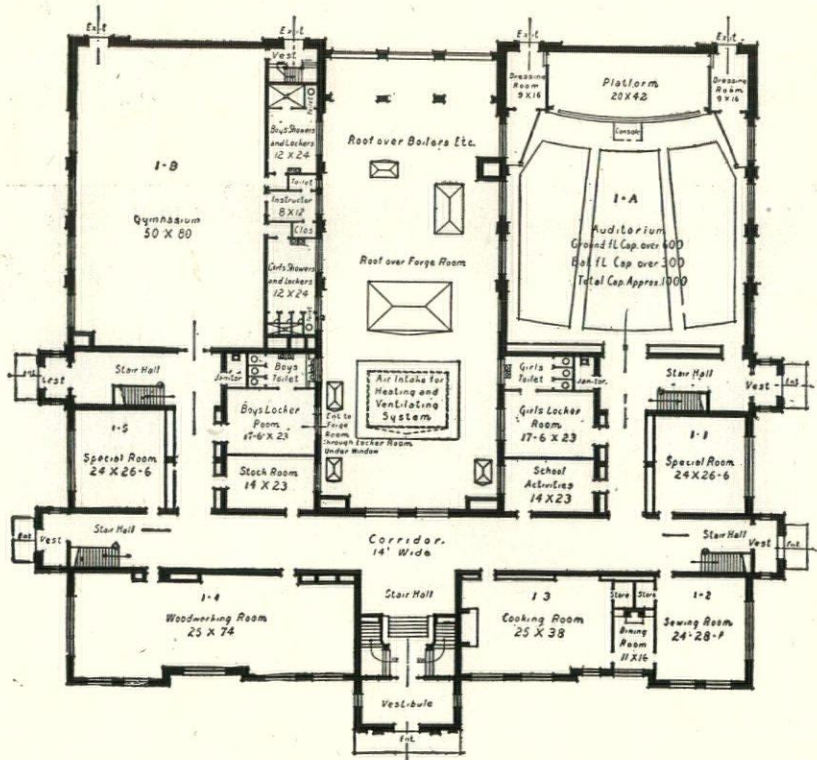
BOYS' GYMNASIUM—CENTRAL HIGH SCHOOL, WASHINGTON, D. C.
William B. Ittner, Architect.



INDOOR RUNNING TRACK—CENTRAL HIGH SCHOOL, WASHINGTON, D. C.
William B. Ittner, Architect.

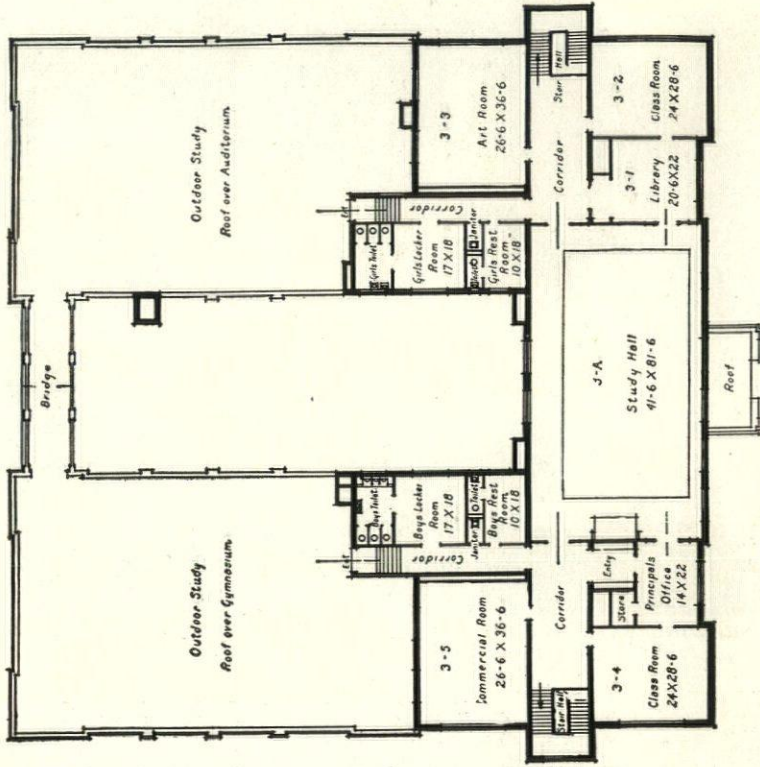
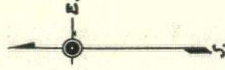


Basement Floor Plan.

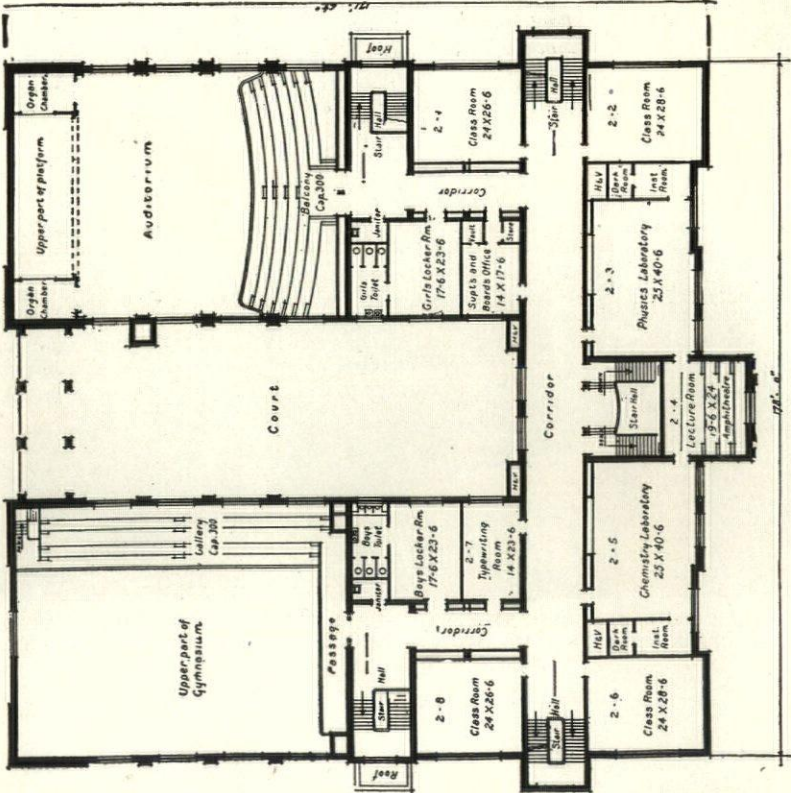


First Floor Plan.

THE EDWARD LEE McCLAIN HIGH SCHOOL, GREENFIELD, OHIO.
William B. Ittner, Architect.

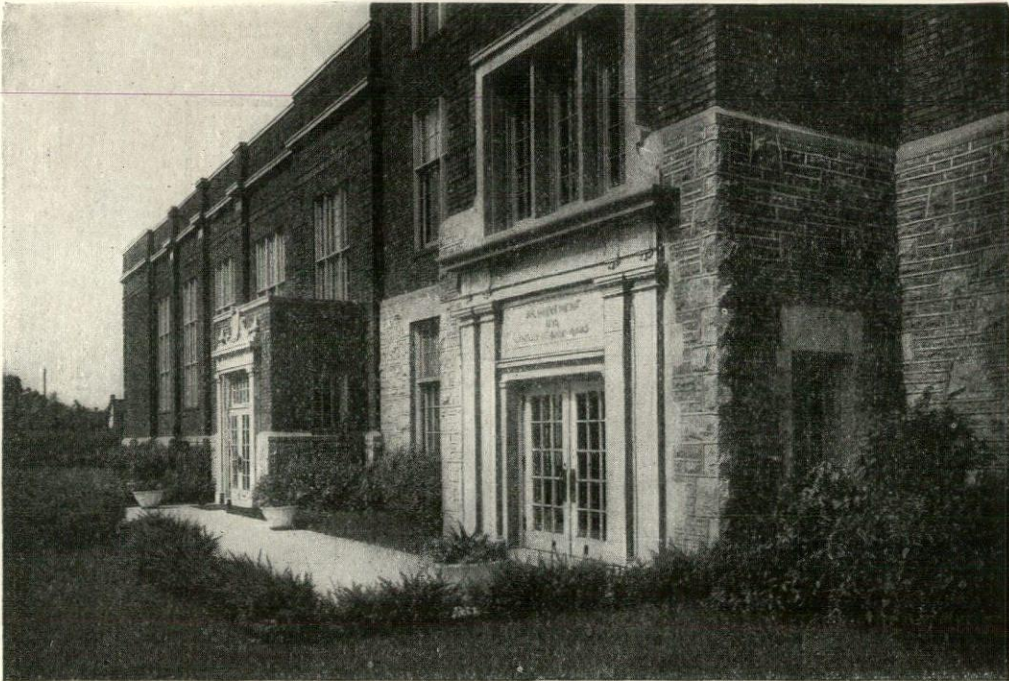


Third Floor Plan.

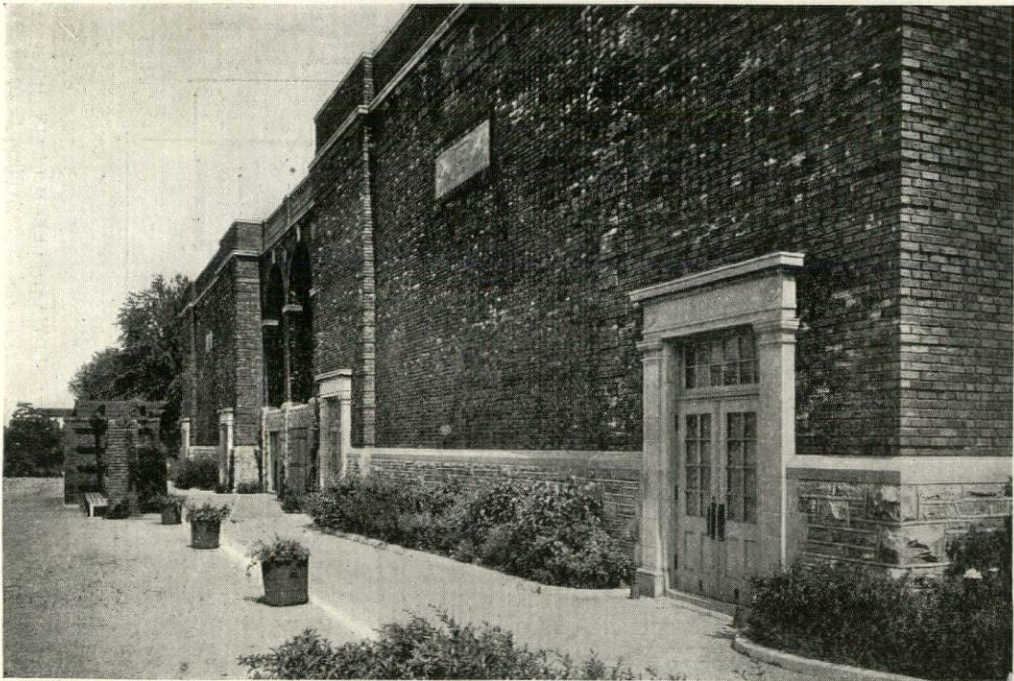


Second Floor Plan.

THE EDWARD LEE McCLAIN HIGH SCHOOL, GREENFIELD, OHIO.
 William B. Itner, Architect.



SIDE VIEW, SHOWING ENTRANCE TO SCHOOL AND ENTRANCE TO GYMNASIUM—EDWARD LEE McCLAIN HIGH SCHOOL, GREENFIELD, OHIO.
William B. Ittner, Architect.



REAR VIEW, SHOWING PLAYGROUND, WITH SERVICE HOUSE AND THE REAR EXITS OF THE AUDITORIUM AND GYMNASIUM—EDWARD LEE McCLAIN HIGH SCHOOL.
William B. Ittner, Architect.



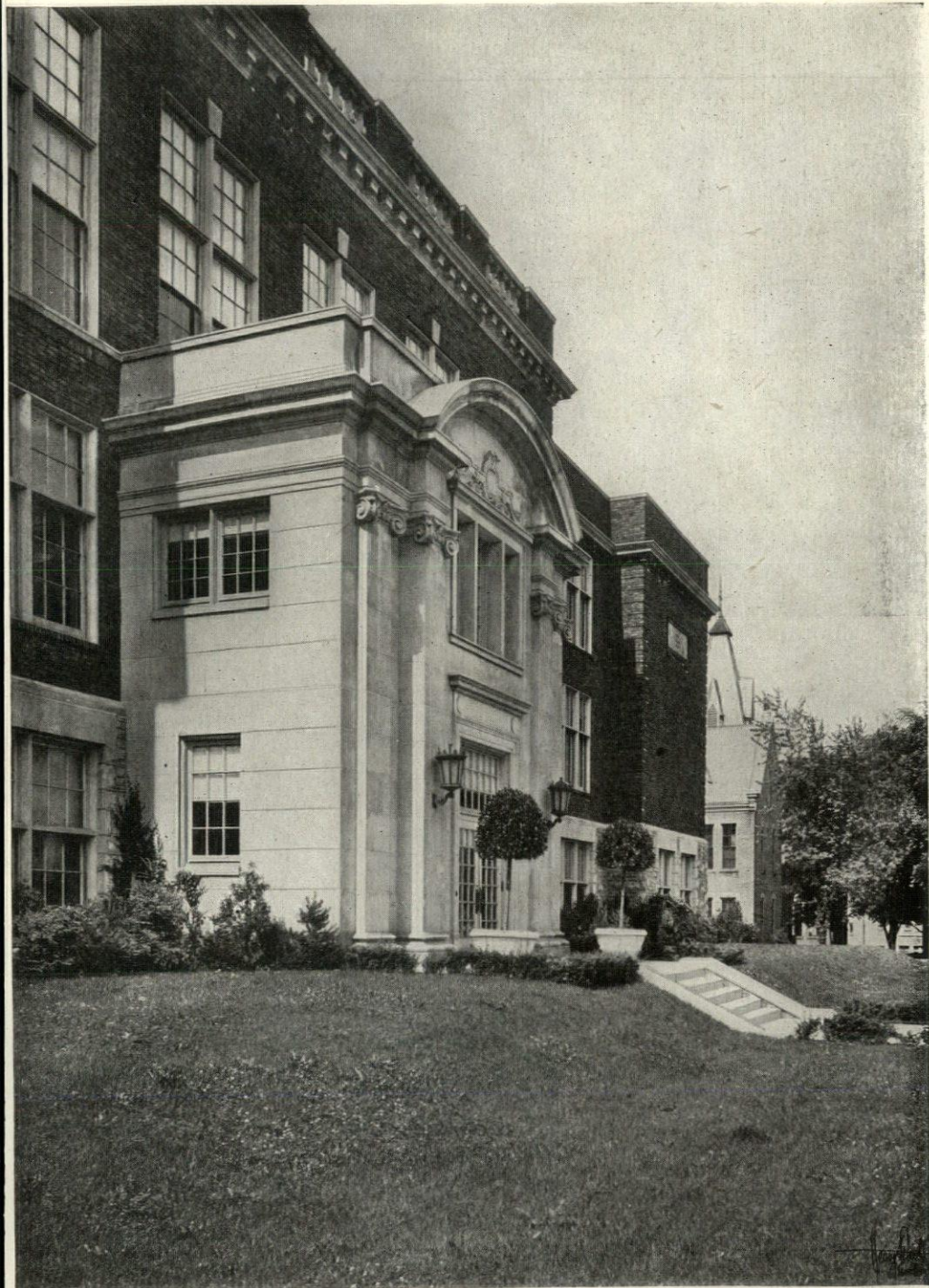
EDWARD LEE McCLAIN HIGH SCHOOL, GREENFIELD, OHIO. WILLIAM B. ITTNER, ARCHITECT.



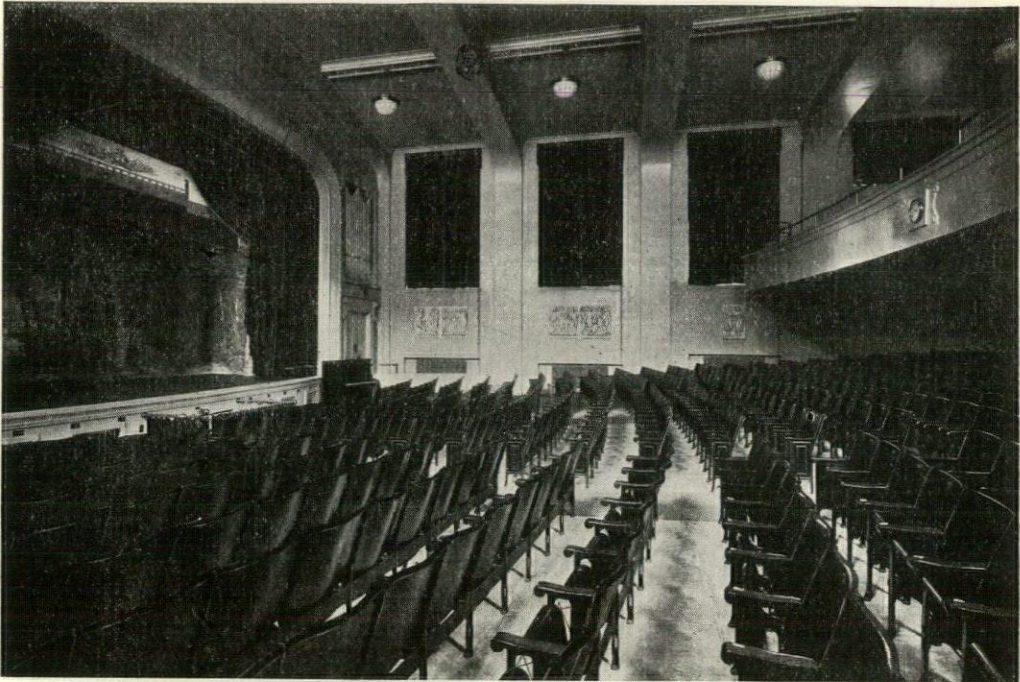
GROUND FLOOR CORRIDOR—EDWARD LEE McCLAIN HIGH SCHOOL, GREENFIELD, OHIO.
William B. Ittner, Architect.



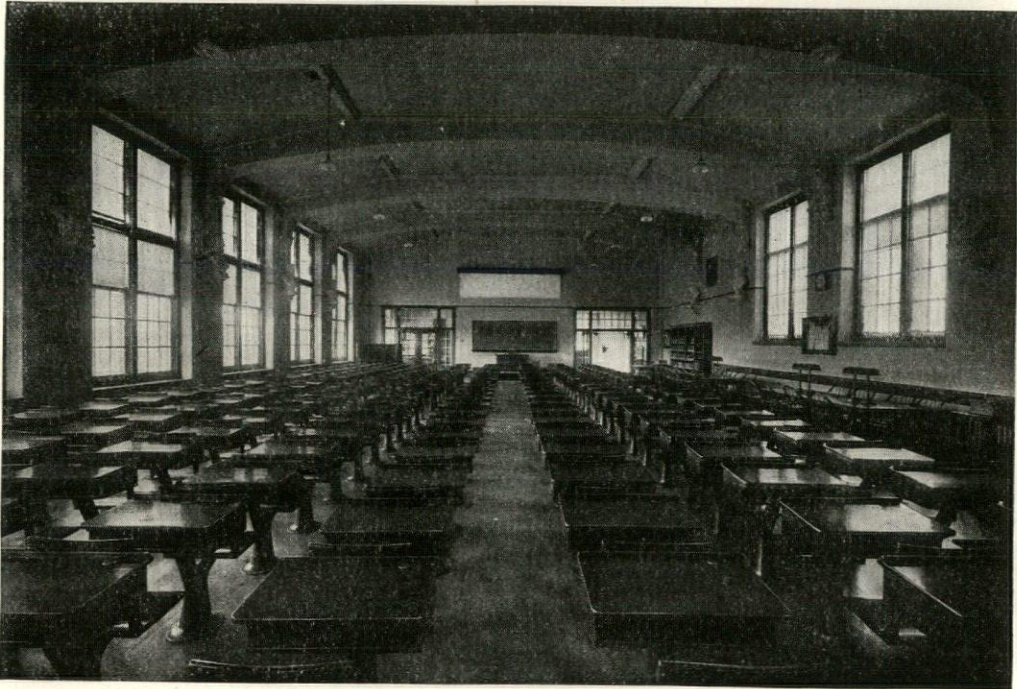
MAIN ENTRANCE VESTIBULE—EDWARD LEE McCLAIN HIGH SCHOOL, GREENFIELD, OHIO.
William B. Ittner, Architect.



MAIN FRONT ENTRANCE—EDWARD LEE
McCLAIN HIGH SCHOOL. GREENFIELD,
OHIO. WILLIAM B. ITTNER, ARCHITECT.



AUDITORIUM—EDWARD LEE McCLAIN HIGH SCHOOL, GREENFIELD, OHIO.
William B. Ittner, Architect.



STUDY ROOM—EDWARD LEE McCLAIN HIGH SCHOOL, GREENFIELD, OHIO.
William B. Ittner, Architect.

for art craft work. The general library, upon the second floor, will seat 150 pupils at tables. A music and lecture room, seating 350 pupils, is located upon the third floor.

The mechanical plant includes water-tube boilers, with stokers, an electric light and power plant, a plenum system of heating and ventilation with air washers, a clock and telephone system, and vacuum cleaning.

The outstanding features of the plan are the placing of the auditorium on the main floor, convenient for community uses, without loss of proper correlation with the classrooms, and the provision of outside light and natural ventilation through the use of spacious interior courts to all rooms, including main corridors, which do not face the street.

The dual purpose disposition of the auditorium and the universal provision of outside light and natural ventilation are the outstanding features also of the Edward Lee McClain High School, although its plan is of a wholly different type.

The basement is limited to the space between the two wings formed by the gymnasium and the auditorium. It is covered by a roof at the ground level and is lighted from above by skylights, leaving an open court between the two wings above the ground level. It contains the boiler room, the fan and ventilating apparatus room, a room for coal storage and a manual training room. By placing the forges of the metal-working department in this room, the noise, which has been found so objectionable in schools where this department is located in the main building is eliminated.

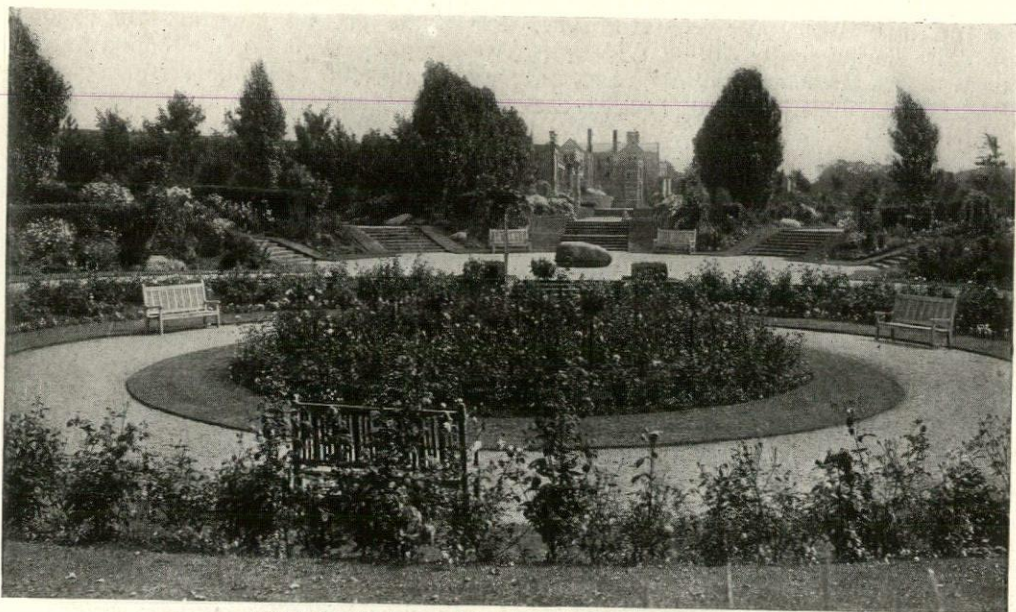
The situation of the basement, in a central position, yet outside the walls of the school building, makes for safety against fire as well as for economy of service.

On the ground floor are the wood-working department of the manual training group, the domestic science group, the gymnasium with its locker rooms and shower baths, the auditorium, and various rooms for school activities. The north doors of the gymnasium open to the playground, and the gymnasium as well as the shower baths may be shut off from the rest of the building for community use after school hours or during the vacation period.

The first floor contains the physical and chemical laboratories, with connecting lecture and instructor's rooms, the gymnasium gallery, the auditorium balcony, and four classrooms.







On the second floor are a large study hall, the principal's office, the library, two classrooms, a commercial room, a literary society hall, and rest rooms; the terraced roofs over the gymnasium and auditorium being for outdoor study and recreation.

It is perhaps not customary to speak of the plan of a building as "beautiful," although there is good precedent for so doing. The plans of these buildings by Mr. Ittner have the beauty inherent in a compact correlation of functions, the sort of beauty one admires in an intricate argument logically and clearly expressed; and this beauty of clear and logical thinking has been extended to the design. The exterior is an outgrowth of the plan without adventitious elements. The language of the design is consequently modern and American, although written in the Renaissance alphabet, and is calculated to stir the imagination of the child. The interior decorative treatment is of the same purposeful order, as is evidenced, for example, by the use of plaster casts in the main entrance vestibule and in the ground floor corridor of the McClain High School.



THE CIRCULAR GARDEN—THORNTON MANOR.

THORNTON MANOR, CHESHIRE, ENGLAND

   *The*   
HOME OF SIR WILLIAM H. LEVER, BART.

By Thomas H. Mawson

THE stately homes of England, showing as they do the result of generations of fine keeping, have one and all an intrinsic merit which is not their chief or only charm. Their unequaled attractiveness arises from the fact that, writ large upon their very stones for all to read who have the necessary insight, are the pages of the history of our country. One and all, the men who have lived there have been soldiers, statesmen, patrons of art and of letters and upholders of the fair name of their country in many lands, and usually we find that the present holder of a manorial estate is filled with a deep

sense of his responsibility as of one entrusted with a great national asset. Undoubtedly such treasure houses as Chatsworth, Haddon or Blenheim are not alone national assets, but they enshrine the heritage of generations of illustrious ancestors.

In turning to consider a comparatively newly created domain, one is curious to discover whether, by contrast, it will appear lacking in interest or association. We shall find that this depends almost entirely upon the personality of the man who has built it, and in very many cases, as will be evident from a moment's consideration of the conditions under which

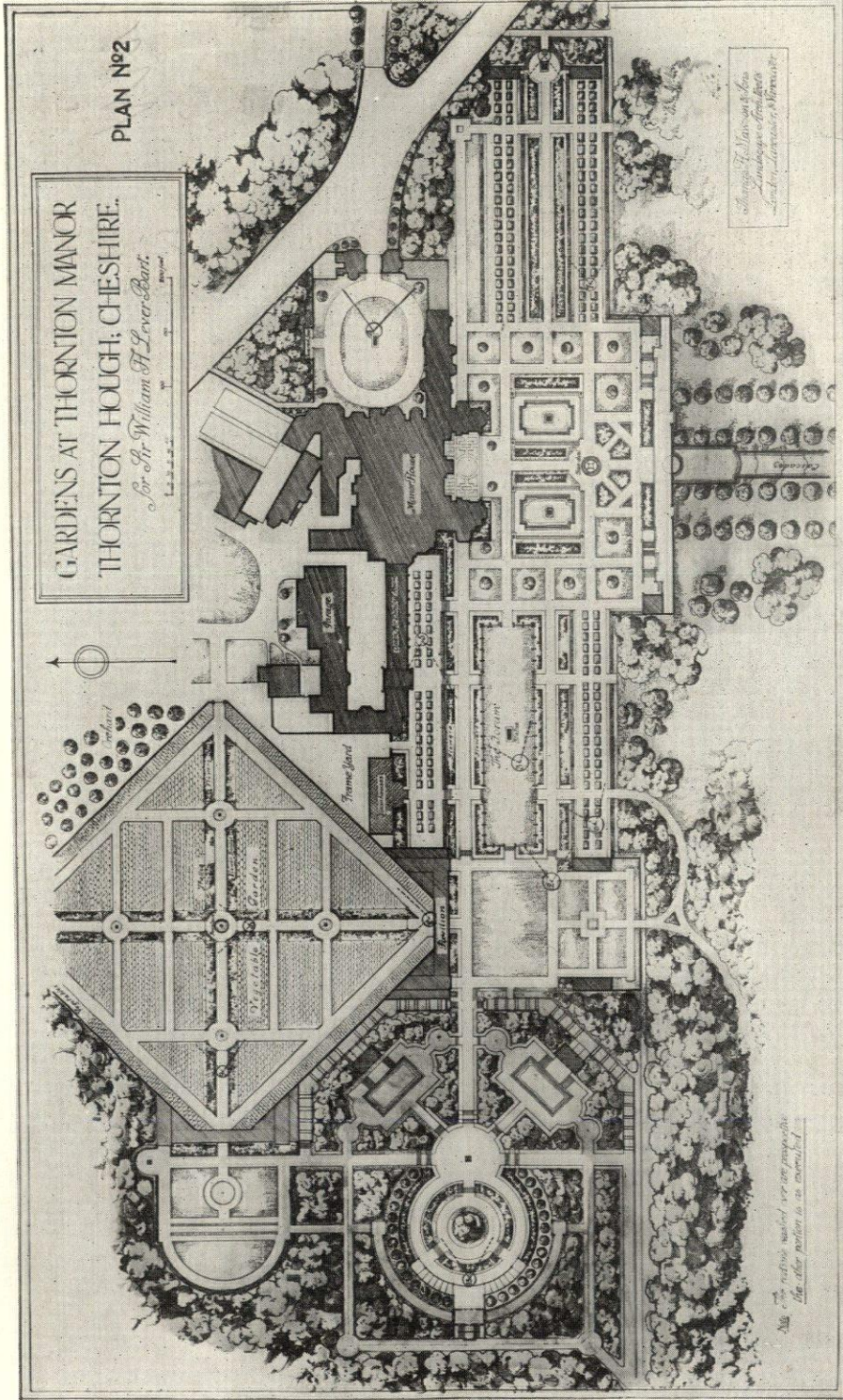


FIG. 2.—PLAN OF GARDENS—THORNTON MANOR, CHESHIRE, ENGLAND. THOMAS H. MAWSON & SONS, LANDSCAPE ARCHITECTS.

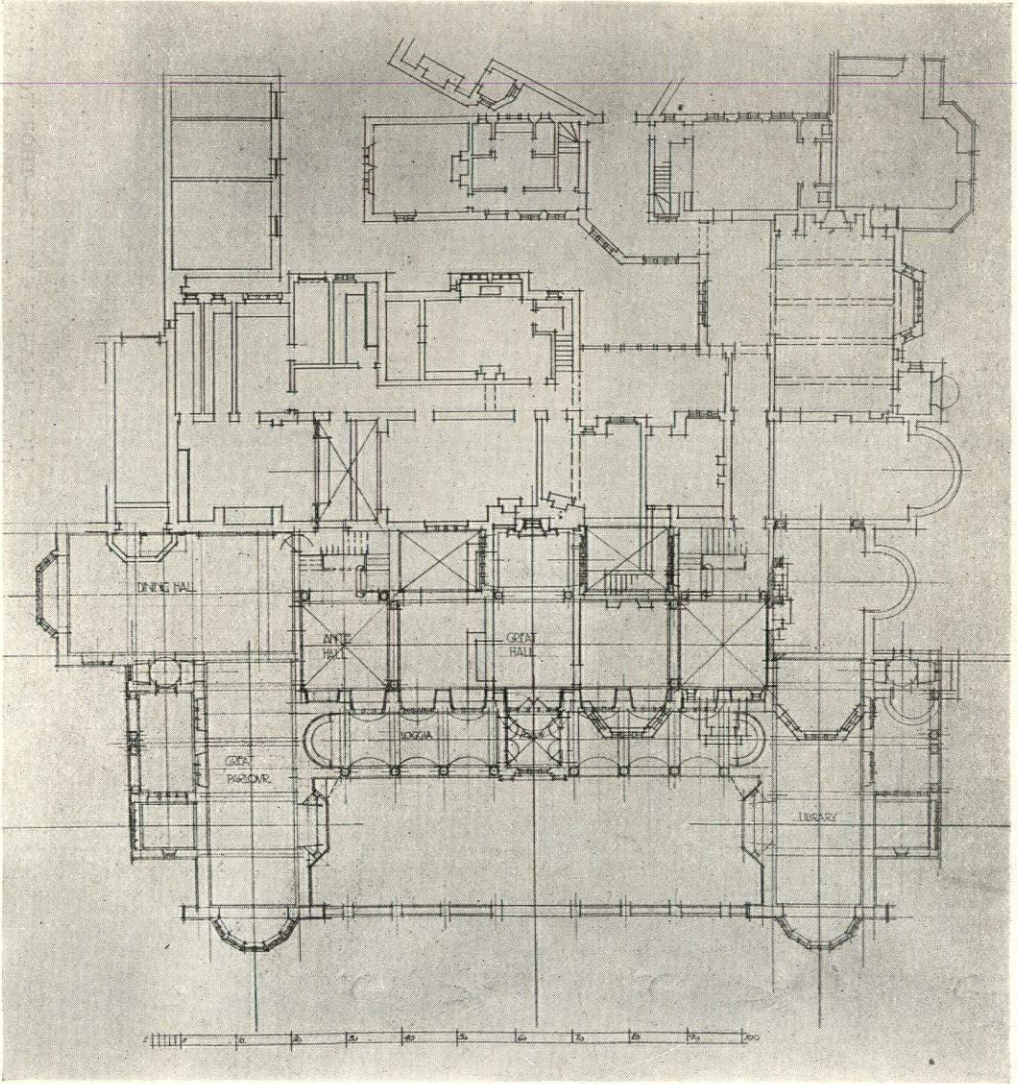


FIG. 1.—GROUND PLAN OF THORNTON MANOR, RESIDENCE OF SIR WILLIAM H. LEVER, BART., CHESHIRE, ENGLAND. THOMAS H. MAWSON & SONS, LANDSCAPE ARCHITECTS.

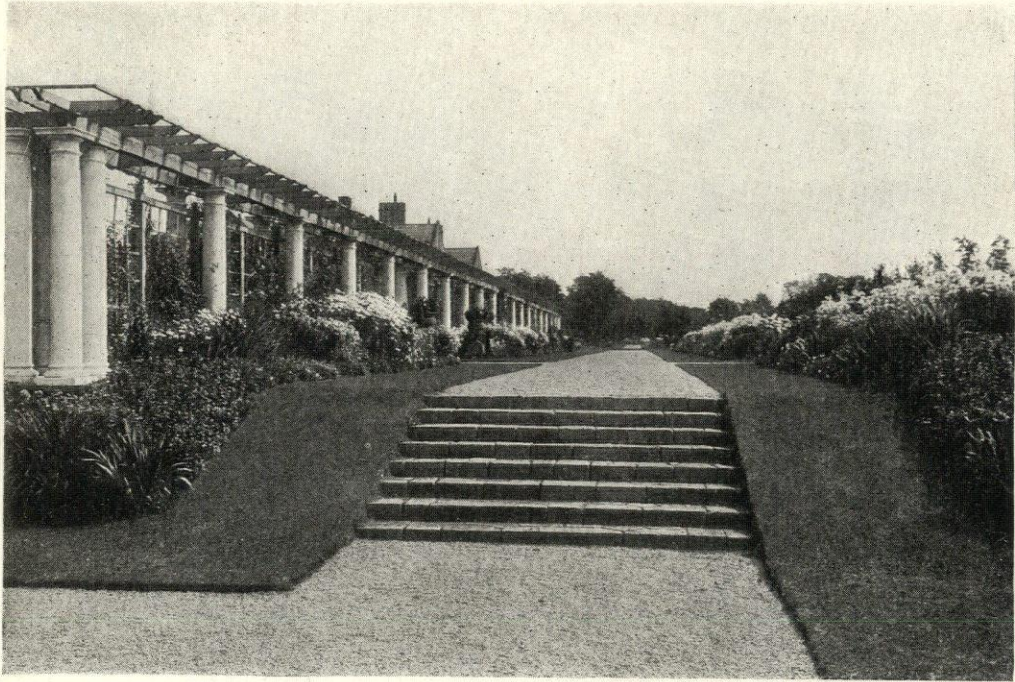


FIG. 3.—SOUTH SIDE OF FORUM—THORNTON MANOR, CHESHIRE, ENGLAND.
Thomas H. Mawson & Sons, Landscape Architects.

these new domains arise, we shall find that they are produced by men of strong and vivid personality. We shall also find that these men, Englishmen to the core, who, while on the one hand they are true to the great traditions of their ancestors, yet on the other in their domains, whether these are entirely new, old, or remodeled, have adapted them to the altered circumstances of a more democratic age.

This is particularly true of the domain in the photographs accompanying this article. The owner, Sir William Lever, Bart., needs no introduction; his name comes vividly before the mind whenever the relationships between employer and employed are under consideration, as a man who has done more to show what these relationships should be than probably any one else in history.

We should therefore expect to find this prominent characteristic expressed in the arrangement of his domain, and we are not disappointed. While the ancestral homes of England were designed for the entertainment of the influential

compeers of their owners, and were virtually the administrative centres of a feudal system which in its best aspects has survived almost to the present day, we find, in the case we are considering, evident everywhere a desire that all, from the highest to the lowest employed by the great industry of which Sir William Lever is the head, shall share the beauties produced by, and benefit from the money obtained by, the united efforts of employers and employed.

Quite naturally Thornton Manor is situated within easy distance of the beautiful industrial village of Port Sunlight, which its owner has created for his workpeople.

The village of Thornton Hough, which lies almost at the entrance of the Manor park, has, like Port Sunlight, been laid out as a garden village, on which nothing which in an architectural sense is unseemly has been permitted to remain. This village, which is replete with fine schools, public institutions and one of the most beautiful modern churches in England, has been almost



FIG. 5.—LOOKING ALONG PLEACHED ALLEY TOWARD HOUSE—THORNTON MANOR, CHESHIRE, ENGLAND.

Thomas H. Mawson & Sons, Landscape Architects.



FIG. 4.—INSIDE OF FORUM—THORNTON MANOR, CHESHIRE, ENGLAND.

Thomas H. Mawson & Sons, Landscape Architects.

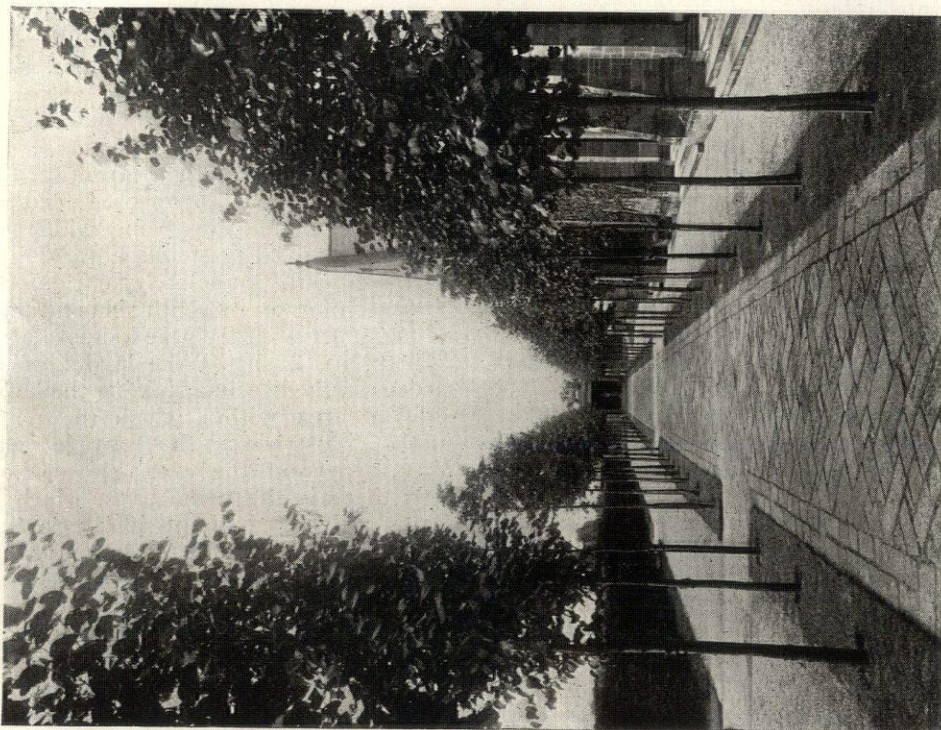


FIG. 6—PLEACHED ALLEY AND OPEN DINING ROOM—THORNTON MANOR, CHESHIRE, ENGLAND.

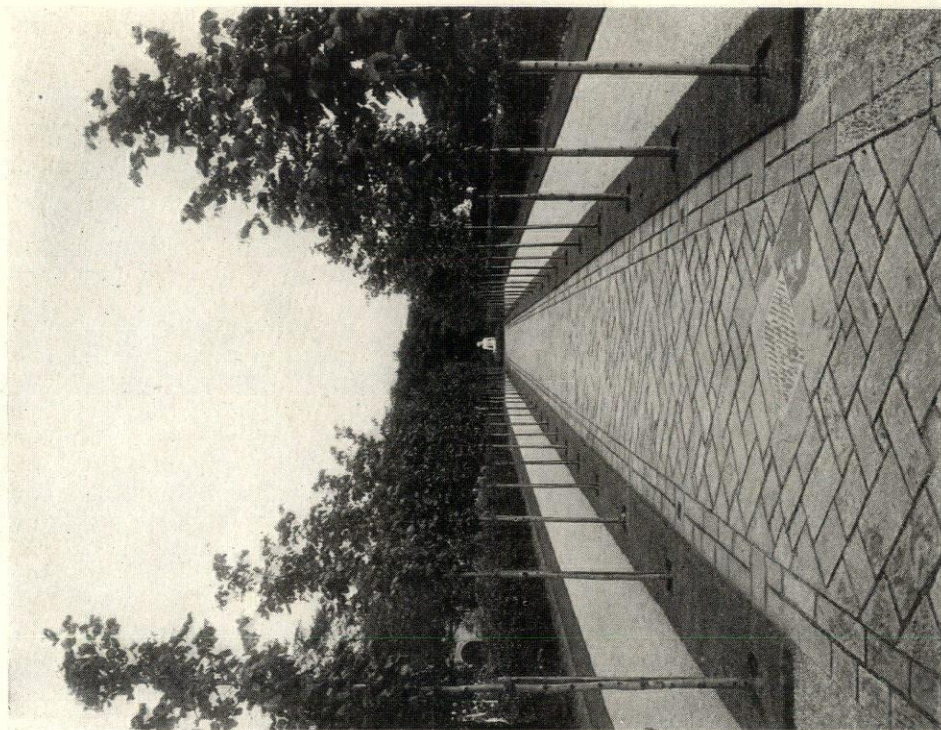


FIG. 7.—WESTERN END OF PLEACHED ALLEY—THORNTON MANOR, CHESHIRE, ENGLAND.

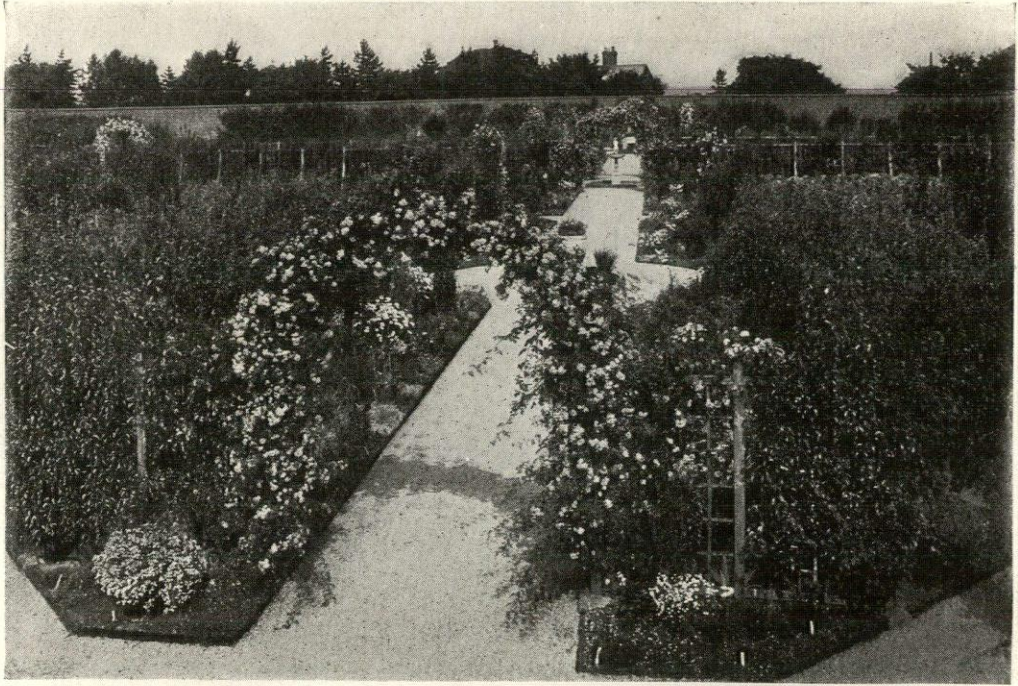


FIG. 8.—KITCHEN GARDEN, FROM ENTRANCE—THORNTON MANOR, CHESHIRE, ENGLAND.
Thomas H. Mawson & Sons, Landscape Architects.

entirely rebuilt, and it may be added that almost every unit it contains is worthy of illustration; but, as the purpose of this article is a short description of the Manor gardens, we can give no illustrations of the church (Congregational) which occupies a dominating triangular site in the centre of the village.

The Norman style adopted by the architect, Mr. John Simpson, admirably suits the stone of the district, which is a soft salmon-colored sandstone; incidentally, the massiveness of the style seems to suit the somewhat austere character of Congregational worship.

When originally purchased by the present owner, the estate was of moderate size, and the residence quite small in comparison with the present Manor; but by subsequent purchases it is now of considerable extent and architectural importance. The Manor house, like so many English houses, has grown by stages, so also have the gardens, and both are now on a scale comparable with the traditional country seats of England.

Although not carried out exactly to this plan, illustration No. 1 indicates approximately the latest extension, which includes new dining room, great parlor, an extended great hall and a new library. The dining room, which is at the east end, is connected with a large open-air dining room, and it is proposed eventually to have a balancing wing which will extend westward from the library. This extension will completely enclose the carriage court on its south side and probably connect with the gate lodge.

Plan No. 2 shows the layout of the gardens immediately adjoining the house, and the area within which the photographs illustrating this article were taken. Beyond the area shown, however, there is the home park, which includes a lake of about 13 acres, with miles of shrubbery, walks and woodland groves, and the views within this larger area might form a fitting subject for a further article. For the present it is sufficient to say that, beyond the formal gardens, there is a greater freedom of treatment, and that much of the ground

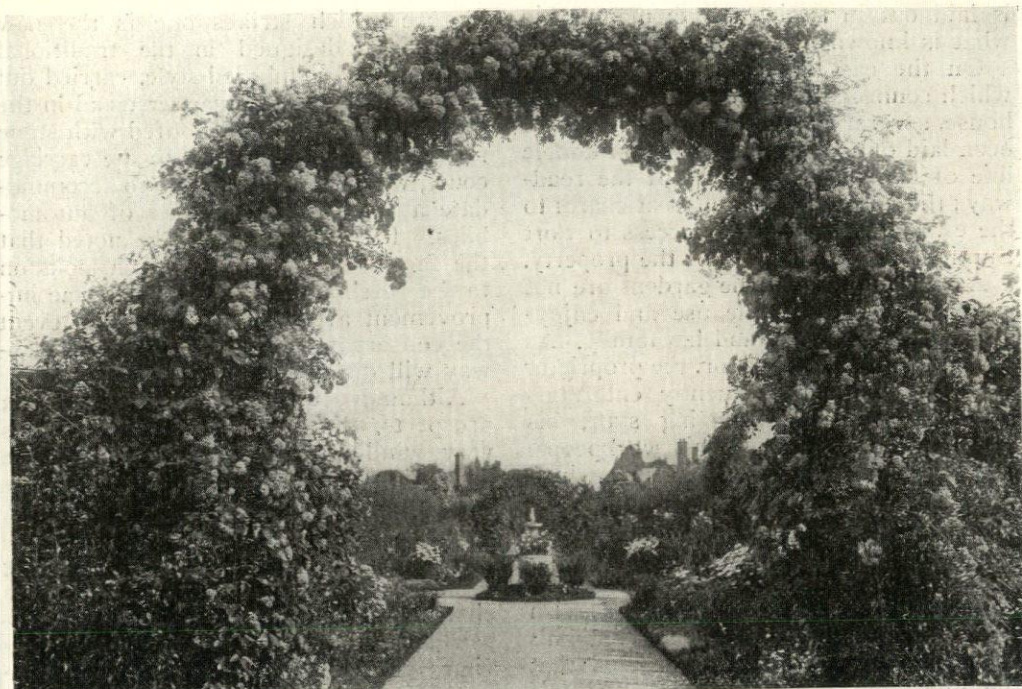


FIG. 9.—VEGETABLE GARDEN, LOOKING TOWARD HOUSE—THORNTON MANOR, CHESHIRE, ENGLAND.

Thomas H. Mawson & Sons, Landscape Architects.

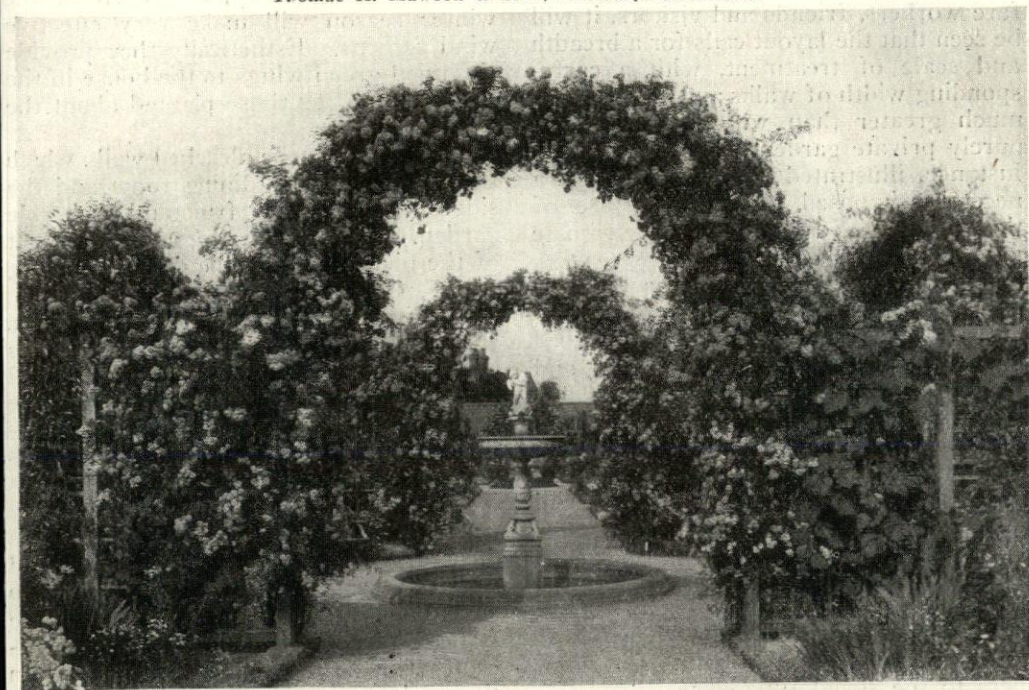


FIG. 10.—CENTRE OF VEGETABLE GARDEN—THORNTON MANOR, CHESHIRE, ENGLAND.

Thomas H. Mawson & Sons, Landscape Architects.

is laid out in a picturesque manner, in what is known as the landscape style.

On the east side of the public road which connects with and passes the gatehouse, several miles of new avenues have been laid out, each planted with a double line of trees on either side of the roadway; these not only add a great charm to the estate, but give direct access to Port Sunlight and other parts of the property.

As already hinted, the gardens are not intended solely for the use and enjoyment of their owner and his family. As a model employer of labor, the proprietor of Port Sunlight frequently entertains his directors and managing staff, his representatives, and also his workpeople of all grades at the Manor, a fact which has greatly influenced the plan. The functions which have called for most consideration in the layout of the gardens are the garden parties and entertainments which are provided on a lavish scale for the children of Sir William's model villages. When it is stated that the guests at each of these children's garden parties number at least two thousand, in addition to teachers, welfare workers, friends and visitors, it will be seen that the layout calls for a breadth and scale of treatment, with a corresponding width of walks and open spaces, much greater than what is usual in a purely private garden. The Forum, for instance, illustrated in view No. 4, is a necessity imposed by the dual use of these gardens, for in our variable climate provision must be made for wet days, and here with the surrounding columns is erected a huge tent capable of seating at least 2,000 persons. The gaily striped tent, with its surrounding columns and rose covered treillage, makes a most picturesque addition to the gardens. View No. 4 shows the inside of the Forum without the tent.

On further scrutiny of the plan it will be evident that there are an abundance of summer houses and accommodation for shelter and rest in excess of the requirement of a private garden. They are purposely provided for the visitors and the children who come in great numbers to the social functions.

On approaching the gardens the first

feature which strikes one is the new gatehouse, designed in the traditional Cheshire half-timbered style, carried out in oak, adzed in the manner usual in the old Cheshire work and roofed with stone slates. This gives access to the carriage court, which is large enough to accommodate a considerable number of automobiles. In passing, it may be noted that the façade of the house, which looks on to the gatehouse, may undergo some improvement after the war; in this event the conservatory seen through the archway will disappear.

Although commanding magnificent prospects, the south and main front is very wind-swept, there being but little protection between the gardens and the Welsh mountains twenty miles distant. This has proved another factor in deciding the type of layout. Here the long pleached lime walks, which form so charming a feature of many of our old-world gardens, have been planted. The views Nos. 5, 6 and 7 were taken the year after planting, but in a few years the trees will form dense overarching canopies of greenery, and even in the winter season will make very effective wind screens. Esthetically they provide extended green wings to the house in the same manner as those planted about the French chateau.

View No. 6 is the pleached walk, which is central with the dining room and the side entrance to the fruit and vegetable garden. Behind the trees on the right of the picture is seen the open-air dining room.

The fruit and vegetable garden, which, with the connecting frame yards, extends to about two and a half acres, is unusual in plan, being set anglewise on the ground. As is common in English gardens, this utilitarian department is treated decoratively. The reason for this is that in the late winter and early spring months this walled-in enclosure is the most favorable place for a sheltered walk; and here, therefore, are always to be found the earlier spring flowers, to be followed by masses of roses and herbaceous plants which love the shelter of an enclosed area. The two views, Nos. 8 and 9, show the garden pictures which

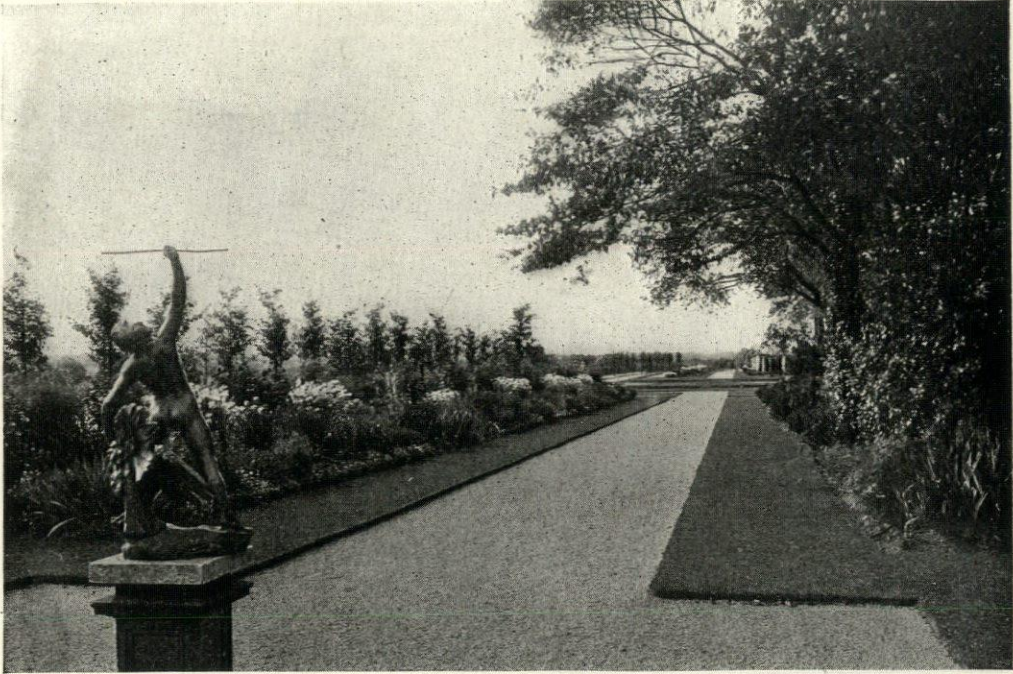


FIG. 11.—VIEW FROM ESTATE, WEST OF PLAN—THORNTON MANOR, CHESHIRE, ENGLAND.
Thomas H. Mawson & Sons, Landscape Architects.

meet the eye from the two principal entrances, and No. 10 is taken near the central fountain. French espalier trained fruit trees form a prominent feature of the garden. They are at once both decorative and productive; and, in fact, this method of training fruit trees may justly be described as providing one of the most successful experiments in intensive cultivation.

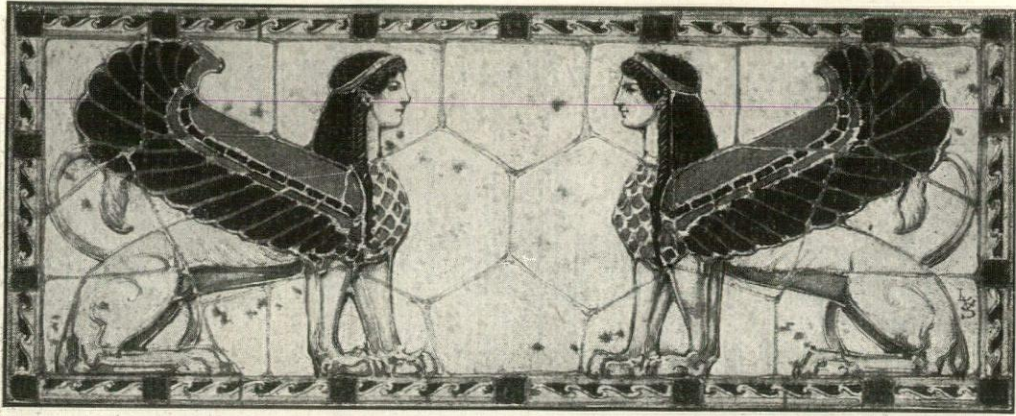
View No. 11 commands the prospect across the terrace from the bottom left-hand corner of the plan looking down the main terrace walk with the Forum in the distance.

The remaining views illustrate portions of the garden which are as yet incomplete. The one showing the south side of the Forum (No. 3) will probably have a balustraded connection, with the Forum on one side and a garden shelter on the other. The view on page 442 is of the rose garden; but this again merely indicates the ground work, for, as will be seen from the plan, it is intended to have a circular pergola with a central

garden pavilion to close the main visual axis.

At a later stage in the development of this interesting English country estate, I hope I may be able to give illustrations of the placid lily ponds which reflect the gables of the south front and also of the steps and balustrades which have already been planned, in conjunction with them, but which, like so many other desirable projects, must wait until the war—the prosecution of which is our main business—is brought to a victorious conclusion. Before closing let me emphasize what I have already stated—viz., that while they are private property, the charms of these gardens are generously shared by the owner with his neighbors and workpeople, and all that is asked in return is respect for that which is shared and a reverent attitude toward the works of the Creator.

Since my writing the foregoing article Sir William Lever has been elevated to the peerage and has taken the title of Lord Leverhelm.



ARCHITECTURAL POLYCHROME ~~~~~ DECORATION ~~~~~

An Analysis of Fundamental Principles ~

By

LEON V. SOLON

LITTLE success has so far rewarded contemporary efforts to revive the use of polychrome decoration in architecture. Perhaps, therefore, it may be of some help to analyze current methods, to ascertain the value of the elementary principles guiding practice, and also to examine carefully the types of decoration adapted to polychrome treatment.

Of recent years the Italian Renaissance has exercised a powerful influence on architects in this country, and many of the essays in polychrome have followed Italian models.

There is meagre evidence to prove that the Italian Renaissance architects regarded color as a desirable adjunct to their major schemes, so far as exteriors were concerned; in fact, it is doubtful whether they had much sympathy with its use. Classic ideals found expression in an intense effort to achieve purity of contour, severity of detail, and exquisite proportions based on Greek and Roman standards. It was not generally known that pigment had once illuminated many of the fragments from which their inspiration was derived; hence, it is most

unlikely that the architect, reacting from Gothic emblazonment of color to classic austerity, would risk the use of an element calculated to disturb that serenity for which he strove.

In reviving the use of classic ornamentation the Renaissance designers adhered faithfully to motif and detail; the pronounced difference that is apparent in their interpretation is due to the influence of their esthetic aims, not to a deliberate modification. When they chose to relieve the severity of their façades with carving, their taste was best satisfied by relief modeled with subtle gradations of light and shade, with soft edges melting into the field on the light side and abrupt projections casting clearly defined shadows in contrast.

The general tendency to avoid any precise definition of mass-forms is a strong argument against such ornament having been intended for color application.

The fact that the Greeks used polychrome to a considerable extent is amply established by archeologists; but, so far, sufficient information has not been accumulated to determine the exact extent to which it was applied to each architec-



DESIGN FOR POLYCHROME FRIEZE IN
GLAZES FOR EXTERIOR OF THEATRE. IN
ATHENIAN MANNER, SHOWING APPLICATION
OF FILLET OUTLINE TO FIGURE DECORATION.

tural unit during the evolution of the orders.

Many ornamental details standardized by Greek builders, in the stone carving, were simultaneously used by other craftsmen. Examples of painted Greek ornament exist today in their original form and can be seen on the beautiful vases made by the Greek potters. These contain much varied data that can be used as a basis for studying the conformation of detail and mass prepared solely for color effect. Comparison of detail so contrived, with corresponding carved versions of a certain technique, shows how the principles formulated by the color designers were followed by carvers when color was to be added. Pronounced differences exist in the treatment of the same motif or detail when produced for light and shade, or color, pointing in the latter case to a complete subordination of the carver's methods to the technical limitations and peculiarities of the painter's media. Ample proof may be deduced that basic principles were recognized and rigidly observed by artists working for the one effect or the other.

In analyzing the colored ornamentations on the Greek vases the foremost characteristic striking us is that form is primarily expressed by silhouette, decorative rhythm and contrast being attained by careful calculation of the relative value of motif and field.

Turning for comparison to those Renaissance carvings which, we assume, were created for light and shade only—this partly from the experience that no planning of color can produce a balanced result—we find that silhouetting of form is a matter of minor importance, and that the fashioning of planes, modulating passage of light, is the element of effect.

In ornamentation of this type, a detail, by varying the angle of its direction, the height of its embossment, and the treatment of its edges, may pass through all the modulations existing between high-light and shadow; this alone is almost sufficient to invest a form with interest, which in plan or mass would hardly invite attention. Any insignifi-

cance in decorative mass or lack of symmetry, which is unobtrusive in such relief, is accentuated by coloring.

Light and shade, which is a common factor uniting all items in the uncolored version, is an element of disunion in polychrome, as the shadow-strength varies with the tone value of each tint.

In carvings prepared exclusively for light and shade, height of embossment is of greater importance than area of mass, the main motif of the composition asserting itself by accentuation of relief; but, if this design is treated in polychrome, the main motif has little more prominence than a secondary detail of equal area, resulting in a depreciation of decorative effect in the designing by a confusion of values.

Failure to grasp the fact that designing for color requires a special form of ornamental planning has been the most serious factor retarding the advancement of architectural polychrome. This effective method has a far higher import than any that can be realized by a casual tinting of embossment prepared for other purposes. The legitimate effect can only be attained by an interweaving of tints, produced by arranging their recurrence at chosen intervals. The contrasts of tone, area and tint, constituting the harmony, are the result of judicious planning and distribution of detail, assembled with the sole object of achieving color balance. These intricate essentials absolutely control success in polychrome design; it is consequently obvious that only by an exceptional hazard could ornamentation designed for light and shade be arranged in such manner as to serve satisfactorily for polychrome.

A review of modern attempts justifies the conclusion that this form of decoration is not yet recognized as a distinct art, with a specialized technique and a code of laws governing taste.

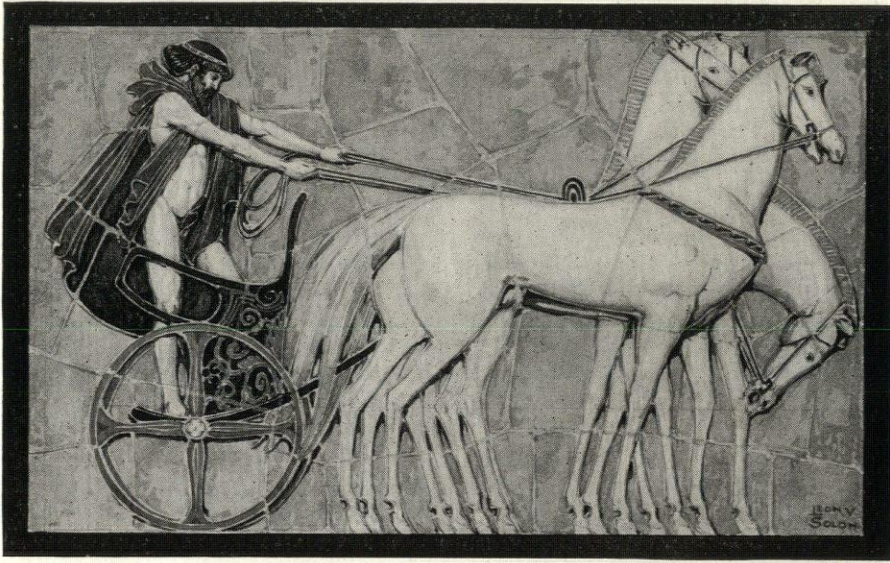
Our first instinct, when needing instruction or enlightenment in art matters, is to turn to the classics. Unfortunately, on the subject of color this resource is not available. To expect that more extensive archeological discoveries could provide us with the means to

formulate good and safe rules for our guidance in the use of color would be an excessive indulgence in optimism.

The limited range of colors at the disposal of the ancients would, in all likelihood, be adjudged by our standards crude and inadequate and probably yield no more satisfaction to the eye than a Greek chorus would to the ear accustomed to the intricacies of Wagner.

tions and applied to detail without giving it undue prominence or misplacing emphasis.

We find much evidence in Greek remains of the vast importance attached to such esthetic subtleties as, for instance, the adjustment of perspective when it interferes with horizontal or vertical lines, or compensation for the apparent diminution of mass when silhouetted



DETAIL OF FRIEZE FOR A PUBLIC BUILDING.

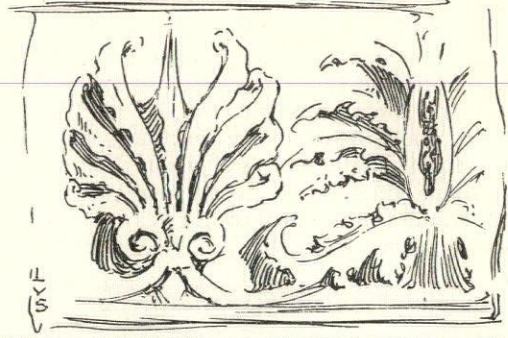
The drawing shown here in half-tone for convenience of reference from the text is reproduced in color on the cover.

Those rare instances in which we have reason to congratulate ourselves on our superiority over the ancients, in matters appertaining to art, have usually reference to some accessory method which has been subjected to scientific development, such as, for example, the manufacture of pigment. Our resources in this respect far surpass those of the Greeks, so that little advantage may be expected from an acquaintance with classic precedent on a subject in which attainment was necessarily immature.

Our energy will find full occupation in separating from chaotic confusion those tints that are capable of producing harmonies consistent with architectonic dignity; these requiring to be adjusted in such order that they may be used without disturbing established propor-

against the sky, showing that many items too subtle for our superficial observation were taken into consideration and provided for. These facts encourage one to believe that a scrutiny of Greek ornamental sculpture may reveal solutions to some of the difficulties besetting us when we attempt the combination of color and relief.

An examination of ornamental sculpture decorating buildings erected in Greece during the fourth and fifth centuries, B. C., when polychrome was extensively used both in architecture and sculpture, reveals a number of examples carved with a very distinctive technique, differing essentially from the conventional renderings of such motifs, by the manner in which the edges of reliefs are treated.



ROMAN ORNAMENT IN VATICAN MUSEUM, SHOWING CHARACTER OF CARVING WHEN POLYCHROME DECORATION WAS NOT INTENDED.

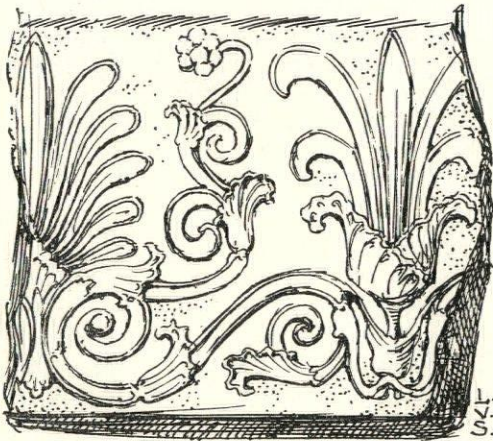
Examples of this type are found on many of the finest buildings of the golden age, on the Parthenon, on the Erechtheum, and on others, of which fragments only remain. The peculiarity of this method is that the contour of the forms is bounded by a narrow, delicately embossed fillet giving additional projection to the edge,* which distinguishes it from carving made for light and shade, with its tendency to efface edges on the light side.

Esthetic difficulties do not confine themselves to any period or race. There is no doubt that the problems which beset

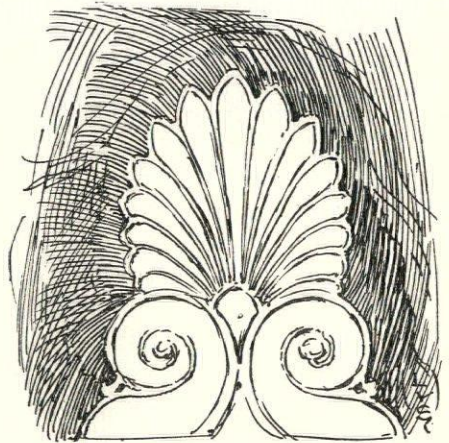
*Winklemann, in the eighth book of his "History of Ancient Art," notes this treatment, but draws no conclusion as to its purposes. In describing funeral urns in the Capitoline Museum, Borghese and Albani villas, he says: "These reliefs, which are particularly elaborated, are distinguished by a raised edge or prominence passing around them."

us, in combining color with relief, were just as formidable to the Greeks. They must have experienced, as we do, that color applied to carved detail, executed in accordance with the usual conventions, had unpleasantly hard edges and a tendency to make the object treated look unsubstantial and detached, and that attempts to rectify this by color outlining or tone gradation were not satisfying. There is little doubt, in the writer's estimation, that the Greeks devised the fillet treatment of edges as the remedy for this defect, which it completely neutralizes, and with which, incidentally, a very beautiful type of ornamentation was developed.

The light falling on the raised edge of the fillet, accentuated by its delicate shadow, adds an appearance of richness



ANTHEMION FROM ERECHTHEUM. SHOWING TREATMENT OF EDGES WHEN POLYCHROME APPLICATION WAS INTENDED.



ANTEFIX FROM PARTHENON.

and softness to the colors which is unattainable by other means.

The fillet edge on the antefixes of the Parthenon is used with much judgment, for the purpose of preserving color value from encroachment by strong rays of light from the sky behind. In the anthemion of the Erechtheum we find a magnificent specimen of the peculiar type of decoration evolved on this principle, which shows the freedom of its application. In this carving, the unerring instinct which invariably guided the Greeks in these matters caused them to modify and even omit the fillet in places where its presence might detract from the elegance of ornamental growth.

This method has just as great a value now as then and is admirably adapted technically to the material in which the hopes of polychrome are centered—glazed clay products. The fillet outline would act as a cloison for the colored glazes; this method, having been identified in other branches of ceramic art in many countries and periods, could not be open to the imputation that it was a technique borrowed from another material to which it exclusively belonged.

Frequently terms applied to matters connected with art have a significance conveying much more than is included in their bare definition, this being the result of mental association with eminent achievements they have designated during generations. The word "polychrome" in its architectural application cannot, unfortunately, be included in this category. Traditions from which it might have gathered prestige have only recently acquired substance through the enter-

prise of savants rather than artists. In this country architectural works of such a nature represent experimentation rather than inspiration; they constitute, as a general rule, the demonstration of a principle, cramped for want of an essential technique and lacking the means for poetic expression through undeveloped color facilities.

The majority of these schemes have been executed in terra-cotta, with the limited assortment of tints obtainable by the single-fire process, precluding any subtle combinations or varied harmonies. This vital question is unfortunately controlled by commercial considerations, which for the moment are a serious obstacle to progress. As only a comparatively small proportion of the total area of a façade would generally be decorated in polychrome, it is to be hoped that architects may recognize the necessity of leaving sufficient financial margin for the manufacturer to develop and utilize this invaluable asset.

The prime reason for this condition is not so much parsimony on the part of the purchaser as the fact that the intrinsic value of color has not been firmly established by works in polychrome of a convincing nature.

Spontaneous recognition can only arise from proof of merit; when once this is firmly asserted, the considerations at stake will appear too precious to discard for a trifling difference of cost.

Good things in art have a currency of their own, in that they carry conviction of their worth even among those having no comprehension of their nature.



HÔTEL DE VILLE, ARRAS. RIGHT (MODERN)
WING SEEN FROM THE GREAT SQUARE.

The DESTRUCTION OF HISTORIC BUILDINGS AS REVEALED *by the* OFFICIAL FRENCH WAR PHOTOGRAPHS



By THOMAS E. TALLMADGE

II.—Arras

THE fate that overtook Arras, the smiling and ancient capital of Artois, is typical of that which has befallen other French towns, and which is likely, alas! to befall others now enslaved but still happily intact.

The course of their undoing seems to run about as follows: The Germans in a successful advance occupy the unresisting town; elated with their success, besides the usual petty military exactions and billeting they do no damage; the fighting, as long as all goes well, is done fairly as in combat between brave men; then comes the check, next the reverse, and then the retreat; the Germans, compelled to withdraw from the gentle village which has given shelter and done them no harm, in wrath and exasperation, turn their guns on those lovely Gothic towers, that quaint Hôtel de Ville, the Great Square, and all the beloved "foyers" of its trusting inhabitants, and what has been for generations out of mind a thriving and hospitable town, within a few days has become a hideous pile of smoking débris.

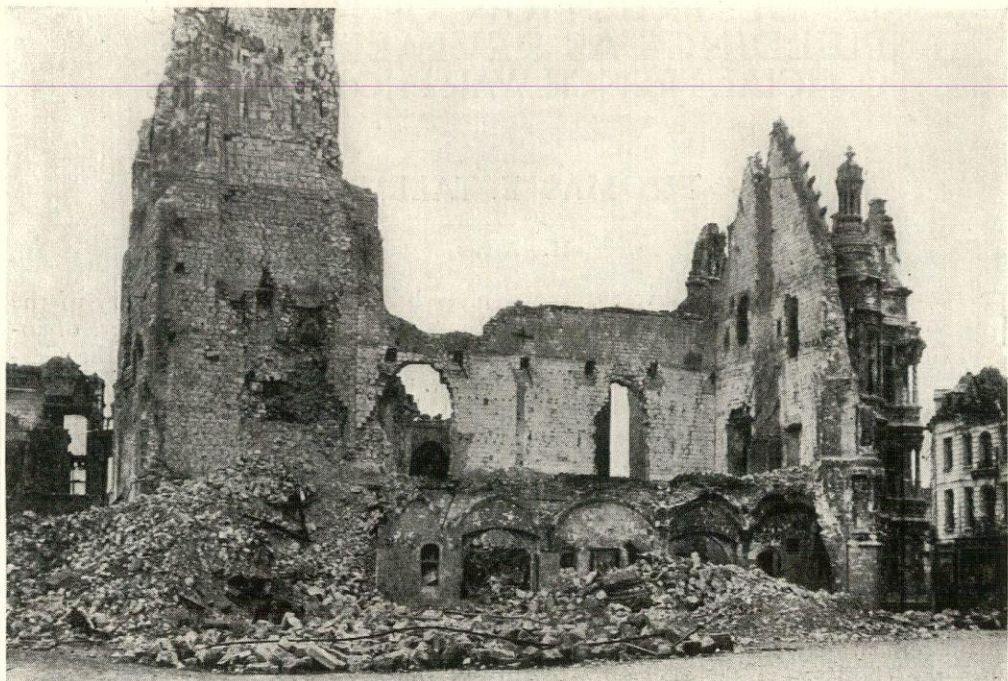
At the end of August, 1914, the French, after the battle of Charleroi, retreated, evacuating the north of France as far as the Seine. In this advance the Germans appeared before Arras. That there might be no excuse for destruction, the town being unfortified, all the men of military age withdrew, leaving the town in possession of the old men, the women and children. The Germans entered Arras September 6. They respected the city and its inhabitants, and did no recorded harm. Then came the battle of the Marne. Fearing a surprise attack, the Germans evacuated the city and entrenched a league distant. In the fighting about Arras the French them-

selves bear witness to the bravery of the enemy. After a month, however, of indecisive and desperate fighting the Germans, realizing that Arras had slipped from their grasp, and actuated by a diabolic desire for revenge, or in conformity with their political dogma of frightfulness, brought up their siege guns, and at nine o'clock on the morning of October 6 the first shell was fired into the town, striking fair the historic belfry of the Hôtel de Ville—a shot eloquent alike of the skill of the gunner and the purpose of the enemy.

In the course of the first day's bombardment and during October 7 and 8, when the firing ceased, more than one thousand shells were thrown into the city. The city, broken and reeling from this wanton attack, still showed to the Germans, above her smoke and dust, remnants of her former glory; so in the middle of November the bombardment was resumed and continued about ten days. On the twenty-third of November sixty-nine shells struck the belfry, the last causing its final collapse, at which the bombardment ceased for the day. After the total destruction of the belfry and Hôtel de Ville, the guns were directed on the Cathedral and the Archiepiscopal Palace of St. Vaast with a like result.

Victor Hugo in two sentences described the ante bellum town: "*Il y a deux places curieuses à pignons en volutes, dans le style flamand-espagnol du temp de Louis XIII. Sur l'une des places la plus petite, il y a un charmant hôtel de ville du XVe siècle, accosté par un délicieux logis de la Renaissance.*"

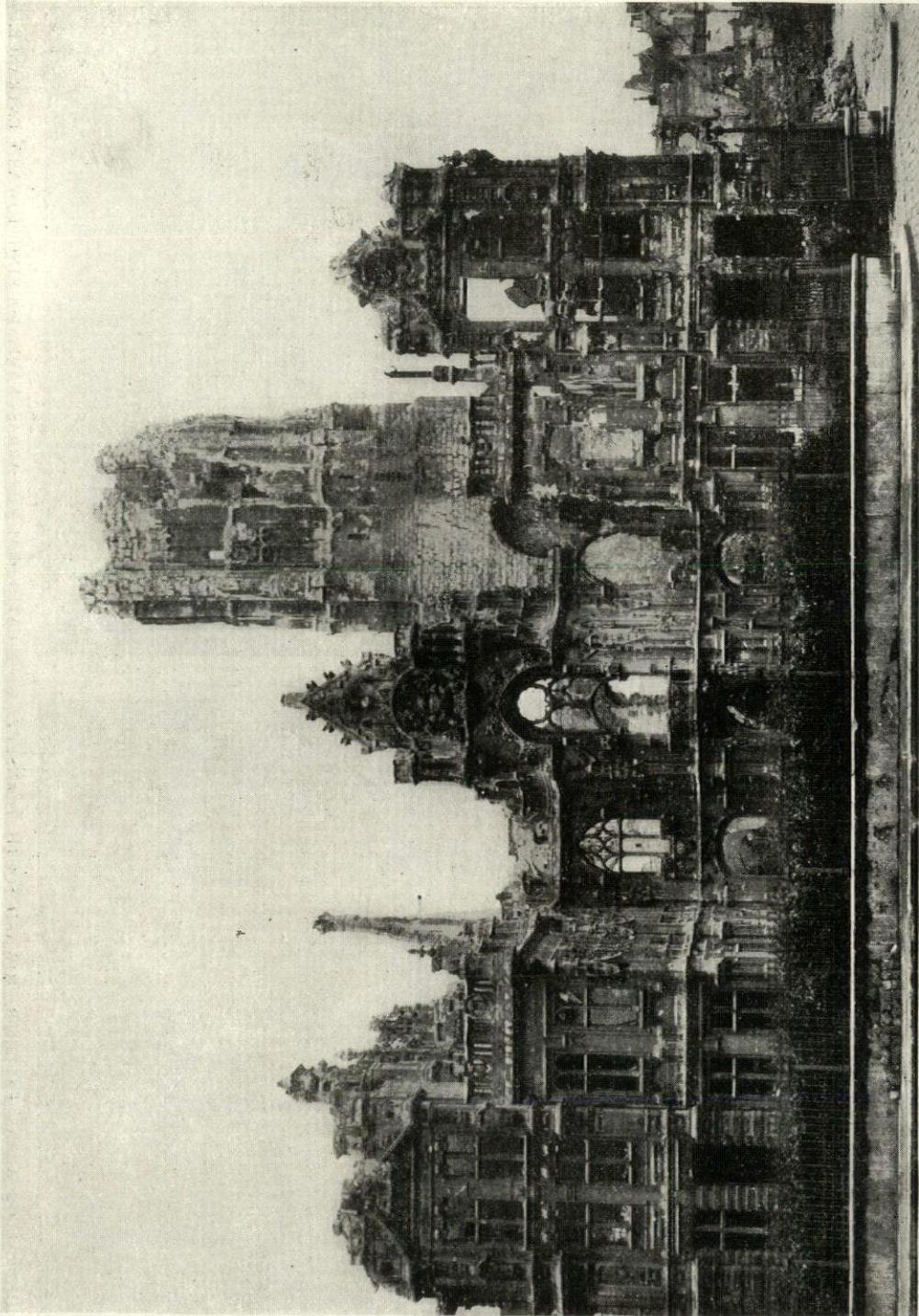
Beside the two squares, with their Spanish-Flemish voluted gables, there was the Rue de Géry, which was lined



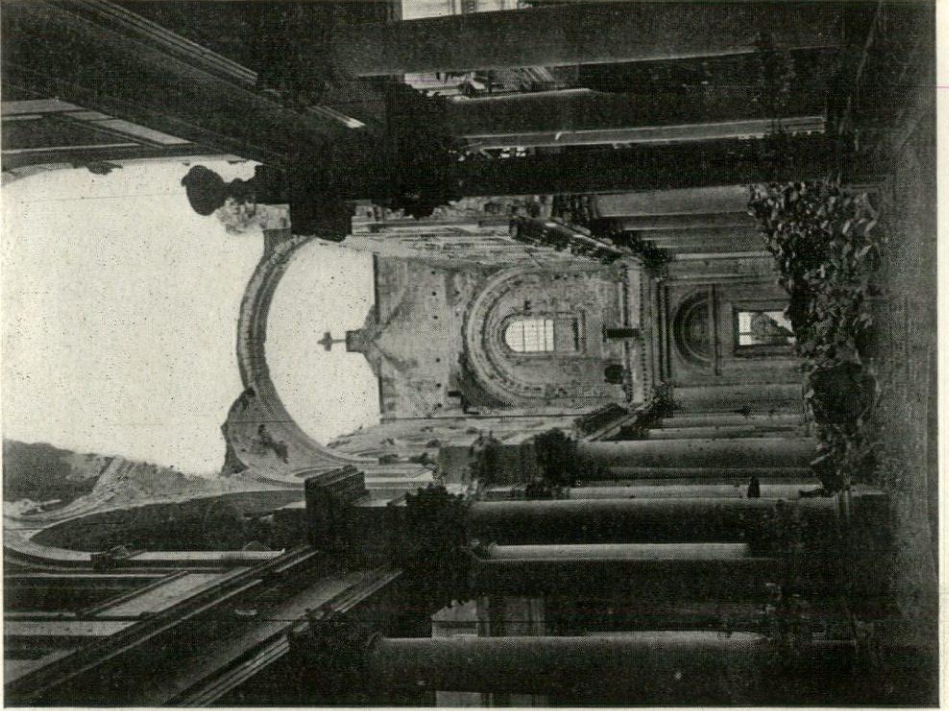
HÔTEL DE VILLE, ARRAS. FROM THE LITTLE SQUARE (LA PETITE PLACE), SHOWING THE TOTAL DESTRUCTION OF THE XVI CENTURY LEFT WING.



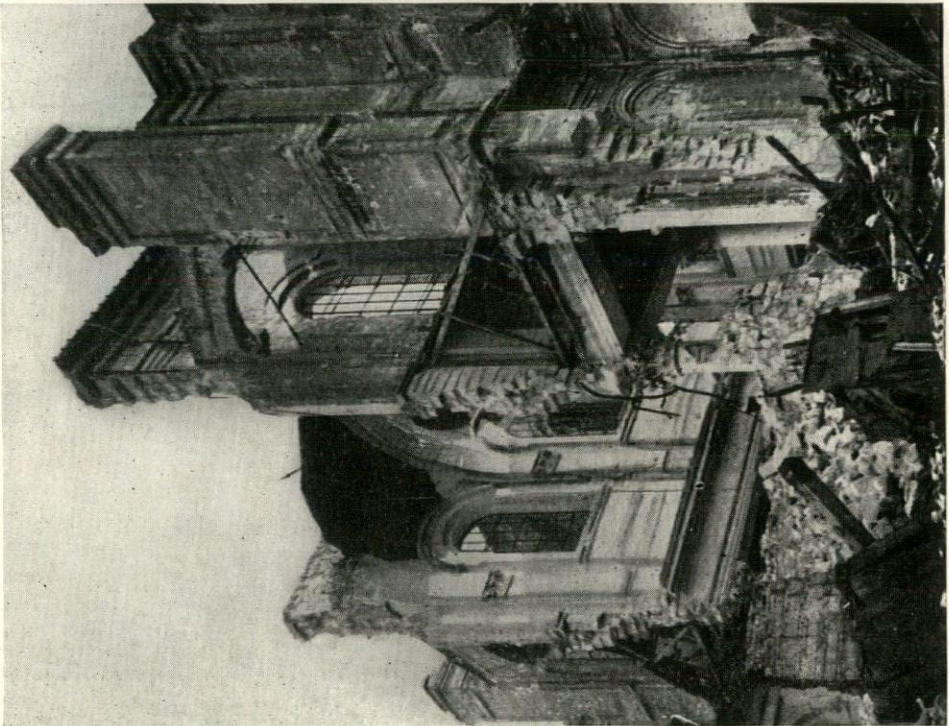
HÔTEL DE VILLE, ARRAS. THE LEFT WING.



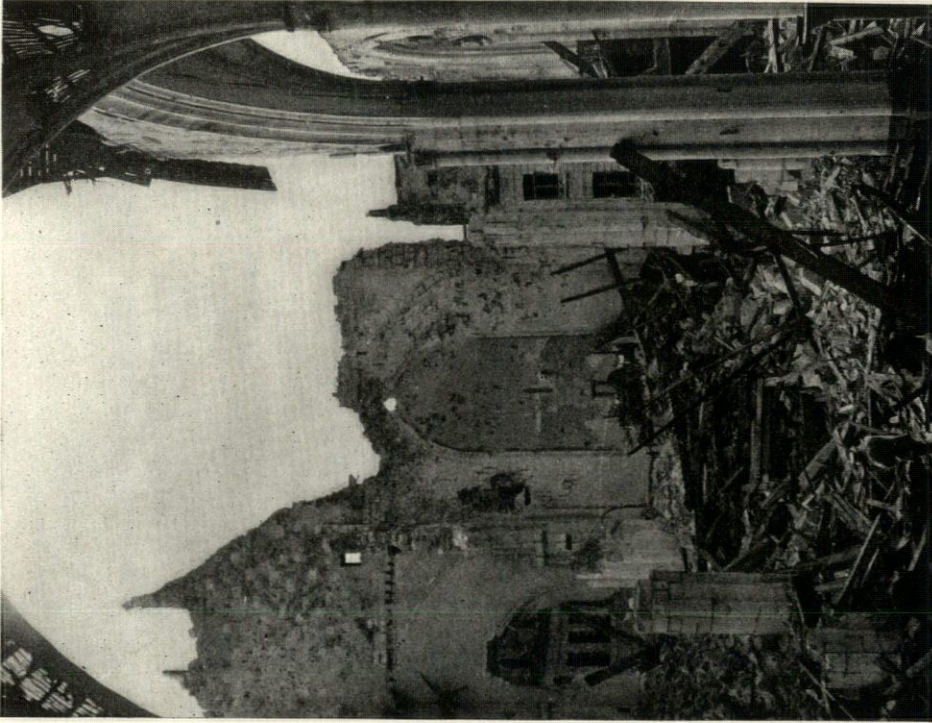
HÔTEL DE VILLE, ARRAS—FACADE ON THE GREAT SQUARE.



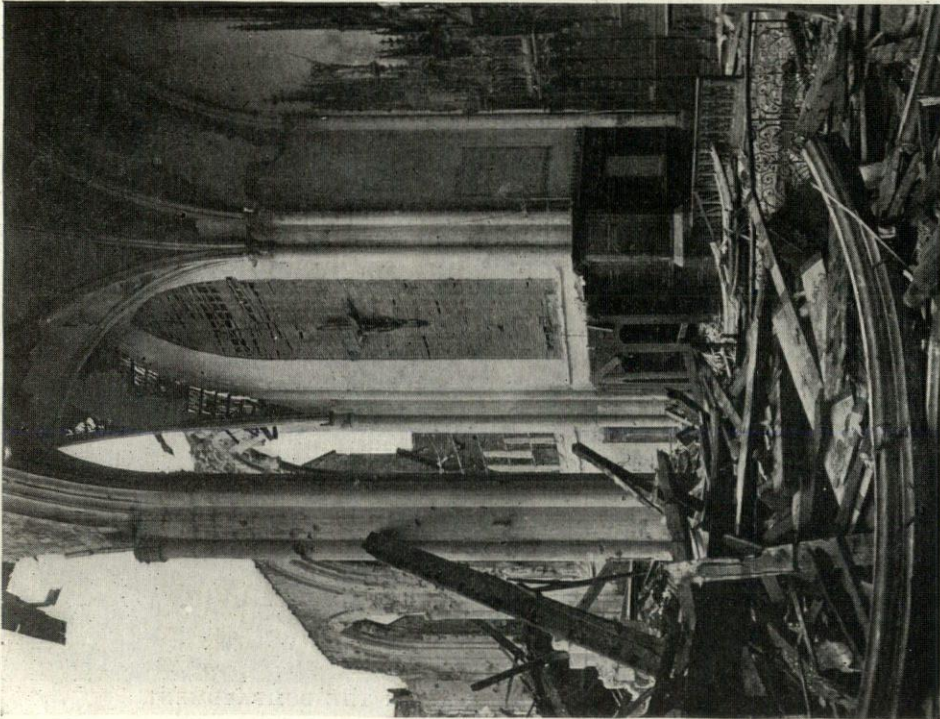
CATHEDRAL OF ARRAS—NAVE, LOOKING TOWARD ENTRANCE.



CATHEDRAL OF ARRAS—EXTERIOR, TOWARD SOUTH TRANSEPT.



CHURCH OF ST. JOHN THE BAPTIST, ARRAS.



CHURCH OF ST. JOHN THE BAPTIST, ARRAS.



THE GREAT SQUARE (LA GRANDE PLACE), ARRAS, EARLY IN THE BOMBARDMENT.



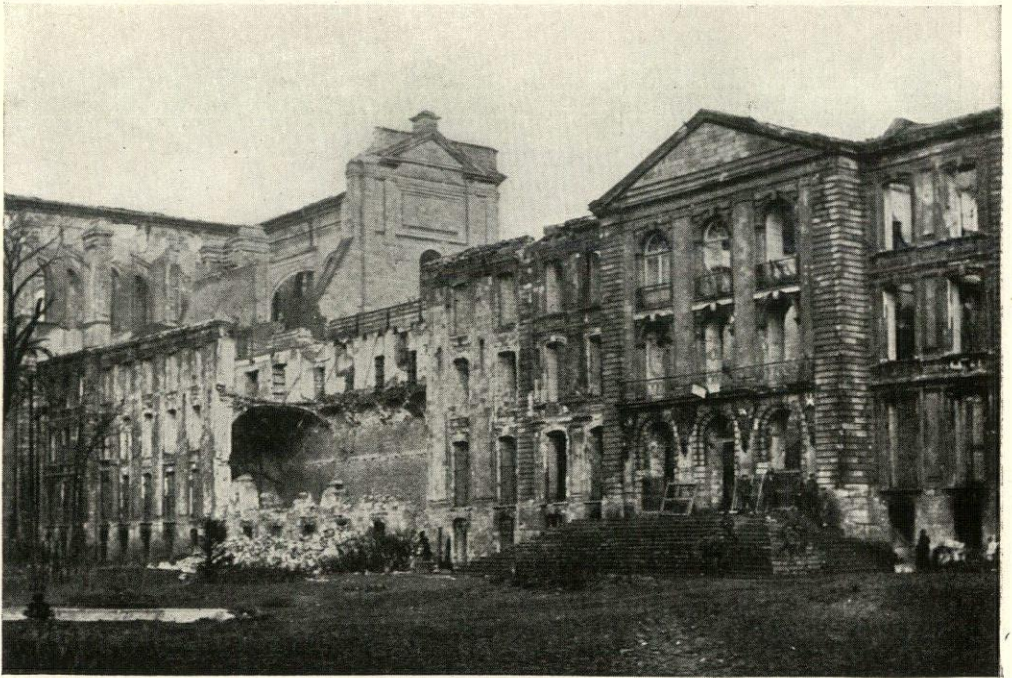
THE GREAT SQUARE, ARRAS, AFTER THE BOMBARDMENT.



TOWER OF THE URSULINES, ARRAS.



RUE ST. GÉRY, ARRAS.



PALAIS ST. VAAST, ARRAS.

with similar houses, and in addition to the Hôtel de Ville, with its exquisite tower, 240 feet in height, with its three great clocks, and "La Joyeuse," the great bell, there once was the cathedral, a classic structure, built 1755-1833. Connected with the cathedral was a collection of buildings including the palace of the Archbishop, the Seminary, and Civic Museum, the cloisters of which contained busts of local celebrities, and its galleries paintings of the Flemish school.

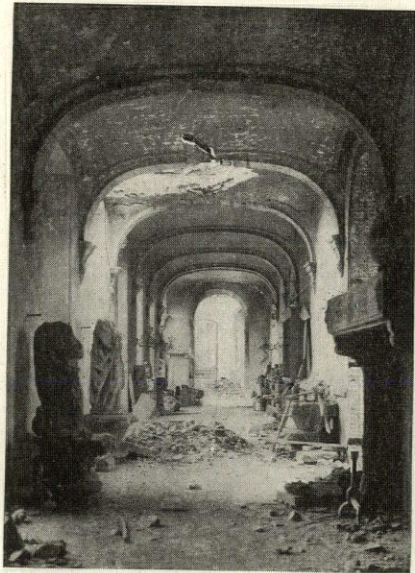
The tower of the Ursulines was a modern structure built in imitation of an ancient tower on the Petite Place; the Church of St. Jean Baptiste, a Gothic edifice of the sixteenth century.

The complete and savage destruction of these fair buildings and of most of the town is made evident enough by photographs without the evidence of witnesses, which is voluminous. Shrouded in her ruins, veiled in her smoke and

dust, like her sisters of Ypres, Louvain and Rheims, Arras mourns the loss of her children—her children of stone and timber and glass—who had stood the storms of the centuries, while the children of men, far below, paused in their little careers to marvel ere they passed on.*

And those of us who believe that the wanton destruction of art and architecture is akin to murder and a crime against civilization are sternly reminded by the German publicists that our protests are "the twittering of birds," and that the military chieftains must not be annoyed.

*"Ma cathédrale est devenue inhabitable. Notre mairie est détruite, le beffroi est déchiqueté. Deux cents maisons ont été brûlées, calcinées—C'est navrant. Je reste au poste au milieu de toutes ces ruines!—Depuis 15 jours, la cannonade ne cesse pas, les fusillades non plus; pendant trois jours nous avons subi un bombardement terrifiant. Rien n'a manqué. Les habitants n'ont plus d'autre fortune que ce qu'ils portent sur le corps. La rue Saint-Géry n'est plus. Je reçois des visiteurs qui n'ont plus rien à eux, mais tous sont soumis dépendant à la volonté de Dieu!"
—(Lettre de l'Evêque d'Arras, 7 octobre.)



SCULPTURE CLOISTER IN MUSEUM, ARRAS.



1.—SCENIC SCREENING OF A VILLAGE SQUARE.

NOTES ON CAMOUFLAGE



By J. André Smith



I AM writing this on the shore of Lake Champlain. Beyond the dense screen of trees that lines the steep railroad embankment in back of me are the long, train-like wooden barracks of the Plattsburg Training Camp.* Where I sit the low-sprung trees arch over me and through the lacing branches the sun throws shadow shapes of leaves over the olive drab of my uniform. A few feet from me, pebbled and grass-grown, the beach lies in a glare of white sunshine, and along this bright strip three men are walking toward me. They are moving at single file about six feet apart. Now they are in front of me, not more than eight feet away. I am in plain sight and yet they do not see me. In the cool green light of the sunflecked foliage, with the shadows of leaves dappling my uniform, I have become invisible. And now they have passed beyond me. Had these three men been my enemies and had I been armed, just one shot—.

The war has done one thing of inestimable value: it has struck us wide-awake. We are on our toes fighting death, not according to the old rules of warfare and self-preservation, but by every possible and impossible means that science and genius can devise. There is a super-hellishness about modern warfare that is almost beyond our wildest imaginings, and the act of defense and offense has called forth every means, every device and every art to serve as a shield and weapon against its frightfulness. The most practical mechanism and the most fanciful dreams go hand in hand, and no one dares to judge of the other's superior power, since the former may supersede the latter and the practical weapon of today may yield tomorrow to a dreamer's ingenuity.

And the one thing that is truly responsible for this tremendous alertness is the

*Since this article was written Mr. Smith has been appointed a First Lieutenant in the Engineering Corps of the U. S. Army, with prospects of being assigned to the newly created Camouflage Division. He is an architect, of the firm of Smith & Ross, New York.—Ed.

aeroplane—the all-seeing eye! Instead of making war impossible, as was at one time seriously predicted, it has made only one kind of war impossible, and that is the old-fashioned kind, the kind our forefathers used to wage. The aeroplane has put the third dimension into reconnaissance, and the enemy's eye, instead of being restricted to width and breadth of observation, now travels in vertical lanes, flashing the sky with incredible swiftness of sight. And it is the aeroplane that has given to modern warfare a new weapon of defense and protection—camouflage.

Camouflage is the art of concealment; it is an old art reborn into prominence through extreme necessity. The screening of trench furrows with leaves and sod which was practiced in former wars is as true an expression of the art as is practiced to-day, where miles of roadways are sheltered by avenues of made-to-order trees and hedges and painted scenery. It differs only in the degree of the increased powers of the enemy's observation, which the aeroplane, driven by keen-eyed observers and equipped with all-seeing cameras, has raised in equal proportion to the vastness and scientific ingenuity of the modern war game. Camouflage is not an incidental function to modern warfare; it is a vital equipment. It is the garment of invisibility that is capable of not only protecting the individual soldier and the furniture of war, but of screening the movements of an entire army. It is an art that is still in its crude stages of development and one that is capable of almost unlimited possibilities. The French, with characteristic alertness, were quick to appreciate its great usefulness and employ and continue to use it with rare skill; the Germans lost no time in their endeavor to outdo the French, and the English accepted it as a modern necessity, but practiced it at first with a heavy hand and with a lack of grace and imagination. As H. G. Wells humorously puts

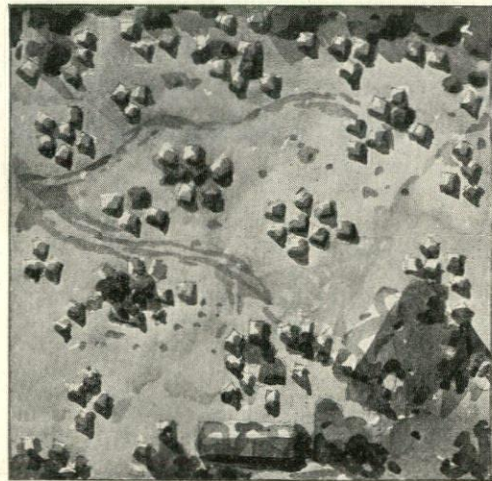
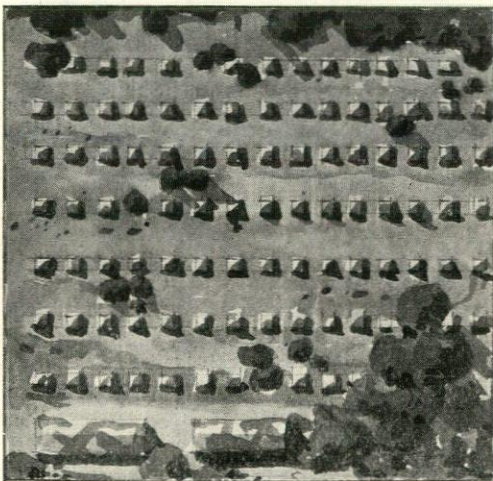
it in his book, *Italy, France and Britain at War*, ". . . many of the British tents look as though they had been daubed over by protesting man muttering 'foolery' as he did it. With a telescope the chief points of interest in the present British front in France would be visible from Mars. . . . But the effect of going from behind the French front to behind the English is like going from a brooding wood of green and blue into an open blaze of white canvas and khaki."

This statement by so keen an observer as Mr. Wells is valuable in that it points out forcibly that camouflage is not merely a matter of daubing paint, but that it calls for the right sort of daubing and the right sort of color and, above all, demands skillful consideration and direction. In other words, it is an art and not the thoughtless application of a theory.

Through various newspaper accounts and magazine articles the public has become familiar with many of the more sensational accomplishments of the French camoufleurs, and in this article it is not my intention to repeat these, but instead to touch upon camouflage from the military point of view, and also to speak of its technical side.

In battle, as in any other position of

danger, self-protection is instinctive. Soldiers need not be taught to seek cover at the sound of the first whizzing bullet, but on the contrary the whole structure of military discipline is founded for the control of men in the face of danger so as to avert, if necessary, the demoralization through the impulsive desire for self-protection. All the long months of intensive training throughout which discipline is exacted in the most minute details there is but one underlying object, and that is to develop the absolute control of the men; to gird them against fear. The untrained soldier in going "over the top" would do one of two things: he would either run forward or turn and run backward, and for that reason he is held in the training camps until he has reached such a state of self-control and discipline that when the signal is given he will go over at a walk and advance in the face of hell-fire in an unbroken line. But to those of us who have never tasted danger it is hard to conceive of men reaching a state of self-control that will allow them to face almost certain death with outward courage. To make the display of bravery all the more glorious we must consider too that the men have stood for hours (usually in the bleak, dispiriting dawn)



Seen from an aeroplane the checker-board regularity of the tents makes it impossible to conceal an encampment where the present system of exact alignment of tents is employed. Like the trees of an orchard they become conspicuous because of exact spacing. With a method of random grouping, especially in a location where there is a scattering of trees, much could be accomplished toward securing low-visibility. With the tents properly camouflaged and the occasional use of leaf-net screening a camp could be rendered almost invisible.



The value of the mottled painting of camouflage is evident in this illustration. Viewed from a distance the tents on the right of the picture are far less conspicuous than those on the left. The irregular markings confuse the eye and make the outlines of the tents harder to distinguish.

waiting and waiting for the signal to advance. It is needless to say that this period of anticipation exerts on the men a terrific nervous strain. And it is right here where the pressure of dread can be somewhat relieved by the assurance of safety or at least partial protection. The dugout, with its heavy roof beams and twenty feet of earth, offers to some degree such a haven; but if it were possible to make our open trenches safer it would result in a decided improvement of morale on the part of men who must unflinchingly hold their courage against the time of attack. It is reasonable to believe that even the most perfect training and discipline cannot entirely relieve the fear of hurt and death, and for that reason whatever can be done to add courage, even to the most courageous, would be an added and invaluable asset to military control. The protected soldier, the man who feels reasonably guarded against needless exposure to the enemy's fire, is a better and more serviceable man than one who is constantly face to face with the fear of death; and it is therefore of vital importance that every measure, no matter how slight, that can be employed to increase the soldiers' comfort, is just so much gained in the morale of troops as a fighting force. It is in this particular that camouflage has a distinct military value. It serves three admirable purposes: (1) Concealment from the enemy; (2) the resulting protection of the men; (3) increased efficiency of the men through the feeling

of greater safety and the partial relief of mental anxiety.

In the matter of concealment, camouflage makes no claim of originality or discovery. As I have said before, concealment is the obvious means of self-protection and is instinctive. In view of this fact it must have been indeed through a very curious circumstance of pride that the soldier of the olden days scorned protection as, no doubt, being unsoldierly, and carried away by the pomp and glory of the military game, or perhaps counting far too much upon its fear inspiring impressiveness, attired himself in uniforms of blatant conspicuousness. Here in America the Indian, painted in body and face or dressed in the earth-tones of leather, taught the Red Coats a bitter lesson in low-visibility. Invisibility is today the cry in uniforms as well as in fighting; the khaki of our army and of the British, the silver-green mist of the German and the smoky horizon blue of the French are all efforts toward the attainment of invisibility; and in fighting, the sheltered trenches, dugouts, the sunken batteries and the miles of sappers' tunnels speak for this same desire for concealment and obscurity. And in view of this fact it is only natural that camouflage should have grown into an important military necessity and developed from the simple methods of leaf-screening to the present practice of the art whereby every piece of the furniture of war is painted for low-visibility; screens are erected to shelter miles

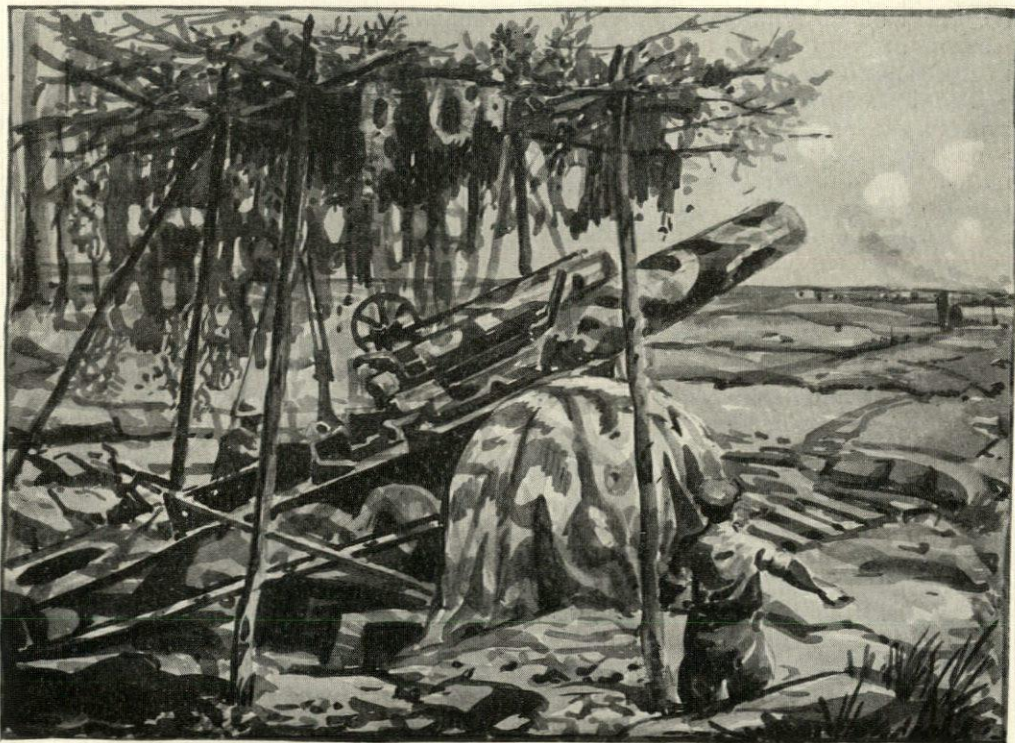
of roadway and, as a further development of the science, deception is resorted to in order to blind the enemy by means of distraction.

In these days of censored news it will be impossible to write with absolute certainty about matters dealing with the war, and for this reason the true history of the art of camouflage will have to wait its historian until universal peace restores to us the freedom of speech. And so, in tracing the development of this new art, I must confess that I am resorting to borrowed evidence; and although I have not seen with my own eyes, I have at least the confidence and trust in those eyes that have seen this work, and until he can convince me otherwise I shall have to ask the reader to share this trust with me.

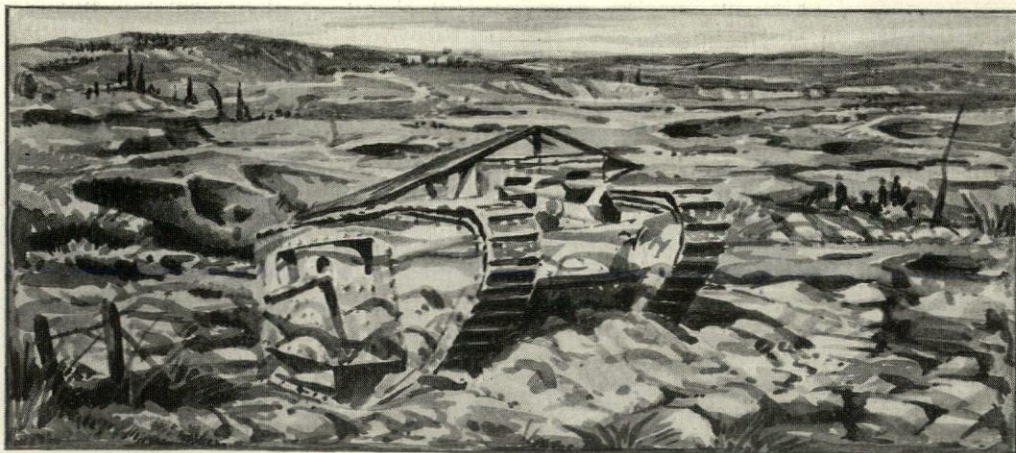
It became quite evident as soon as the enemy aeroplanes began to penetrate far in back of the French lines that some form of concealment on a much larger scale than would be possible by the old method of leaf covering would be necessary. During the first weeks of the war and well into September the countryside was still wearing its summer foliage of bright green; and although tree branches and also trees would answer the purpose of screens, the leaves soon dried in the summer heat and, turning brown, declared their secret purpose to the shrewd eye of the enemy. In the open fields hay offered a ready means of concealment, and it is a fact that many an innocent haystack shot death from its heart.

But these natural means of protection, although useful in an emergency and under conditions where leaves and tree branches and even hay were procurable, were not suitable on the extensive scale of concealment that the new warfare made imperative. To cover the long lines of supply trains and the vast canvas coverings of the ammunition dumps and the even greater area of tentage of an encamped battalion would demand a forest of green, and even if this were available, the thing would be absurdly impracticable. So it became a matter of paint, and not paint alone but the proper application of it. From the very first it became evident that merely a "battle-

gray," or in fact any one-color painting, would not answer the purpose of a substitute for foliage; it lacked what the foliage quite naturally accomplished: the breaking up of the surfaces concealed and the confusion and deception of the eye of the observer. So in order to make paint yield the highest effectiveness it was decided to apply it with a certain realistic imitation of leaf forms, and during the earlier experimental stages of the art of camouflage it was not unusual to see enormous guns and their tractors and ammunition wagons painted to represent banks of foliage and rocks. These when placed on the edge of a wood or in the particular location for which they had been especially painted were remarkably effective. They melted into the landscape and quite effaced themselves from the eye of the enemy. But when the time came to advance these same guns into new positions it was not always possible to find for them the necessary sympathetic background, and more often than not the greens and yellows of the suggested leaves proved to be more conspicuous against the dull earth color than if they had been painted in some single tone of gray. It was also impracticable constantly to attend these guns with a squad of painters whose sole business it was to alter the color scheme to fit its ever-changing surroundings. And besides another element entered to defeat the most carefully painted war machine, and that was the fact that a gun when painted in leaf forms, although made reasonably invisible at a certain distance, lost its effectiveness when viewed at a greater distance; the short brush strokes that nearby were so suggestive of leaves in dappled sunshine became a mere flecking of paint spots, and the further off one viewed the work the more completely blended became these spots and the more sharply did the form of the gun itself assert itself. In other words, it became evident that the application of paint, no matter how cleverly done, in imitation of leaves and smaller natural objects, while it served to render it more harmonious to its surroundings and gave it some degree of invisibility, nevertheless failed to destroy



An example of camouflage painting (leopard spots) and overhead screening. The dappled marking on the gun aims merely to distort its form and create in the mind of the observer a doubt as to its military value. In this picture the huge tell-tale wheels with their caterpillar treads have been draped with a mottled cloth. The overhead screening is made of leaf-netting and tattered canvas, holes have been cut and the light showing through them repeats the mottling on the gun and adds to the effect of the confusion.



The shell-ruptured earth of the modern battlefield forms the pattern motif which the camoufleur must use in the painting of his war furniture. The tank pictured here has been camouflaged with "perspective markings," the lower part suggesting the crumpled earth and the upper portions gradually blending with the long lines of the horizon. The color would correspond, running from warm earth tones to the gray-blues of distance.

the form of the gun itself. Here then was the problem: how to apply the paint to overcome this difficulty.

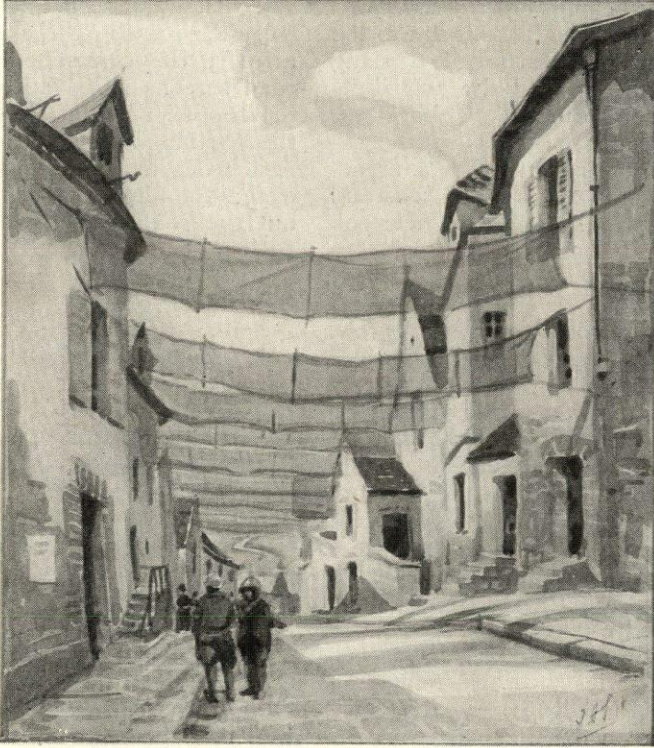
The French, with their natural alertness to the uses of science, saw in the protective coloration of birds and animals a solution to this perplexing question. They began at once to experiment along this line, bearing in mind that the coloration of animals seems to have been done by a kind Providence for the purpose of breaking or disguising the outlines of the animal and to counteract as far as possible their under shadows. With this in mind the camoufleurs darkened the high lights along the top of a gun barrel and lightened its under surfaces, using for their paint colors that were agreeable to the existing surroundings. And then with this as a foundation they began "breaking" the outlines with irregular streakings and blotches, all very weird to behold at close range; but at a distance, if they did not accomplish invisibility, they gained what they were unable to do before, and that is the confusion to the eye. A gun painted in this way became a "What-is-it?" It raised a doubt in the mind of the observer; it disarmed his suspicions and accordingly blinded him to its importance. In other words, this new method of painting accomplished invisibility by giving to objects a sort of harmless insignificance. Painted in this way, aerosheds, tents and the various gigantic instruments of war are modest, shrinking deceptions. They seem to say "Tut, tut, don't look at me; I am nothing!"

But to accomplish this degree of distraction is not any easy matter; the camoufleur finds the problem of "breaking outlines" the most difficult of his art, for the reason that he must contend with the painting of surfaces which in most cases are composed of angular planes, projections and overhanging edges with their underlying shadows. In the case of animals, and especially with birds, this is almost entirely eliminated, since the furred and feathered surfaces here are softly modeled and the light falls upon them with the most gradual gradations of tone from the upper to the lower and under surfaces. In addition to this, an

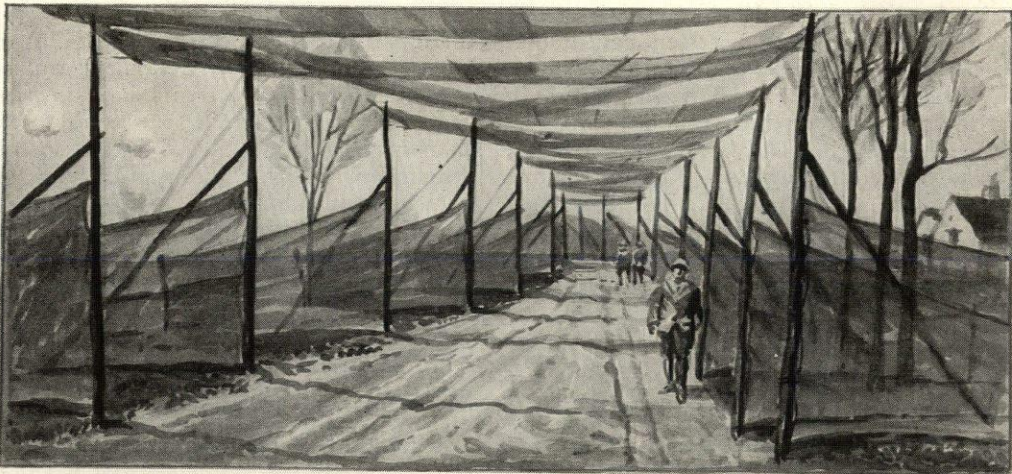
animal or bird can always "lie low," and by crouching close to the ground can "squash away" the telltale shadows of the deeper under surfaces. Furthermore, the protective markings in animals are usually more perfect in the smaller animals, and especially the helpless young, and in these cases the markings are small in scale—that is, they correspond in size to the crinkled forms of dried leaves, lichen and fragments of tree-bark and the like.

In contrast to this the camoufleur's task is almost in proportion to the comparative increase in the size of the objects that he must conceal. His protective markings must be in scale with tree trunks and boulders or the scarred upheaval of the shell-torn earth. He must constantly struggle against obliterating mechanical surfaces, sharp angles, cogs and wheels, and, worst of all, he must fight against the suppression of the infinite shadows cast by projections, to break the sharp mechanical edges and wipe out, if possible, the shadow cast by the entire object. Paint alone cannot always accomplish this obliteration of form, especially in the larger guns; but it is nevertheless constantly employed as a basis for protection, and further augmented by the use of reed or leaf nettings supported on posts above the guns and often in front and on both sides.

And the next step from this humility of paint was the introduction of a counter attraction. Following the "Tut, tut, don't look at me," came the logical, "Oh, say, look at this," the "this" being, of course, something very carefully and apparently carelessly exposed with the object of attracting attention away from the "don't look at me." And it is in this particular, and the ingenious development of this idea, that camouflage can claim originality. And it is also through this side of the work that camouflage gained its popular recognition; the game of "fooling the Boche" appealed to the people and amused them tremendously, and although or perhaps because the work was fraught with danger it must have brought considerable satisfaction and amusement to the camoufleurs themselves. A joke is a joke the world over,



Overhead screening on a hill road. When viewed from the enemy's position below the hill and at a distance the overlapping strips of cloth hide the road entirely.



Exposed roadways are screened either by a continuous wall of canvas or by the method of wing-screening illustrated here. Above the road, strung from pole to pole, is a network of cloth as a safeguard against aerial observation.

even if it is lighthearted or grim as death; and while it has raised camouflage to the prominence and popularity of a slang word, it has also robbed the art of its dignity and seriousness. We are too ready to associate the work of the camoufleurs with their mirth-provoking accomplishments, the fakes and tricks and amusing deceptions, and to overlook their thoroughly important work of concealment.

At Chalons and several other places are factories devoted entirely to the manufacture of camouflage properties and materials. Here is prepared the reed and grass matting, yards of it, miles of it, that is used for the screening of roadways. These road screens, sometimes of leaves on wire netting or more often of burlap or some lighter material, are strung on poles along the sides of the roads, forming a continuous shelter from the observation of the enemy. Along some roads, and especially those that are unusually dusty, these screens have been arranged in a series of wings extending outward from the edge of the road perpendicularly for a distance of ten to fifteen feet. When viewed from the position of the enemy, the wings overlap each other and give the appearance of a continuous screen. The reason for this method of construction is to allow the dust to blow freely to the side of the road rather than let it rise above it in a clearly distinguished column, as it would do if it were held between continuous walls of screening.

This same method of road screening is also employed on hills that are open to the enemy's observation. In this case the ruse of overlapping wings is used above the road and over it, like the sky-drops on a stage set. Looked at from a distance the rise in the roadway is completely covered. Work of this nature is not so much a matter of ingenuity as straightforward engineering; but it is nevertheless hard and dangerous work. Roads that require screens are obviously roads that are open to the searching eyes of the enemy, and that means that they are exposed to shell fire and all the terrors and destruction that modern war machines are capable of inflicting. The

camoufleurs, as part of the engineering corps, are with "the army ahead of the army"; they must either prepare the road screens in advance of a movement of troops or undertake the work under the partial protection of night. At the best it is a hazardous job and very often exacts the highest penalty, and that without the soldier's satisfaction of conflict with a visible enemy.

As a protection against aerial observation strips of green are stretched over the roadways diagonally from pole to pole, forming a sort of criss-cross network. When viewed from a great height this green lattice is sufficient to counteract from the bright glare of the road and to a great extent conceal whatever movement of troops that may be going on beneath it.

It must be remembered that the enemy does not rely entirely upon visual observations; in fact most of the location maps, trench lines and the like are made from photographs taken through a telescopic lens. For this reason the camoufleur must count to a certain extent on the effect of color on a photographic plate. Blues, for example, photograph very light; in fact all the cool colors appear a good deal lighter in a photograph than do the warm colors. Accordingly the matter of the proper use of color, or, rather, the use of proper colors, becomes a very important factor in the painting of protective markings and outline distortions. A piece of work that might pass very successfully a visual examination might prove utterly inadequate when seen in a photograph. It would seem, therefore, that it be advisable to use whenever possible a monochrome of some warm color, such as brown-green, varying the tones with the introduction of white and black and depending more upon color suggestion than the actual use of color.

Just what the American camoufleur will bring to this new art is still too early to predict; he will approach it at first in true humility, asking of his French brother the benefit of his experience, inspecting carefully the work that has been done on the English as well as the French fronts, and after that—who knows? The

art is still in an early stage of development. If the French were ingenious enough to invent it and the Germans to copy it, it is safe to say that we Americans shall first of all *systematize* it; we shall make a business of it—not a cut-and-dried business, but one directed with level reasoning and touched by American humor and inventiveness. To the

French artist and architect we have always looked for instruction and inspiration; it will be easy for us to follow their lead in camouflage as we have in painting and architecture, and, united by a common cause, we shall delight in playing the game with them against the Boche, and we shall do it in much the same spirit—happily, seriously and brilliantly.

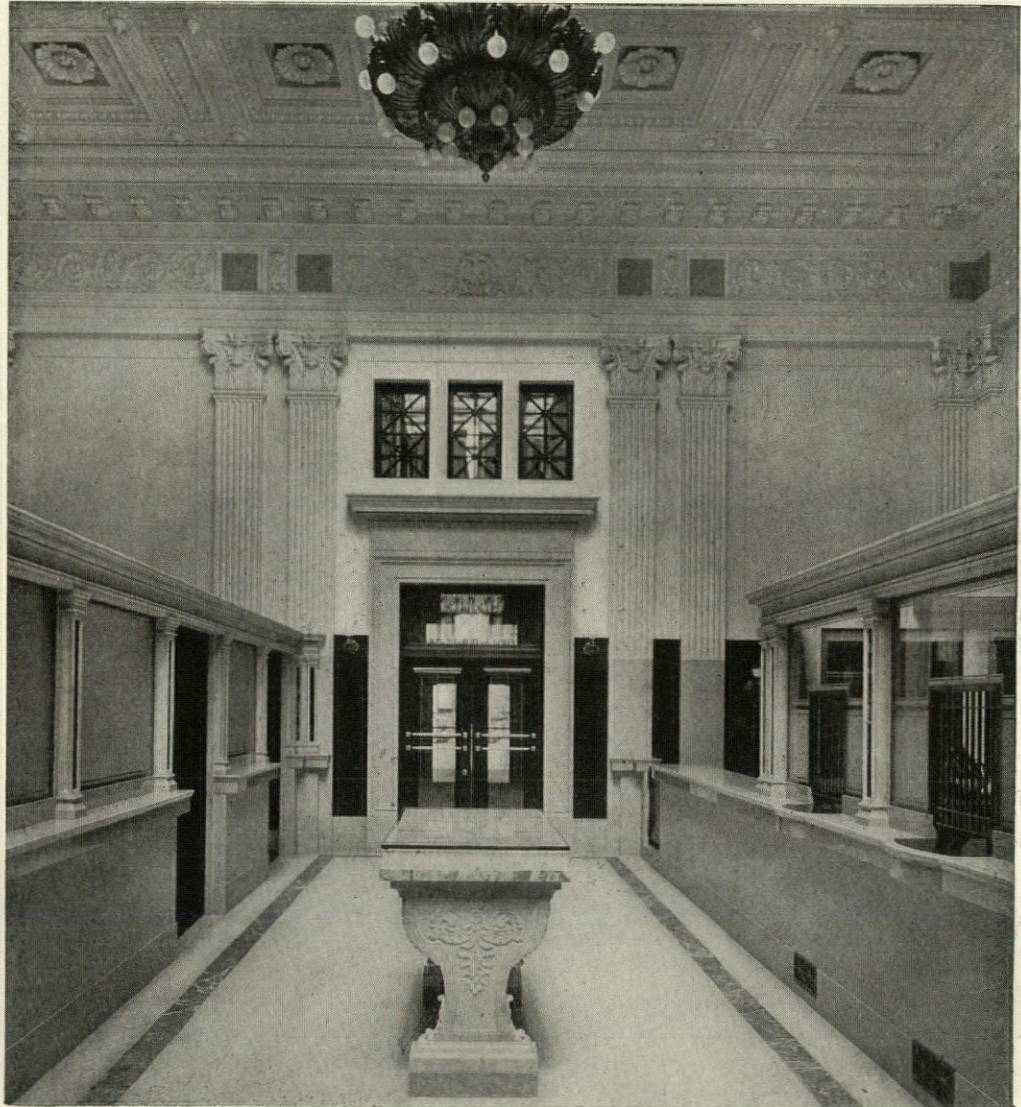


The vast area of roof and wall surfaces that must be camouflaged involves a tremendous amount of labor. Since much of this work could be standardized the use of a paper with a camouflage pattern lithographed upon it and applied to the walls with a thick paste would offer many advantages over the use of paint.



FIRST NATIONAL BANK, MENASHA,
WIS. CHILDS & SMITH ARCHITECTS.

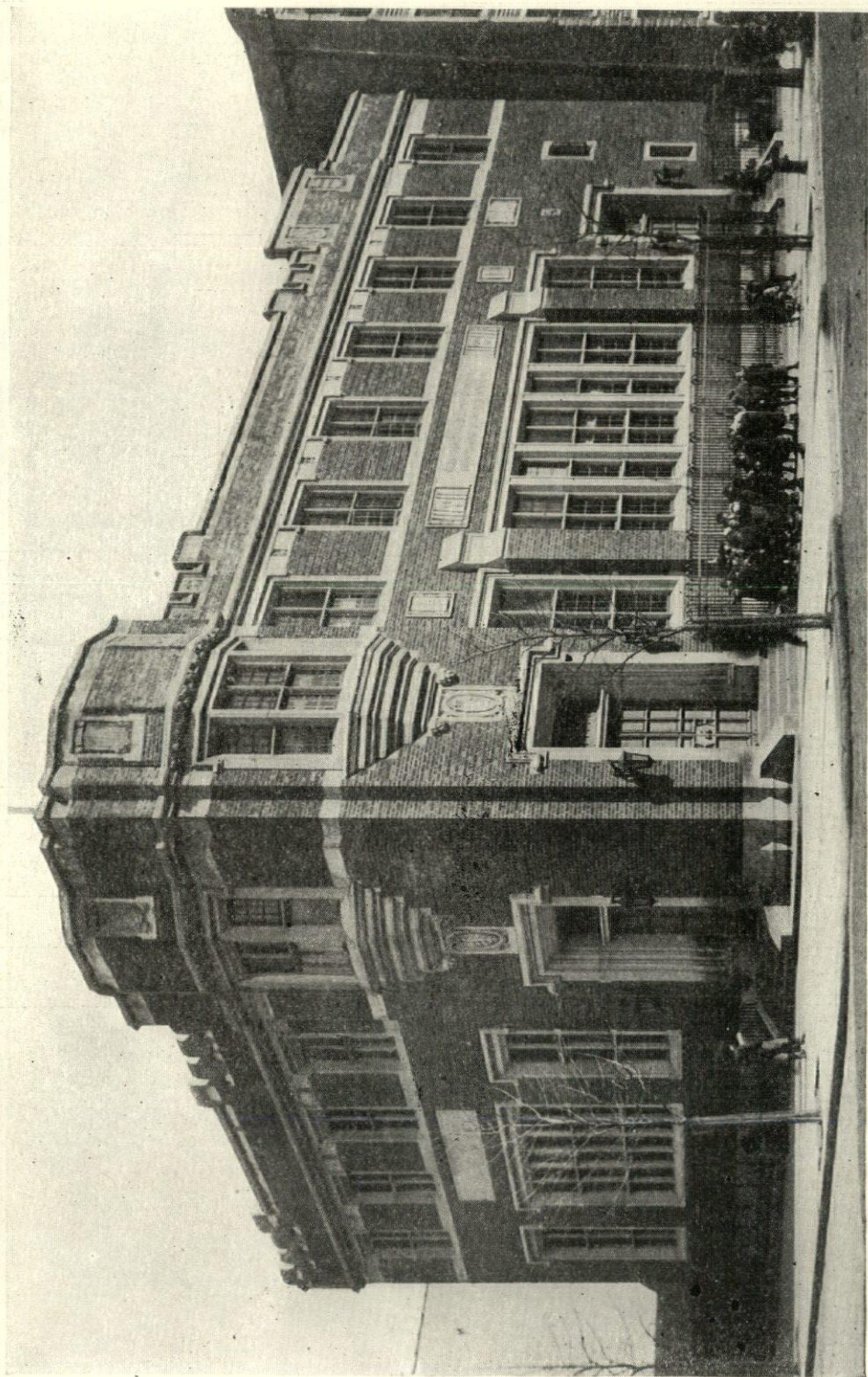
PORTFOLIO
OF
CURRENT
ARCHITECTURE



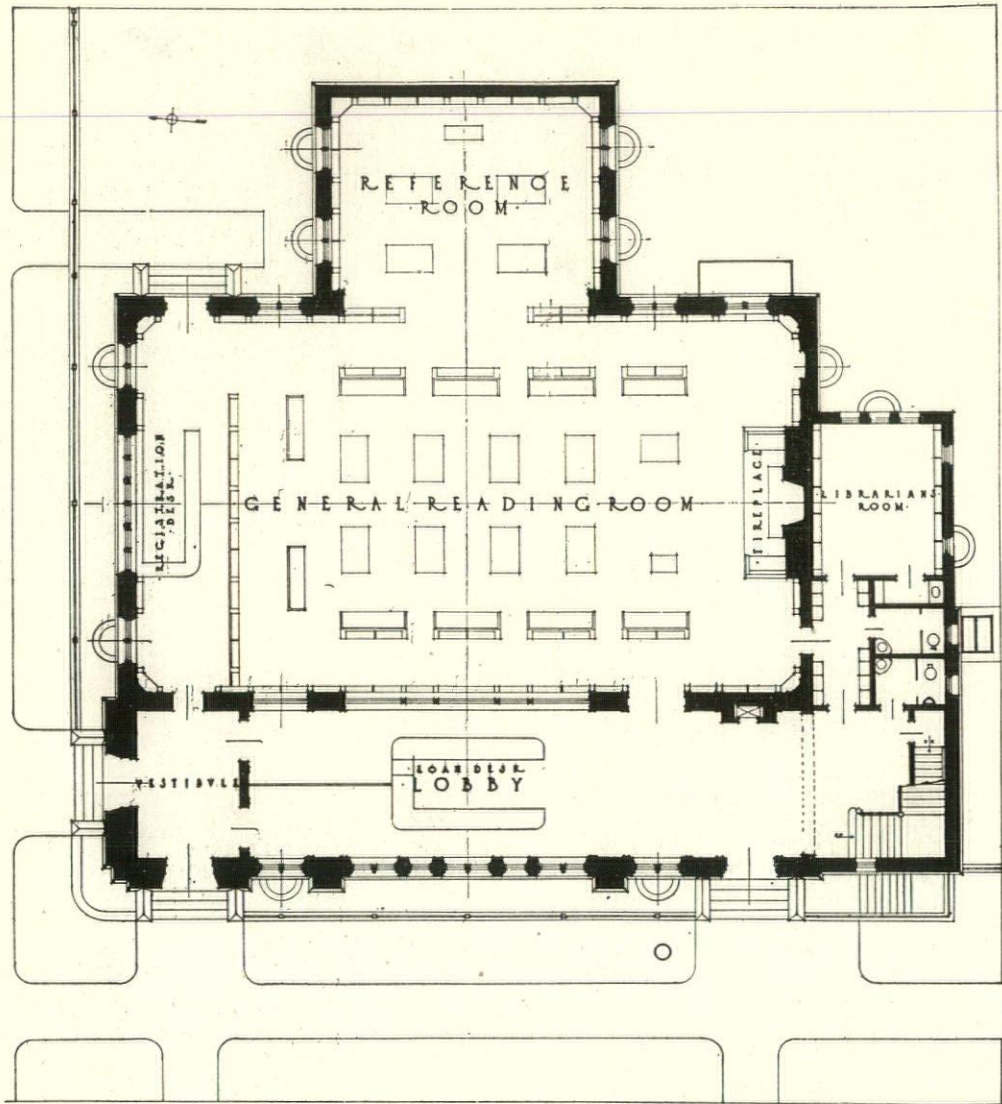
BANKING ROOM, LOOKING TOWARDS EN-
TRANCE—FIRST NATIONAL BANK, MENASHA,
WIS. CHILDS & SMITH, ARCHITECTS.



BROWNSVILLE CHILDREN'S BRANCH, BROOKLYN
PUBLIC LIBRARY. WILLIAM B. TUBBY, ARCHITECT.



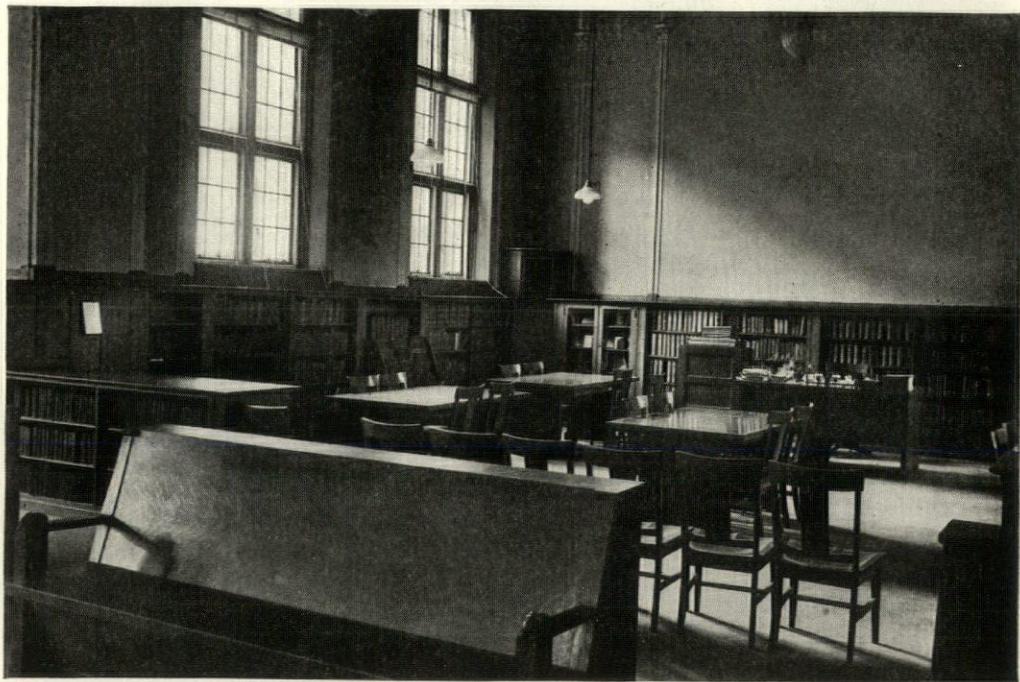
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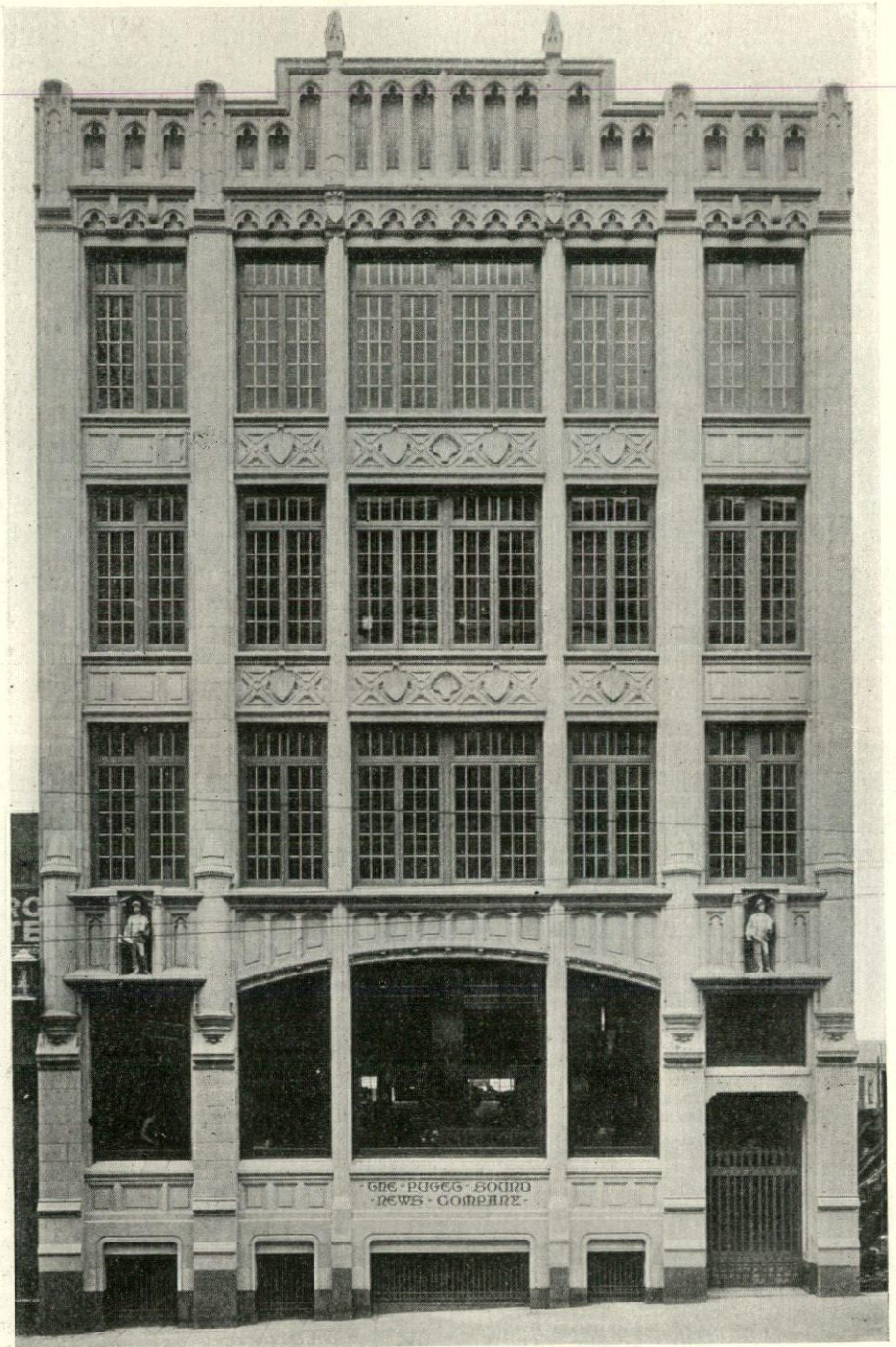
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WILLIAM B. TUBBY, ARCHITECT.



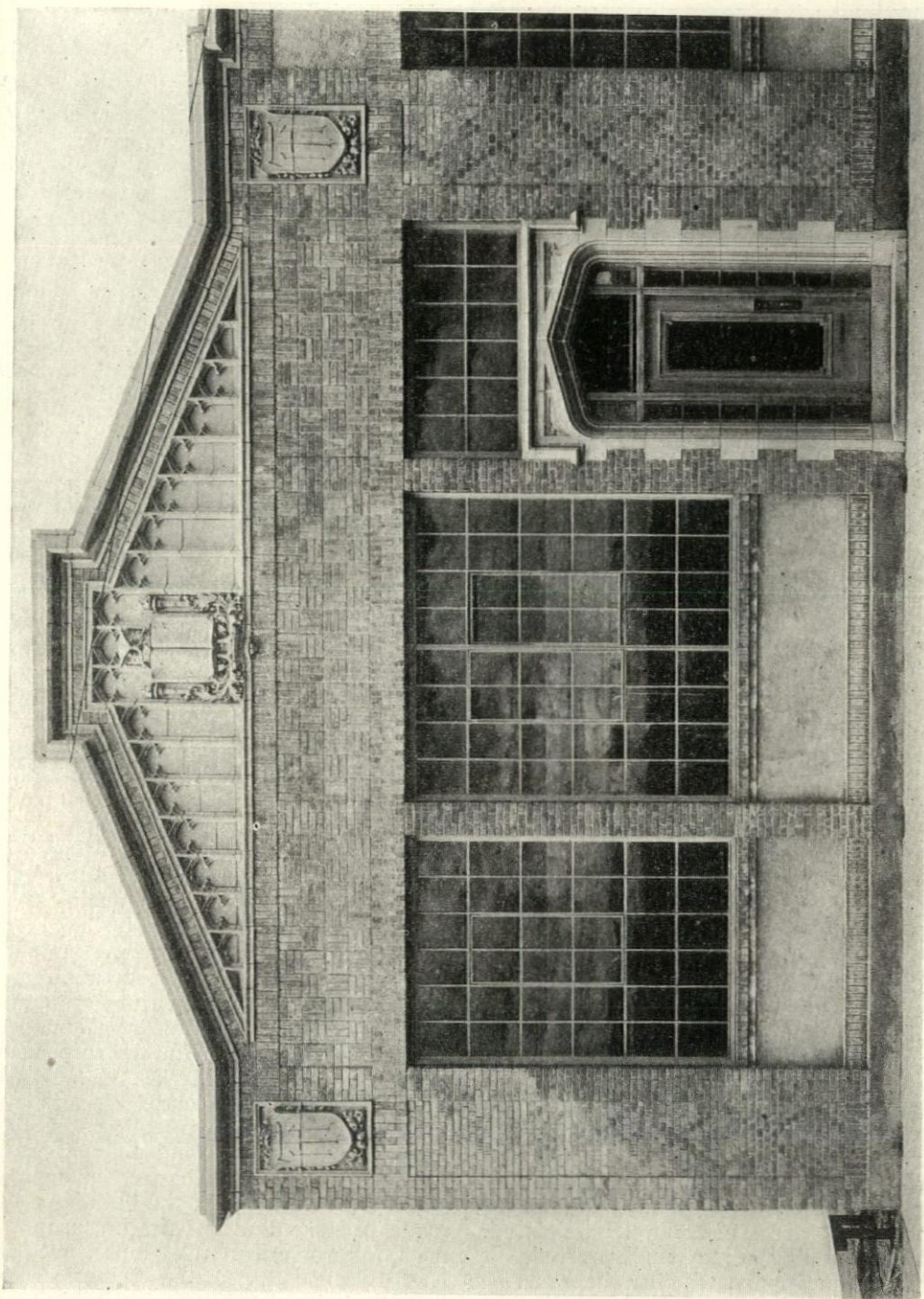
READING ROOM—BROWNSVILLE CHILDREN'S BRANCH, BROOKLYN PUBLIC LIBRARY.
William B. Tubby, Architect.



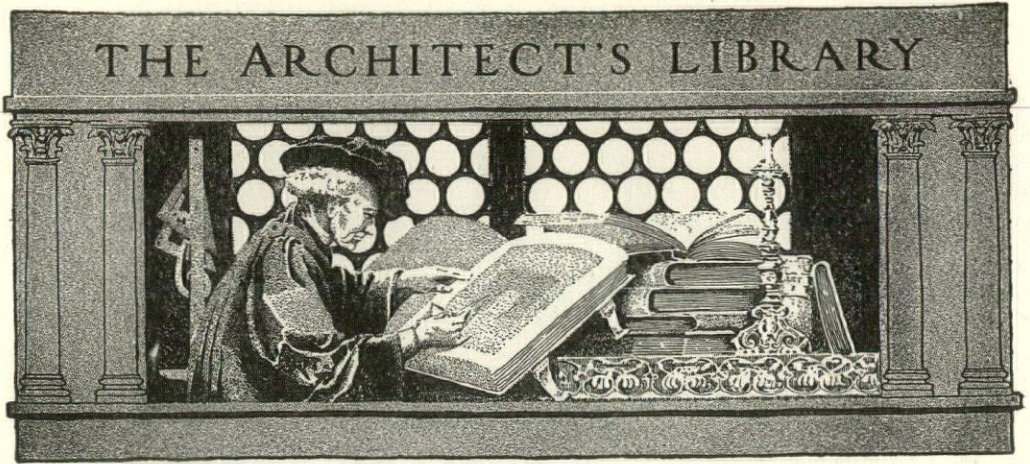
BAY IN READING ROOM—BROWNSVILLE CHILDREN'S BRANCH, BROOKLYN PUBLIC LIBRARY.
William B. Tubby, Architect.



BUILDING OF THE PUGET SOUND NEWS CO.,
SEATTLE, WASH. CHARLES H. BEBB AND
CARL F. GOULD, ASSOCIATE ARCHITECTS.



BUILDING OF TUCKER HANFORD CO., LITHOGRAPH-
ERS, SEATTLE, WASH., CHARLES H. BEBB AND
CARL F. GOULD, ASSOCIATE ARCHITECTS.



BOOKS ON COLONIAL ARCHITECTURE

By RICHARD F. BACH

Curator, School of Architecture, Columbia University

Part VIII.—The Final Record

IN the course of a series of studies on the literature of Colonial architecture which it was our good fortune to publish in the pages of the Architectural Record during a number of months, we have made a humble effort to gather together and comment upon as many as possible of the representative works dealing with the fascinating field of the formative years of American building art. For reasons given at the outset and emphasized from time to time we have sought to provide a complete index of published works—books, brochures, articles in periodicals, even efforts in germane parallel or allied territory—in this very fertile field for architectural study, and in so doing, we have been enabled to demonstrate some of the crying needs in this architecturally important province—many of whose constituent areas are as yet unexplored, some possibly even undiscovered. It may be questioned whether there can be any crying needs beyond those of warfare at the moment of writing, but it is our sentiment that the maximum propagation of the arts of peace even in the

midst of war can but redound to the added credit of the ultimate victory.

Above all, it is to be urged and reiterated that American treasures of Colonial architecture require—and that very soon—a final and definitive record. The monuments are fast disintegrating, or, worse yet, are being restored out of all semblance to their pristine quality and homeliness. Remodeling old New England farmhouses has become a rich man's pastime; making aberrations of the type of Shadow Lawn out of dignified manor houses on the Rappahannock is an attractive outlet for the increment of a favorable stock market. There are now in the South splendid manors occupied by ill-starred descendants of old-time planters, too proud to relinquish the homestead in exchange for money and too poor to grant the buildings the requisite care and repairs to preserve them for posterity. There are, even in New England, farmhouses lying in ruin, though their history reaches back to a noble age in American growth. These buildings all demand an adequate record, not only of their existence, but of the

details of their construction and design and decoration. By approximating some understanding of the mode of attack of the Colonial architect, or rather "carpenter," we shall likewise approximate an understanding of the impulses that actuated him and made good his results. And be it remembered that, though in general sometimes of but mediocre achievement, most of the early buildings were favored with the personal attention of the builder; the actual turn of the hand of the carver may be seen, and this again is a reason why we should require some record of these interesting realities of a bygone art.

It may be said and, in a sense, justly, the Colonial has been written into the ground; there is nothing new, and why duplicate? Nothing is further from the truth. Colonial architecture has never been completely recorded. Some few buildings or some few aspects of many buildings have been photographed and drawn and reproduced *ad nauseam*, especially certain types from Salem and Boston. But even with this alleged superfluous repetition, every reproduction in a periodical of a Salem doorway meets with interest, though the reader may well know the source at first sight; nor does the architect ever deny a similar interest, feeling that the qualities of a good Colonial motif share with all other excellent works of art the quintessence of character, by virtue of which design is enabled to transcend the moment and live for centuries other than that of its creator. And there is the further insinuation that any feeling of being overfed on Colonial detail may be due either to poor reproduction or to poor understanding on the part of the spectator. And here we have one of the leading difficulties, a problem of constant recurrence which will trouble us as long as there are magazines satisfied with repetition and inferior illustrations, and as long as there are architects too strongly controlled by the professional inertia which obliges the practitioner to find his motives exclusively in a limited office library. A magazine will be content to commission several draftsmen to travel abroad to ransack unfrequented corners of Italy and France for unrecorded evi-

dences of Renaissance civilization, of a type surely written and rewritten, edited and re-edited, as often and as poorly and as insipidly, as Colonial architecture could not be in a dozen decades of prolific periodicals; yet this same magazine will be loath to expend half the cost of such an expedition in sending draftsmen to make a final record of even the most prominent buildings on Maryland's Colonial eastern shore.

And, on the other hand, how can the reader of such periodicals avoid the nausea due to frequent repetition of the same old Colonial doorways and McIntyre carvings, unless his intelligence is trained to appreciate the multifarious shades of significance and form and beauty that are everywhere reflected in Colonial building and furniture and decoration, as controlled by locality, climate, and type of early foundation? Again we say that a complete record is needed and needed at once. Such a record will be adequate, it will be excellent, it will be final. If, then, any more books and articles in the magazines see the light after such a record has been completed, they must be most abstrusely detailed in character and deal chiefly with things other than those purely architectural or artistic, or else they must for obvious reasons be duplications of the desired final record published under the best available auspices and therefore themselves as nearly as possible infallible.

What is true of the magazine articles is true of the books. Most laudable efforts have been made by several publishers to bring out works of more than casual interest by enlisting the efforts of recognized authorities and by fathering only such collections of essays, photographs or, best of all, measured drawings, as would achieve an actual and welcome contribution to the knowledge of the subject. If the great final record is undertaken, as we shall propose it in the following paragraphs, such collections and texts will become part of the record, either in the first instance by previous agreement or else in the form of reprints. But above all, the proposed final record will be a type and an example of inclusiveness and quality, both as to text and as to drawings and other

reproductions, and therefore all other publications worthy of a second glance will automatically follow its leadership and the future of American architectural history will be blessed with an assurance such as has not been vouchsafed to that of any other country, notwithstanding even the paternal interest of the splendid ministries of fine arts of France and Italy.

But by dint of what agencies, natural or supernatural, is such a final record to be obtained? Whence secure the means, which at first bid fair to be fabulous, to set so vast a project on foot with any guarantee of completion, let alone of ultimate success?

II

The solution, be it said, is to be found in good will and whole-hearted cooperation, rather than in an outright appropriation of money probably to be misguidedly expended. There are in this country a number of recognized authorities on Colonial architecture and art generally. There are also a number of writers, not perhaps authorities, but sufficiently acquainted with the Colonial manner to be able to render good and intelligent service in gathering or collating Colonial material. There are also a number of schools of architecture regularly requiring as part of the prescribed work of their students a certain quantity of carefully prepared measured drawings. There are in addition a number of architectural and allied periodicals that regularly or frequently publish matter of interest in the Colonial field. There are numbers of architects either directly interested because of the particular character of their practice or maintaining a collateral interest as a matter of principle, so that here again there should be no lack of cooperation. What is more, there are many architects residing in regions still redolent with the Colonial atmosphere, and these surely cannot deny a distinct Colonial interest. And, finally, there is the well established organization of architects in municipal centres, by states, and even nationally.

There are, then, a goodly number of channels through which interest in things Colonial already flows, in greater or less

intensity, and the problem therefore is chiefly one of organization, or possibly of consolidation. The extant remains of American formative architecture are very few; of the existing buildings by no means all are worthy of detailed record, except as to the fact of their existence and the names of their owners, but the remainder surely deserves a definite reproduction in book and plate form. It would be a matter of no great effort, with the system of cooperation indicated below, to catalogue all worth while Colonial buildings still in existence and to keep such a catalogue in an accessible place for the use of architects, writers and others interested.

The American Institute of Architects is the logical organization to father such a program of cataloguing all existing Colonial buildings, since a project of such value could be granted its proper dignity nowhere as well as under the aegis of so well recognized and well established and well regarded an institution.

But the preparation of such a catalogue would be but the forerunner of the much weightier task of gathering of drawings, literature and other data on the Colonial field. In the first place, it would be necessary to collect all published works on Colonial architecture, so that a complete collection, fully representative of the work already done in the direction of recording our formative building period, might be established and made available for reference and comparative study. This collection of works, which would require but very limited shelf room, should be given into the care of a body or institution enjoying a thoroughly recognized architectural influence in this country. We can think of no better location for a representative collection of works on Colonial architecture than the Avery Architectural Library at Columbia University (of whose staff the writer has the honor to be a member), long representative of American architectural traditions and progress, which might be regarded as a library of deposit, the works issued to date forming a nucleus around which, with the aid of any further publications—and there are bound to be an always increasing number—

would logically be gathered the first complete library of works on Colonial art.

The task of preparing the catalogue above mentioned might involve a small expense, for clerical labor and for stationery, but for the work of supervision and collation as based on knowledge we are convinced that there would be no dearth of willing assistants, each qualified in his own district of the original Colonial territory. And in the gathering of the books and other data no serious obstacle should be met. In the first place there have already been brought together at the library above cited a goodly number of the books thus far published. Of those not already there many could be obtained on request if so great a purpose were made known, many would be sent in without request and others could be purchased at a small cost. In some cases, as for instance that of one of Asher Benjamin's books, the gap could probably never be filled, since extant copies are too few.

But in both these preliminary undertakings a similar mode of operation could be followed, so as to eliminate the largest number of waste motions. We can imagine, for instance, a central committee on Colonial architecture, a regular committee of the American Institute of Architects, very carefully chosen and with permanent membership. This central committee might be composed of men residing in the chief centres of the original thirteen states. The members, beside meeting as they might find it advisable and rendering an annual report to be published, would also individually be chairmen of similar committees in their respective chapters. By this means the whole interest is subdivided and localized in sufficient degree. The chapter committees would be the ultimate agencies through which the data necessary for the catalogue of existing buildings and also any other material for a representative library on Colonial architecture would finally be obtained. The whole undertaking should, thus far, not be unwieldy, chiefly for the reason that we have followed our quarry to its source. Time would be required and it would not be a work of a day, but it

would be worth any expense of time when finally completed.

We have, then, the beginning of the final record of which we have so emphatically proclaimed the need. The Colonial library would at once make known any serious gaps, so that the interest of searchers and writers would at once seek new fields for exploitation. To find these fields they would automatically be referred to the Institute's catalogue of existing buildings.

Out of this would then grow a great new interest, interpretation and understanding, of the building era that started us on our national course so well, only to be replaced by imitations and emulations of ideals that were dead or otherwise not of our creation. This great new interest would turn the periodicals in the right direction and the repetition of the same old doorways and mantels would cease of its own accord. It would guide the writers of books and articles, the makers of measured drawings, the historians and all others interested into new channels of fertile fascination. The general exploitation of a noble past would, when thus accurately understood and made known under the finest auspices, lead to such an understanding of the firstlings of our architecture as no amount of desultory writing and preaching and promiscuous drawing could ever accomplish. Out of such an understanding a revived Colonial style in its thousand phases would soon come into being, and the thread of our architectural growth, broken under the spell of the dread classic revivals, could again be given its requisite continuity, at least in domestic architecture.

III

After the catalogue and the library would come the final record itself. It would be a labor of persuasion and good will and cooperation, for in this day and age we cannot picture the donation of a large amount of money for the purpose of drawing up Colonial buildings. A gift of such Utopian savor would at once remove all our difficulties, but it is not to be expected in the midst of the world war. It would therefore devolve upon the same central and chapter com-

mittees above suggested to act as the chief agencies in guiding writers and publishers in the proper directions, so that their results would be adequate and illuminating and new and final. The committee would arrange for some general scheme for the publication of works on Colonial architecture, with due regard for sizes of sheets, character of drawings, details to be observed, best manner of indication and reproduction, kind of paper to be used for plates, best form of binding, lettering, etc., in fact embracing all essential features of an excellently made and thoroughly useful and final record of the building a book undertook to reproduce. With this as an ideal, this committee could easily impress upon publishers and writers and magazines the advisability of approximating as nearly as possible such an ideal of representative publication. We are assured that, for obvious reasons, all members of these three categories would be prompt to respond, for all three are looking for help and for light. What is more, the efforts of the schools of architecture could also be enlisted and the measurement and drawing of living Colonial forms substituted for that of lifeless plaster casts of foreign art in museums.

Of course, if the Utopian appropriation—a consummation devoutly to be wished for only—could be realized, the Institute itself might be made an agency of execution to bring into being a thoroughgoing set of volumes on representative buildings still in existence. And even with no greater spur than that of general interest, we can imagine at some future time a small appropriation from the Institute or some other organized body or institution, to start such a publishing project on its way. It is, of course, too much to expect from the august Congressmen who fathered the execrable power house project in Washington. To be sure, we cannot expect publishing firms, in accord with our suggestion in the preceding paragraph, to dispense with their own ambitions as to the format and quality of their books, nor that authors in turn will not demand some degree of individuality, however

much beside the point for the purposes of record. Still even an approximation to an ideal set by the Institute would be a great advance. And working along similar lines, it would not be a serious matter to persuade publishers of new editions of the more modern works on Colonial architecture to cast them into this ideal format, although any bona fide reprints of old-time "Companions" and "Treasures" would have to preserve their original features.

IV

By these three steps, then, (1) of making a catalogue of existing Colonial buildings, (2) of making a collection of books and other data on Colonial architecture published to date and placing this in some centrally located library of deposit, and finally (3) of drawing up an ideal form of publication for instructive books on Colonial architecture, inspiring and persuading the publication of always more books patterned after this ideal and urging approximation to this ideal on the part of all writers, publishers and other *cognoscenti*,—by these three steps will the final record of Colonial architecture ultimately come into being.

But where such a record shall begin and where end we cannot say. At best its earliest and latest dates will be simply arbitrary fixtures. At any rate, there would be no difficulty in finding the earliest extant building, but this in turn might not be deemed worth the labor of detailed drawings and text description. But this is a minor matter and one for our suggested committee to determine. Yet there are other unexplored regions contiguous to that of Colonial architecture: what of Colonial furniture, painting, textiles, sculpture, and a dozen and one other lines of endeavor, not to mention the closely allied matter of biographies of architects and craftsmen and disquisitions on Colonial office practice and methods. Could other academies and institutes be persuaded to undertake a similar labor of record and reproduction? So enormous an undertaking it is beyond us even to suggest.

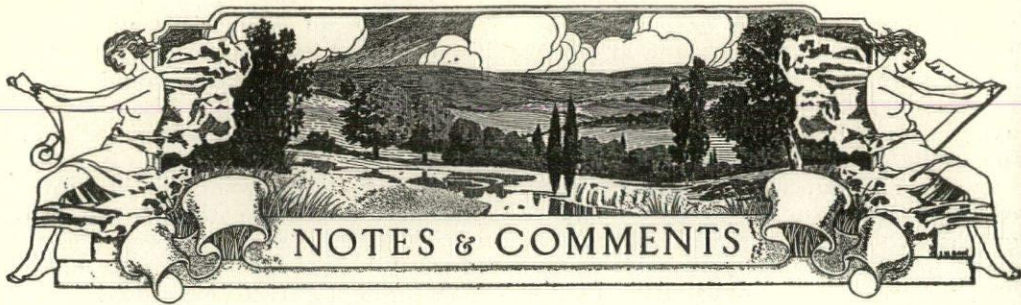
And what sort of a final record should we find of best avail? Shall it be a rec-

ord for architects alone, or shall the laborious task of instructing the architecturally untutored laymen up to the level of the inscrutable plan and section be undertaken, and the financial welfare of the whole project thus endangered? It should not be difficult to strike a middle course. By means of excellent photographs and correct perspectives the layman's interest can always be held; by accurate plans and sections and measured drawings of details of carving and other ornament the architect's interest can always be held. How much of each there shall be is again a matter for our suggested committee to determine. Regardless of the angle from which it may be regarded, such a final record, attainable only by dint of untold sympathy and cooperation, is bound to win recognition and prove its worth.

But it will sponsor some other advantages. We need only to mention the positive improvement in magazine plates and text that is bound to follow; or again, the improved character of books of photographs and measured drawing—excellent though many of these already are—when it is generally known that the Institute favors or recommends thus and such method as of best value to architects. And finally, it is not difficult to prophesy the good augury of such interest on the part of the Institute when the layman himself is considered.

Presently an increasing number of historical and patriotic societies, like the Sons of the Revolution, would undertake the preservation of historic buildings—as has been done with the Philipse Manor House and with Fraunce's Tavern—and out of this might grow a movement to make national or state or municipal reservations of certain buildings and their adjacent territory—as was done through private generosity in the case of the Dyckman House in New York and through public will in Independence Hall—so that, like the nations of Europe, we also should be blessed with "national monuments" preserved and perpetuated out of the public funds, because they breathe of a worthy past.

Yet one other point occurs to us. Could not the good execution of such a final record by chapters on the Atlantic Coast inspire in turn similar projects in behalf of Spanish Colonial architecture in the great Southwest, or corresponding studies of the work of lower Mississippi Valley, or like examinations of the French Colonial remains in the region of Quebec? These, to be sure, would not be of virile interest—excepting of course the first named—for present practice, but by such means would be provided the possibility at least of bringing into existence some few chapters of the history of architecture in North America, and particularly in the United States.



Venetian Monuments in War Garb.

In accordance with Italy's customary solicitude in all matters regarding the fine arts, most detailed precautions on the part of the Italian national ministry and similar commissions in a number of cities have been taken toward protecting historic edifices and their precious contents against destruction by military and naval forces, but most of all against aerial attack. The region of Italy most directly affected, considering the geographic location of the nations now in conflict, would be that of Venice and the surrounding territory of the province of Venetia.

The proximity of Venice to the Austrian naval bases at Trieste or even Pola, a matter of from 80 to 100 miles, and the particular nature of the terrain immediately surrounding the city, with its waterways, lagoons, marshes, not to mention its actual small size and crowded buildings, all aid in rendering aerial attack a simple matter, as the frequency of Austrian bombing expeditions seems to show. What is more, the plentiful areas of water, with a clear moonlight playing upon them, serve as a frame for the city, and provide for the airman a sort of target. While old St. Mark's is the bull's-eye of such a target, a hit anywhere within the limits marked out by environing waters would be sure to score destruction in some work of antiquity, for practically all of Venice is old; we have only to consult records of building activity there in recent times to learn that several centuries have witnessed the removal of but a very small number of old structures to make way for new, while the actual addition of modern buildings is of negligible quantity. If with these conditions in view, an enemy attack by means of hydroplanes were considered, it would be seen that the many bodies of water would provide ample space for landing of machines before or after at-

tacks, while their small size and the noise and roughness of open water would furnish added concealment. As seen from above, and especially in the light of the moon, these same bodies of water served the airmen as a suitable frame for their objective. The defense of the city had, therefore, to rely not so much upon fortifications as upon mobile air forces as the surest safeguard at longer distance. But such defense depended upon previous notice of an approaching enemy, and, granted that such warning was too brief, the actual struggle between friend and foe would have to take place in the air above the city itself, with consequent aggravation of any damage the enemy could accomplish.

Venetians were obliged, as a result of these many unfavorable conditions, to resort to the last possible defense of all, namely, that of removing all portable art objects, in many cases to the south of Italy; in many others to cellars and sand pits near the city or within its confines. In the case of entire buildings, on the other hand, a most careful program of preservation and protection was worked out, involving such a packing with sand and burlap, and such a boarding up with planks and timber, as to disguise effectively nearly all of the most important buildings in Venice. But these precautions were the result, curiously enough, of a campaign—largely under the direction of Corrado Ricci, of the Italian ministry of fine arts, and of Gino Fogolari, supervisor of all galleries in Venice—for the citizens could not bring themselves to believe in the reality of an enemy attack; and it was not until a number of attacks on Ancona, Ravenna and finally a bomb within a few feet of the central door of St. Mark's, had proved this reality, that many Venetians were willing to set aside the original sentiment: If Venice must fall, let her fall in the midst of her beauty.

As a rule, sandbags and timber best served

this purpose, but in the case of certain special problems new methods had to be devised. Such methods were necessary especially in connection with St. Mark's, the Palace of the Doges, and numerous frescoes and other mural decorations not removable.

In the first place it should be borne in mind that it was not possible, because of local conditions of the soil, to build any inclusive structures of metal to shield any one building, as, for instance, the church of the Scalzi, which together with all other vaulted structures, not to mention their invaluable decorations, had to rely chiefly upon the precarious protection of lighter defenses, as will be shown. What is more, most of the vaulted structures were themselves too slight to bear the additional weight of any protecting construction above them; referring to the Scalzi again, we find Tiepolo's frescoes painted upon a very thin coat of plaster set against a slight wooden false work in vault form. For this reason the Austrian aviator was able to make such thorough work of the destruction of the great painting of the Translation of the Santa Casa to Loretto, in October, 1915, the bomb having penetrated to the void between roof and false vault, and, exploding there, scattered roof tiles to the winds and demolished the fresco to such an extent that all hope of assembling any of its parts had to be abandoned.

In the case of St. Mark's, arose the problems of protecting the domes, of removing all portable sculpture and other objects, and of building sand shields around practically the entire façade. The protection of the domes—that is, of the wooden and lead covered exterior domes—had been begun before the war by Luigi Marangoni, guardian of the structural fate of the old basilica—curiously enough still so called though not of basilican plan; this architect had caused to be poured over the entire superficies of all five domes a thin coating of cement mortar, thus giving each a sort of armor plate of sufficient elasticity to offset partially the effect of serious concussions or even of actual blows. The façade of the building, with its double tier of small columns and its myriad materials and colors, was enclosed in sand bags and wood boarding. Many detachable figures have been buried in sand, in some cases even in sand first baked at high temperature to destroy all possible source of decay. So great an addition to the weight of the entire building was made necessary by these many sacks of sand that the main piers of support had to be greatly strength-

ened in the crypt. To guard against incendiary bombs, a water system was installed serving all parts of the edifice from crypt to domes. Most interesting is the precaution taken in protecting the interior dome mosaics. Owing to the nature of the material, it was found that mosaic compositions subjected to great concussions of air fell outward, the resulting loss being usually greater than would have been caused by an actual penetration by a shell. The effect is very similar to that to be observed near the scene of explosions, where it is found that windows of neighboring buildings invariably crash outward, as a result of the sudden release from the equally sudden compression of air, the glass being insufficiently elastic to withstand the difference in pressure, which difference operates as a powerful suction. To guard against such destruction of mosaics it was found advisable to stretch curtains of strong linen before the walls, or in this case inside the domes bearing mosaic compositions. By this means a cushion of air was formed between the mosaic and the linen, with the result that this absorbed the force of a nearby explosion, thus saving the mosaic and the wall, and even in some cases saving windows.

The Palace of the Doges offered a particular problem, for the reason that any blow at its exterior columns at the level of the Piazza would have entailed the fall of the entire structure, or at least the effective disruption of the entire exterior design. All interior paintings by Veronese and others were fortunately on canvas and were rolled up on wooden cylinders for storage or transportation to safer regions. The building itself was made safe against marine or aerial destruction, that is against missiles sent directly or diagonally at the façades, by means of the construction of a new pier inside each arch of the main story arcade. But so that these additional piers might not exert any actual and as yet unnecessary supporting strength, in conflict with the columns and arches, they were made to terminate so as to leave an infinitesimal space beneath the arch in each case, and, finally, to prevent any new mortar from destroying existing patinas, this intervening space was filled with a piece of cloth covered or saturated with paraffine. Owing to the excessive weight of such an addition of material, a similar scheme could not be carried out in the second story loggia, and in this case a framework of wood was substituted. In the courtyard, again, the bronze well curbs, the Giants' Staircase, with its reliefs and

figures by Rizzo and Pietro Lombardo, received the usual mantle of sacks of sand.

In similar manner the fine Colleoni at Venice, the tombs of the Scaligers at Verona, the great Giovanni's Fountain of Neptune at Bologna and other free-standing sculptural and architectural works have received each its war garment of sand and wood and metal, for in such cases it was found possible to erect steep pitched roofs of wood covered with steel as an additional protection.

The Italian has taken every precaution, but he is—in Venice at least—almost directly on the firing line. In America we look with awe upon the very need for such protection and with characteristic indifference wonder if the great conflict will ever be brought so close to our doors.

RICHARD F. BACH.

The Latin City.

There is no higher achievement in Latin civilization than the Latin idea of a city. In the ancient world the Romans invented the institution of the "Municipium" as one of the principal agents in spreading their empire of progress over the earth. Ever since, the mighty tradition which they founded has inspired a chain of brilliant successors in Italy to become centres of enlightenment for mankind, each in turn down to the present day. Planners in twentieth century America might well take this ideal for their own if they wish their work to be a complete success; that is, if they want to avoid losing themselves in technical and mechanical details, if they desire to make their work purposeful and imaginative and inspired.

The Municipium, though characteristically Latin, like most Latin conceptions, had a Greek idea behind it. Athens had dazzled the ancient world of the Mediterranean in her role as a centre and source of power and ideas. She dispensed a civilization of art, letters, politics and manners to a barren world, giving out more than she received in return from the world. Then Rome took over the burden from Athens, with this difference that to the Greek simplicity and smaller scale was added Roman organization. The Romans developed the intricate mechanism of the city plan somewhat as we know it today. This makes their experience directly valuable to us. But in all their works—and herein their experience is more significant still—they held strongly to the

grandeur of the Greek ideal, even magnifying it into conceptions of power and splendor characteristic of Latium. In the process, it is true, the Romans lost something of that limpid purity, the exquisite grace and vivacity and color, that extreme simplicity without surplus, which to us is the spirit of classic Greece. This difference is to be remarked in Roman sculpture as well as architecture, in most things Roman, indeed. The Roman work is more machine-like. It is as if Athens, unencumbered, could rise higher than Rome, who had to bear the burden of her mechanical organization. What Rome lost in humanism she chose to make up in power and magnificence, going even farther on the road than Hellenic Greece, from whose ideals she freely took over much to make her own. In fact, had she not had the civilizing example of Greece constantly before her, Rome might have become the Prussia of the ancient world.

Such distinctions between ancient Rome and ancient Greece may seem too far removed from our own twentieth century concerns, but they are valuable because their remarkably unified character seems to symbolize for us the important truths that underlie the civilizations of antiquity. For the great cities Rome offers instruction; and for the small, Athens, like Florence, shows that quantity may be a bar to quality. To use a more practical illustration, how often do we see today immense sums spent in projects where only a little clearer idea of these truths would have gained much finer results?

To pattern after the Greek ideal is an almost impossible task for moderns. They live in a more mechanical and a far more technical age than Rome. And how shall they attain the pinnacle gained by Athens or Florence? The Latin ideal is more practical. There has been only one Florence and one Athens in history, but a large number of flourishing municipia of Roman or Latin origin have existed, and modern minds can interest themselves in this field with more hope of success.

Then what is the Latin ideal? It is to be discerned in the cities of the Romans. The mechanical difficulties the Romans solved as we do. They built great avenues and streets and great sewers, and brought running water over huge aqueducts to the vast baths and into all districts of the cities. They made large bridges and markets. The difficulties of organization were solved as we, unfortunately, are only just learning to do. Much more clearly than we see, the Romans

saw the advantages of geometry in organizing their difficulties. Their large spaces and communicating streets, their open forums and courts and markets, and their basilicas for the dispatch of business and for the exchanges of trade, the sheltering colonnades of communication, the amphitheatres and stadia, the fountains, drill grounds, the arsenals—all were planned completely, spaciouly and imaginatively to permit the varied life of the cities to function easily and fully. Geometrical arrangement and sense of form were the correct answer to their problems. It is true that now modern conditions are different, but the Latin system of reasoning was never more needed than it is today.

Always in the Latin mechanism the Greek ideal is the motive power. Where it is not so strong in art or letters it is apt to be reinforced with tremendous political or legal or economic impulses that knit it together in remarkable spirit and action. Inevitably there is an extraordinary development of enterprism among the citizens of civic patriotism. They feel the municipality to be a state, and all that it does takes on for them the dignity and majesty of a nation. This spirit is to be seen in its ceremonies and its functions. Architecturally it is expressed in splendid streets, gardens, parks, squares, colonnades, public structures, churches—all welded into a geometrical whole, symbolizing the might, the grandeur, the importance of the city. And the strong personality and imagination of the municipium prevents the geometry from making the result too mechanical or too monotonous. Altogether the purpose of a Latin city is to benefit the surrounding territory as well as to enrich itself—not to drive a one-sided bargain with the outside world in which the city is a parasite on the earth, disliked and feared by the country.

This civic ideal of Rome was handed down to medieval Venice, to the city-republics of Italy—Florence, Genoa, Renaissance Rome, and Venice again—all come to mind as symbols personifying the Latin idea. Such was their will and their imagination that they grew into states, and one of them—Venice—twice in her history became a world-power. In her economic, military, naval, and artistic splendor Venice rivaled Athens. From Italy the mantle descended to Paris, which today is the modern exponent of the Latin tradition, along with some of the cities of South America.

The Anglo-Saxon or Teutonic world has nothing to match against this Latin scheme

of a community so organized, so harmonized and so well reasoned out, and so inspired and inspiring, an entity so clearly defined that it almost seems a person. With all their shrewd advertising and salesmanship the Germans have never made Berlin or any of their Prussian cities appear anything but homely and provincial. The mathematics of their architectural features are crudely copied from the French. In the Tier-Garden the Sieges-Allee of the Hohenzollerns is ridiculed even by the Germans—"the Puppen-Allee" they call it, "the street of the puppets"; while not far away the Kaiserdom—at once the St. Peter's and the Invalides of the German Emperors—houses an enormous tomb shaped like a gigantic gilded Rococo baby's cradle, gilded and painted and decorated and sculptured as one of Mr. Barnum's circus chariots and much larger, a sight that moves the traveler to tears—of laughter. Only Munich, in the south, where Latin influence and refinement penetrate, Munich alone partakes of the cheerful, well-formed character of the municipality. British cities, although they avoid the absurd, except like ourselves, when they set up statues to famous men, are, like our own, too often ugly and formless. They stretch over their sites more like overgrown towns or villages. Although it hardly becomes an American to criticise anything so mighty and important as London, the British capital seems to spread out into the country in a series of vast towns. Away from Piccadilly and Trafalgar Square it scarcely seems like a world-city. How different is the closely-knit unity of Paris, where each arrondissement has a remarkable character of its own, yet is truly Parisian. The Englishman prefers the country; he is more at home there than in urban surroundings. He even brings country-like features into the city. It is a frequent criticism of English architecture that it has mostly been a town and country architecture, that English city buildings are rarely monumental. The late Professor H. Langford Warren was accustomed to point out what he termed the "domestic scale" of British public buildings—how, with all the quantity of precedent of Rome and Italy, even so basic a feature as the orders were scarcely understood, were reduced to a domestic scale. They were never detailed with the splendid, forceful effect of Roman or Italian or French models.

It is apparent that the Latins alone grasp clearly the true idea of what a city should be; and this should be remembered

by those who are responsible for recent developments of city planning. The followers of the new school, who are mostly landscape architects, rebel at some of the extreme geometry of Latin planning. They dislike the formalism and monotony of the architectural symmetry, and would substitute informal and picturesque conceptions instead. In so doing they pursue the dangerous course of borrowing motives from old England and Germany, which are exactly the two sources where the ideal of the city has been only slightly understood architecturally. Consequently the new school sometimes forces on cities things that really belong in towns—or that belong in the country—not by way of contrast, but because they have a town-like conception of a city. Under English influence landscape architects often miss the true grandeur of civic expression. Their work sometimes lacks scale or else their public structures have private scale. Under German influence they tend to lose public scale by overdoing the picturesque. Some of them scorn symmetry and geometry, which are almost fundamental in a great community. As said elsewhere, the basis of this modern informal school of city planning is a sound one, for it rests on the unsymmetrical dramatic beauty of medieval cities. Its principles are to a degree Gothic. In practice today, however, the informal is emphasized at the expense of public scale, and the dramatic

is neglected for the picturesque. A way to harmonize the conflicting theories might be the following:

Let the extremes of the Latin idea be understood and avoided, and let its occasional rigidity and machine-like form be softened with elements of the dramatic and the picturesque, especially in the residence parts of the city which are less public. It should be made clear that there are distinct architectural differences that mark a city from a town. The town may express more informal ideas than the city. New methods and fresher elements may well be employed if the ideal of the city is to remain a live one, but they can never alter the exalted ideal of the city as the Latins have imagined it. They alone have understood what an agent of civilization a city may be. The dramatic may justly be sought in a city, for the dramatic may personify the majesty of the municipality. But one should be sure that the achievement is surely dramatic and not merely informal or pictorial. It should be realized that the dramatic is one of the most difficult of all qualities to attain. It is, in fact, nothing less than supreme art. But the most important fact of all, the vital necessity, is to understand the fundamental idealism of the Latin Municipium. Compared to it all other elements, all technical and mechanical innovations, are details merely.

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