



A XIIIth CENTURY MEDALLION WINDOW FROM THE CATHEDRAL OF CHARTRES, KNOWN AS "NOTRE DAME DE LA BELLE VERRIÈRE."

From the Drawing by Leicester B. Holland.

[The border on one side has been left uncolored in order to show how the pattern is laid out in lead, and how much grisaille painting is used to harmonize the colors.]

THE ARCHITECTURAL RECORD



VITRAILS
 [Stained Glass]
 PAR
MONS VIOLET LE DUC
 TRANSLATED BY
LEICESTER G. HOLLAND

FIRST PAPER

[This is the only known English translation from the "Dictionnaire Raisonne De L'Architecture Francaise" by M. Viollet-le-duc, of the portion forming a scholarly and authoritative treatise on stained glass. This is the first of a series of four articles comprising the entire treatise.—Ed.]

IT IS NO longer seriously believed that glass was a commodity unknown to the Greeks and Romans. To-day every museum in Europe possesses objects of glass dating back to a great antiquity, which for perfection of manufacture are in no way inferior to those sold by Byzantium and Venice to all Europe during the middle ages.

The Asiatics and Egyptians also made pastes of glass, colored in diverse colors, and Gallic tombs yield to us objects of copper and gold inlaid with colored glass in little pieces, as well as bracelets, beads and necklaces of vitrified pastes.

The Romans used glass to garnish the windows of their dwellings, but were these window frames filled with colored glass? We know that they em-

ployed natural substances of a translucent nature, such as alabasters, talc and gypsum, which shed a subdued light through the interiors of their apartments and monuments; but up to the present there have been discovered no antique window panels composed of glass of different colors.

It must be said that in the monuments of Rome and ancient Greece, windows were small and rare. In great buildings like the baths, for instance, daylight was commonly transfused by skylights of metal or marble, without the interposition of glass. The immense size of these buildings and their carefully chosen orientation permitted this method to be used without discomfort, especially since these openings were pierced at a great height, and acted on the lower air as a means of ventilation. Moreover, the Romans as well as the Greeks were accustomed to an outdoor life, the climate of Greece and southern Italy making habitual protection against the cold unnecessary.

But even if we cannot definitely state that the ancient Greeks and Romans made colored glass windows, we must admit that the Asiatics used this form of transparent decoration from a remote time. The introduction in Italy of mosaics composed of cubes of colored glass paste dates first from the intercourse of Rome with Asia. When the empire became established at Byzantium it was from the orient that those vases of colored glass came to which such a great value has attached in Europe since the VII. century. In the east things change but little, and the window screens of stucco and marble enclosing pieces of vari-colored glass which we find in monuments of the XIII. or XIV. centuries in Asia and even in Egypt must be the expression of a very ancient tradition whose cradle seems to have been in Persia.

Whatever may have been these more or less distant origins, windows of colored glass were certainly made in Europe in great numbers as far back as the XII. century, and the Monk Theophilus who wrote at that time does not speak of the methods of manufacture as any novelty. On the contrary, his text indicates a long practice in this species of transparent painting, and in fact the windows of that period which we still possess, are, as regards execution, so perfect that we must presuppose the long experience necessary to reach such a development in an industry whose processes are not simple.

But, it will be objected, it is strange that not a single panel of colored glass authentically earlier than the XII. century remains to us, while we still possess other objects much older than that period. But when one realizes how easily we allow things no longer in style to perish, and particularly, how easily stained glass goes to pieces, once it is removed from its proper place, this objection loses much of its force.

Of all the windows which were transported during the Revolution to the Musée des Monuments Français how much remains? Some ten panels at St. Denis, a few at Ecouen and at Chantilly, and that is all. [Knowing that many

of these windows had been carried to the store rooms of St. Denis after the breaking up of the Petits-Augustins Museum, we asked, as soon as we were charged with the restoration of the Abbey Church, where these windows were placed. We were shown three or four boxes containing thousands of pieces of piled up glass. Scarcely three pieces remained joined by their leads. The boxes are still awaiting the good fairy who will disentangle this chaos.]

We must, therefore, begin our study of the glass workers' art from the time when the great edifices of France begin to appear, that is toward 1100, and we may say that these XII. century monuments are the most worth study of all, if we consider this art from a decorative point of view.

The work of the Monk Theophilus is the oldest written document dealing with the manufacture of stained glass windows, and this cleric lived in the second half of the XII. century; or at least the receipts which he gives and the style of ornamentation that he prescribes appear to indicate that date.¹

Theophilus did not write his book as a theorist, but as a practitioner; for this reason it has a deep interest for us today, especially as the processes which he describes agree exactly with the works of that epoch which remain to us. We must therefore study these documents carefully. He commences by giving the method of making the design for the panels of glass.²

"First," he says, "make a table of smooth wood and of such width and length that you may trace thereon two panels of each window." This table is covered with a coating of chalk thinned with water and rubbed with a cloth. On this preparation, when all dried, the artist draws the scenes or ornaments with a stylus of lead or pewter, and later, when the sketch is done, with a red or black outline put on with a brush. Between these outlines the colors of each piece of glass are indicated by means of signs or letters.

Suitable pieces of glass are then

¹*Diversarium artium schedula.*

²*Lib. II. cap. XVII.*

placed one after another on the table, and the principal lines, those of the leads, are traced on them. They are then shaped with a hot iron and the glosing iron.*

Theophilus does not state clearly whether the full modeling of the figures or ornaments is indicated on the table (which we will call the cartoon), however, when he comes to the painting, that is to say to drawing the modeling on the cut pieces of glass, he says that the lines on the cartoon must be followed scrupulously. This passage explains itself easily when we examine the method of painting used on XII. century glass. The modeling on these pieces of glass is nothing but a reduplication of the outlines in the general direction of the form.

We will come back shortly to this important part of the glass painters' art.

Theophilus gives the receipt for making the shading, modeling or hatching on the glass. All who have examined windows made during the XII. and XIII. centuries know that the pieces of glass used are colored in the glass itself, and that the modeling is entirely obtained by a black or dark brown pigment (grisaille) applied to the glass with brushes, and vitrified in the fire. Theophilus speaks of this black pigment in Chapter XIX. of this book. It is composed of finely ground copper burned in an iron crucible, green glass and "Greek Sapphire." He does not explain what he means by "Greek Sapphire." Was it a natural or artificial substance, a flux or an oxide? There is every reason to believe that Greek Sapphire was a bluish glass of Venetian manufacture which acted as a flux. And in truth, the Venetian glasses possessed this quality in a much higher degree than our own ancient glasses. These three substances are ground on a porphyry slab, mixed in equal parts, i. e., a third of copper, a third of Greek Sapphire and a third of green glass, and thinned with wine or urine. This color, placed in a pot, is applied with brushes, either lightly, more heavily or thickly, to make dark or fine lines, or sometimes it is spread over

the glass in a thin wash and scraped off with a wooden stylus, so as to form very delicate ornament or spots of high light on a dark but still transparent background.³

The pieces of glass so treated are then put into the furnace in order to vitrify this monochrome painting. According to Theophilus, then, it was by means of an oxide of copper that this brown color was obtained. On the other hand, the pieces of painted glass of the XII. and XIII. centuries that we have been able to have analyzed show only oxides of iron in this dark brown vitrified color, and it is the protoxide of iron that is employed to the present day. However, a calcined protoxide of copper gives a brown powder which, when put in the furnace with a flux, would produce a similar effect to that of protoxide of iron, but with a greenish cast.⁴

An important question in the manufacture of stained glass windows, aside from those relating to the artist, is the method of making the sheets of glass. In the XII. century, according to Theophilus, these were made by two processes which are now no longer employed.

In the first the glass blower with the blowing tube collected from the crucible a mass of incandescent glass; this he blew into the form of an elongated bulb. Bringing this near the flames of the furnace, the end melted and opened. With a piece of wood the glass blower spread the opening until it equaled the greatest diameter of the bulb.

Then by bringing the two opposite sides of this circle together, he formed a figure 8. The glass so prepared was detached from the blowing tube by rubbing a piece of wet wood on the neck of the bulb. Reheating the end of the tube, with the bits of incandescent glass which still adhered to it, he stuck it in

³Lib. II. cap. XIX.

⁴M. Oudinot, the glass painter, has had fragments of painted glass of the XII. and XIII. centuries analyzed on his own account; and this analysis also has only given protoxide of iron. At the present time this pigment is made from "iron flakes," collected at forges, which are sifted to separate out the metallic particles and are then ground together with a flux. An iron ore called "ferret d'Espagne" (Spanish hematite), which is a natural iron oxide browner than blood stone, was also formerly, and is still used. This gives a warmer tone to the shading than the iron flakes from the forges.

*Replaced today by the diamond cutter.

the middle of the 8. The upper end of the bulb was then presented to the flame, and this opening was enlarged in the same way as the other end. This done, the piece of glass was separated from the tube and carried to the annealing furnace. These pieces of glass, of the shape shown in Fig. 0, being put in the furnace to spread, opened and flattened out.⁵

The more rapid and simpler method of "bull's-eye" glass was also employed. The glassworker blew a bulb, presented its lower end to the flame as described above, then spreading this end he caused the tube to rotate very rapidly; the opened edges of the glass, owing to centrifugal force, spread away from the centre, and a disk concentrically striated and thicker in the center than at the edges was thus obtained. The sheets of

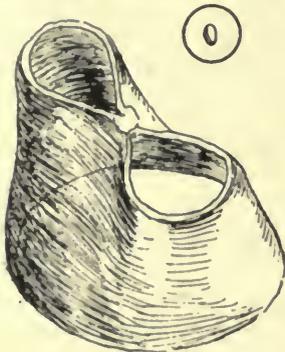


FIG. 0.

glass made according to the first or second method were originally colored in the crucible by metallic oxides. Theophilus does not speak of doubled glass, and, in fact, the windows of the XII. and XIII. centuries show no trace of it except in red glass⁶ of the XII century, which are colored in the mass, or at least for about half of their thickness. This manufacture of red glass must have been a very ancient process.⁷

As a matter of fact, the cubes of glass that compose the mosaics in the interior of the church of Santa Sophia at Con-

stantinople, and on which a facing of gold is applied, are generally of a fine warm transparent red, with layers of a dark opaque hue. The transparent red layers are 3 or 4 millimeters thick, and give a beautiful coloration much like that of certain red glass of the XII. century. After this period red glass was obtained by another process. The glass blower had two crucibles, filled with greenish white glass, in the furnaces. In one of them scrapings or spangles of red copper were thrown and stirred up; the blower immediately gathered a ball of white glass in the first crucible and plunged it into the second, which contained flakes of copper in suspension. He made this resulting mass even on a hot stone, then blew and operated as described above. In this way doubled glasses were obtained, in half, at most, of the thickness of which the red coloration showed as if spread in streaks. If one of these pieces of glass be broken the red coloration shows in layers or spangles unequally scattered throughout the body of greenish white glass, as the section indicates (Fig. 1). This method of coloration by spangles overlapping each other unevenly gives the red tone a marbled scintillant appearance of great power. It can easily be seen that light passing through this glass and striking the interreflecting flakes of red, striated through the paste, must produce a coloration of unequaled intensity and transparency. Each plate of red paste has the effect of a spangle, and the transparent red color is seen with an added red brilliance reflected from the neighboring red flakes. Later, from the middle of the XIV. century on, red glass was obtained by an extremely thin red coating on greenish white glass; this red was no longer streaked through the paste, but was applied to the surface of it when the lump of glass was taken out on the pipe.

For this reason, the latter glass gave a coloration more equal and, near at hand, more powerful than that of the glasses of the XII. and XIII. centuries; but at a distance, the brilliance of these doubled glasses is less luminous, less sharp, it is often heavy, oppressive in

⁵See Theophilus "Diversarum artium sched." Lib. II. Cap. VI. & IX.

⁶We even find pieces of fine arranged orange red glass.

⁷Red glass of a very soft tone colored in the mass is still made in Venice. This glass strongly recalls certain XII. century specimens.

large pieces; in a word, the decorative effect is less good. However, the operation of coating the crude lump of glass still gave certain inequalities, streaks of different color intensity, which preserved for the tone a certain transparency. Today, the doubled red glasses are absolutely even in tone, and to use them, the glass painters, if they wish to give a sharp coloration at a distance, have to marble them artificially. In the XII.

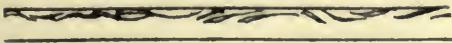


FIG. 1.

century, yellow glass made with silver salts was unknown, pieces of yellow glass being simply smoky pieces of white glass, and it was only chance which furnished them, as Theophilus indicates.⁸

The yellows from silver salts only

of glass caused gradations in tone, which the glaziers employed with great skill by cutting the glass so that the thinner pieces came at the lighter parts of the design. Even in solid backgrounds, these variations in thickness gave an appearance of changing lustre to the colors which, at a distance, augments singularly the intensity of the tones. All colorists know that to give a color its full value, it must be presented to the eye only in little pieces, in bursts, so to speak. The Venetians and Flemings knew this law well; to look at their paintings is sufficient to be convinced thereof.

This, which is true of paintings applied on a panel or on a wall, is still more absolute when it comes to transparent painting. In colored windows the colors share in the light that passes through them, and have such a brilliance that at a distance the smallest speck as-

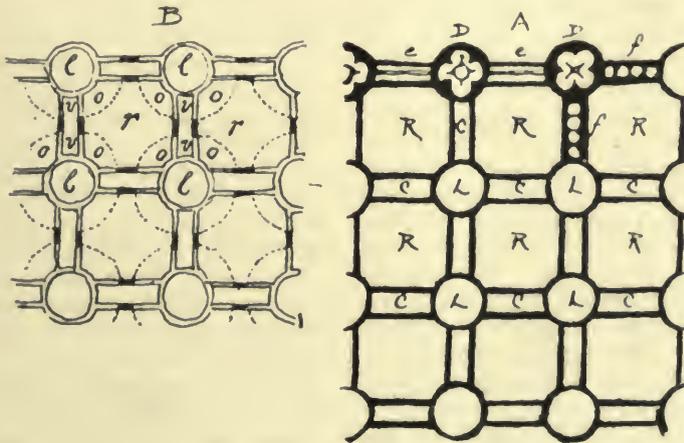


FIG. 2.

date from the XIV. century; they are simply painted on white glass.

From the decorative standpoint, the bull's-eye glasses, or those roughly spread out, present an advantage. Since these glasses were colored in the mass, at least during the XII. and XIII. centuries (with the exception of the red), the difference in thickness of the plates

sumes, by its radiation, a prodigious importance. Now the radiations of transparent colors have very different values. Thus, to consider only the fundamental colors, those of the prism, blue, yellow and red, these three colors applied on glass, and hence transparent, radiate to very different extents. Blue is the most powerfully radiant color, red radiates badly, and yellow not at all if it tends toward orange, a little if straw colored.

Thus, let us imagine a design in glass

⁸Lib. II. cap. VII. See for information on the manufacture of colored glasses, the "Guide du Verrier" by M. Bontemps (Paris, 1868).

worked out according to Figure 2. The black lines indicate the leads (see A). The compartments R are red, the compartments L are blue, and the bands C white. Here is the effect produced at a distance of about 20 meters (see B).

The circular blue compartments "b" radiate as far as the dotted circles, and the red remains pure only in the middle of each of compartment "r." The result is that all the surfaces "o" are red tinged with blue, that is, violet; that the dividing whites between the tones, not having any colored radiation of their own, are lightly tinged with blue "v," as are also the leads themselves; that the general effect of this glass is cold and purplish over the greater part of its surface, with red spots "r" harsh if you are close to the glass, sombre if you are at a great distance away from it. Now, if (see A) we diminish the fields of the blue disks by black painting, as is shown at D, we neutralize partially the radiating effect of these disks. If instead of white bands C, we place yellowish or greenish white bands, and if we draw lines on these bands as is shown at "e," or beads, as at "f," then we obtain a much better effect. The blues being heavily surrounded with black designs and further picked out with black internally, lose their radiating faculty. The reds then are much less tinged with violet by their proximity. The yellowish or greenish tones of the filets gain in delicacy by the blue tones which, tinting each of their ends, leaves between a warm part which ties in with the red, especially if we have taken the pains to increase the value of the leads by the beading or by simple internal lines.

Let us assume, on the other hand, that the squares "R" (see A) are blue and the disks red. At a distance the powerful radiation of these large blue surfaces, in comparison with the red spots, becomes so great that these red spots seem black or sombre violet, and give no hint at all of their true color. The white bands appear a dull gray, or green if they are yellowish, or blue green if they are greenish white. The effect will be unquestionably bad. The radiation of the blue fades and dulls the other tones,

while the latter have no longer the power to bring out the pureness and transparency of the blue. The coloration as a whole will be cold, muddy, of a false tonality, because in colored glass even more than in paintings each color acquires its value only through the apposition of another color. A light blue next to a green becomes turquoise; the same blue near a red turns azure. A red beside a straw-yellow has an orange appearance, while it will tend toward a violet if near a blue.

These elementary principles, and others which we will have occasion to develop, were employed in practice by the glass painters of the XII. century with such assurance and experience that we must concede to these artists a long course of previous observation. We do not believe that they established a written theory, a sort of scientific treatise on these relations of transparent colors, such as might be made nowadays; they proceeded, rather, by the experimental method and by gathered traditions handed down in the work rooms.

For appropriateness of design to painting on glass and for appreciation of the combined effects of transparent colors, the XII. century work is incontestably superior to the XIII. Drawing in the XII. century proceeded according to the Greco-Byzantine method; the nude form dictated the masses, the draperies did no more than cover it, nothing depended on chance, the ensemble and details were conceived and executed according to definite principles, which were in turn based on profound observation; while, later on, neglect and ignorance of these principles are often found in otherwise fine works.

The glass employed by the artists of the XII. century may be classified thus:

Blues—1st, Limpid blue, slightly turquoise; 2nd, sapphire blue, becoming greenish; 3rd, indigo blue, intense; 4th, sky blue, very light, flax grey.⁹

⁹The blue glasses of the XII. century possess a peculiar quality which enables them to be distinguished from those of other periods: it is that they appear blue by artificial light, while those of later periods turn to lake gray, green or violet. This observation was suggested to us by glass painters who were themselves skillful practitioners, and experience has confirmed it to us.

Yellows—1st, Straw yellow, smoky; 2nd, saffron yellow, or tawny gold.

Red—1st, Red (not doubled), slightly orange and equal in tone; 2nd, intense red, marbled; 3rd, light red, smoky.

Greens—1st, Yellow green, limpid; 2nd, emerald green: this tone in the hand seems grey rather than green: it assumes its brilliance at a distance, and especially by the opposition of blue or red tones; 3rd, bottle green: in the hand this green appears cold: it assumes its proper color in the same way as the preceding one.

Purple—1st, Light purple, warm; 2nd, limpid purple, bluish; 3rd, dark purple, wine color; 4th, very light purple, smoky, for flesh tints.

Rare Colors—1st, Reddish brown, color of Spanish wine; 2nd, dark green, warm.

Whites—1st, Greenish white, smoky; 2nd, grayish white, glaucous; 3rd, pearly white.

All the chemical operations of the medieval glass workers being empirical, the list of unexpected colors and varieties was long. Theophilus makes us readily understand that chance alone gave certain tones, whereof the artist made good use. The palette of the glass worker was thus very extensive, and the classification that we gave must not be taken as absolute. All we have done is to indicate the values; but as regards tonality, these values present numerous varieties. The talent of the glass workers consisted above all in never placing two equal values in juxtaposition and in profiting by the tonal varieties with the true feeling of a colorist.

As we have said before, all these colors, except the red, are distributed through the color of the glass, and are not doubled as in later times.

This palette being gathered together, the glass workers proceeded as the monk Theophilus indicates. They traced over the cartoon the principal lineaments of the figures and ornaments. These lines gave the leads, or rather the leads were only the scrupulous outline of the different parts. In composing his cartoon, the artist kept in mind the leading of the pieces; this stands out clearly

from a close examination of windows of the XII. century, since the contours are always accented by a lead, thus giving the general outline. But did the artists paint all the shadows, half tones and internal markings on their cartoons? We do not think so for two reasons. First, because it sometimes happens that pieces of glass are simply cut out, and through lack of time or by oversight were never finished by painting; second, because sometimes the same cartoon has served for the outlines of two separate figures, balancing each other, for instance, while the internal modeling in these two figures differs. There is every reason to suppose that the master traced the outlines only on the cartoon with some few principal internal lineaments; that the workers then cut the glasses over this cartoon and traced the principal lineaments as reference marks, and that the pieces of glass being assembled provisionally on the easel, against the light, they were painted by inspiration, without reference to any opaque cartoon modeled in advance.

Figure 3 will make this method of proceeding clear. In A we have the cartoon outlined by the master; in B, the modeling done on the glasses themselves, when they have been cut and provisionally assembled on the transparent easel. It can be seen that with a drawing so precise, giving the lead lines, it was not at all necessary to indicate on the cartoon all the modeling. The dotted lines on figure A show the positions of connecting leads which do not follow the contours. To avoid too large pieces of glass, the master has drawn on the mantle the band *a*, which is of another color, and which is frankly outlined by the leads.

It was, of course, requisite for the painters who applied the "grisaille" or anochrome modeling to the pieces of glass cut according to the cartoon to know how to draw. It may be truly said that at that time in the West, as in the Byzantine schools, there were absolute conventions for painting a head or garment, and these conventions were, all considered, founded on a long and deep observation of decorative effects. It was



FIG. 3.

only necessary then, once the master had outlined the cartoon (the style thereby being his own) to find neat-handed workers, sufficiently imbued with the traditional methods, to paint appropriate modeling on the cut pieces of glass.

We do not understand the art of painting in this fashion to-day, and it need not be regretted, when it comes to pictures made to be placed outside of a general decorative effect, as objects

possessing their own qualities independent of what surrounds them. But when the painting forms part of an ensemble, when it enters into a general concert of harmony, such as it seems all building should present to the eye, it is necessarily subject to purely physical laws which should not be ignored and which are superior to the talent or genius of the artist. Certainly the genius of no master can in any way

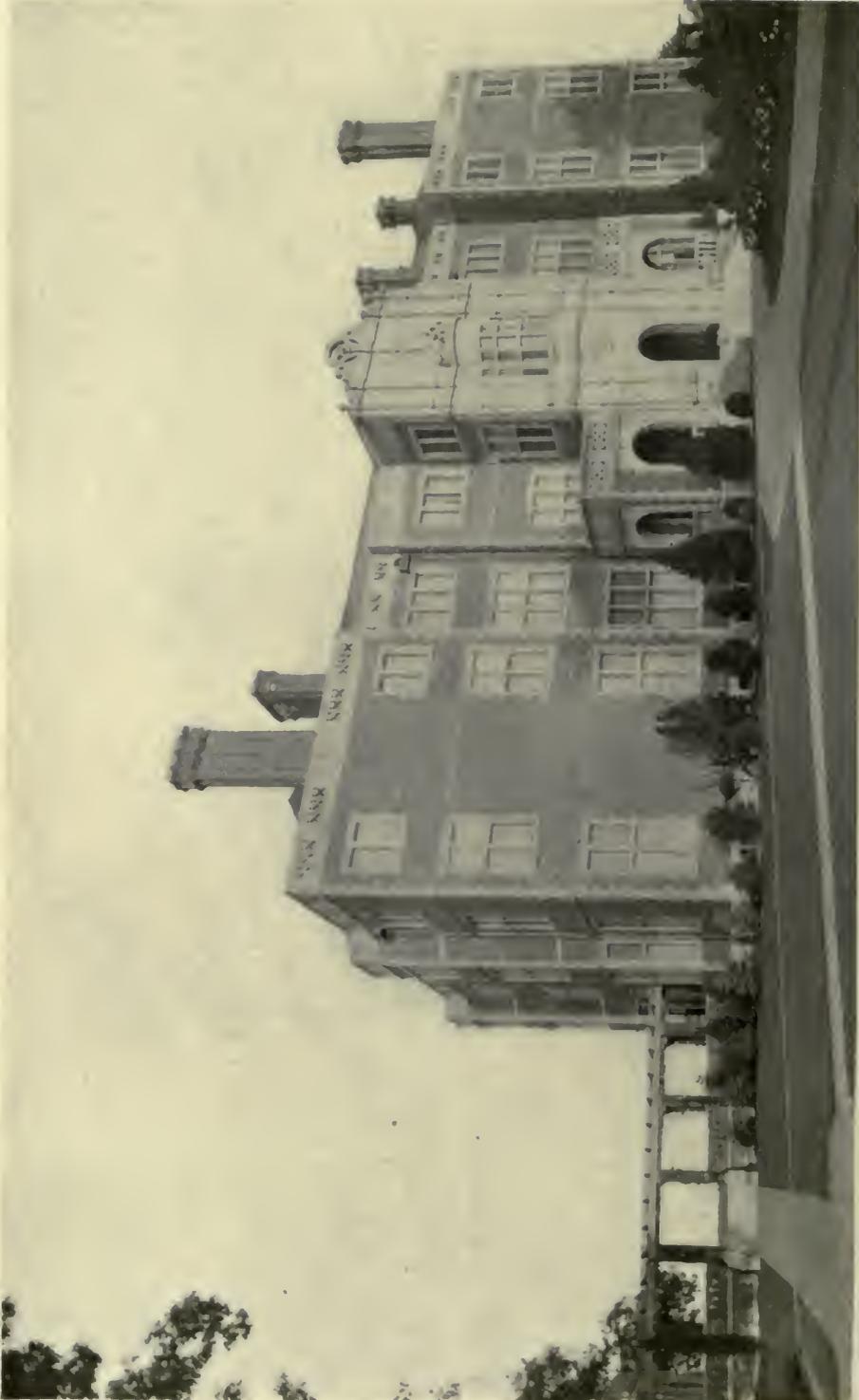
modify the laws of light, perspective and optics. We are well aware that a large number of artists of the present time are endowed with too fugitive and independent a sentiment to submit themselves to other laws than those indicated by their fancy, but we know with no less certainty that light, optics and perspective have not yet modified the laws which rule them, to comply with these insubmissive spirits. Although light, optics and perspective were physical conditions of another age, although they ruled in the times of barbarism, yet they still rule at the present hour, and do not seem disposed to abdicate, or even to grow old. Now, the artists who composed the windows of the XII. and the XIII. centuries showed, on the contrary, their absolute submission to these laws, and turned them to their own ends with as much intelligence as modesty. This submission is an example to us whereby we do not profit, but which for all that is none the less good and well worth the trouble of being examined.

We all know the attempts made during the last thirty years to give a new magnificence to glass painting. Our most able workers have made at times excellent copies; they have completed ancient windows with such a perfection of imitation that one cannot distinguish the restorations from the old parts. They have in this way gained ample knowledge of the processes, not only of material workmanship, but of art as applied to this species of painting.¹⁰

They have been able to recognize the remarkable qualities of the ancient windows in point of decorative effect and harmony, the perfection, skill of the workers, and to appreciate how admirably the style of these masters was fitted to its object. This art of the stained glass worker cannot then be a mystery or a lost secret.

¹⁰The following may be cited as noteworthy among these facsimiles. The restored panels of the Sainte-Chappelle by M. M. Lusson and Steinhell; those of the XII. century windows of the abbey of Saint Denis, by M. A. Gerente; restoration of windows at Bourges and LeMons by M. Coffetier.





"DARLINGTON"—THE ENTRANCE FRONT.
JAMES BRITTE,
ARCHITECT.

"DARLINGTON," A JACOBEAN MANOR IN NEW JERSEY

JAMES BRITE,

ARCHITECT.

By L. R.

MCCABE



THE LITERAL or quasi-grafting of Old World historic homes on to American soil, is one of the most significant phases in the development of modern domestic architecture, be its logical propriety what it may.

Large wealth naturally quickens its possessor with desire to be importantly, if not comfortably or artistically housed. In this day of facile print production and universal travel, "all the world and his wife" may have ocular, if not veritable, acquaintance with the originals of Old World historic homes. In consequence, when wealth selects for the model of its city palace or country house a Rhine castle, a French château or an English baronial hall, it is rarely without some knowledge of their architectural beauty if not adaptability to present day need.

Sentiment in the selection of an Old World model for a New World home plays a larger rôle than is generally credited, though to the architect, sentiment upon the part of a client, unhappily, is more often hindrance than inspiration. When sentiment, however, is wedded to fitness, which is only good taste in everyday use, and wealth retains as guide and executor, skilled architect, artistic builder and sympathetic decorator, why should not a Jacobean manor, for instance, take healthy root in New World soil and ripen into a public benefaction by reason of its beauties so rendered that "all who run may read."

An experiment now in process of fruition is "Darlington," the country estate of the late Mr. George Crocker, today the property of Mr. Emerson McMillin, banker and art collector.

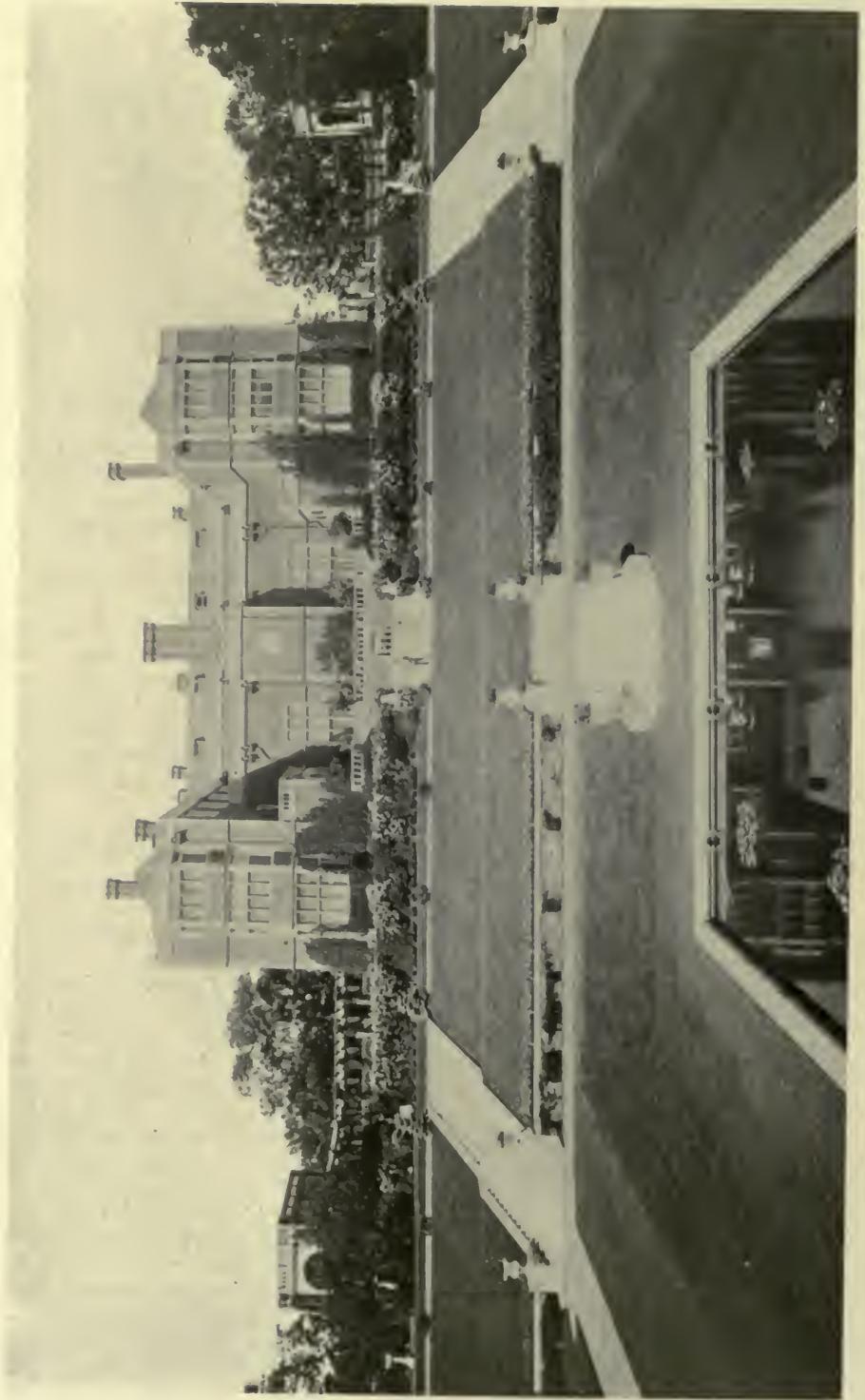
"Darlington" is one of the few pure structures of Jacobean precedent in the

United States. It was begun in 1904 and finished in 1907. After five years' service it might have weathered Queen Bess's time, so remotely does it suggest newness, so appropriately does it fit into its frame—the Ramapo hills of New Jersey, with the Ramapo River winding through the hundred acres the mansion commands, the remaining thousand acres of the estate being largely virgin forest.

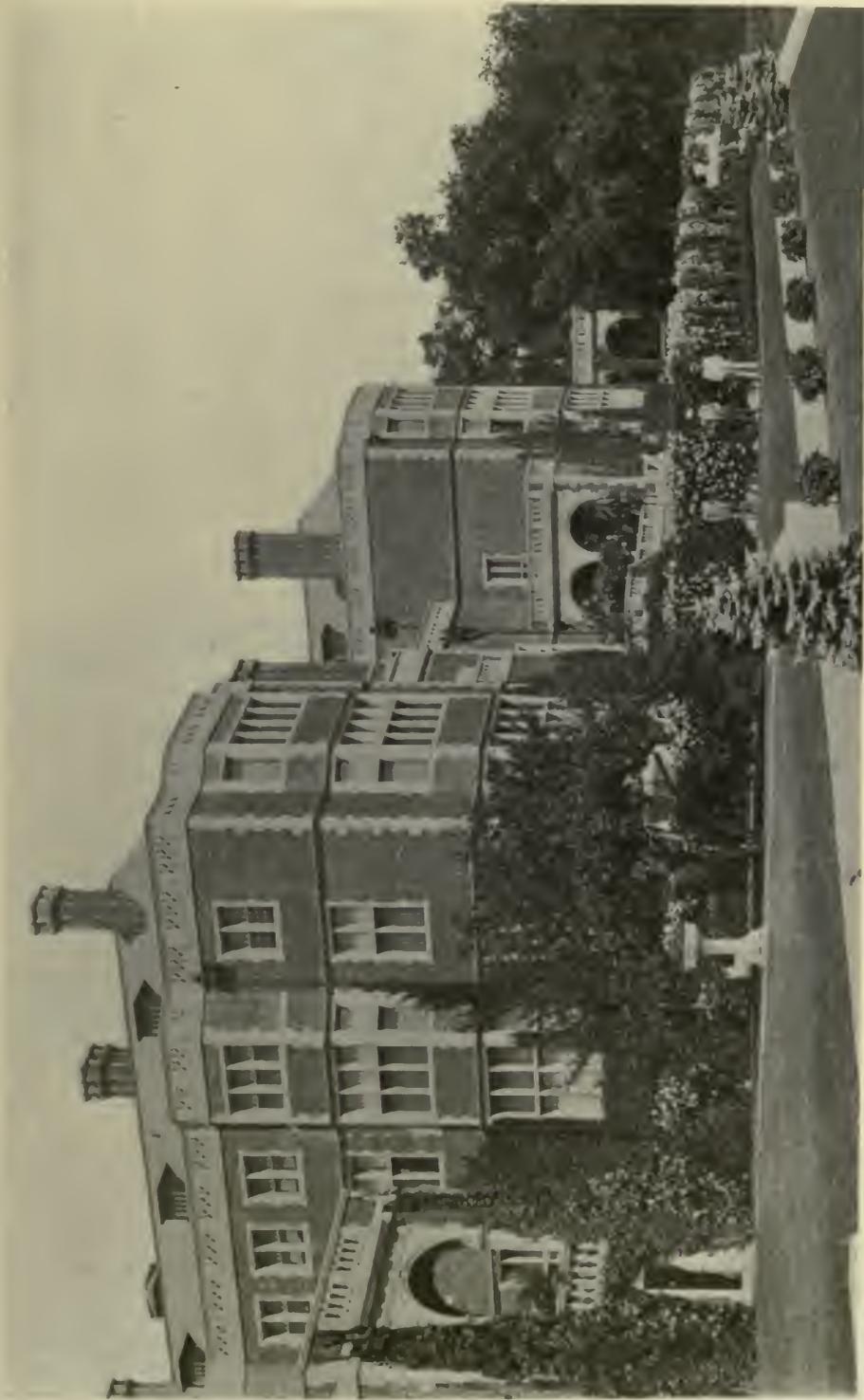
"Darlington" is modelled directly after Bramshill, Hampshire, one of the finest examples of Jacobean architecture. It is attributed to John Thorpe, architect. Despite it dates from two periods—early 17th, early 18th century—and has passed through many ownerships, unlike most structures of its day, it has suffered little from "modernizing."

"Bramshill" stands to-day as it was built in 1605-1612, when it came into the family of the present owner, Sir Robert Cope.

With Bramshill for model, Mr. James Brite designed "Darlington." That his is the distinction of never having studied abroad lends piquant interest to this notable achievement. Southern born, Mr. Brite is a product of the American Architectural League, being one of its early gold medalists. With Messrs. McKim, Mead & White he served his apprenticeship, entering their office when it had eleven draughtsmen, quitting it, to try his further fortunes alone, when the draughtsmen numbered 110. Beyond some twenty months' travel abroad, Mr. Brite has worked out his architectural career in New York. Although he has gone far, "Darlington" remains his most ambitious undertaking.



"DARLINGTON"—THE GARDEN FRONT.
JAMES BRITTE, ARCHITECT.



"DARLINGTON"—THE GARDEN FRONT.
JAMES BRITTE, ARCHITECT.



"DARLINGTON"—THE TERRACE.
James Brite, Architect.

"It cost me much hard work, many heartaches, and no end of joy," he declares, "and it is good now to see how well 'Darlington' is wearing."

While to few architects or builders is given the opportunity "Darlington" afforded, there are to the humblest of the craft, great inspiration, and suggestion in the problems it solved, the effective merging of the arts in its decoration, the

adoption of Old World conceits to New World conditions—the comfort and luxury of modern living.

Consider the front entrance of "Darlington" and the front entrance of Bramshill as shown on the cover. At first glance they are identical. The radical difference is in the wings; where there is depletion in Bramshill there is extension in "Darlington." This extension was

made to furnish space for the desired number of rooms, which exceeds that of Bramshill.

The front entrance to Bramshill is striking. It embodies the most notable stonework of the English Renaissance. The parapet of the roof consists of pierced panels, not the usual baluster. The whole of the front depends for effect upon a long, straight stretch of wall divided by flat bays and pierced with many mullioned windows. "Darlington" not only preserves the stone ornamentation, the sculptural decoration of Bramshill's front to minutest detail, but enriches it. The house is built of "Harvard" brick trimmed with Indiana limestone, material unknown to English architecture of any period. The plan is H shape, with a center flanked by projecting wings. Its greatest length is 143 feet, and the depth of the wings is 102 feet. The area is greatly extended by the pergolas on either side, north and south, which are an integral part of the structure. The entire area covered by the mansion is about 290 feet by 127 feet.

The terrace, or garden front, as it is called in England, first seen upon entering the estate, overlooks a series of terraces, while the main entrance is on the opposite side, the approaching driveway sweeping round the mansion to the entrance terrace. This entrance terrace is supported by a massive stone wall surmounted by a balustrade. The entrance bay is faced with limestone and is rich in sculptural ornamentation. A loggia serves as an entrance porch.

Mr. Brite's originality or adaptability is happily disclosed in "Darlington's" terrace front. Here the resemblance to Bramshill's garden front is so modified



DETAIL-MODEL FOR WOOD-CARVING—"DARLINGTON."

James Brite, Architect.

as to almost lose its identity with the original.

In place of Bramshill's three gabled roof projection — additions made at various periods — "Darlington" has a modified mansard roof with the straight parapet finish of Bramshill's front entrance. The one break in the long, straight stretch of wall, is a center broad projection from cellar to chimney base, giving the effect of a huge flat Maryland chimney. This projection affords the interior of the Great Hall a two-story inglenook.

However the gabled roofs of Bramshill's successive additions may have fitted in pictorially with its informal garden they would hardly have been in keeping with "Darlington's" formal terrace front, which recalls in its studied lines the Luxemburg or Versailles.

It is interesting to note the introduction of the motive of the oriel window of the front elevation in the wood-carving of the right-hand baluster-post.

Here house and landscape architects have effectively worked into each other's feeling, with the result that the straight balustrade lines of the roof are in harmony with the white terraced walks leading down to the white stone framed lily pond, in which house and terrace garden are reflected.

The interior of "Darlington" is not a whit less interesting than Bramshill's, whose 17th century ceiling and 18th century panelling it reproduces. Unlike the exterior, the interior has a number of departures from the pure Elizabethan of the Great Hall, the staircases and the breakfast room. To the untimely passing of Mrs. Crocker before the house was under roof, may be attributed the Georgian dining-room and the library



DETAIL OF WOOD-CARVING, STAIR-HALL
—“DARLINGTON.”
James Britte, Architect.

of French rather than Italian Renaissance. In taking these liberties with his model, the architect evidently accorded with the English commentator who declares: “Whoever planned Bramshill, whether Thorpe or another, would have to modify his ideas very considerably were he to rise from his grave with view of pursuing his former occupation successfully.”

“Darlington’s” first story is occupied with the general and public rooms. The main doorway opens into the entrance hall from which begins the grand stairway by which the upper floors are reached. This main doorway like all the doorways of the first floor, is after the manner of Bramshill, the lofty square opening of Queen Anne’s time.

Beyond the entrance hall and separated from it by an imposing corridor

that runs across the mansion, north to south, connecting the five great rooms of the interior is “Darlington’s” most distinctive feature—the Great Hall. The center of this corridor serves as an outer part of the Great Hall opening into it by arches and having a roof of groined vaults after that of a cloister walk.

In the south wing to the right are the dining-room and the breakfast room, in the north wing, to the left are the drawing-room and the library. To the right of the stairway are a lavatory, servants’ stairway, flower room (refrigerated for preservation of flowers used for interior decoration), and pantry; on the left are a coat room and office.

This entire first floor interior is wholly finished in wood as are all the halls, corridors and the family suites.

No private house in the United States, perhaps, is so rich in carvings wrought by hand out of solid wood. Many varieties of wood contribute to the rich, sombre beauty and solidity of the whole; American quartered white



DETAIL, MODEL FOR WOOD-CARVING IN
THE STAIR-HALL—“DARLINGTON.”
James Britte, Architect.



DETAIL OF WOOD-CARVING,
"DARLINGTON"—THE HALL.
JAMES BRITTE, ARCHITECT.



"DARLINGTON"—LOOKING INTO THE GREAT HALL.
James Brüte, Architect.

oak, English oak, cherry, Circassian walnut, English walnut and California redwoods.

In a day of rapid building and keen competition, it is good to consider the experimental care and infinite pains with which "Darlington's" interior was thought out and executed.

The Great Hall is an imposing room 80 feet long and 45 feet wide, extending through two stories to the height of 30 feet, without counterpart in modern domestic architecture. The walls are encased in Enville stone. Three sides have a high oak wainscot while the entrance wall is a two-story balcony in American white oak. The screen of this balcony is solidly carved in Elizabethan designs, completing decoration rare as it is beautiful.

The wood of the entire Great Hall is American quartered white oak. The original color is a light tone. To secure its present silvery grey tint, the wood before it was carved or set in place, was put into a hermetically sealed

room, encased with pipes charged with ammonia as in a refrigerating plant. The wood was left there until thoroughly permeated with the ammonia fumes. It was only after repeated experiments that it was discovered that a two-hour exposure was sufficient to secure the desired silvery grey tint. This time limit determined, all the wood used in the Great Hall was subjected to the hermetically sealed ammonia room.

The motif of the decoration both in plaster and wood is the Tudor rose. Aside from the plaster the ceiling has carved oak beams and cross beams, with elaborately carved pendants. The pendants are carved out of the solid wood of the beam, not done in bits and glued on as obtains in most ceilings of this type constructed for effect rather than endurance. The panels formed by these beams are of plaster, modeled in flat relief and tinted to harmonize with the character of the hall.

All the wood carving was done in Philadelphia and set up in the house by

master cabinet-makers. The plaster modeling of the ceiling was cast in sections and applied to a light steel backing. The sill of the gallery at the south and entering the library is hand carved out of Uriel stone, a material rarely used.

In the second story is a corridor surrounding three sides of the Great Hall. This corridor serves the double purpose of yielding further space to the interior of the Great Hall and affording access to the guest chambers and family rooms on the second floor. On the longer side of this upper corridor are the openings in the oak gallery screen; at each end of the corridor are arches with Caen stone frames richly carved. To enter the Great Hall under the carved screen balcony is to confront the "inglenook." This spacious and attractive feature fills the projection beyond the main hall. It is practically the inside of the Maryland chimney that breaks the straight stretch of the terrace front wall. This inglenook contains a fireplace with mantel

and overmantel. The latter are of Caen stone, inlaid with colored marbles. On either side of the inglenook are tall triple windows reaching from floor to ceiling. The lower casements open onto the balcony without and bring the Great Hall into immediate connection with the terrace front. Above the overmantel concealed by a tapestry is the echo-board of the great organ that fills a goodly part of the south wall.

The staircases of "Darlington" are no less monumental than pictorial. With all the spacious suggestiveness of Elizabethan days, the grand stairway leads to an upper foyer hall by which the corridors that enclose the Great Hall are reached. The stair wall is panelled in oak to the roof, and the richly carved balustrade is carried to the summit of the third floor.

The foyer hall with a geometrical ceiling in plaster (Tudor rose motif) opens into an elevated recess which contains the oriel window-feature of Oriel College, Oxford—that is such a charm-



THE GREAT HALL—"DARLINGTON."
James Brite, Architect.



"DARLINGTON"—THE LIBRARY.
JAMES BRITTE, ARCHITECT.



"DARLINGTON"—THE BREAKFAST ROOM.
JAMES BRUTE,
ARCHITECT.



"DARLINGTON"—THE DINING ROOM.
JAMES BRITTE, ARCHITECT.

ing note of the entrance front. This oriel window is repeated in one of the key arches of the balcony screen of the Great Hall and elsewhere.

With California redwood as interior decoration Eastern architects and builders are practically unfamiliar, so rarely is it used this side of the Mississippi. Nowhere is its beauty and utility so richly or effectively demonstrated as in "Darlington's" dining-room of Georgian splendor.

Three varieties of redwood are used; the burl, which is the root of the tree; the straight, and the curled grain. The markings which lend such varied beauty is secured by a peculiar way of sawing the wood.

The walls are a series of great panels with moulded frames, between which are pilasters carved in high relief. These pilasters support cornices, also elaborately carved, and which give way, at the end, to Corinthian columns. Over the fireplace of black, green and brown marbles, is an elaborately carved redwood overmantel. This huge and elaborate oral design is carved out of a solid block of redwood, and is the work of an Italian of twenty-six.

The floor is patterned after a ship's deck with wide pieces separated by narrow strips of white caulking.

The dominant note of the library is the ceiling of exposed beams and rafters, the latter closely set and the whole painted by James Wall Finn after the style of the Italian Renaissance.

Unlike Bramshill, where access to servants' quarters at one time necessitated making a circuit of the entire building or emerging into the open air, "Darlington" reserves on the third floor of the

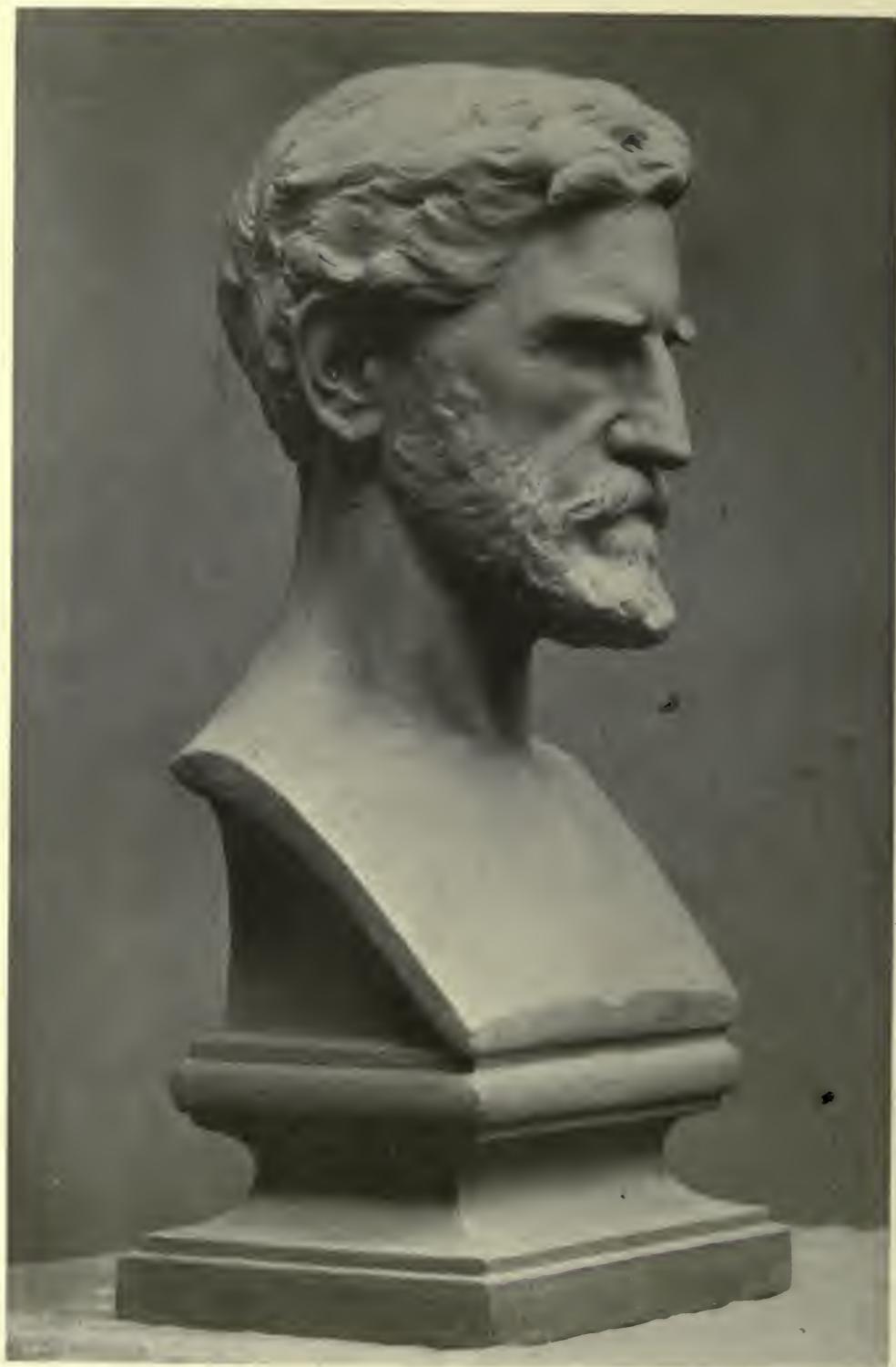
south wing at the end of a corridor, opening into or shut off at will from guest chambers, twelve bedrooms and a bath for domestics. Theirs by pressure of button are the heat, light, telephone and elevator service of the master.

But nowhere is the vantage of the present over the past so obviously brought home as in "Darlington's" huge basement. Where Bramshill's cellar housed for centuries lanterns, tallow dips, forest faggots, wooden vessels for the distribution of light, heat and water through personal service of human slaves, its American reincarnation is a storehouse of miracle workers in the comfort and luxury of modern domestic life.

There are boilers to radiate steam to heat, ice to cool, there is electric plant distributing through wires in iron conduits not only light to myriads of make-believe candles, heat to make-believe logs, but power to turn laundry machines, ice cream freezers, vacuum sweepers that connect on every floor.

Where Bramshill's successive masters communicated with greenhouses, overseer's office, or coach stables through an old fog horn or slow footed courier, "Darlington" has telephone connection with every outlying house of the estate, and their number is legion.

Is it not significant that in this Elizabethan structure, with détours into Georgian architecture, French and Italian Renaissance, America's ingenuity should be concentrated in the root of the whole—the basement? For steam, electricity, telephone, vacuum sweepers as utilized in the modern home, are they not all American inventions?



PORTRAIT BUST—THE LATE
AUGUSTUS SAINT GAUDENS.
HENRY HERING, SCULPTOR.



BAS-RELIEF OVER FOUNTAIN NICHE, HOUSE OF TRACY DOWS, ESQ.
HENRY HERING, SCULPTOR.

THE WORK OF HENRY HERING

By GUY PÈNE DU BOIS

AMERICAN SCULPTURE with the figure of Rodin hovering over it, an evil genius, is as though it had been dipped in an acid that only age could rub off. There have been many monumental figures in art, but no single, contemporary figure of any period so enormous as that of the great Frenchman. He is, as I have said elsewhere, a god or a monster. The great mass of sculptors either profit from the radiation of his light or are lost in the darkness of his shadow.

Rodin with the world, I am inclined to believe, is a realist. That may be because the present day interest in dollars is greater than the present day interest in art. Indeed it is the art market, the glamour of the fabulous sums spent in it, rather than the art product, that creates talk, excitement, admiration, envy among the people.

Now unless art takes the reins and tugs on them one way or another we are going to be realists—that is, we are going to take life as it comes and comment upon it with all the literal truth of

which we are capable. Not because the world is without natural idealists and symbolists, men with intuitive prejudices who would follow a path blindfolded despite temptations placed in a million by-ways, but because the vaster world with eyes glued on gold follows the practical man who may lure it with enough of the stuff that glitters. The practical collector of gold is a realist.

Place ideals instead of dollars, which for the simplification of the argument is not an ideal, on the pedestal, and immediately the heads of artists, who are individuals, will bob up definitely above the vortex; idealism becomes a buffer to realism; symbolism steals a little of the fire of literalism.

It is true that nothing lives that is not truthful, and likewise true that the range of truth is so vast that one end of it must seem very great truth and the other end very great falsehood. Now the modern realists who see in truth an obvious theme are likely to call the idealist a liar, forgetting that truth, which is sin-



DETAIL—GARDEN TERMINAL: "SUMMER."
HENRY HERING, SCULPTOR.



DETAIL—GARDEN TERMINAL: "AUTUMN."
HENRY HERING, SCULPTOR.



GARDEN TERMINAL FIGURE: "WINTER."
Henry Hering, Sculptor.

cerity, lives in every man's individual vision.

Henry Hering, the sculptor, whom this article concerns, is not a realist, not a follower of Rodin, strange for the day, and one of the most sincere of the men here who feel that they have something within themselves worth giving out to the world. He was born in New York City in 1874. He began his studies at Cooper Union, worked for eight years with Martini and for eight years with Augustus Saint Gaudens. The latter connection was broken only with the sculptor's death.

It would be futile and rather foolish to say that he had retained nothing of the teaching of these men, that he had discarded, with a shake of the shoulders, the veil thrown over every sincere student and stood forth an individual linked to no other individual by any trend of thought or any method of expression. He is Saint Gaudens over again, the workman and, in many little delicacies of conception, the artist. Here the influence may be said to rest and through it and above it stands Hering the individual, with his own grip on thought. A very distinct point should be made of this because it would be a very easy and a very natural thing to place him as a pupil of Saint Gaudens, in accordance with the tradition of the pupil and the master, and to let it go at that, and because I fear that it would be as great a mistake as to say that all Republicans and all Democrats and all Socialists were sheep or that every soldier in a company was like his captain.

Hering works quite alone and rarely exhibits. In this he resembles the older sculptors whose work became familiar to the public only after it was placed in a public building or square or park a finished commission. He has made an ideal of dignity and in this he stands a little aside from modern sculptors whose gymnastic minds are capable of leaping and bounding, backward and forward, from peaks to valleys, with the acrobat's agility and the mountebank's boast of infallibility. He seeks completion, and in this resembles the Hellenists and not at all the followers of Rodin, who, hav-

ing given the suggestion of an idea in their work, are wont to leave entirely untouched parts considered unessential, which is as though a woman, meeting success in the effort to attract eyes to her face, went barefooted.

The man who makes a goal of perfection leaves himself open to the attacks of the realists who are ever ready to cry inhuman, cold, for the Puritan spirit has brought up here the vision of a perfection which called the heart, since it could be tempted, a weakness. Often enough the realists have been right. Attacks on the works of the classicists who built a theme about the shell of the Greek idea, copied lines and forms and proportions and failed to see the heart, the soul, the palpitating, living, immortal thing inside of it are justified, surely.

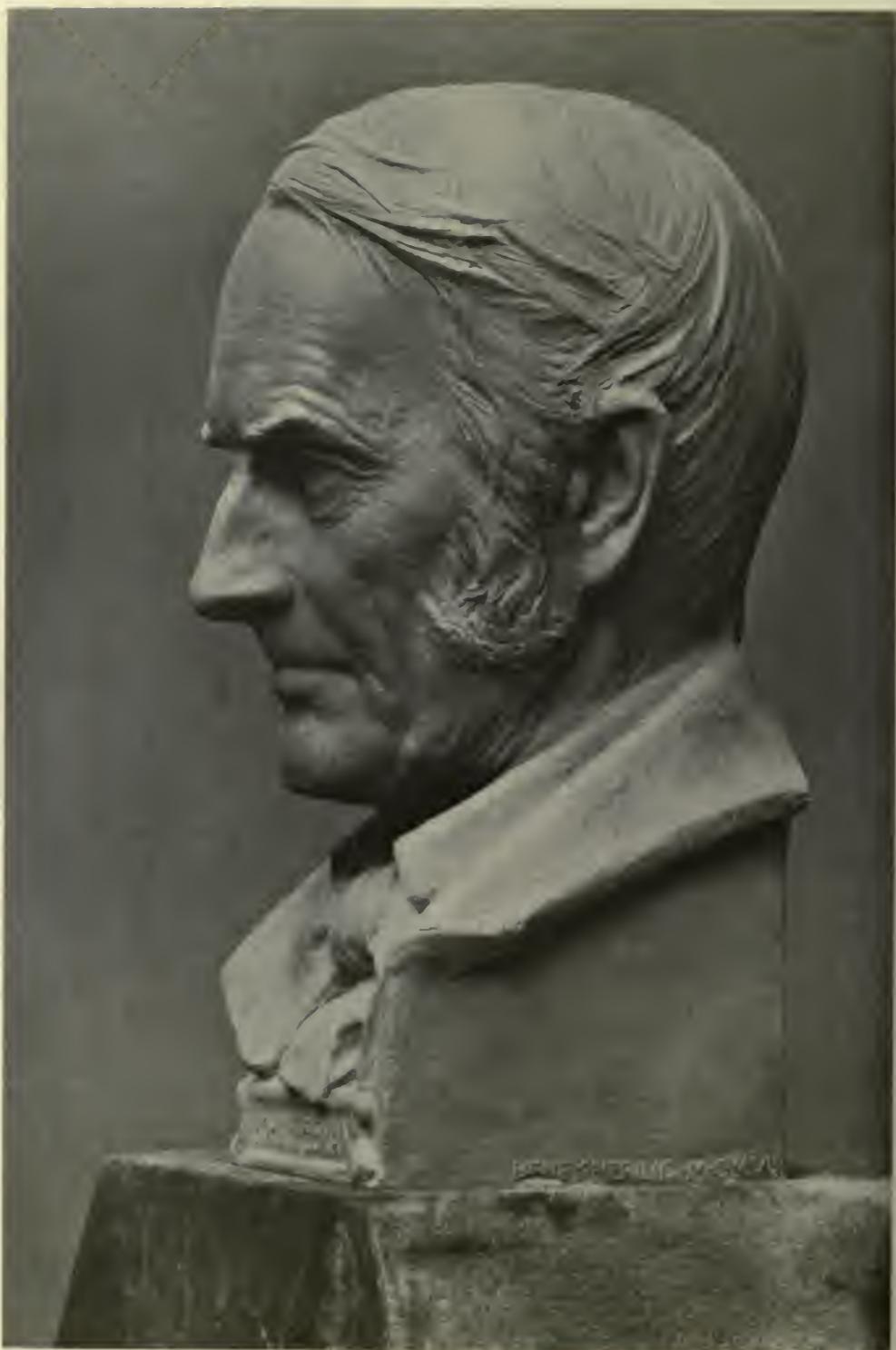
But there are realists too who copy the shell of man and call that hollow reproduction real man. Mr. Hering is neither the one nor the other. The classicists who follow formulas and are described as Academicians might point to the realism in his work and therefore, in accordance with the formula, bad. I imagine that realists finding that the classic spirit regulated the realism would discover an ideal in it and cry falsehood. Mr. Hering, as a matter of fact, is too truthful to deny his eyes as the Academicians do and too sincere or too truthful to deny the ideal of beauty, which with him, as with any man, must color his sight.

I believe that this ideal in Hering is dignity. A portrait bust of John Freeman, a New England farmer, which he showed to me recently in his studio, is to me the most direct expression, at least the most obvious expression of himself, or of his art, if you prefer it, that I can call to mind.

That Hering himself considered the execution of it important is certain. He spent three years getting the old farmer, who is past eighty, to pose for him. During that time he was forced to push his wit to the extreme of effort in almost every direction. Mr. Freeman, being a typical New Englander, feared the thing that he could not understand, feared that possibly a fortune was to be made from



GARDEN TERMINAL FIGURE: "SPRING."
Henry Hering, Sculptor.



PORTRAIT BUST OF JOHN FREEMAN.
HENRY HERING, SCULPTOR.



FOUNTAIN FIGURE, MATHER RESIDENCE.
Henry Hering, Sculptor.
Charles A. Platt, Architect.

him before his eyes while he, the dupe, lent time and patience to it with child-

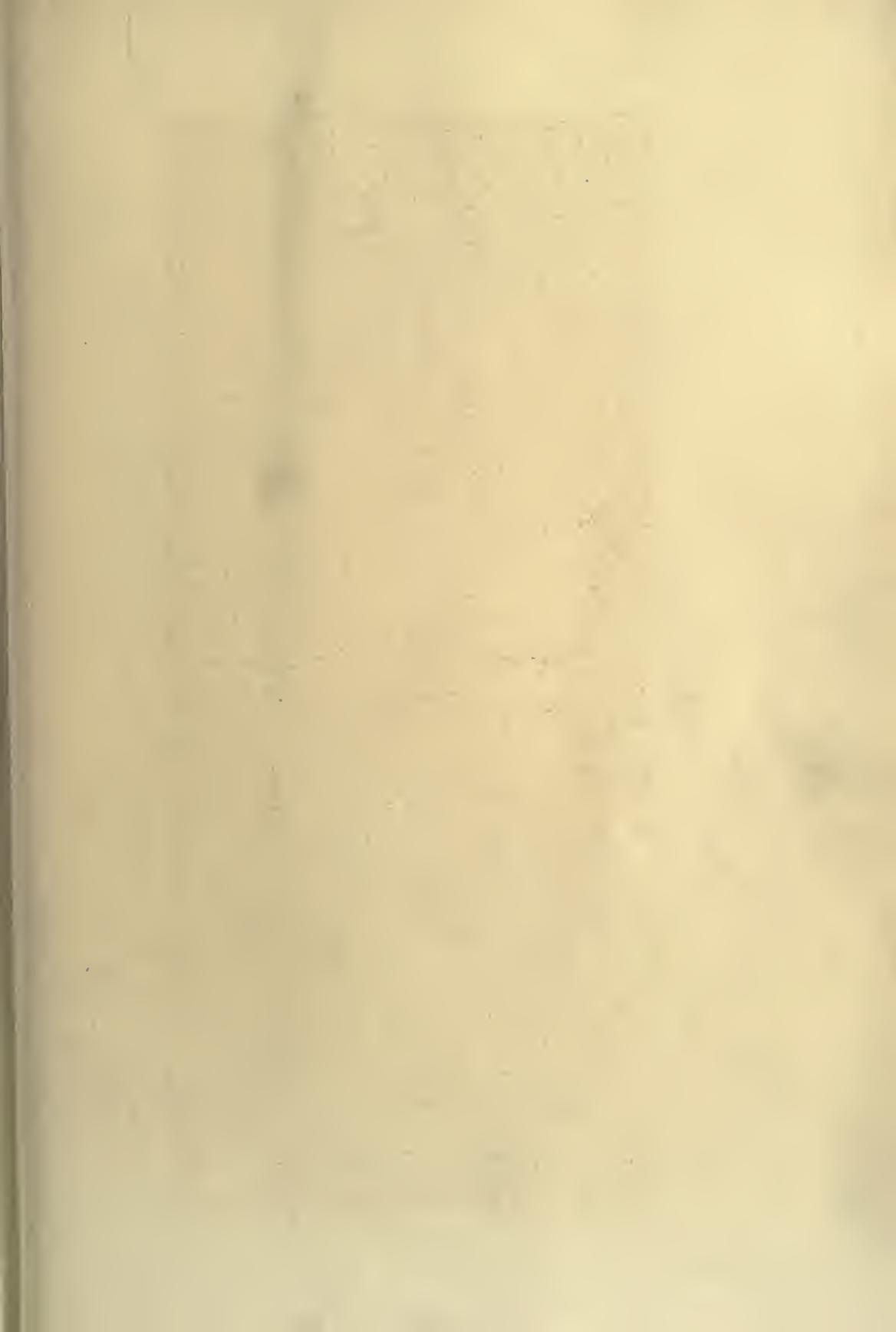
like confidence. Mr. Hering invented reasons for paying court to him, for visiting him, for having the visits returned, and finally, with the assistance of Saint Gaudens, did manage to get him to pose for an hour or so, during which time he worked frantically. The result, by chance perhaps, pleased the old man who sat at intervals until the completion of the bust. It is a fine sample of the power of concerted purpose. With strings guiding the trend of its realism it is one of the most dignified portraits in American art. It is loyal to realism and loyal to an ideal—the process of selection and omission, of accentuation and subjugation carried in it with definite purpose has resulted in truly remarkable definiteness of expression. Here are lines and forms not copied from life and yet so far from ignoring life that the very spirit of it is here, the fundamental spirit of which the old man's course in life was built, the spirit for which he stood, and that is the dignified spirit of those great



DOLPHIN FOUNTAIN.
Henry Hering, Sculptor.



"L'ALLEGRO," A BRONZE,
BY HENRY HERING.





"DIANA," A BRONZE BY HENRY HERING.



"DIANA"—A BRONZE (PROFILE)
BY HENRY HERING, SCULPTOR.



DETAIL, "YOUNG PAN," FOUNTAIN,
HOUSE OF TRACY DOWS, ESQ.
Henry Hering, Sculptor.

settlers, who, strangers in a strange wilderness, became conquerors of it.

The theme of this work Hering carried out in a portrait bust of Augustus Saint Gaudens finished just previous to that great American's death and never publicly exhibited. This Saint Gaudens bust indeed, as a tribute to the famous artist, is inestimably valuable. In the Metropolitan Museum of Art are two portraits of Saint Gaudens, one by Kenyon Cox that follows closely an academic formula, and therefore must be valueless as a document, and one by Ellen Emmet, in which the literal facts concerning forms, features, construction are made to seem, perhaps, over important as though the detail of a mole on a man's face was to be turned into a conclusive argument in the judgment of his character.

Hering points to the puny in minor details with big comprehensive truths. One finds them in his portrait of Bishop Talbot, of Southern Pennsylvania, and in his portrait of Roger Platt, the son of Charles Platt, the architect. In this latter portrait one sees not only the boy

Roger, but an epic to the spirit of American youth. It is handled in much the way that Praxiteles handled that head of Hermes, the smooth clearness of the face accentuated by the tumbled roughness of the hair.

Indeed the spirit of the ancient Greeks is to be found often as not in the works of Mr. Hering. It is decidedly apparent, for example, in a little statuette of Venus, hands upholding a drapery that hangs in symmetrical folds, the proportions lending grace, the attitude, dignity; the almost frenzied coldness of the manipulation of flesh—the godlike purity of the Greeks, clear as air on a fine Winter day.

It is the bronze Diana that Mr. Hering considers his masterpiece and in which he has made of reserve a fine art. That statuette shows a Diana new to modernity, a Diana that is really a goddess, free from earthly temptation, from material care, happy, joyous, but refined and as divine as though she were a goddess of Hering's own religion. He shows her in lines that are clear and continuous, sinuous and unhampered, devoid of prudery. Continuous line, but not too continuous, too suave, which, like urbanity, is vulgar.

Another picture of joy, less dignified, more youthful than the joy of Diana, that is ageless, is in his figure, suggested by Milton's "*L'Allegro*," blowing through pipes similar to those of Pan and dancing, her face lighted, like her figure, by the joy of rhythmic tune and motion.

A catalogue of Hering's work would be entirely inadequate if it did not include examples of his work in bas-relief. Here one may not forget that he was a pupil of Saint Gaudens who knew how to lend air and even color to a flat surface. His bas-reliefs reach almost into the province of the painted picture. Their forms are a little fuller, a little more robust than those of Saint Gaudens. I am thinking of the bas-relief of Evarts Tracy, the architect; of Charles Albert Coffin, the president of the General Electric, and of the group portrait of Alice Olin Dows and of Stephen Olin Dows. The last is captivatingly decorative. This



"YOUNG PAN"—FOUNTAIN ON TERRACE.
RESIDENCE OF TRACY DOWS, ESQ.
HENRY HERING, SCULPTOR.
ALERO AND LINDBERG, ARCHITECTS.



BAS RELIEF PORTRAIT OF
MRS. TRACY DOWS AND SON.
HENRY HERING, SCULPTOR.



PORTRAIT HEAD—ROGER PLATT.
HENRY HERING, SCULPTOR.

may be said too of his medal for the Scarsdale Golf and Country Club, an arrangement of Scotch thistle, which it is possible he may win himself, as much of his spare time is devoted to golf.

Elsewhere in that catalogue designs for architectural motifs should be given a prominent place. In this field of his work the most apt examples are to be found in a lioness wearing the Egyptian headdress, seated, the lines of her figure rigid, her gaze impenetrable—a sphinx

truly; in the terminals of the seasons now at the Harkness house of which Gamble Rogers was the architect; in the fountain of the boy and the dolphin in the Mather house, Cleveland, which Charles Platt designed, and in a beautifully arranged figure of Pan, the immortal, for the fountain of the Dows house at Rhinebeck, designed by Albro and Lindeberg—here is a strong feeling by the sculptor that his art is indeed allied to architecture.



ARCHITECTURAL SPHINX, THE MATHER HOUSE, BY HENRY HERING.
CHARLES A. PLATT, ARCHITECT.



BAS-RELIEF PORTRAIT OF MR. S. HENRY OLIN.
HENRY HERING, SCULPTOR.



MEMORIAL TABLET, BY HENRY HERING.



THE APARTMENT HOUSE MEDAL OF THE AMERICAN INSTITUTE OF ARCHITECTS.



CHAMPIONSHIP MEDAL OF THE SCARSDALE GOLF AND COUNTRY CLUB.

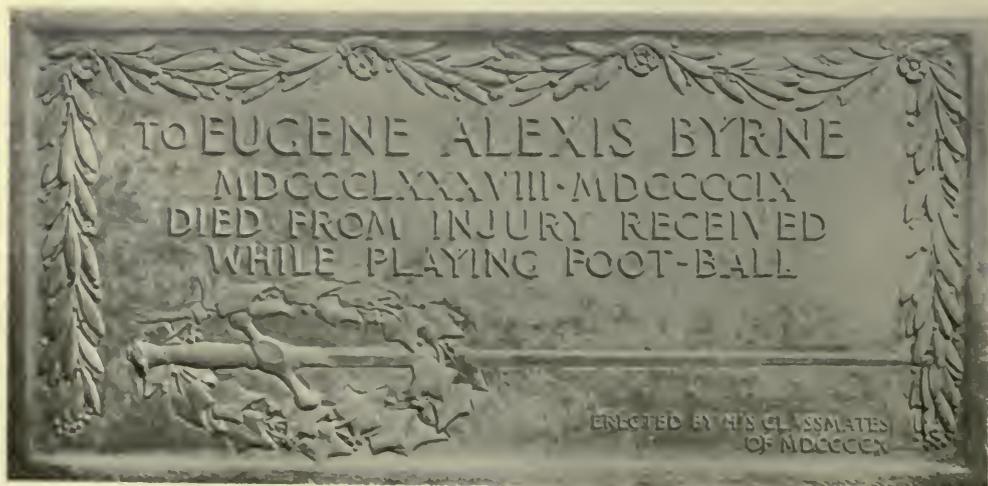
OBVERSE AND REVERSE OF TWO MEDALS.
MODELLED BY HENRY HERING.



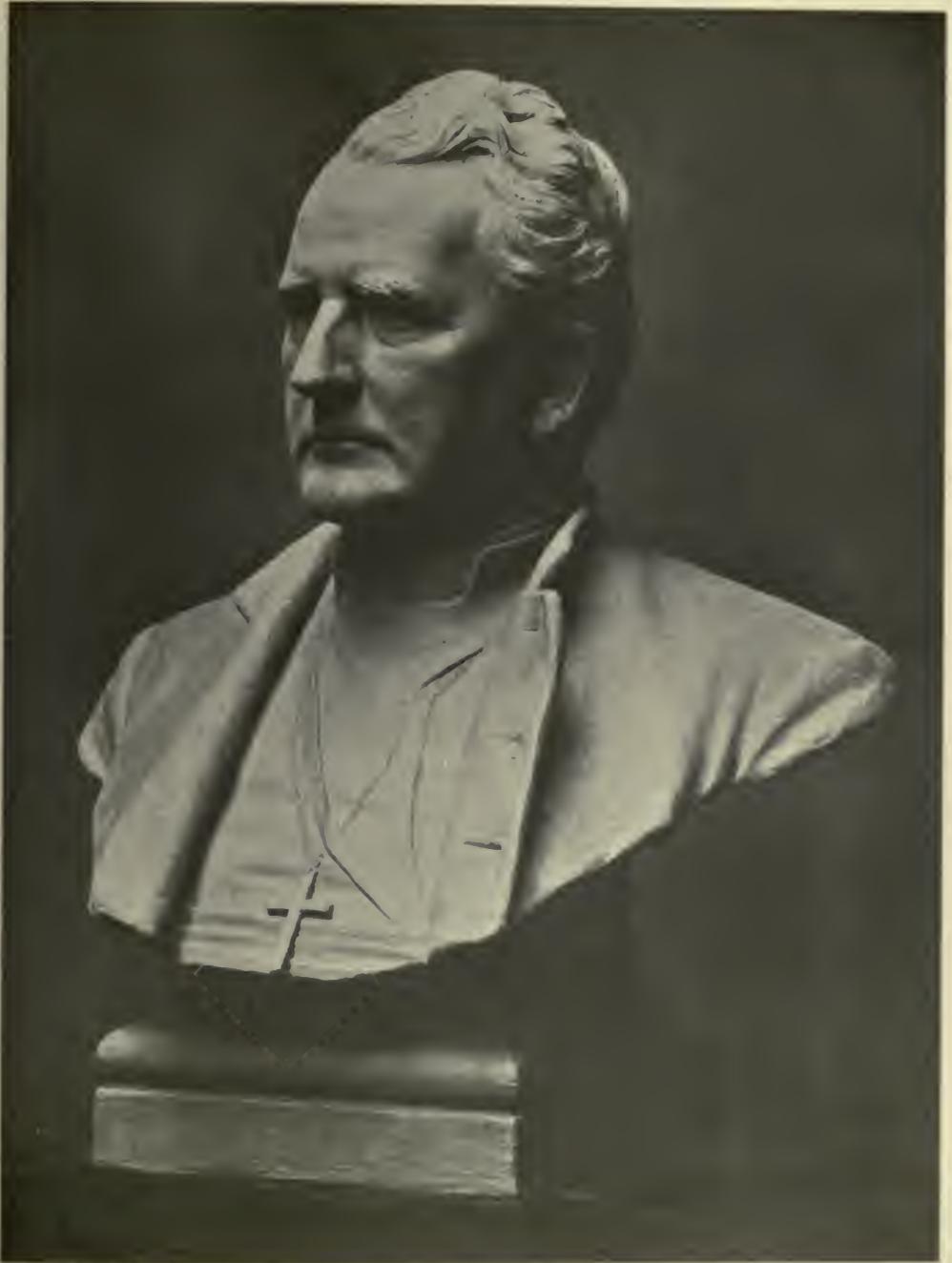
A MEMORIAL TABLET.
HENRY HERING, SCULPTOR.



BAS-RELIEF PORTRAIT OF MR. EVARTS TRACY (OF TRACY AND SWARTWOUT, ARCHITECTS). HENRY HERING, SCULPTOR.



A MEMORIAL TABLET. HENRY HERING, SCULPTOR.



PORTRAIT BUST—BISHOP TALBOT OF
PENNSYLVANIA HENRY HERING, SCULPTOR.



AEOLIAN HALL, NEW YORK CITY,
LOOKING ACROSS THE LIBRARY TERRACE.
WARREN AND WETMORE, ARCHITECTS.



The NEW ÆOLIAN HALL

WARREN AND WETMORE, ARCHITECTS

*Some Notes on French Arch-
itecture of the Renaissance*



I.

IT IS REASONABLY safe to say that any prejudice on the part of critics against French architecture is the outcome of as many vague derogations as underlie any prejudice. Certain excesses in modern French design, certain stupidities in the earlier part of the 19th century, certain decadent tendencies of earlier times have, perhaps, led many to a sweeping condemnation of all that is French in architecture. That this is not only an ill-taken viewpoint, but an unfortunate one, may be realized both by a conscientious study of historic work of the best periods of the Renaissance in French architecture and of certain modern adaptations of this work.

In common with the Renaissance in Italy and in England, that in France dealt primarily in the inspiration derived from classic influences, and more broadly (and often detrimentally) in the more sophisticated "refinements" of the day. And this is more true of the French Renaissance than of the classic revival in any other country. Nowhere did it reach such heights of extreme urbanity as in France, nowhere did it degenerate into such inexcusable vagaries as in the Rococo—unless we except the Chippendale of England. The Italians were truer to abstract ideals—perhaps they were more sincere, and certainly they were greater artists. In England the basic conservatism of the race saved the English developments of the Renaissance from anything seriously approaching eccentricity.

So much of French architecture, unfortunately, has fallen under the stigma of being superficial, frivolous, insincere, that the peculiar beauties of its more reserved and urbane developments have been buried in the lava from terrific

eruptions of derogatory criticism. And modern French design seems to be so largely a matter of taste that the critics of the French Renaissance cannot logically allow themselves to find anything in it either to redeem their estimate of the past or to encourage their outlook for the future. They say that "If you like that sort of thing, that is just the sort of thing you will like"—and few of them, if any, will admit that French architecture should be taken seriously. Yet, if there is any good in the modern school (which a reasoning study must answer with a strong affirmative), then the case for the French Renaissance is proven beyond a doubt.

Opinions on the question of the worthiness of French architecture were at one time largely swayed by the criticisms of Ferguson, and that this is an unfair basis is firmly upheld by Ward on the ground that in this case Ferguson framed his criticism on inadequate material, and dismissed this very important chapter in his history with the damnation of faint praise—and worse.

We are not concerned in the present commentary with the Renaissance developments of French architecture under Francis I. This was a style in itself, leaving but little influence beyond its time, and manifesting itself but slightly in subsequent work. Unfortunately much of what was good in the reign of Louis XIV, Louis XV and Louis XVI is buried beneath more that was decadent. The fantasies of the Baroco, of the Rococo which followed, and of the even worse combination of the two did more to check the balanced development of French architecture than would an invasion of barbarians. It was an instance in which the pendulum



DETAIL OF DOOR (42ND ST. FRONT)
ÆOLIAN HALL, NEW YORK CITY.
Warren and Wetmore, Architects.

of civilization had swung so far back as to reach almost to barbarism.

That this wave of irrationalism and degeneracy in design should have been lived down at all is only a proof of the remarkable intrinsic excellence of that part of French architecture which was good—of such splendid achievements as Mansart's additions to Versailles in 1680. In the dignified and thrice-refined treatment of the "*Cour de Marbre*" Mansart was fifty years in advance of the architecture of his time—but this court, and other contemporary work at

Versailles was the forerunner of what was to come. There was the beginning of that remarkable style, like none before or since—a style of refinement in every member, of studious reserve in mouldings, restraint in ornamentation and of sculpture handled in a delicate low relief. Certain motives were developed in architectural favoritism. There were urns, sculptured medallions like monumental cameos, festoons and garlands, oval windows, and most characteristic of all, oval niches adorned with marble busts. And there were infinite minor niceties—drapery treated in a decorative yet monumental manner in stone, delicate wreaths, bands of fret and key ornament, and always a sort of thoroughbred attenuation and slinness of proportion.

"About 1730," says Ward, "the pendulum began to swing back toward classic purism, largely helped by the impression produced by newly discovered remains of antiquity; and architecture began to assume a more archaeological character than at any time."

Perhaps the best of French architecture began, sporadically, in much work being done during the reigns of the Louis, and reached its height just before the empire, when it became ultra-classic—more "classic," indeed, than the precedent from which it sprang. In the "Empire" the Renaissance was at its zenith—classicism "could no further go," and the bars were let down for a chaos which has obtained with more or less discomfort to eye and mind ever since.

Taking as the keynote of that type of French Renaissance architecture which may be said to be a highly desirable type, the qualities of restraint, reserve, refinement and urbanity, it is to be submitted that these qualities lend themselves in a peculiarly happy degree to the treatment of theatres, clubs, hotels, exclusive commercial buildings and certain city residences. And it is this type of French architecture of the Renaissance which has been revived in a manner at once scholarly and pleasing by the firm of Warren and Wetmore in their recently completed building for the Æolian Hall in New York City.



AEOLIAN HALL, NEW YORK CITY—42ND ST. FRONT
AT NIGHT. WARREN AND WETMORE, ARCHITECTS.



FIRST AND SECOND FLOORS (42ND STREET FRONT)—AEOLIAN HALL, NEW YORK CITY, WARREN AND WETMORE, ARCHITECTS.

IT IS A MATTER of common observation that the work of Warren and Wetmore in the past has been almost entirely confined to studies in French architecture. The greatest monument to their skill in handling the elusive niceties of the style of the French Renaissance may always be the Dreicer building, at 560 Fifth Avenue, in New York City, which for refinement of feeling and scholarly adaptation ranks among the best examples of "transplanted architecture" in this country.

In the New York Yacht Club and the Hotel Belmont the style is modern French (the proper appreciation of which seems to be even more a matter of taste than is French Renaissance), and the temporary and apparent apostasy of the firm, in the Hotels Ritz and Vanderbilt, in New York City, only throws a stronger emphasis on its fundamental feeling for French Renaissance. This is because the style known as that of the Brothers Adam was, after all, not only a continuation of the style which had developed in France, but a continuation which dealt in even greater refinements. There was even more attenuation of forms, more suppression of mouldings, more delicacy and flatness of bas-relief treatments and far more esthetic color-schemes.

So it is by no means surprising that Warren and Wetmore should have turned to expression in the style of the Adams, or that they should have been exceptionally happy in their renderings of it. In their new Grand Central terminal station there is still a later development, a Franco-American style, if so it might be called, blending the grace and richness of modern French architecture with what we might like to call the sanity of American architecture, the whole pleasantly dominated by the dignity and urbanity of the earlier architecture of France.

In the new building for Æolian Hall, however, Warren and Wetmore have returned to that rendering of French architecture which was so successful for its purpose and so happy in itself in the Dreicer Building. It is only unfortunate that the exquisite line drawings of the detail are unavailable for publication, for

much of its finesse is lost in photographs, and that of the upper stories is nearly impossible to obtain. Solely in line, without the artifice of shadow or color, they stand on their qualities of grace and refinement, those qualities without which any conception of this particular type of French architecture is inadequate.

The doors show a treatment which is not only characteristic in itself, but skilfully flexible in detail. While the door itself is essentially in French Renaissance, especially in its feature of the oval niche for a marble bust, yet the glass and iron hood has the cursive lines which we associate directly with the more volatile type of modern French work.

Above these doors there is a severe simplicity befitting the base of a monumental building, relieved only by the line of cleanly designed incised inscription, gilded: "*ÆOLIAN HALL.*"

What has been considered the base of the building ends above the third floor, and here, as well, the severity is modified. The three central windows of the fourth floor are treated in a manner happily reminiscent of the tall windows of the Dreicer Building, at 560 Fifth Avenue. Between these windows there is a detail essentially characteristic of the period, musical "attributes" in low relief, taking one directly back to one of the most perfect expressions of French Renaissance architecture in Europe—to the theatre at Amiens.

Above the story thus clearly designated as the last occupied by the company whose name the building bears, there are eight identical stories of offices, diversified only by the panels of figured marble set in the metal window facings.

At the ninth floor there begins a nicely studied composition which was undoubtedly intended, and successfully achieved, to crown the building, and to lower its otherwise too-great height. Thus, where a mere cornice, or elaboration of the upper story, would keep the eye at the highest point of the building, the great colonnade here draws the eye down to a level five floors below the top. Resting on a perfectly studied string course, a narrow base with the Greek wave-pattern, projecting over a dentil course and a bed-mould, there are four engaged



DETAIL, UPPER FIVE STORIES—ÆOLIAN HALL, NEW YORK CITY.
Warren and Wetmore, Architects.

corinthian columns and two pilasters, the iron-work of the windows between these being elaborated, and introducing tall, narrow urns to emphasize the central mullions. The colonnade supports a carefully proportioned cornice, not too bold or heavy for the style, nor yet too light to cast the necessary shadow at its height above the street. Above this member, the building is, perhaps, more thoroughly in accord with Warren and Wetmore's peculiar rendering of French architecture than the three floors just discussed, which are by no means dissimilar from the handling of the Tiffany Building. On the main cornice there is a base story, handled *en bloc*, and on it the crowning story of the entire building, made to appear light by the use of similarly proportioned pilaster-columns to those so effectively used (by the same firm) on the pergola which crowns the façade of the New York Yacht Club. The division of the windows into small panes furthers this impression of finesse and lightness—to have placed "heavy" architecture above what is so saliently the main cornice would indeed have been fatal. And for the sky-line, above a light subsidiary crowning cornice (which in no way conflicts with the main cornice) there is a seemingly delicate balustrade and six admirably designed monumental urns (of happier profile than those on the Ritz Hotel), which, in their design, strike the final note of conformity with the present idea of French Renaissance Architecture that could adapt itself to current American and commercial needs. In Æolian Hall, one of the very most recent commercial and office buildings in New York, practical considerations have not stood aside for the esthetic or abstractly architectural, nor, on the other hand, have these given their place to the first. They are co-ordinate, they go hand in hand, and speak, in terms so open that all who run may read, the message that an age of a high development of commercialism need not discard the offerings of the highest developments of architecture, and that the utilitarian and the esthetic may, perhaps, be those two ends of a circle which find a common meeting point.



DETAIL—ÆOLIANT HALL, NEW YORK CITY.
WARREN AND WETMORE, ARCHITECTS.



MAIN FOYER — ÆOLIAN HALL,
WARREN AND WETMORE, ARCHTS.

ÆOLIAN HALL

DETAIL OF INCISED LETTERS, ÆOLIAN HALL.
Warren and Wetmore, Architects.

II.

IT WOULD NOT be strictly accurate to speak of the new Æolian Hall as an office building, or even, strictly, as a purely commercial building. Inasmuch as the management intends that it shall become a musical center, there is a club-room for musicians, a perfectly appointed concert hall designed to seat 1,362 people and a spacious "green room" for the informal gathering of performers. Above the fourth floor the plan is typical—below there has been devised a complete home for the centering of various musical interests in New York.

The building is 78 feet wide and runs through at this width to a front on 43d Street, 210 feet over all, excepting the basement which extends north and south under the sidewalk.

The entrance on 42d Street is at once dignified and suggestive of the character of the entire idea. The great display window, interestingly detailed, is flanked by two doors, which, in their design, strike the keynote of that type of French architecture which is well maintained throughout—a conservative rendering of French Renaissance. Of these two doors the left opens into the office lobby, where the four public elevators reach not only the upper office floors, but also the four floors occupied by the Æolian Company. The door at the right opens directly into the great first floor foyer, where there are two private elevators used only by the company.

The foyer is dominated by the monumental stair, which leads to a second foyer, of equal dimensions on the floor above. Directly behind these two foyers the greater portion of the remainder of the floor space, to a full height of two stories, is occupied by the concert hall. This auditorium is an exceptionally skil-

ful treatment of the problem, being no less appropriate in its design and decoration than it is practical in its details of acoustics, ventilation and lighting. At its south end is a stage, amply large for a full orchestra, yet not too large for a single performer and accompanist. The background is occupied by a great pipe organ, which is designed to afford an absolutely complete range of organ expression in a manner never before attempted.

Beyond the concert hall is the 43d Street carriage entrance, lobby and box-office, while a freight elevator, one passenger elevator and a service stair are isolated in one corner, yet directly accessible from the street through a separate door. The design of the 43d Street front is no less interesting than that on 42d Street, detailed in the same clean-cut rendering of French Renaissance.

On this front the fire escape necessary for the balcony of the concert hall has been cleverly devised as a balcony when not in use, by the employment of the "balanced fire-escape," which swings down with the weight of one person, and back in place when that weight is removed. It is shown partly down in the illustration, but is ordinarily entirely concealed in its horizontal position behind the fascia of the balcony.

In the concert hall, at stage right, a stair leads down to the "green-room" in the basement. This is located under the main foyer of the first floor, and is one of the particularly interesting features of the building. "Green-room" in name, it is green in fact—a dull, subdued green, with a delicately harmonious grey and white treatment of the doorways. Adjoining are four dressing rooms, each with its complete bath-room. The "green-room" is also entered by one flight of the main stairway, the corre-

sponding north flight leading down into the department devoted to the sale and demonstration of phonographs. Lining three sides of the long central hall of this department are separate sound-proof rooms, walled with glass partitions and designed for the demonstration of records without mutual conflict or outside distraction.

conditions obtaining in the average room of a private house or apartment, thus producing all music in exactly the same way in which it will be heard after it has been bought.

On the 43d Street side of the basement floor, and on a level still lower, is the engine-room, floored with white tile and thoroughly complete and up-to-date



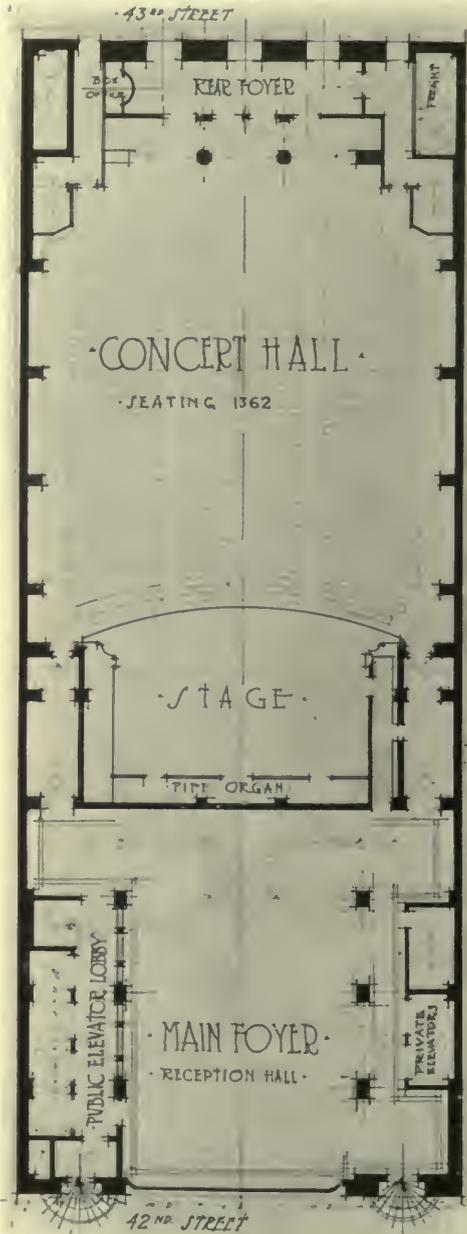
THE BALANCED FIRE-ESCAPE, ÆOLIEN HALL,
WARREN AND WETMORE, ARCHITECTS.

The mezzanine formed by the roofing of these rooms affords space for stock, both of records and music rolls. A feature of these individual sound-proof rooms, apart from their efficiency in simplifying the demonstration work, is that they are proportioned in height and size to duplicate the acoustics and general

in all its appointments—supplying heat, power, light, vacuum cleaning and every detail of the most recently devised list of conveniences of the thoroughly studied modern building. The heart of the entire fabric, it is a monument to present day standards of completeness and efficiency.



MAIN FOYER, AEOLIAN HALL, NEW YORK CITY.
WARREN AND WETMORE, ARCHITECTS.



FIRST FLOOR PLAN.

ÆOLIUS HALL, NEW YORK CITY.

Warren and Wetmore, Architects.

Foyer, Elevator Lobby, Private Elevators,
Mezzanine Gallery.Concert Hall, Rear Foyer, Box Office,
Freight Elevator and 43rd St. Passenger
Elevator.

Ascending to the second floor, by means of the main stairway, there is the second large foyer, designed for use as a lounge and promenade during intermissions in the concert hall, which opens into it right and left. The great display window below rises to the ceiling of this room, and is unobstructed to the very floor line, affording an absolutely unbroken view of the long formal terrace behind the public library, a prospect of Bryant Park and a raking perspective of the Library itself. It is a city vista which is hard to associate with strictly utilitarian New York, and it affords an excellent example of the actual commercial value of the parking and formal planting in enhancing the desirability (and hence taxes) of adjacent business property. Parks, as some real estate fanatics would have us believe, are far from being "waste space." Apart from this foyer or lounge, and the elevators, the entire remainder of the second floor is occupied by the upper portion of the concert hall. From the balcony here an impression received below is further intensified—namely, that this hall is so designed and decorated as to subtly give expression to that peculiar combination of dignity with festivity which we associate with a large theatre, yet it possesses also pleasant suggestions of intimacy and privacy excellently in keeping with exclusive musical performances.

The third floor is dominated by the "Blue Room," done entirely in an unusually rich and restful tone of blue, and devoted to the display and sale of player pianos. For the demonstration of these there are thirteen small sound-proof music rooms, simply decorated and partitioned with heavy plate glass, with glazed French doors. They are constructed in a manner similar to the small demonstration rooms in the basement, and though all are virtually sound-proof, their ventilation (unlike "sound-proof" telephone booths) is so excellently efficient as to be perfect.

The space between the "Blue Room" and the 42d Street front is occupied by the pipe-organ rooms, exquisitely decorated, and by a row of offices connected with the pipe-organ department.

The mezzanine floor between the third and fourth floors affords the necessary height for the organ rooms and the "Blue Room," and provides a number of additional separate demonstration rooms, as well as space set apart for heating and ventilating apparatus, and a large room on the 43d Street front, devoted to experimentation and invention.

The fourth floor, like the third, is mostly given over to large space—two principal rooms. The first, the "Pompeian," or "Red Room," is done throughout in a magnificent red, of a tone rarely seen, and is flanked by seven of the sound-proof individual music rooms. The "Red Room" is devoted to the sale and demonstration of pianos, and is remarkable for its excellent acoustics. Passing through a door in its north wall, access is had to the "used pianos" department, which gives in turn on the Musicians' Club Room decorated in golden brown—a room of pleasant proportions, lit by a row of windows on the 43d Street side.

Above this floor the plans are typical—well-planned, well lighted general office floors, running to the entire height of the building and completing what even the most conservative critic must admit to be a monument to the development of the thoroughly modern commercial building in this country.

When a building has been shorn of all its architectural embellishment—when it stands only on the direct merit of its planning, on the adequacy upon which the general layout and even the details have been made to meet given requirements then it stands the ultimate test.

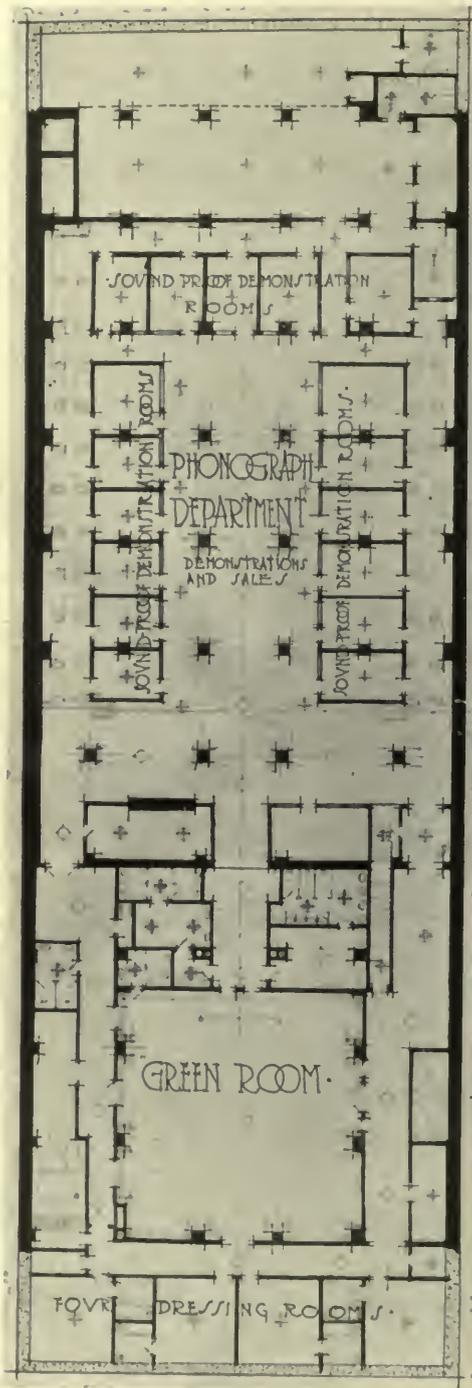
In Æolian Hall there were certain very specific requirements. There was not to be built merely a business house, with so many floors devoted to this or that department or so many offices to so many executives. There was a problem as individual as the design of a chemical laboratory or an astronomical observatory. In detail and in general disposition the planning of the building under consideration may be said to have been eminently successful.

The entrances hold just the subtle

suggestion of theatrical architecture desirable in a building devoted to music, and the two foyers, with their formal stair further carry this out and lead up



SECOND FLOOR PLAN.
ÆOLIAN HALL, NEW YORK CITY.
Warren and Wetmore, Architects.
Second Foyer and Upper Portion of
Concert Hall.



BASEMENT PLAN.
 ÆOLIAN HALL, NEW YORK CITY.
 Warren and Wetmore, Architects.

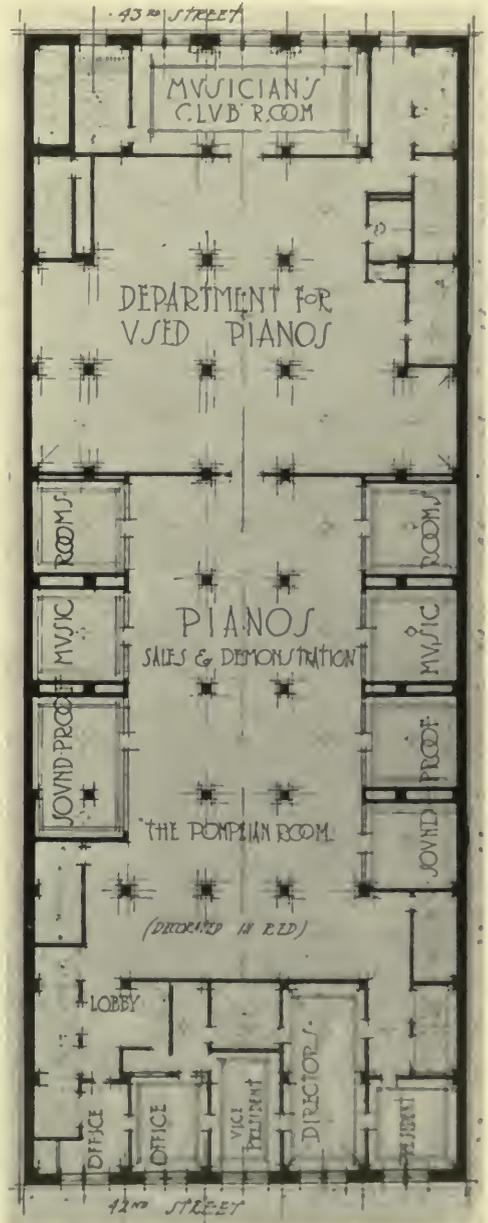
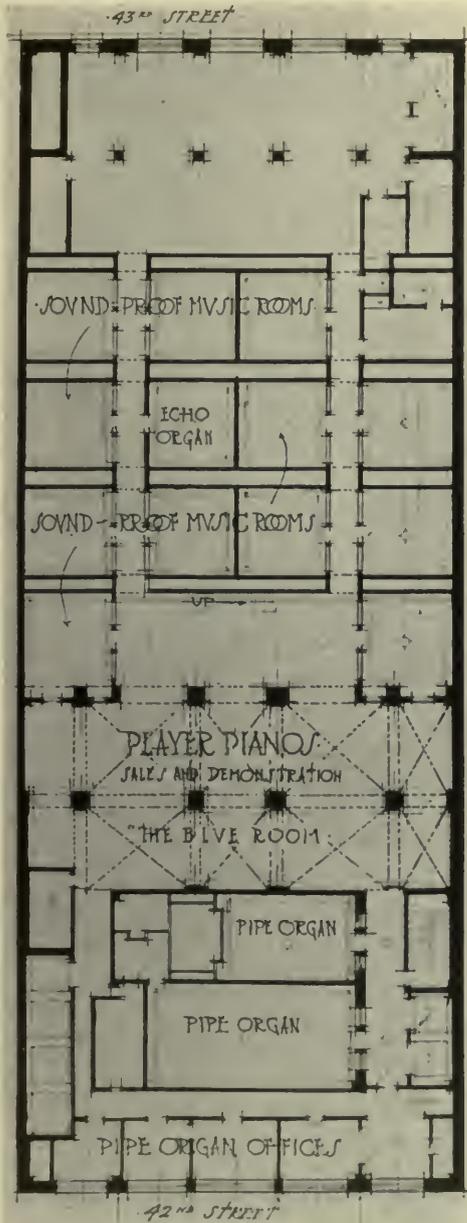
to the purely theatrical treatment of the concert hall.

Perhaps one would prefer a mural painting by Maxfield Parrish to the canvas now occupying the wall of the main stair-landing, and certainly one of Everett Shinn's XVIII. Century French Decorations, designed especially for the place, would be in excellent conformity with the general character of the building, both architecturally and logically.

In the large piano display rooms the theatrical suggestion of the foyers is properly absent. These are rooms richly dignified, intended to offer a background to the business in hand, rather than any tendency to distract mind or eye. Of the special sound-proof music rooms, more has been said elsewhere—they are a part of the careful study of the problem which went to make Æolian Hall a successful building.

It is the combination of qualities practical and esthetic that should give occasion for a hopeful outlook in American-commercial architecture. We have been so busy perfecting steel construction, so enthusiastic in seeing how short a time we can put up a twenty-story loft building, that considerations purely architectural have been too widely overlooked. It is safe to say that Æolian Hall is not merely a new building but an indication of an interesting and very encouraging trend in city building.

There were, to an unusual degree, certain problems in connection with the new Æolian Hall which made its planning a far more intricate and difficult matter than that of the usual building designed for commercial purposes. There was to be housed a business not only of certain interests and general characteristics, but of certain ideals and subsidiary purposes apart from pure commercialism, and calling for certain specific requirements, both practical and esthetic, and that the architects have achieved a signal and thorough success in their problem is a matter of congratulation not only to them, but to the Æolian Company itself and to the cause of American architecture and building in its broadest sense.



THIRD FLOOR PLAN.

FOURTH FLOOR PLAN.

ÆOLIANT HALL, NEW YORK CITY.
WARREN AND WETMORE, ARCHITECTS.

Pipe-Organ Rooms and Offices, Sales and Demonstration Room, 13 Sound-Proof Music Rooms.

Executive Offices, Sales and Demonstration Rooms, 7 Sound-Proof Music Rooms and Musicians' Club-Room.



THE CONCERT HALL, AEOLIAN HALL, NEW YORK CITY.
WARREN AND WETMORE, ARCHITECTS.



A CORNER OF "THE GREEN ROOM,"
ÆOLIAN HALL, NEW YORK CITY.
WARREN AND WETMORE, ARCHTS.



DETAIL — "THE GREEN ROOM,"
ÆOLIUM HALL, NEW YORK CITY.
WARREN AND WETMORE, ARCHTS.



SALES AND DEMONSTRATION ROOM—PHONO-
GRAPHS, AEOLIAN HALL, NEW YORK CITY.
WARREN AND WETMORE, ARCHITECTS.



SALES AND DEMONSTRATION ROOM, PHOTOGRAPHS, SOUND-PROOF ROOMS AT SIDES
—AEOLIAN HALL, NEW YORK CITY.



DETAIL OF SOUND-PROOF DEMONSTRATION ROOM—
(PHONOGRAPH), FOLIAN HALL, NEW YORK CITY.
WARREN AND WETMORE, ARCHITECTS.



DETAIL OF A STUDY IN FRESCO
BY MAXIMILIAN F. FRIEDERANG.



AN ANCIENT ART REVIVED



AN ACCOVRT OF FRESCO BUONO BY MAXIMILIAN FRIEDERANG

THE REVIVAL OF the art of fresco buono (good fresco) in this the twentieth century will be an epoch in the history of fine arts, and probably will be the means of forming a great school of monumental painting in this country, hastening the unification of the sister arts of architecture and sculpture.

My life-long studies of the methods adopted by the masters of the Italian Renaissance has directed me into the path of inquiry. I was able to trace valuable documents and manuscripts from the highest authority and, with scientific and scholarly intention, I set about investigating all the materials—chemicals and pigments entering into the art of true fresco painting, presented here in a strictly scientific treatise.

The inducement to pursue this inquiry came from my belief that the introduction of the art of "*fresco buono*" (which I will call "monumental painting") into this country would be the stimulus for a new era of art and lead to a new school of architecture and painting. Almost all the writers of eminence mention *fresco buono* as the highest branch of art, and the most competent judges have expressed opinions that in technical scope, boldness of design, facility of expressive execution, and hold that its durability exceeds all other kind of painting, especially for the decoration of monumental buildings.

To quote Cennino Cennini (chapter 67):

"In the name of the Most Holy Trinity I will now put you to colouring. I begin first with painting on walls, and shall teach you step by step the manner in which you ought to proceed when you are going to paint on walls, which is the most delightful and charming kind of work that there can be."

The architectural value of this type of art is proven by the well known fact that all the greatest paintings of a monumental character and those employed as grand decorations of the noblest buildings in Italy are painted in *fresco buono*.

"The durability, simplicity, absence of glaring surface, and the peculiar and acknowledged fitness of this process of painting to large surfaces, and the scope it gives for the display of artistic genius—these advantages should cause our great architects to decide upon fresco painting for the leading features of decoration to be employed in new monumental structures."

It is common enough to say, to hear and to read of the condemnation of fresco painting by critics and even by some eminent artists, all of whom seem to echo each other in pointing out the failures in the examples executed on the walls of the Houses of Parliament; attempts at fresco and *sgraffito* in Italy, Germany and this country, and all agree from these failures that fresco painting is impossible in this country, owing to the dampness of the climate. Our damp climate seems to have a deal to answer for, but it is hardly fair to blame it for the ignorance of some of our mid-Victorian and latter-day artists, as to the nature and behavior of the materials used in fresco painting and for their possibly limited knowledge of the chemistry of colors and the after-action of caustic lime on the colors they used. No artist will attempt fresco without great failures, and in this disappointing feature lies the satisfaction of experience, which alone leads to success.

The *fresco buono* student has to practice all the details himself. The authors, dependent upon themselves, are often



A CARTOON FOR A PANEL IN THE DOME
OF ST. JOSEPH'S CHURCH,
BABYLON, L. I.
By Maximilian F. Friederang.

only compilers, with no practical acquaintance with the technical processes they describe, and probably preferred to copy from older compilers rather than take the trouble of collecting information from the craftsmen themselves.

The original craftsmen had the ad-

vantage of the accumulated knowledge of centuries of tradition and of years of training in the use of the lost technical processes.

The modern experimenter has nothing to guide him but a few brief words of description. All his experiments must therefore be of a very thorough and exhaustive character before he ventures to decide that the process is impossible or that a given work of art must have been produced by another method. Years of practice are demanded by the student of this now almost lost art.

Michelangelo, when working at the Sistine Chapel, furnishes us the following instructive lesson: he experimented with Florentine decorators of the highest quality on the interior of the Sistine for five weeks. The actual beginning of decorative work commenced with the utmost secrecy and ended with the tearing down of all the work finished in two months. He discharged every co-worker and began the work anew without help and behind closed doors.

Michelangelo found a new formula for a new "binder" in the form of materials which he alone was able to decipher and to analyze in an antique artist's studio unearthed at that time.

He finished the entire work in a remarkably short time, without help, and gave to the world the greatest example of *fresco buono* and mural decoration known to art. A day of investigation in the work of the Sistine Chapel furnishes more knowledge for the student of fresco than any other decoration and all the books on mural painting in existence.

The wall of the Sistine Chapel is very unsatisfactory, and the construction in detail worse. No architect of to-day would use such materials. Michelangelo had to accept the wall in the condition in which it was given him, and he made the best of the opportunity. To secure and strengthen the wall he used the very best richly haired coarse stuff, one and a quarter inches thick, and on this ground he put four other layers of plaster, every one of different materials. The last ground he finished off in perfect harmony with his design (rough or smooth finish).

There is distressing cracking all through the work, but only a Michelangelo could have saved that interior from complete disintegration up to date.

The pigments used were very primitive, and the beauty and harmony is reached by underpainting a warm golden tint of a rich ochre used. But the ochre was not able to withstand the thick plaster and lime bed. The ornaments and decorative details are all underpainted with burnt umber, burnt sienna and sienna natural. The lasures over all the works with thin tints are remarkably successful, and the strengthening of detail and finishing produces a simplicity and balance, a grand effect never previously seen or subsequently attained—the greatest existing lesson in *fresco buono*.

The scientific problem of *fresco buono* is as follows:

Fresco buono, as explained by all authoritative writers, is a kind of painting performed with mineral pigments on fresh laid plaster, or a wall covered with mortar not quite dry. The pigments are mixed with a binder or a medium to thin these colors. The plaster is only to be laid on as the painting proceeds, no more laying done at once than the painter can despatch in a day.

The lime and the binder are a very difficult problem and the durability of the fresco depends entirely on these materials. Great chemical surety and experience is demanded for the judgment of the strength of the solid lime-putty, for the plaster and the fluid of lime, and the binder for the pigments. The binder used in *fresco buono* is the only secret problem, and the brilliancy of the pigments, the color quality, the adhesive union of plaster and colors, and the molecular action for the crystallization of the fresco depends upon this secret factor.

In the process of mural painting, known as "the lime fresco," you may be able to paint with lime water, but this is a very primitive technique, and you never will be able to judge the outcome beforehand. All successful lime frescoes are only good for their excellence in drawing. The color quality is



A CARTOON FOR A PANEL IN THE DOME OF ST. JOSEPH'S CHURCH, BABYLON, I. I.

By Maximilian F. Friederang.

very primitive and disappointing, but every fresco painted with special binder (frescoes by Michelangelo and Raphael) are superior in every part. The chemical action of the materials and pigments are as follows: Hydrate of lime perfectly slaked will be mixed with sand-

marble to augment its cohesiveness. The plaster laid on the wall will be finished according to the architectural detail, rough or to a perfect polished surface, the colors (pigments) are applied while the wet plaster is setting, drying and hardening; that is, while the carbonic acid is expelling the water. The painting must be finished before its expulsion is complete.

A thin crust of carbonate of lime will then be formed over the painting and molecular action produces encasement in carbonate of lime, thus protecting it from water and moderate friction; the binder used in many cases is helpful in this latter action and has other separate qualities in itself.

Every man of intellect acknowledges *fresco buono* to be the only practical medium for monumental decorations, but, if this strong opinion is put forward in a manner to be convincing, it is necessary to hark back to its adaptability before mentioned. Where it is desired to have the decoration in harmony with every detail of architecture, as it lends itself perfectly to all angles or curves in any structure, there is always to be found, even under the most difficult conditions, a perfect freedom from distortion of reflected lights. This is due to the fact that the pigments sinking into the wet plaster leave a level surface and incrust perfectly level the molecules of the plaster. This regularity is impossible in a surface painting, where the pigments are irregularly superimposed and where, even if they formed a level surface, the oxidation of the oil results in a glazed surface which reflects light and therefore produces distorted effects, necessitating a view from a single point. This always breaks up the *bigness*; the condensation of decorative values which is one of the most disappointing features. I have seen oil paintings and frescoes, compositions of the same values in the same space and frame under similar conditions of light; but the fresco produced such a difference in light—enlargement of space, breadth, and powerful superiority, that the fresco, being out of harmony with all other parts of the building, was at last removed.

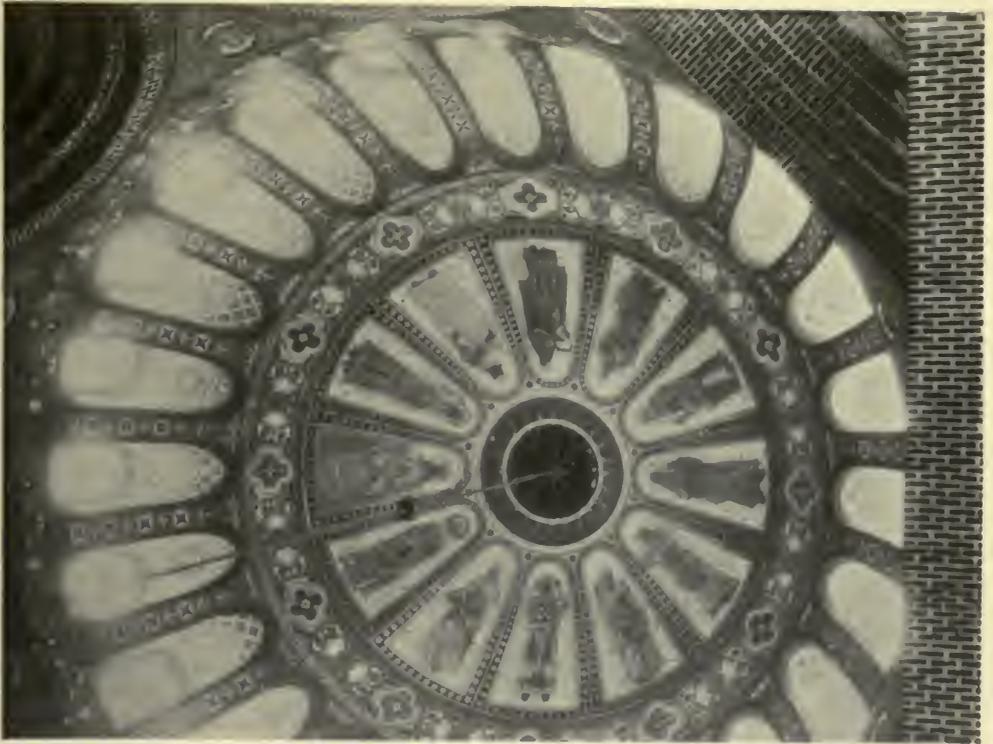
The weight and solidity of all *secco* decorations—oil or distemper—are out of harmony with our solid building material, but *fresco buono* lifts up all the spaces in its sphere; the natural lighting, its own internal spiritual light brightens up the darkest corners.

Speaking of the "acoustic quality" last, but by no means the least important point of superiority in *fresco buono* brings in the quality to assist in a perfection of acoustics. The close investigation of many buildings—churches, theatres, and other interiors of a monumental character—furnishes me with facts of great value, and I am sure that most of the sharp glazed decorative finishes in oil, plaster, wood and solid stone, have mostly to answer for their failures. Aside from their esthetic shortcomings many failures of great artistic and architectural beauty receive their explanation through this investigation.

The art of fresco has been commenced in the District of Columbia, in the States of New York, Connecticut and California, and it may be safely predicted, that it will form hereafter the principal part of the decoration of our monumental buildings. I firmly believe this will be fully realized; *fresco buono* will be extensively and successfully practiced in this country, and will ultimately attain a perfection equal to that for which the Italian schools were so justly celebrated. Our country, with its growing history, riches and art education wants works of art for future generations, monuments to speak to later years, which only *fresco buono* does, by producing durable pages of history.

The commencement has been most auspicious. The patronage of Church and Government has been offered, and with such encouragement and the patronage of art-loving citizens, ability and genius will not be wanting to achieve marked results in the art of fresco.

There is so little material for consideration in modern attempts at fresco painting that it is interesting to follow the genesis and development of the art through history—its use by the Egyptians in the decorations of their tombs



THE DOME OF ST. JOSEPH'S CHURCH, BABYLON, L. I.

Relly and Steinback, Architects. Fresco Decorations by Maximilian F. Friederang.

and temples, its appearance in Etruria, in Greece and in Rome, and its greatest height in the Italian Renaissance. It is curious that an art which played so conspicuous a part in the architecture of the past should now be nearly lost and should have come to be a factor so little reckoned with by the artists, architects and decorators of to-day.

The history of *fresco buono* may be summed up in brief, its genesis and antiquity, its spread to Egypt, to the "land of the Minotaur," to Greece, to Etruria, to Rome, its climax, its decline and the causes, attempts to revive it and failure, the substitutes for it, the new revival or discovery of its secrets, the vicissitudes in attempting to revive it and the work already executed.

Its genesis may be logically traced to the hieroglyphics, or sign writing, when history was recorded by pictures, where the hieroglyphs were often exposed to the elements, which necessitated the use of a painting medium that would with-

stand the ravages of heat and moisture. It follows therefore that its antiquity antedates present written history, but work in this medium has been discovered by Petrie in Assyrian temples known to be 3,400 years old.

Its progress was then traced to Egypt, where it was used to decorate the tombs of the Kings and the wealthy nobles. The paintings discovered seem to show that it was used there in the same stage of development as found in Assyria.

The next point of discovery was the "land of Minotaur," which for ages was deemed to be a mere myth or legend, but which archaeologists in their excavations in the Grecian archipelago, Knossos and Mykene, prove to have been a historical fact. I have seen mural decorations in pure *fresco buono* discovered there which in beauty of color and technique equal the works of Pompeii.

To what is now known as ancient Greece, this process was carried, though the painting art seemed to have been



A CARTOON FOR A PANEL IN THE DOME
OF ST. JOSEPH'S CHURCH, BABYLON, L. I.
By Maximilian F. Friederang.

there secondary to sculpture in general esteem.

It appears to have been principally used there in the decorations of the sarcophagi of the wealthy, and some wonderful examples of the work done at this period have been preserved. Poly-

gnotos, Phydias and Apollodorus have produced their best efforts in *fresco buono* and only Polygnotos uses the lighter technique of *secco*, which examples are all lost and only of historical record.

When the Romans conquered Greece many artists were taken to Rome to grace the victor's triumph, but, when permitted, resumed the practice of their art, "*fresco buono*." Others fled the conquering hosts and took refuge in Etruria where they revived their art. It is there that this art's advance is next traced, and the cities of Pompeii and Herculaneum were adorned by them and their pupils, only to be buried soon after by the eruption of the volcano Vesuvius.

Rome at the same time, at the height of artistic superiority, spread the inspiration over Italy and the Empire, using it widely.

At the decline of Rome and the spread of Christianity, with its wars for supremacy, the spirit of freedom in politics, religion and art had to make room for the taste of the victorious church. The Byzantine art has been too often thought lifeless and childish in ignorance of the best or in contempt of its ideals. We have from this period examples of art which contains figures—ornament and monumental decorations of real beauty, which show what quality of art the Italian Renaissance had for its starting point. It is not possible to attempt here even to barely outline the history of church painting through the Middle Ages. Churches were universally covered with painting inside, and, where the architecture was Gothic, with sculpture outside.

It is a debated point whether, wherever we find a survival of classical form, we must trace it to a Byzantine source, but in the main I believe that to be the truth. In Roman times painting did not become truly cosmopolitan, but remained principally in the hands of the Greeks and retreated with them to the Eastern Empire, which retained its ancient splendor.

The Church in the East controlled the invention of the painters much more than it ever attempted to do in the West.

but for a long time this rather had the effect of raising than debasing the standard. The kind of uniformity enforced by the well-known canon of the second council of Nice need not be derogatory to the painters' craft and their art. To be debarred from novelty may direct the attention to nobility.

The composition of the figures is not the invention of the artists, but the law and tradition of the Catholic Church, which has been soundly proved.

"For what excels in ancient things is to be venerated," as says St. Basil, "and this purpose and tradition is not the part of the painter (for his is only the art), but is the ordination and disposition of our fathers."

That epoch produced laws, and schemes, connected with the inheritance of classic dignity and is the best teacher of the art of composition within a given space, a knowledge of grace, of posing, of proportion. Men like Duccio, Giotto and their contemporaries add to this convincing reality and truthfulness of sentiment and action.

But "we always come back to this, that the inventions which we are inclined to ascribe to the little creative middle ages, are only accomplishments of the thought of Graeco Christianity."

The town hall at Padua, which Giotto frescoed, the council chamber and the Chapel at Sienna, the Church at Assisi where the whole vaulting and walls are covered with legendary and historical subjects, the work of Cimabue and his successors in art, are executed in fresco.

At Orvieto, and at St. Mark's in Venice, the decorations in colors are not even confined to the interior; large portions of the exterior and facade being occupied by historical subjects in mosaic-fresco and *sgraffito*.

The marked success of this work; the well known fact that all the greatest paintings of a monumental character and those employed as grand decorations of the noblest architectural successes in Italy are, that they all are painted in *fresco buono*. Its climax of progress may be said to have arrived in the time of Leonardo da Vinci, Botiicelli, Masaccio, Raphael and Michelangelo.



A CARTOON FOR A PANEL IN THE DOME OF ST. JOSEPH'S CHURCH, BABYLON, L. I.
By Maximilian F. Friederang.

The knowledge of old Greek and Rome was imbedded amongst rubbish and debris of centuries covered with the rich vegetation of the location, a reincarnation of art, an awakening of the riches of the Roman Empire.



DETAIL OF THE DOME AT BABYLON.
Fresco Decorations by M. F. Friederang.

Little belonged to the Greek period. It was not the period of the noble simplicity of art, but the lesson and motives of wealth and voluptuous detail; at the other side we find the stiff characters of the Byzantine, the perfect scholars of ornament and decoration, the humanistic uprising—the unification which led the world to the nativity of a child, an art as great and noble and full of dignity as the art of Greece.

Nicola Pisano—Pietro di Giovanni—Tedesco—Giotto are the first lights to free art—the Republic of the Renaissance.

Men of the time were able to receive, to digest the new lesson of the era. The methods and aims of the men like Michelangelo and Raphael were deeper and more profound; they were beyond the reach of explanation and analysis. No man, no critic has ever explained how this instantaneous awakening was created—such works of art, such a style. Historians—antiquarians may give us dates and complicated tabulations, but all this leaves the vital facts

of art untouched. The value of the works of this epoch as examples of art is enormous, if we look upon these as superb expressions of their age; more valuable still if they inspire modern artists to try and express their own age with the same power; but they are disastrous if we only try to mimic them.

The Renaissance representatives were studious, but the great men of the time were singularly fitted to receive the inspiration of classical Rome and they created works of art which stand today in our estimation as high as the best examples of Greek and Rome.

If we study the works of Brunelleschi, Donatello, Lorenzo Ghiberti, Luca della Robbia Pietro, Perugino, Pinturichio, Raphael, Giovanni da Udine, Luca Permi and Giulio Romano, then we are able to understand the dignity and the ability to subordinate the arts to the lines of architecture. We see in them the most beautiful unity of architecture and art. With the passing away of these "old masters" the decline of art began, Europe being torn with wars and



DETAIL OF THE DOME AT BABYLON.
Fresco Decorations by M. F. Friederang.

ravaged by the plague, during which painting and all the arts declined to its lowest ebb.

With the decline of art and the freedom of thought the *fresco buono* was impossible.

About the middle of the nineteenth century, Germany and Great Britain made an attempt to revive this lost art. The former government sent one hundred artists to Rome to search for its secrets, but without avail. Assmus, Carsten, Thorwalsen and Shinkel, Cor-

decorator into the decoration with lime colors, or the technique with tinted whitewash, are represented in the history of *fresco buono*, but an investigation tells the story at a glance and the story is one of failure.

True *fresco buono* speaks for itself in a language of color and texture which cannot be confused with any of its imitations.

It is interesting to trace the names and dates of authors who have treated practically on *fresco buono* painting:



AT WORK LAYING THE GROUND FOR THE FRESCO IN THE DOME AT BABYLON.

nelius—Overbeck—Veit and Schado, they studied the famous frescoes painted during the golden age of Italy, which illustrate so saliently the power and the elevation of monumental painting. All the works attempted in this later epoch are only great drawings and compositions without color quality. (Lime frescoes finished in *secco*.) All works of monumental character attempted are disappointments or failures of oil painters or decorators in *secco*. Many a decorative work in Germany, Italy, Spain, England, Ireland, where financial difficulties forced the architect and

| | |
|------------------------------------|-----------|
| Theophilus M. S. between.. | 1000-1300 |
| M. S. in the Bibliotheque Royale.. | 1431 |
| Cennino Cennini M. S. published | |
| in 1421 | 1437 |
| Leon Batista Alberti..... | 1485 |
| Vasari | 1547 |
| Guevara | 1550-1557 |
| Borghini | 1584 |
| Armenini | 1587 |
| Cespedes | 1608 |
| Pacheco | 1641 |
| Pozzo | 1693-1702 |
| Palomino | 1715-1724 |
| Mengs | 1779 |
| Berger | 1909 |

Commencing therefore with Theophilus, the series of writers on fresco painting embrace the periods of its commencement, progress and decline. I believe there is no point of importance which has not been explained by some one or other of the above series of authors most of whom were also artists.

Between the period when Cennino Cennini wrote his treatise and the publication of the works of Vasari, the art had advanced rapidly. Leonardo da

Vinci, Michelangelo, Raphael and Correggio had lived and died. The Sistine Chapel, the Vatican and the Duomo of Parma had been painted.

The practice of *fresco buono* painting was changed in some important points and the general use of *secco* preferred. Only a few great experts of drawing once more succeeded in important works with the use of clean *fresco buono* and the limited use of *secco*. Carracci and his school are remarkable for good work in the perfect medium with binder.



THE CHURCH OF ST. JOSEPH AT BABYLON, L. I.
Reily and Steinback, Architects.

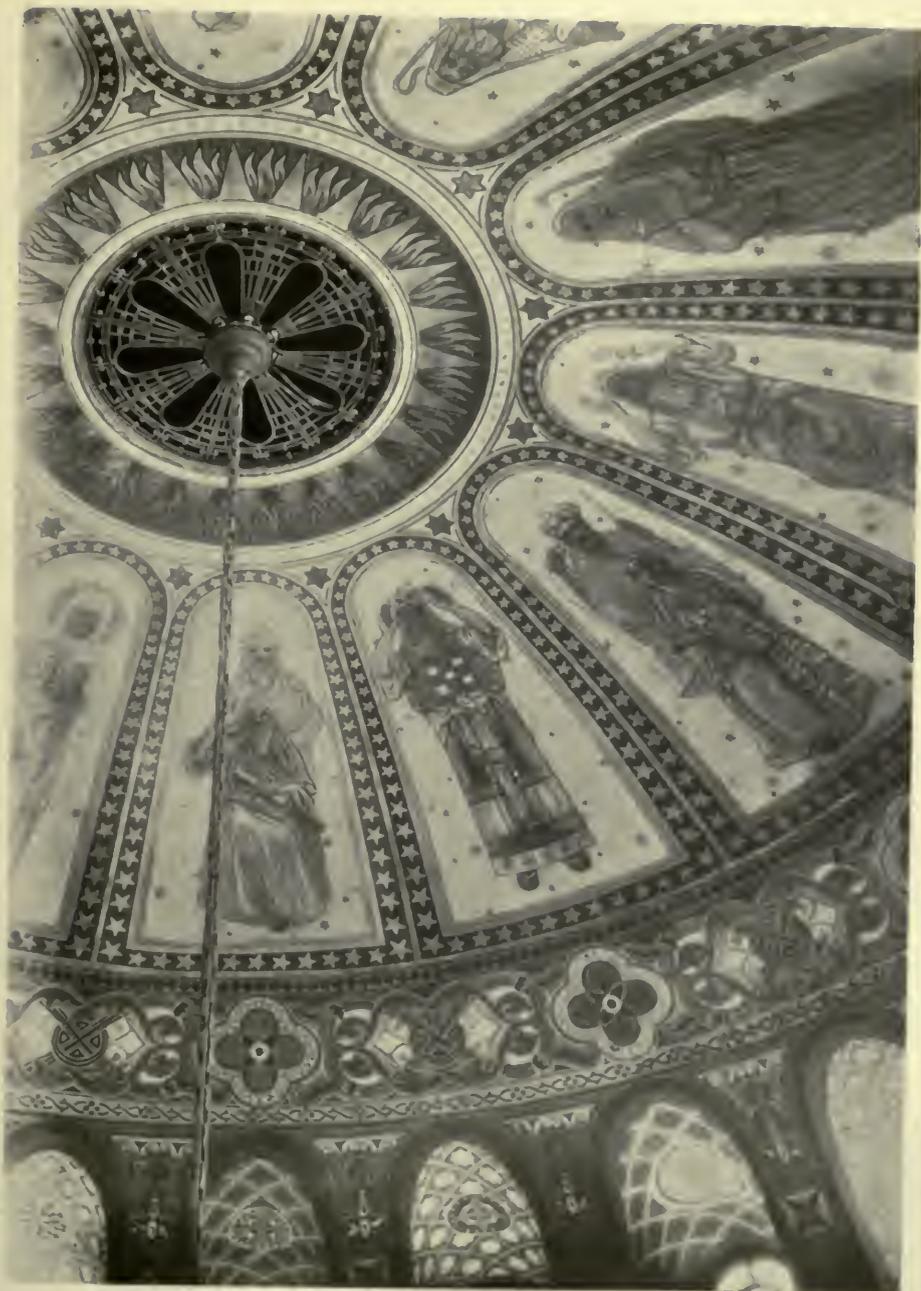
THE DOME AT BABYLON, L. I.

Interior Decorations in *Fresco Buono* by Maximilian F. Friederang.

AN EXCEPTIONALLY interesting and successful decorative treatment in *fresco buono* has been achieved in the dome of St. Joseph's Church at Babylon, Long Island. The architects, Messrs. Reily and Steinback, are to be commended not only in their general design for the church, but in their decision for the use of the now almost forgotten art of true *fresco* painting. The church itself, based

on the central building of St. Stefano of Bologna, is an admirably studied addition to the list of churches of the Byzantine type in this country—a church, indeed, well worthy of comparison with the Parkhurst Church by McKim, Mead and White, and the Columbia Chapel by Howells, and Stokes in New York City.

St. Joseph's Church at Babylon is constructed inside and out of deep-colored



A DETAIL OF THE DOME AT BABYLON.
ST. JOSEPH'S CHURCH. REBILY AND
STEINBACK, ARCHITECTS. FRESCO
DECORATIONS BY M. F. FRIEDERANG.

red-brown bricks, rough in texture and well-studied in the setting. The dome itself is of cement construction, faced outside with the same brick as the rest of the building, and treated inside with light angle-irons and galvanized wire mesh which forms the ground for the *fresco buono*. The execution of this was placed in the hands of Mr. Maximilian F. Friederang, the writer of the foregoing article on the part of *fresco*, a decorator who combines to a degree almost mediaeval the qualities of artist, scholar and artisan. Having pursued exhaustive studies in the "lost art" in the country of its greatest glory, as well as in the countries of its earliest origin, Mr. Friederang is considered as alone being capable of working in *fresco*, or in its sister-art, *sgraffito*, in which he has also made exhaustive studies and achieved marked success. To succeed in these arts the practitioner must be a chemist as well as an architect, an artist and a craftsman.

In Mr. Friederang's decoration of the dome at Babylon he was confronted with the treatment of some 2,300 square feet of plaster, and with the problem of devising a scheme to at once harmonize and set-off the heavy, dark-brown brick work—to counterbalance its solidity with color and ornament, and to keep inviolate an essentially ecclesiastical feeling in the whole.

No architectural features in the dome afforded themselves, either as helps or hindrances, for the dome is a simple in-

verted bowl, pierced near its greatest diameter with twenty-four small windows. The success or failure of the interior rested with the decoration of this dome, and none can gainsay that its *fresco buono* decorates. It gives life to a flat surface, and, at the same time, does not obtrude in the interior to its detriment or repose—it is colorful and rich without being blatant.

For its story Mr. Friederang took the life and lineage of St. Joseph from Abraham, Moses, Samuel and David through the Prophets and the Incarnation, and treated the panels in a manner at once original and in conformity with the most conservative of ecclesiastical canons. And technically art almost buried with the past—the art of Monreale, of Ravenna, Venice and Constantinople—was reborn and transplanted to the flat plains of Long Island. Quite apart from its esthetic values, the relation of this revival of the art of *fresco buono* to architecture cannot be made too much of. Through lack of knowledge of its processes, latter-day attempts at *fresco* have failed, and with these failures the architect has ceased to reckon with it as a possibility for the decoration of churches or monumental buildings in general. That it is not only possible, but highly successful and effective, is undoubtedly proved in this brilliant technical achievement in the dome at Babylon, which may prove to be the first step in the second great re-nascence of the art.



DO ARCHITECTS READ?

A GROVP OF INTERVIEWS

BY SAMVEL HOWE



PART I.

The following group of interviews comprises the opinions of Messrs. George B. Post, Arnold W. Brunner, Thomas Hastings, James Munroe Hewlett, I. N. P. Stokes, Wilson Eyre, Charles D. Maginnis, A. B. Harlow, W. S. Eames and E. R. Smith (of the Avery Library).

DO ARCHITECTS READ? This startling question recently arose during a debate as to how much space should be assigned to "copy." I repeat "*should be assigned.*" As is too frequently the case, the space in question had been cut down so that but little remained for description or critical notes and protest had been in vain. The building was important, the illustrations numerous, the occasion worthy in every way, but a "story" was necessary not merely to carry the pictures but to inform.

"Why, man alive, architects don't read," shouted the publisher-owner. "And yet," he continued quietly, and in a reminiscent manner, "if ever we spell their names inaccurately or falsely locate the city in which the building is erected, they find time to dictate a few lines to the editor to know 'how about it.'"

It is easy to scoff at the method of substituting pictures for articles, for after all it is a picture-loving age, and the testimony of the camera is accepted everywhere in spite of its blackness, its dreadful perspective, its density, its lack of color. Desiring to investigate as to the reading quality of the architect, I have been so fortunate as to secure from many prominent architects by way of reply the privilege of a personal interview and a personal opinion. This opinion has been graciously vouchsafed at odd times, in the street, the office, away from business, wherever the man could be reached, and at times by letter.

And naturally I turned first to the venerable dean of the profession, Mr. George B. Post, and to him put the question. He said:

"The architect must be a prolific reader. I do not see how he can get on without reading. I know I cannot. I do not know of any class of men who read more and who indeed require it, considering the subjects they are compelled to study. For the architect must know about construction, trade building conditions, real estate values, engineering, and of course he must be well informed in all matters connected with architecture and the allied arts.

"I read everything I can get hold of, from popular fiction to modern and specialized science. Of course I try and avoid rubbish, wild-cat schemes.

"Look at the diversified nature of an architect's general practice. Here is a letter from Mr. French, the well known sculptor, requesting me to call at the studio to see the finial he is working on for the Wisconsin State Capitol. I am not a sculptor, but the responsibility of final decision rests with me, and my distinguished associate realizes that when he requests that I examine it. For instance, the silhouette must be acceptable when viewed from every frontage. It must scale in with other things, forming part of the design of the building. At the same time I am asked to decide if the change in the water level under an important building in New York will endanger its stability by causing rot in the wooden piles upon which it is supported.

"Examine, if you please, the list of men engaged in big national affairs, and you will find prominently among them the leading architects of our day. I fail to see how the non-reader could possibly keep abreast of the times. He is even

required to be something of a lawyer. He must read law."

Everyone knows the mental equipment, the vigor and alertness, the great gift of directness with which Mr. Arnold Brunner attacks every architectural problem. To be with him for a few moments is indeed a stimulus of no mean order, a tonic, a mental shampoo. Between the rush of committee meetings and office work generally he found time to say:

"Yes and no. It depends upon the man. In other words, there are two classes of architects as there are of other professions: the reader and the non-reader: the man who only has the intelligence of his profession, and the man who has general intelligence besides. A man may be content to be *merely an architect* and he can get along reaching, maybe, a prominent position in his profession without a very large amount of reading, but if he be ambitious, if he desire to serve the city, a service that at times is without hope of financial reward, he will be compelled to *read*, and he will find that, like his professional brethren, the physician, the lawyer, the player, the writer, he will be forced to read and to read omnivorously. For instance, there is the painter who paints like an angel yet is a dunce when taken from his easel and palette. The actor who will personify living characters without limit yet be callous of the greater problems of life. The sculptor, busy with human shapes, ignorant of the souls of his subjects; and, on the other hand, there are men practicing these arts who are vitally interested in the work of the world, and alive to all its important problems. For my own part, I like to browse through everything I see. Biography is important, fiction is excellent, stimulating to the imagination, widening to the view and understanding, as well as a tonic and a challenge to noble impulses. All good literature is worth while. A man concerned in the designing of a court-house must know people, men of all conditions, their coming and going, their littleness, temptations, and limitations. No architect can design an armory without knowing

something of the soldier, or a bank without appreciating methods for the safety and handling of documents and securities. Nor can he design a house for a gentleman without being perfectly aware of what a gentleman needs and how he lives and entertains. He must realize the conditions, the daily life of a man of culture and refinement, or he can neither cater to them nor be of service to the occasion. All this information is strengthened by reading, broadly, persistently and deeply. I like to read Roman history, to study the type of government of the time, the needs of great peoples, and I read Kipling and Thomas Hardy for their fiction, Arnold Bennett for close observation."

It was Mr. Thomas Hastings who said:

"Every professional man, particularly every artist, be he painter, sculptor or architect, must learn to think, and general reading of a broad, liberal character tends toward that end, and is of all things a stimulant to the imagination. Every moment I can spare from my work is devoted to reading. I read history as well as philosophy and science. Truly, I cannot spare the time to indulge in the reading of novels; besides, they are too near my own work. To me the magazines are very interesting. Lay opinion, that is, opinion expressed by educated men of a liberal mind, is of infinite value, and so is the specialistic writing of trade journals."

Here is the man who reads because he is fond of it, not because he happens to be a very well-known architect. Mr. Frederick E. Wallis "finds entertainment in Smollett's History of England, in Guizot's History of Civilization, and enjoys popular fiction for the action."

Mr. Henry Rutgers Marshall writes:

"I have come to the conclusion that I am in no position to express an opinion as to the reading habits of the other members of my profession. Architects meet usually in relation to business matters, and the habit of reading is an affair of family life. I know a large number of architects who are readers and cultivated men, and I know of many others

who apparently never read anything but the newspapers. My impression is that the reading habit is just as prevalent among architects as it is among the higher class of business men, but not so prevalent as it is among the doctors or lawyers."

My interview with Mr. James Munroe Hewlett was very stimulating.

"What is there to read, dear man? Who writes anything of interest?" he asked, with a searching look that seemed at once a challenge defiant and yet winsome and persuasive. Without waiting for an answer, he continued quietly: "For my own part, I find much that is stimulating in '*Scribner's*.' The notes at the end, 'The Field of Art,' written by such men as Kenyon Cox and Royal Cortissoz, and I like exceedingly the writing of Arnold Bennett. His '*Your United States*' is full of suggestion to architects because the point of view is distinctly not architectural. Look at the work of William Locke. Some people have forgotten that this scholarly novelist was for years the secretary of the Royal Institute of British Architects. His association with the proud Dame in her many caprices, her wonderful silences and grand quietude, meant something to him. Of course, it's always been difficult to get architects to talk about their own work, or their methods of doing it, and those who essay to handle architectural subjects in the press make a dreadful botch of it." Keenly realizing my inability to justify or account for the poverty of writing in many of the architectural journals, and feeling to be strangely on the defence, I ran for shelter, fearing that perhaps I had undertaken too much.

From one of the best known members of the Committee on Architectural Competitions, whose name I am not privileged to give, but whose judgment has always been tempered with sound sense and fairness, I received some little encouragement.

"What do you understand by reading?" And then, flinging on the table the last book by his professional brother, Ralph Adams Cram, who added to the realities of architecture the immortality of the pen, he said: "There's a man who

can write." And continued: "The real students are readers of men, and in order to study completely and directly, naturally resort to traveling. They read the buildings for themselves, the times in which they were erected, the philosophies they teach. The architect is certainly a greater student than the men of Wall Street or the men of affairs. Such students sketch, photograph, and to these they add notes in color where possible. Notes as to material, measurement, projection; notes as to construction; and wisely, they buttress these notes with specimens which give at least some light upon the texture and quality of the material, some view, vivid and welcome, that help amazingly in realizing the great charm of the old buildings, and these note-books are the jewels of the drawing-office, becoming in some instances the standard by which he measures the work of his fellows and incidentally of himself."

Mr. I. N. Phelps Stokes said:

"The reading of magazines is, to my mind, of but little value. It is far wiser to go abroad and study the sources of the best work, preferably to Italy and to England for the work of the Renaissance and of the Gothic school. The practice, far too common today, of studying the design of some good piece of modern work, and of being satisfied with that as a starting point in trying to produce something better, is a sad mistake. We must go back to the beginning of things, or at least to the periods of the best architectural expression. Real progress, I believe, can best be achieved by studying and adapting to modern needs the best work of the 'old masters.' If time or opportunity is lacking for study abroad, its best equivalent is systematic study among the original stuff in the Avery or some other good architectural library.

"I recently bought in England a little Tudor house in its original condition, had it taken down, patched and packed, and shipped to Greenwich, Conn., where I have been amusing myself this summer putting it together again. It is a fine object lesson in good construction, and illustrates in a simple and most impressive way the intimate connection between

good design and good construction as it was understood and practiced in the 16th century. This Tudor work is not thrown together in a haphazard fashion, as some think, but is full of subtle thoughtfulness and balance, and withal is charmingly naïve in its directness and easy simplicity. I am sure I have profited more by this little practical experience than I could have by years of promiscuous reading."

Mr. C. D. Maginnis, who has reason to be known as a writer himself, as well as a reader, writes:

"I think the publishers of all literature except the morning paper should be constrained for a period of five years to give a tired public a chance to catch up! The present output of books and magazines constitutes an assault on the national sanity. We have almost ceased to think! Fifty years ago, it has been well said, reading and thought went together; now, reading has become the chief occupation of the thoughtless! Note the aggressiveness of the average news-stand, with its dailies, weeklies, monthlies, quarterlies and yearlies, making their absurd chromatic claims on our consciousness. Is there any transaction more incomplete than the casual purchase of a monthly magazine while thirty other magazines stare in challenge? Mr. Dooley would have no books but the Bible and Shakespeare. Asked if he read them constantly, he replied: 'I niver read them. I use them for purposes of defnese. I have niver read them. They stand between me and all modern literachoor. I've built them up into a kind of breakwather, and I set behind it calm and contint while Hall Caine rages without.' I too, am a reactionary, for 'I read nothing, if I can help it, which bears a date on its face. The reading I relish is that which lies between stiff covers and waits upon the mood. And any reading which is worth any man's while will ultimately get into stiff covers. An immense amount of economic waste might be avoided by waiting on the process. I find my interest in all architectural publications seldom extends farther than the illustrations. Doubtless there are many—younger, more eager minds than mine—to whom the text is no

less important. I have written articles and have been paid for them; therefore, no doubt, there are those who have read them. But the busy architect, these days, is such a jaded mortal that I rather like to think of him in his hour of ease turning to his shelves for a good story."

"It seems to me that it resolves itself into what a man is interested in," said Mr. Wilson Eyre, when confronted with the question "Do Architects Read?" "My interest is centered in the country house work, and I feel that I visualize. With me it is always pictures, pictures, pictures! Yes, I visualize, in the streets and wherever I am the problems present themselves for study. I can't keep up with the writing about architecture. To do so would be to read a stack that high," holding his hand about the height of the table. "As a relaxation I read fiction, everything that I can get hold of, and of course I realize that the people away from our sphere of things must be interested in what we are doing and must like to be told about it. But I am compelled to depend mainly upon the people and others with me who do my specification-writing and the superintendence; also to undertake the special reading of technical works. Reading is mainly a matter of temperament; to some it is everything, and to others it comes but little into their lives. In my designing in no way am I led by what I read."

"Yes, but your association as founder of the 'House and Garden,' America's first magazine of that character, was a great tribute to the reading public."

"Perhaps; but I didn't write for it."

"Possibly you inspired others."

"Well, I tried to."

"What would you say to the student of architecture relative to reading, or, rather, relative to study?" I asked.

"It depends upon the man. I would tell him to keep at it and to keep at it hard until he can find what method seems best suited to him. It may be reading, it may be study abroad, it may be association with bright men, but we must remember that much which enters one ear often goes out at the other. Design cannot be taught by books. I would say to all, be he student or man in active prac-

tice, 'Do the thing that comes naturally,' for no two men are alike."

Remembering the intimacy of the library and how easy it is to look as it were into the very soul of the architectural student, I turned with no little pleasure to Mr. Edward R. Smith, of the Avery Library, who said:

"From my experience in the library, I certainly find the architect a reader. Particularly does he seem to analyze, extracting from the various publications which appear those which to him are fraught with interest. The French, German and English books are welcome and enriching to the student because they seem to be penetrating as well as broad. I doubt if we have on this Continent many architectural writers who are so worthy of the attention bestowed upon these foreign enthusiasts. The Southern European seems to dig into matters, and deeply. He is not simply profound but exceedingly entertaining and stimulating. And just look at some of the stuff the English architect turns out both as designer and writer. His manipulation with building material is as delightful and full of texture and color as some of the romances of the day, and of course the French have always ennobled everything they touched. I don't know that I am prepared to admire or to stand for all that the German speaks of, still less some of the extreme philosophies and designs which he presents; he is in advance of the age, showing withal a marvellous breadth of understanding and of human interest. At the same time the mind of the architect in actual practice seems to work more healthily and to find a more vital expression in his drawings and models than in text. He seems to visualize his problems and finds himself as it were sketching them out on paper instead of writing about them. There is about this method a dramatic strength and directness that is delightful."

John Galen Howard, of Berkeley, California, sent in a most interesting working viewpoint in the matter:

"'Do architects read?' Why, how are they to keep body and soul together? They read and they write, and they try

to do arithmetic. The architect I know best reads every spare moment. I don't call keeping up with the architectural publications (or trying to) reading—that is 'shop'; but *belles-lettres*, history, fiction, poetry—especially this last—he cannot live without. Not much magazine work comes his way; it used to years ago, but it gets so thin! It spoils the digestion and with it the appetite. Occasionally the club-table spread of literary free-lunch seduces him from ways of wisdom, but in general the *réchauffé* of 'Literary Digest' or 'Current Literature' supplies his full modicum of such *hors d'œuvres*. What he finds his real sustenance is the good old year-in and year-out classics. Nowadays you can get them all, almost, in 'The Temple' or 'Everyman's' or some thin-paper edition that slips into the pocket to enrich the train or tram or ferry, go-and-come. It's astonishing how much ground can be covered in such 'waste moments' if you really have a mind to use them—especially if you are lucky enough to get a good long trip now and again to catch up in. Within the last few years,—since the earthquake, say—the man I was speaking of has read nearly the whole bulk of the greatest Greeks (in translation, be it said, for he is no scholar!)—all of Homer, the Three Tragedians and Aristophanes, and half a dozen other poets from Hesiod to Theocritus; both of the great historians and most of Plato and Aristotle; then the Bible, from end to end,—this for the first time at one consecutive reading; Dante; and I hardly know what not of the English substantials of the olden time, like Mallory, Chaucer, Spenser, Bacon, Carlyle;—Shakespeare and Wordsworth are the bread of the feast, omnipresent essentials. But think of the new work that is just as relishable to the up-to-date palate, whatever its permanent value,—Bergson, Dubois, Metchnikoff, Hewlett, Noyes, Galsworthy, and now this amazing Masefield,—not to mention the scintillances of Shaw and Chesterton! And then a year without a taste of Goethe and a month without a good drink of Moliere were starvation. But the feast is as long as the Greek word

for hash, and as nourishing as the dish itself. I have already, perhaps, said too much. But, frankly, architects love reading—depend upon it,—and what is more they do what they love,—they read, no doubt, about that.”

Mr. A. B. Harlow, of Alden & Harlow in Pittsburgh, throws an interesting side-light on the question in a short letter:

“Of course the architect reads—he wants to know of what and how other men are thinking. If he judges this by pictures only, he must feel that a lot of men are thinking and feeling badly.

“I read what interests me, nothing else. I by no means read everything in the architectural publications, but eliminate all the reading matter and what would happen to any magazine?

“I have books constantly on my desk in which I read what attracts me, when I have the time, not attempting to follow any definite course.

“I believe that every man skims about, some more and some less, in this way, in books or short articles that attract him.”

And from St. Louis, Mo., Mr. W. S. Eames writes the following contribution:

“Were I to be asked ‘Do you read?’ I should promptly answer, Yes! I read the newspapers especially with reference to current affairs of this and other nations, politics and matters of scientific and social development. I read, as a pastime, some of the current fiction that is favorably reviewed. I read the Bible chiefly for its literary style. I glance through all of the current illustrated magazines and papers that come to me each week or month—sometimes reading historical or political articles with care and patience. Architectural publications chiefly interest me in their illustrations. The remainder of my time is necessarily consumed in an effort to make a living and have some enjoyment with my friends.”

And so the interviewer ranged, and quizzed country-house architects, and those who lean more toward the monumental, and so varied were the answers and comments, so widely interesting that it became impossible to condense these opinions in one article—even if it were in any way desirable to do so. In a second installment there will be printed further interviews interesting and illuminating as these in their scope and variety.



THE ARCHITECT'S LIBRARY



J. M. ROSE

It is the purpose of this department to keep the readers of the "Architectural Record" in touch with current publications dealing with architecture and the allied arts, describing not only literary, but practical values.

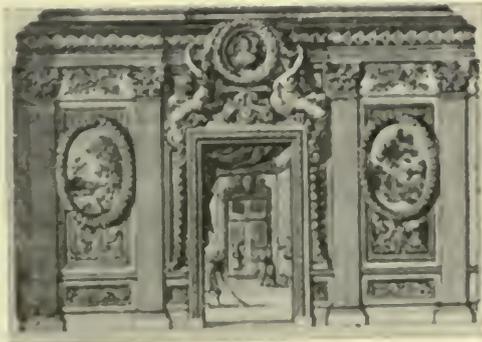
"*The Architecture of the Renaissance in France (1495-1830)*" (2 vols.) By W. H. Ward. It is rather interesting to speculate as to whether some of our designers have really "subjugated" the styles of the so-called "periods." Does the "style of Louis XVI.," for instance, much as we may talk about it, and lead it about at the end of a chain, as it were, belong to us any more than do the Polar bears in their pen in the zoo? Possibly not as much, because I think our imported and imprisoned "styles" get away from us, and even rend us in pieces far more often than our captive animals do. The bars we erect around our imported styles are

formulae — certain academic formulae, as similar each to the other as the bars of a cage — and yet evidently not so strong. To conclude the analogy, which, perhaps, may not be so far-fetched as it seems, we might indeed call the Polar bear ours if we had so studied its habits and so acclimated

it that we had it lying beside our library table while we worked and we might, by the same token, have license to speak of "the Italian Renaissance" or "Georgian," if we had ever had the wit or patience to thoroughly acquaint ourselves with its habits, even to the extent of visiting the country where our particular specimen was captured. A few of our architects have done this — but in how overwhelming a portion as any such logical working viewpoint been glaringly absent? How painfully and how uneasily an 18th century French bas-relief medallion rests above the pointed pediment of an Italian Renaissance window — and there are worse things than this.

Now of all marked styles perhaps few are more widely misunderstood or more generally marred by well-meaning but unintelligent appreciation and attempted emulation than that of the Renaissance

in France. The reasons for this are several — one being that the scarcity of good examples of its finest development even in France increases the ratio of failure when these are sought as inspiration; another that much patience and faith are needed to winnow the mass of impossible chaff, and yet an-



From "*The Architecture of the Renaissance in France*," by W. H. Ward.

A DESIGN FOR THE SIDE OF A ROOM.



From "The Architecture of the Renaissance In France," by W. H. Ward.

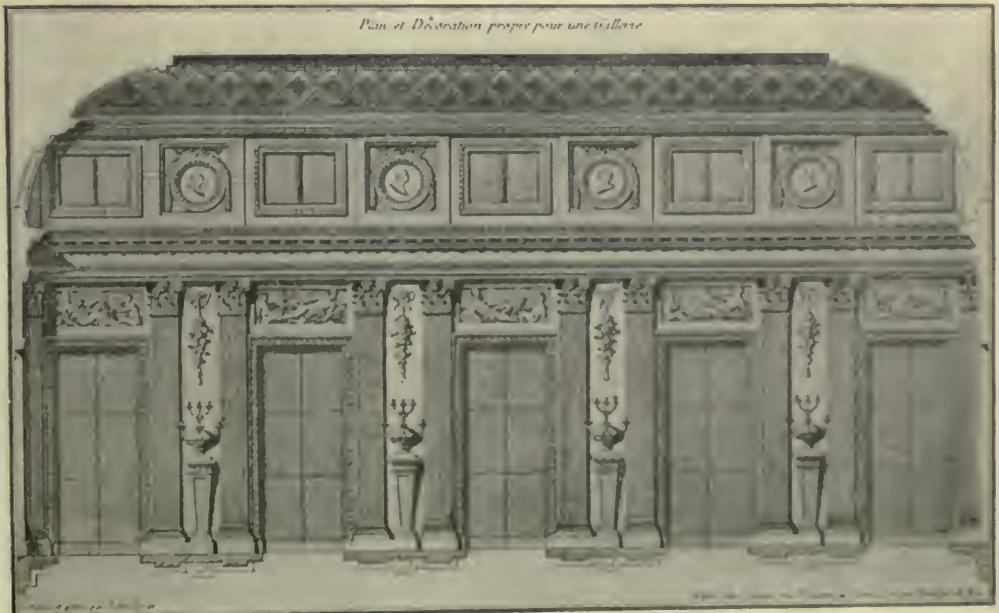
UNDER THE DOME—SECOND CHURCH
OF THE "INVALIDES," PARIS.

other (and by no means negligible) the extreme rarity, hitherto, of fair and competent books on the subject. "French Architecture" is very apt to mean different things to different people—to some the impossible phantasy of the Rococo or the Baroque, to others the frivolity of Louis XV. and even of Louis XVI. (under Louis XIV. it still retained elements of sanity and reserve); to some it means the stupidity of certain unenlightened designers of the 18th century, to others the volatile vagaries of the ultra-modern school. To very few does it appeal as possessing refinement equalled or approached by the design of no other period or country, and yet, in its purest manifestations, it developed more of grace, more of dignity, and more of *architecture*, as such, than any style with the possible exception of the Italian Renaissance or the style of the Brothers Adam. And that is because it formed the link of sequence between the two—being the direct outgrowth of the first and the immediate forerunner of the second. But extremes, first and last, were the almost florid cursiveness of Francis I. and the severe classicism of the Empire.

Inclusive of these extremes Mr. Ward, an Associate of the Royal Institute of British Architects, has prepared a scholarly history in two splendidly illustrated volumes, which his sub-title further describes as "A History of the evolution of the Arts of Building, Decoration, and Garden Design under Classical Influence, from 1495 to 1830." There are many full-page illustrations in heliotype process, many in half-tone, and innumerable text illustrations from actual photographs, from drawings, and from those marvellously conscientious contemporary line-engravings of the period.

These alone (be it said with no disparagement of Mr. Ward's scholarly text), would tell much of the story, and he is to be commended for his keen discrimination in the selection. As we would confidently expect from the architect he has given many details, and these, as in any style, are the flesh and blood that go to fill out the skeleton which is called "composition."

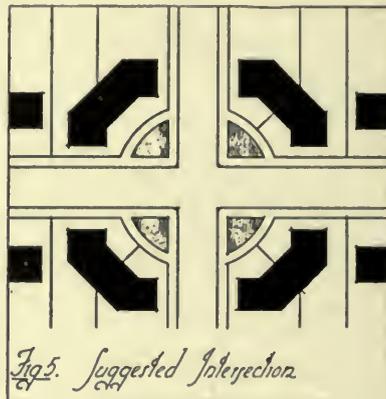
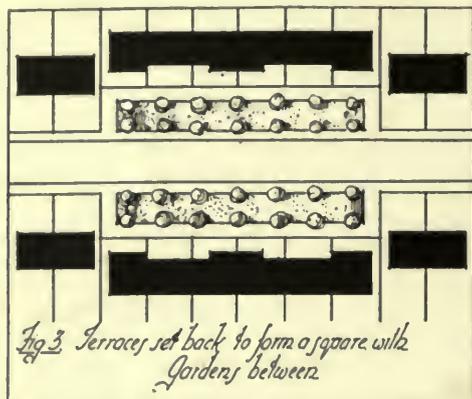
And in this scholarly book the subject is scientifically articulated, and the excellent text and profuse illustrations must throw a fine search-light on an



From "The Architecture of the Renaissance in France," by W. H. Ward.
A DESIGN FOR A GALLERY IN THE STYLE OF LOUIS XVI.

architecture which has been either entirely ignored or grossly misunderstood. The practical value of the volumes is vastly enhanced by two indices—one to the illustrations and one to the text, and by a copious bibliography. Certainly to know French architecture of the Renaissance serves a two-fold end. To know it for itself is to discover a style more especially suited to the rendering

of theatres, clubs, hotels and certain other types of building than any other; to know it for the part it has played in the development of other and subsequent styles of architecture up to the present day, is to broaden that complete knowledge and appreciation of architecture in general which should be the equipment of every serious-minded designer.



From "The Garden City Movement Up-To-Date."

ILLUSTRATIVE OF HOUSE GROUPING IN "GARDEN COMMUNITIES."

"The Garden City Movement Up-to-Date." By Ewart G. Culpin. This book is precisely what it purports to be—a record of facts. But the facts are presented in an attractively readable way, and are given vividness through the use of many diagrams, illustrating the layout and present development of the various "garden" settlements.

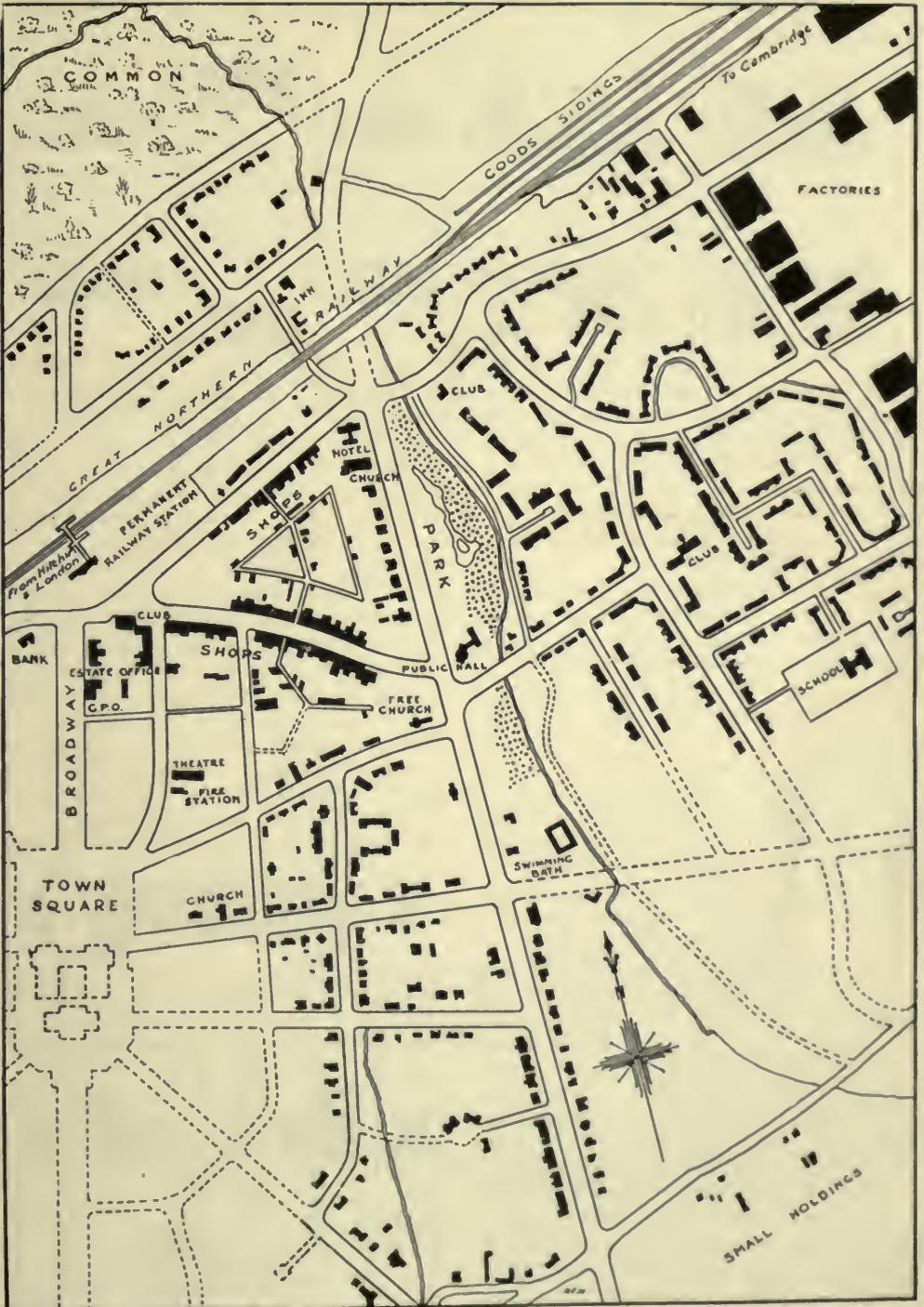
It is remarkable that so pretentious a book could be published only thirteen years after The Garden City Association was first formed, for it contains the salient facts relating to thirty-three different settlements in which there are already nearly 50,000 people. In its early days the literature of The Garden City Association was necessarily almost wholly propagandist. Now, as Mr. Culpin remarks, the time has come when the Association can best plead and most convincingly argue by pointing to facts. It must be stated, however, that within these years the garden city movement has extended, to include Garden Suburbs and Garden Villages with even more empha-

sis than Garden Cities. This is largely due, of course, to the fact that while the Garden City meant the creation of absolutely new conditions, the Garden Suburbs were evolved simply by directing an existing flow. Naturally, this line of least resistance has been largely followed.

Interesting, therefore, in this connection, are the definitions which Mr. Culpin offers of the terms Garden City, Garden Suburb and Garden Village:

"A 'Garden City' is a self-contained town, industrial, agricultural, residential—planned as a whole—and occupying land sufficient to provide garden-surrounded homes for at least 30,000 persons, as well as a wide belt of open fields. It combines the advantages of town and country, and prepares the way for a national movement, stemming the tide of the population now leaving the countryside and sweeping into our overcrowded cities.

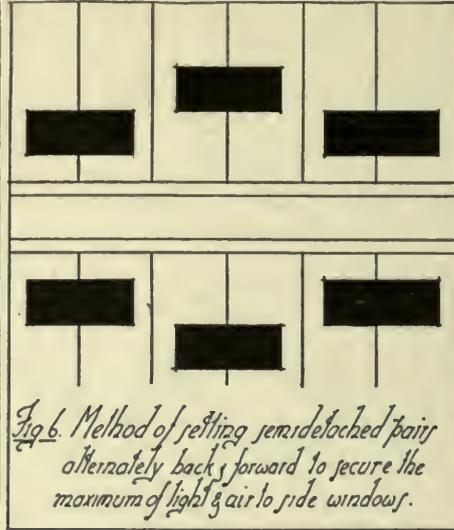
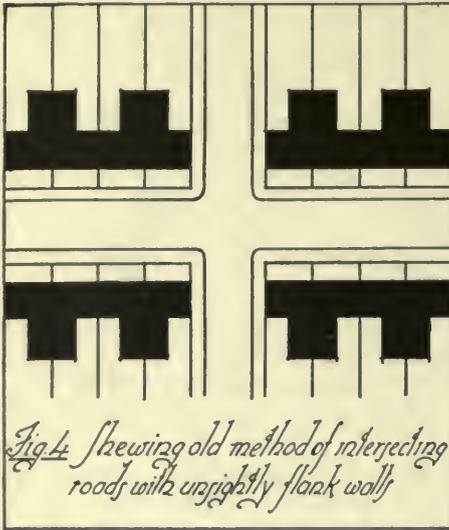
"A 'Garden Suburb' provides that the normal growth of existing cities shall be on healthy lines; and, when such cities



From "The Garden City Movement Up-to-Date."

PART OF LETCHWORTH GARDEN CITY.

Showing details of lay-out, workmen's cottages adjoining the factory area, and the central Town Square.



From "The Garden City Movement Up-To-Date."

ILLUSTRATIVE OF HOUSE GROUPING IN "GARDEN COMMUNITIES."

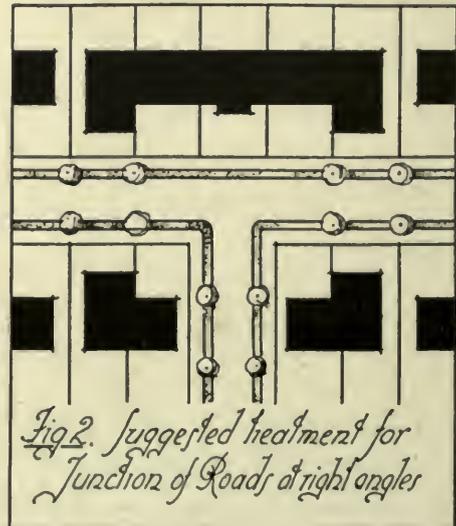
are not already too large, such suburbs are most useful, and even in the case of overgrown London they may be, though on the other hand they tend to drive the country yet further afield, and do not deal with the root evil—rural depopulation.

"'Garden Villages,' such as Bournville and Port Sunlight, are Garden Cities in miniature, but depend upon some neighboring city for water, light and drainage; they have not the valuable provision of a protective belt, and are usually the center of one great industry only."

Letchworth, which is the only real Garden City yet constructed, contains nearly 4,000 acres, of which 800 have been now developed. It has a population, to-day, of 7,000, and is designed to have an ultimate population of 35,000. But Hampstead Garden Suburb has nearly as many houses as Letchworth, and Ruislip Manor has almost the same population as Letchworth, while Bournville has more.

There is no need to give here the many details which are noted. It is enough to quote Mr. Culpin's statement, that "every effort has been made to obtain the utmost degree of accuracy, and the figures given have been supplied by the companies or societies concerned."

Mr. Culpin closes his volume with the annual report of the Garden Cities and Town Planning Association, as submitted at the 1912 meeting. This is supplemented by the constitution and by-laws, and a list of officers, branches, affiliated associations, and foreign correspondents. It is noticeable that among the latter, which represent most of the countries of Europe, no American is named.



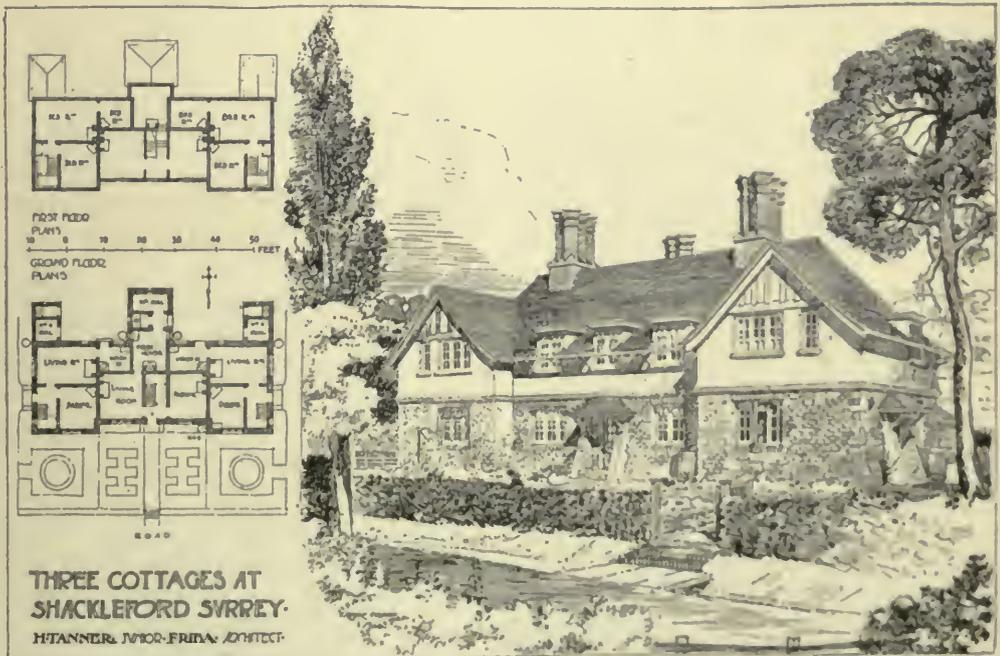
From "The Garden City Up-to-Date."
ROAD AND HOUSE GROUPING SUGGESTION.

"Modern Cottage Architecture." By Maurice B. Adams, F.R.I.B.A. The interest which centers around the design of country houses, be they small or large, is a perennial one, and we have looked more persistently perhaps, and certainly more profitably, toward England for inspiration in this type of design, than toward any other source.

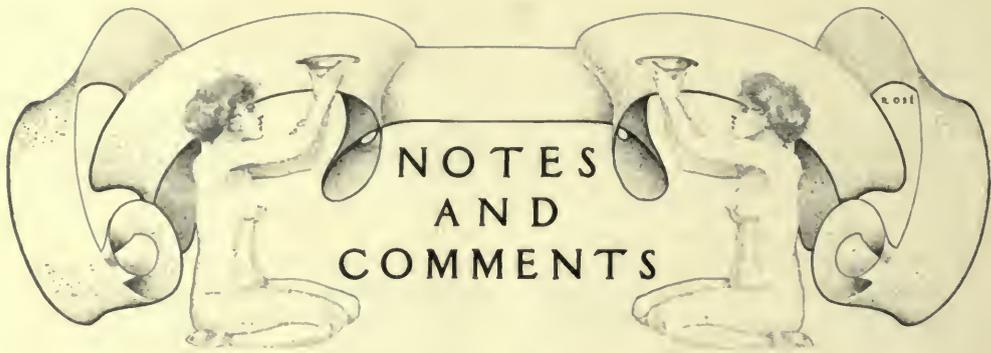
There is a certain flavor of domesticity about the English type of country house which has long been absent in similar work in this country, especially in our smaller houses, and it is for this reason more than for any other that the English type should claim our most respectful attention. And in addition to their qualities which suggest domesticity, which suggest that they are homes as well as houses, there are often qualities no less salient.

Primarily they are picturesque. On the exact "Nature of the Picturesque" one Sir Uvedale Price, in 1739, wrote a treatise of some four hundred odd pages, and even a careful perusal of this

classic will not rob the English country house of its right to claims in this direction. It is picturesque not only in itself, but in that it fits its landscape—being at once an incident and a feature. There are illustrations covering a wide range of cottages of half-timber construction, stone, "rough-cast" (which is called "stucco" in this country), brick, and various combinations of materials, in a hundred and twenty-seven illustrations from line drawings and photographs. The planning of a small house increases in difficulty in direct ratio with its smallness, and the numerous plans are full of apt suggestions as to economy of space. The haste with which we generally build small houses too often precludes the possibility of working out careful perspectives, but in England the smallest cottage seems always to warrant a beautiful rendering (of which there are many in this book)—and these renderings have always been at once the admiration and despair of the American draughtsman.



From "Modern Cottage Architecture," By Maurice B. Adams, F. R. I. B. A.
A TYPICAL ENGLISH RENDERING.



NOTES AND COMMENTS

The Missouri State Capitol Competition.

Following are two press comments from St. Louis papers which would indicate a popular appreciation of the methods under which the Missouri State Capitol competition has been conducted:

"Reserving for more leisurely comment the stately design for the new State Capitol which has just been accepted by the Capitol Board, *The Republic* desires to congratulate the people of this Commonwealth upon the manner in which the selection has been made.

"For the first time in the history of American architecture a State Capitol design has been selected in conformity with the rules of the American Institute of Architects. Never was there a competition more impartial. The preliminary competition brought forth sketches of sixty-nine different buildings. From among these ten were selected by a jury of experts. An examination was made into the professional and business standing of the ten firms so honored and an honorarium paid to cover the cost of production of complete designs.

"The three architectural experts selected from the Institute and the four Capitol Commissioners were a unit in the choice of the successful design. None of the commissioners knew when the final choice was made whose design they were approving.

"On this important matter, of deep interest to every citizen in the State, Missouri has set an example to the country. It is under such conditions that great buildings are produced and truly monumental architecture made possible. In view of the history of the selection of designs for the State houses of certain other western commonwealths, the action of the State Capitol Commission appears the

most desirable."—"*The Republic*," St. Louis, Mo., Oct. 8, 1912.

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"The members of the American Institute of Architects have rendered a valuable service to Missouri by winning their contention that in the submission of plans for the new State Capitol, the work should be genuinely competitive.

"The State Capitol Commission has announced its willingness to further the competition idea; and if its concession to the architects has not been complete, it still indicates a willingness to be fair.

"There has been no charge from the first that the Capitol Commission has wilfully opened the way for irregularities in the work of constructing the new Capitol. But in view of the methods which have prevailed in other commonwealths in similar circumstances, there is need of every possible precaution to prevent the charge of favoritism or political influence in a work which should be held clear of favoritism and politics, if it is to be done well and honestly.

"The position taken by the architects is, we believe, one which would be insisted upon by thoughtful taxpayers. They demand simply that the plans submitted for the new building should be without identification, and that they should be chosen upon their merit, the name of the architect being revealed only after the choice was made.

"On no other terms would a very large majority of the leading architects of the United States enter the competition by which plans are to be secured. They asked for a system under which no fraud would be possible. The original system submitted by the Capitol Commission had not this merit; and the gentlemen composing the commission are therefore to be commended for an action which makes their position and intention fairly clear."—"*The Times*," St. Louis, Mo., June 7, 1912.



A NEW YORK SHOP, IN AN ADAPTATION OF FRENCH RENAISSANCE ARCHITECTURE.

Warren and Wetmore, Architects.



AN OFFICE BUILDING IN COLUMBUS, OHIO, ERECTED SUBSEQUENTLY.

The Upper Four Stories of the New York Prototype Over a Pseudo-Italian Base.

A Study in Architectural Ethics.

The illustrations show two buildings, by two firms of architects—the first in New York City, the second in Columbus, Ohio. It would seem, even on a casual inspection of the two buildings, that something might be said as to the very questionable professional propriety of a copy so direct, although to lean very heavily on this phase of the matter is to deal with the obvious.

The right of Messrs. Warren & Wetmore to adapt a style of 18th century French Renaissance to a commercial building in New York is not open to any dispute—the right of another firm to copy this adaptation is, however, open to serious criticism. If a prospector finds a gold mine and works it profitably, we comment only on his fortune and his industry; if another man happens by and knocks the first one on the head and appropriates the mine, the second man is apt to be considered very differently. But even if this aspect of the case did not enter into this

particular instance, one would deplore the stupidity and lack of discrimination shown in placing so pure a rendering of 18th century French architecture in the superstructure on a quasi-Italian Renaissance base. Here is "Scrambled Architecture" with a vengeance, and being familiar with the original of the upper four stories, one cannot help speculating as to what building furnished the "inspiration" for the base, and why the two should have got mixed in the "adaptation." Perhaps another building exists with the base of the 18th century French shop and the superstructure from which the Italian Renaissance base was taken—or perhaps not, because the base of the office in Columbus is not even a scholarly adaptation of the style which its pointed pediments and rusticated stone-work tries to suggest. Imitation may be the sincerest form of flattery, but one might be justified in at least making the plea that the imitation be intelligent and accurate, even while deploring a lack of professional ethics which could make possible a copy otherwise so literal.

**A Last
Word On
the Lenox
Library.**

In the recent controversy, which consisted mostly of protest centered upon the proposal to erect the old Lenox Library in Central Park, many views,

both lay and professional, were put forward. While many landscape architects entered the fray (and all on the opposition side) few, perhaps, presented a view of the situation in which logic outweighed personal bias. It should therefore be interesting to read a thoroughly excellent presentation of the case by a landscape architect whose viewpoint is logically but firmly taken, in a letter from Mr. H. A. Caparn.

When the attempt was made last spring to put the Lenox Library on the site of the arsenal in Central Park it no doubt seemed strange to many people that there should be any difference of opinion on the subject. It looked like merely replacing a bad building by a good one; the chief architectural merit of the arsenal is that it is largely invisible, buried in charitable ivy that so often covers a multitude of sins of design; while the library was the work of one of our very ablest architects. This very natural point of view and the fact that the building itself and the setting of it up was to be a gift, and a costly one at that, made it all the more difficult to find arguments against it that could appeal strongly to the man in the street who has the advantage in so many things (including numbers)—opposition seemed not only unnecessary but ungracious and ungrateful to Mr. Frick. In spite of this, however, and the warm support of many, including the Park Commission; the resistance of public opinion kept the Library building out of the Park. The opposition of the average citizen probably took no more definite form than resistance to any invasion of Central Park on general principles. Architects and others qualified to form more analytical judgments foresaw also the effect to be produced on that part of the park by the intrusion of a building of several times the mass of the arsenal, and the difficulty of adaptation to its new uses of a structure designed for another and very different purpose and surroundings, and felt in a different key; and it is probable that the library was kept out of the park more by the weight of professional than lay opinion.

Another and even stronger argument

was not generally advanced. It was plain to anybody that buildings which are only occasionally loved for themselves would take the place of so much grass and trees which everybody loves for themselves; it was also clear that any building injected into the Park would form a precedent for others.

But it was less clear that new buildings would alter the Park more by the different character they would give to its scenery than by the destruction of lawn and planting. A large monumental building among rural scenery is the dominant object in the landscape, and the rest becomes its setting. It is not a question whether the building is bad or good. It is sure to predominate because of its artificial and assertive character, because it is a building in fact. It thus becomes obvious that five or six public buildings in the lower part of Central Park would change its character entirely. Lawns, trees and shrubbery would at once become mere foreground or background to the architecture and the "rural" expression of the park would be lost. Every important vista would draw the eye to a facade, every scene would lose its individuality and become an incident to the central and most striking feature of the whole composition. Central Park might in some eyes be improved, but it would be improved out of existence by the substitution of something entirely different. Instead of the soothing and elusive effects that now meet the eye everywhere the attention would be definitely drawn to some smart building in the latest fashion, probably in itself very fine, but giving one a certain sense of being on parade, and destroying the impression of escape from the brick and stone of the city which Central Park was intended to create. We should have a succession of palaces with their gardens something like those left us by the kings and nobles of France and England, instead of that peculiarly American product of which Central Park was the first and still remains the most conspicuous example—the rural scene created not for or in relation to any building but for its own sake for popular use and enjoyment. It is not worth while to discuss, as it would be impossible to prove that one is in itself better than the other. They are two essentially different things—and so far, the "rural" scene sufficient unto itself, and created in our popular sentiment and to fulfill a popular demand remains the American ideal of a large public park.

There are some to whom out of door scenery informally composed does not show competition at all. Whether natural or artificial, it seems to have happened so. It may be beautiful, but in every case Providence gets all the credit. This attitude cannot be due to analysis of or experience in this kind of design. It may be due in part to the training of the architect by which he is accustomed to consider lawns and foliage always as settings to his building. The idea of the building being secondary and the scene itself the main motive has perhaps never been presented to him and perhaps he does not think it worth considering. Yet perhaps the most basic difference between the design of the architect and that of Central Park is that the former is made for and depends on the building, the latter is made for itself and the building if any, is incidental.

Amendments for Fire Law.

E. D. Litchfield, writing on the New York Fire Prevention Law "From the Architect's Point of View," suggests in the Real Estate Magazine some interesting amendments to

the law. The work which is done under the act, he points out, divides itself distinctly into two classes: That of preventing the dangerous accumulation of rubbish, and that of requiring the better construction and maintenance of buildings themselves. As yet, the appropriations of the Bureau are, in his judgment, only about a quarter what they should be. There ought to be money enough to permit inspection of the city block by block. Until this is done systematically, property owners are bound to complain of the unfairness of the Bureau, since orders are sure to be given for very necessary work upon one building in a block, while neighboring or even adjoining property in which conditions are equally bad goes free. Such cases of complaint are brought before the Board of Survey, and the present constitution of that Board suggests one of the amendments which Mr. Litchfield thinks advisable. The act now requires that the Board consist of three members—a member of the Bureau or of the Municipal Explosives Commission, some one selected from a list furnished by the Board of Fire Underwriters, and an architect or builder of at least ten years' experience. It has been

the custom of the Fire Commissioner to permit the owner of the property to select the latter member, but it is quite clear that on any division of opinion, the latter is likely to be in the minority. Mr. Litchfield's suggestion is that instead of having a member of the Bureau one of the members of the Survey Board, his place should be taken by a representative of the local chapter of the American Institute of Architects. "The members of the Institute," remarks Mr. Litchfield, "are experts in matters of building construction, and to some extent in matters of fire prevention and risk, and are in a position to be absolutely impartial in the position which they would take." The other change which he proposes is that the inspectors of the Bureau, especially the rubbish inspectors, be a part of the uniformed force of the Fire Department. He says, "Not only should the uniform itself be a deterrent to graft, but it would seem that there should be many men who have grown old in the service and who are not as active as they once were, who might well be used in making these inspections. * * * Besides which there is the very important consideration that these men are especially expert in the knowledge of those things which lead to fires." Mr. Litchfield's judgment is that this law, like the requirement of the removal of projections on principal streets, will in the end prove a benefit to property owners.

To Rebuild London's Guildhall.

Much general interest attaches to the announcement that at last a large part of the ancient Guildhall of London is probably to be rebuilt. The matter has been talked about for several years, but now plans have been prepared by the city surveyor, Sydney Perks, F. R. I. B. A., in consultation with Sir Henry Tanner, the chief architect to His Majesty's Office of Works, and these plans have been recommended for adoption by the City Lands Commission to whom the question was referred. The committee, commenting in its report on the inconvenience and lack of harmony in the present Guildhall group of buildings, describes the premises as "a reproach to the Corporation." The high cost of adjoining buildings makes it impracticable in the view of the committee to purchase additional land, and the committee rec-

ommends that the present front elevation of the Guildhall be retained. While this is not, it says, good Gothic, it is an extremely interesting piece of architecture which ought to be preserved, clearly marking a period in the history of the Guildhall and so well known all over the world that its removal would be a national as well as an antiquarian loss. It is proposed at present to reconstruct only the building on the east side of the courtyard. This contains the Art Gallery, the Mayor's Court, and the offices of the Land Tax Commissioners, and was constructed in 1822. The plans for rebuilding this structure contemplate an increase in capacity as well as in convenience. The galleries of the new building will be adapted for ceremonial purposes in the way of dinners and receptions. The plans for the structure on the west side of the court have also been made, and it is hoped that the building of this may not be long postponed. The work on the east side, which the committee recommends should be taken in hand at once, will cost, according to Mr. Perks' estimate, about £130,000.

The Study of City Planning.

That the serious and scientific planning of cities is to be accorded in this country the consideration which has been accorded it in Europe for many years is evidenced by the action of the National Conference on City Planning, of which Mr. Frederick Law Olmstead is the chairman. Doubtless the capability of American designers in the matter of city planning will come to be more widely recognized since Mr. Griffin, of Chicago, won the competition for the new capital city of the Commonwealth of Australia, with an unusually well-studied and brilliant project, but that he is not to be accorded a unique position in such matters in the future seems reasonably assured from the manner in which the conference is going to work. For its members the committee of the conference announce a series of "studies."

The purpose of this study is not that of an ordinary competition, undertaken as a means of selecting and premiating that one among the designs submitted which, upon the whole, after offsetting its merits against its defects, presents the most praiseworthy solution of the particular

problem in question. It is rather a means of securing the co-operation of a number of people in preparing and assembling specific and concrete illustrations of the application, under a given set of normal conditions, of a variety of important ideas and principles and devices used in city planning, in a manner which will facilitate a close comparison of their respective advantages and limitations.

It is expected that two or more members of the conference will collaborate in some cases upon a single plan. A single member may submit more than one plan or take part in more than one group submitting plans. Authors of different plans may consult with each other concerning their respective plans while in progress if they see fit to do so. It will be left to those submitting the plans to determine when such consultation amounts to joint authorship deserving recognition in the title of the drawings.

The committee in charge of the study is shortly to issue an outline covering the conditions of the study and the description of the tract. We are in a position to announce that the general plan will include:

1. The location of streets and other proposed public properties.
2. The development of private lands in accordance with the general plan and with such control as could properly be exercised by ordinance or statute under the most favorable constitutional limitations in the United States.
3. The recognition of such control as might reasonably be expected to be exercised by public spirited land companies or other owners of real estate through restrictions in the deeds of lots.
4. It is assumed that the demand will be mainly for the erection of dwellings and for such other purposes as are normally incidental to such development—real estate, local places of amusement, schools, churches, etc.

Unlike competition in any one field like that of architecture or engineering, the problem proposed by the committee will engage the efforts of engineers, architects, landscape architects, sociologists and men of affairs, and it is hoped that representatives from each of these fields will collaborate upon one plan.

The committee proposes to arrange dates at which entrants may meet and present preliminary studies for criticism and discussion, the first conference to be November 22, 1912.

**Germany's
New
Architecture.**

Summer voyagers have been coming home in the last few weeks, bringing with them the usual sheaves of descriptions and impressions. That German architecture is "different" and interesting and becoming more so year by year, has been the burden of such reports for a decade. H. T. P., writing several columns on "Architectural Germany" to the Boston Transcript from Munich, expresses the wonder whether it may not be that we in America are, for a time at least, "taking France in the arts with too much seriousness and Germany with too little, forgetting that we have quite as many analogies to the newer country." He notes that "the newer architecture is part and parcel of the vitality of the new Germany, conscious of its right to an individuality. * * * From the new Germany, moreover, it has received its opportunity. Without the financial, industrial and commercial expansion of Germany in the last twenty years, the architects would not have gained their commissions to build the banks, the warehouses, the shops and the offices upon which they exercise some of their best skill. Without the prosperity and ambition that this expansion distributed, they would have lacked equally the commissions to build the houses that fill new streets. * * * They owe much to the German devotion to the fair exterior of their cities; not a little to the artistic zeal of sovereigns who have encouraged them, * * * and much to the artistic wisdom of the public authorities generally." The work is not all good, of course. Where there is freedom, there will be excesses; but in general the effect is stimulating. Great and little shops, or stores, there are, which have lightness, pleasantness and gaiety. A bank, requiring a new building, takes pride, as we are learning to do here, in making it an interesting and distinctive piece of architecture. "A flourishing German newspaper, about to build new offices, summons an eminent architect, bids him exert himself to the utmost, allows him a liberal expenditure, and finally installs itself in an establishment that architecturally and artistically makes the average newspaper office in America appropriate only to the early days of a Western town. The owner who must divide his building between shops and offices appears to build as though architectural comeliness and distinction would bring him tenants."

Applying his observations, the writer now remarks how few streets in the business quarters of American cities hold and stimulate the eye of the passing wayfarer. "The surprise of German commercial architecture lingers long in the American in Germany. The warm pleasure of those streets in Düsseldorf haunts recollection, and similar streets in New York or Boston seem grim and forbidding beside them. It is not fair to reproach our architects with lack of ability; but it is fair to regret that they—and those that commission them—will not allow them a freer self-expression and, if they have it, a warmth of temperament. Possibly it is the communal pride and the communal spirit that is lacking, while this is the life of the German city."

**Trees and
Shrubs as
Architectural
Materials.**

The following is an interesting contribution from Mr. H. A. Caparn, the landscape architect, in which he takes up an interesting and practical phase of the art of landscape design: "All classes of design grow out of and depend upon their materials; wood, iron, marble, stone, concrete have produced their various styles or manners and imposed their limitations on them. So with garden material, trees, bushes and plants; they impose their limitations and possibilities, their charm and their disappointments on him who would combine them into an ordered scheme in their own peculiar way as no other materials can. These alone are interesting in themselves, actual living and increasing things, perfected without the craftsman's touch and so differing from marble, paint or bronze which gain all their value from the hand of the artist. Planting material, while incomparably the most fascinating in itself, is uncertain, changeable, and requires for its proper use an intimate knowledge of its ways and waywardness; and unfortunately instances are rare of a piece of landscape work coming into development without having changes from the designer's original scheme.

Most people who use trees, shrubs, and flowers for decoration do so without any clear idea of design. Some of the others combine according to accepted principles of composition, but forget their personality and endeavor to use them like stone, iron or wood. Not being this kind of material, they don't respond. They fail to grow tall

or short, wide or narrow enough, or to acquire a satisfactory texture or expression or to do generally what is expected of them, or very likely refuse to grow at all. They cannot be counted on as having so much tensile or crushing strength, to last so many years without repair if only the foundations are solid. They resent being treated as dead instead of living things, and in short are likely to respond to such treatment by incontinently dying. He who would conquer planting material, who would make it do what he wishes, must give it what it wants; it is only tractable under its own conditions.

The climate of the northeastern states is severe and trying to the stamina of vegetation, though stimulating to some of the more rugged kinds, and many things in common and popular use in the milder climates of Europe are here received and nurtured with more or less difficulty or not at all; and no one can make a successful garden of fifty feet square or five hundred acres without a good working knowledge of what will grow there. Many people go to England, France, or Italy and see in all directions rich and luxuriant effects produced with box, holly, yew, anonimus, aucubas, oranges, ilex, cypress, and so on, which have taken many years of patience and fostering atmospheric conditions to produce, and expect to put up similar vegetable architecture here after a mere process of drawing to scale and turning the job over to the nurseryman. This is rather like a painter and geologist combining to make a statue or a sculptor and a paint manufacturer

uniting forces to produce a picture. One understands design, the other materials, and surely the result ought to be all right! Readers of "Pickwick" will remember the newspaper editor who ran a series of articles on Chinese Metaphysics. He read up China under "C" in the Encyclopaedia Britannica and metaphysics under "M" and combined his information. This knowledge of planting materials for purposes of design does not mean that of the grower or botanist. It means not merely a familiarity with names of plants, but a feeling for their character and appropriateness for various purposes not unlike that of the architect for detail as belonging to work of a certain period. Annuals, perennials, bedding plants, native and exotic trees and shrubs and nurserymen's varieties have not only their different names and cultivation, but their differences not to be defined under color, texture, habit or anything else except individuality. All are fit in some surroundings, unfit in others.

This is not written to show that any particular class of men should or should not make gardens. There are many kinds of gardens, and whoever can make them successfully should do so. But the most modern and popular idea of a garden is a place that exists primarily for the things that grow in it. Anyone who has made well this kind of garden or the other kind, in which the vegetation is simple and mere furniture has shown himself to have in that degree a knowledge of and sympathy with planting material."



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