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PARKER MORSE HOOPER, A.I.A. Editor

Contributing Editors:
Harvey Wiley Corbett; Aymar Embury II; Charles G. Loring; Rexford Newcomb; C. Stanley Taylor; Alexander B. Trowbridge
—answering your Questions regarding High-Early-Strength Concrete

Made with the standard Universal (not special) cement

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CHENONCEAUX FROM THE RIVER

FROM A PENCIL SKETCH BY EUGENE F. KENNEDY, JR.

The Architectural Forum
Sketching in the Chateau Country

By EUGENE F. KENNEDY, JR.
Rotch Scholar, 1924-26

Some of us have perhaps taken our first unconscious steps in sketching when at tender ages we created fairy castles upon perfectly clean and unsullied pieces of paper. Even now, though more advanced in years, we never tire of conceiving the same ethereal castles, with perhaps more successful results. It is undeniable that there is something about a castle that must find its way to paper. In the valley of the Loire and in Touraine we can sketch real, material castles much like those we have imagined, and—if anything—more beautiful. The material realities are no different, in another way, from those of day-dream castles, for they too invariably find their way to the sketcher’s paper.

One might imagine that sketching in the country of the chateaux would be exactly like sketching in any other part of France, and as a matter of fact the fundamental act of putting lines or washes on paper is quite the same. No especially different method or technique is employed when sketching Azay-le-Rideau than would be used upon a sketch of any similar building anywhere in this world,—unless of course that is the desire of the person making the sketch. And yet those who know the chateaux of the Loire country and Touraine and have sketched there know that there is a great difference. There is—for one thing—a differing atmosphere, a different beauty that is wholly unique to that section of France. There is a variety of subjects surprising to one who might think that one chateau is as like another as are the two proverbial peas in the pod, and while in a remote sense the chateaux are somewhat similar in style and spirit, they are conceived and placed in such a variety of moods that each is an entirely different thing from any of the others. Then, too, the average artist invariably picks out a subject that is more often than not commendable only because it is picturesque. The architect, on the other hand, desires primarily to sketch architecture, but he realizes that architecture often does not compose into nearly as fine a picture as a subject picturesque but architecturally void. He often finds himself in a quandary whether to ignore the architecture and make a pretty picture, or to ignore the picture and record a charming bit of architecture.

Imagine the delight of one uninitiated who happens in the chateau country and finds there that sound architecture and the picturesque are one!—that he makes not only a charming picture but portrays some exquisite building with each sketch. There is,—for example,—the Chateau of Blois, built in the center of a town, but remotely situated upon a high plateau, and picturesque enough in its ensemble to make anyone sharpen up the pencil and set it working on the paper. Then too, in its component parts it offers a wide variety of styles, making it possible for him who wishes to sketch only the earliest of Gothic to face in a certain direction and do so,—while his companion, who is interested in portraying only the Renaissance, or that intermediate style called ‘Francois Premier,’ sits beside him but looks off into another corner, and there finds what he wants.

The Chateau of Chambord offers opportunities for numerous compositions, and here we have something that differs from Blois as the day differs from the night, and yet they are built,—for the most part,—in the same general style. We have compositions of many large turrets, with cone-like roofs, crowned with graceful pinnacles and chimneys of every description, all arising from a clear plain devoid of adjacent high shrubbery, yet interesting and varied enough in itself not to require greenery to complete its sketching possibilities. Perhaps after bicycling from Blois to Chambord we are merely content to admire it abstractly, reclining on the broad lawns that surround it, and remarking to ourselves: “Wouldn’t that make a dandy sketch,” or, “That would make a corking water-color,” which is, of course, entirely up to him who fortunately finds himself there. In my own case, I must admit that I made only mental sketches, and found that the more material sketches came more easily after getting rid of the bicycle and reclining on the aforesaid grass!

Chaumont is again different. Perched high and dry upon a hill, in the midst of a vast park, it overlooks the river and valley of the Loire. Unfortunately, if we have time for only one sketch, we must rush frantically from one spot to another trying to decide which composition might be the best. Shall we sketch the entrance portal with its flanking tur-
THE TOWERS OF AMBOISE
FROM A PENCIL SKETCH BY EUGENE F. KENNEDY, JR.
IN THE COURTYARD, BLOIS

FROM A PENCIL SKETCH BY EUGENE F. KENNEDY, JR.

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A CORNER OF AZAY-LE-RIDEAU

FROM A PENCIL SKETCH BY EUGENE F. KENNEDY, JR.
LANGEAIS FROM THE HIGHROAD

FROM A PENCIL SKETCH BY EUGENE F. KENNEDY, JR.
It is indeed the happy hunting ground of the artist...
The Sculpture of a Modern Pediment

By EDWIN J. HIPKISS

ANYONE who has had occasion to actually draw a design for a pediment enriched with sculpture must have felt the inadequacy of his "indication" even when filled with assurance as to a generally promising treatment. It is here that generalities, even of the able designer, must be sifted down to the actualities of form, of balance, of light and shade, at last, by the talent and two-handed strength of the sculptor working in collaboration with him. The New York County Court House, lately completed in lower New York, offered such an opportunity to a sculptor, and the accompanying illustrations show an interesting, and, we think, an excellent work of its kind:—a sculptural design which follows knowingly the classical tradition of the building, its present-day purpose, and its place. The sculptor has rightly had his backward glance at sculptured pediments of the past, but here is a modern version, the more satisfying in that it fits into a scheme of things larger than the individual and much larger than the megalomania of those detached and mystifying performances so plentifully and so unfortunately sprinkled over the field of current art.

As is well known, the New York County Court House design was won in competition by Guy Lowell many years ago, and construction on a huge scale has been carried on during the past 12 years. The completed portico of the building has across its front ten columns of the Corinthian order, 60 feet in height, surmounted by a pediment 104 feet wide. The architect's scheme called for sculpture in high relief to fill the tympanum and three figures in the round to stand on the acroteria. In 1924 Frederick W. Allen was commissioned as sculptor for this part of the work, and with a modern version of traditional figures in mind to represent the ideals to which courts of justice are dedicated, Mr. Allen has found his own arrangement after three years of study and development worked out in models of clay and plaster. A sense of design in the large has governed all his study; in his search for pose and action through the use of living models, he has referred con-
stantly to the area as a whole, or, obviously, the filling of his triangular space with an ordered pattern.

The figures in the tympanum, it may be seen, are placed in five groups which are, however, bound together through a skillful interrelation of action and accessories, and the resultant combination of dignity and grace is no small achievement in itself. It will be noticed that those ever-difficult areas in the acute angles have been filled with a seeming ease which leads one to make comparisons with classical or other examples and to find here a unity of scale in the figures, a sense of balance and a lack of either crowding or sparseness throughout which would seem to mark this work as one of outstanding merit. On the structural side there are certain factors to be noted in order to better understand both the sculptor’s problem and his achievement. For instance, in the matter of relief, the granite blocks of the tympanum left “in the rough” permitted but a maximum cutting depth of 15 inches. Furthermore, the huge scale was to be visualized, for this pediment, 104 feet wide, stands 80 feet above the street level. Mr. Allen’s studies were carried forward in his studio on models of the portico at a reduced scale, and eventually the actual cutting at the building was done from plaster sections made at full size. In this the sculptor faced the hard exigencies of modern granite cutting, the cause of much difficulty to sculptors.

According to the sculptor’s intent, we are confronted with the figure of Justice, assisted by Courage and Wisdom, in the central dominating group. The ends are filled with seated or kneeling figures as guardians of the records, and between these on the two sides are groups representing the opposed forces of Good and Evil. The Philosopher, the Bearer of the Robes, and Youth Bearing Garlands are balanced by three figures symbolic of corruption. On the acroteria above stand figures representing the Law, Truth, and Equity. The artist has given us a carefully studied scheme in constructive design, and something remains for our imaginative perceptions to supply. We are reminded that John Singer Sargent once turned aside an inquiry that may have suggested to him a too literal point of view, when he remarked laughingly of one of his decorative panels that it represented “just some blokes dancing.” You may take it as you like it!

To appraise Mr. Allen’s sculptured pediment in its degree of excellence need not be undertaken hurriedly; for the years will tell. But it is to the sculptor’s honor that his skill has been wedded fittingly to the demands of a scheme wherein architecture and sculpture supplement each other for a greater honor, which is the serving of Justice in a great community.
ENTRANCE FRONT, HOUSE OF EBEN S. DRAPER, ESQ., HOPEDALE, MASS.
BIGELOW & WADSWORTH, ARCHITECTS
PLANS, HOUSE OF EBEN S. DRAPER, ESQ., HOPEDALE, MASS.

BIGELOW & WADSWORTH, ARCHITECTS
VIEW FROM LAWN, HOUSE OF HEN. S. DRAPER, ESQ., HOPEDEALE, MASS.

BULLOW & WADSWORTH, ARCHITECTS.
SECTIONAL VIEW, HOUSE OF EBEN S. DRAPER, ESQ., HOPEDALE, MASS.

BIGELOW & WADSWORTH, ARCHITECTS.
GARDEN FRONT, HOUSE OF EBEN S. DRAPER, ESQ., HOPEDALE, MASS.
BIGELOW & WADSWORTH, ARCHITECTS
MAIN ENTRANCE, HOUSE OF EBEN S. DRAPER, ESQ., HOPEDALE, MASS.
BIGELOW & WADSWORTH, ARCHITECTS
SERVICE WING, HOUSE OF EBEN S. DRAPER, ESQ., HOPEDALE, MASS.
BIGELOW & WADSWORTH, ARCHITECTS
DETAILS, HOUSE OF EBEN S. DRAPER, ESQ., HOPEDALE, MASS.
BIGELOW & WADSWORTH, ARCHITECTS
DINING ROOM

HOUSE OF EBEN S. DRAPER, ESQ., HOPEDALE, MASS.
BIGELOW & WADSWORTH, ARCHITECTS
THE Dawson Building, at 19 East 60th Street, New York, was awarded by the unanimous vote of the committee the gold medal or first prize given by the Fifth Avenue Association for the best altered building erected during the year 1926. It was the opinion that this building presented an unusual example of charming and effective alteration work. This award, made every year, is arrived at after a thorough inspection by the committee, consisting of three members of the Fifth Avenue Association and three architects, of all alteration work done during the current year in the section of New York extending from Washington Square to 110th Street, from Park Avenue to Sixth Avenue.

An unusual opportunity for an effective treatment was afforded in this instance, due to the fact that the owner appreciated the value in his particular kind of business, the selling of antiques, of an architectural setting. It is here obtained by a tall, uninterrupted show window, letting in a flood of light and producing a feeling of liberality and spaciousness that is pleasing to the customer. This would have been lost had he striven for the greatest amount of floor area possible by placing a mezzanine gallery across the front of the building, as is so often done. This height was made possible by dropping the forward part of the ground floor from the previous level of about 7 feet above the sidewalk to a level of 2 feet. The basement is reached by a service entrance at the right of the show window, and the necessary headroom is obtained by a gallery built up at the side at the level of the original first floor. A new gallery was also built at the rear of the building on the rear lot line. The second floor is used for the display of antiques and for the office, and the upper floors consist of two apartments, one occupied by the owner. It is a highly successful alteration.

The facade of this building was originally an old brownstone front, set about 4 feet, 6 inches back of the building line, with a long flight of steps leading up to the entrance. This was entirely removed and a new facade erected on the building line, extending each of the upper floors out far enough to meet it. The facade is in the Georgian style.
DETAIL, DAWSON BUILDING, NEW YORK
GREVILLE RICKARD, ARCHITECT

Photos. P. A. Nyholm
LOWER HALF OF FACADE, DAWSON BUILDING, NEW YORK
GREVILLE RICKARD, ARCHITECT
ELEVATION

DETAIL OF STORE FRONT
GREVILLE RICKARD, ARCHITECT, NEW YORK CITY

The Architectural Forum Details
ARCHITECTS who are working on the plans of large garage buildings will not, as a rule, fail to give serious consideration to the class of problems suggested by the title of this article. At the same time, there are so many variations in building code and in insurance requirements, and so many short cuts through which correct planning and equipment results may be achieved without a great expenditure of the architect's time, that a brief outline of some of these points may be found of value. While this article will deal primarily with the problems of insurance engineering as applied to garage design, it will also contain here and there a suggestion on plan or construction which has been gained from some practical source and is thrown in for good measure. Some important details are suggested.

Before entering into a discussion of detailed insurance engineering as applied to the planning of garage buildings, it may be well to review the correct method of procedure on the part of the architect through which he may obtain expert advice on this subject at no cost to himself or to the owner. Having important fire-preventive precautions embodied in plans and specifications, there need be no further sense of responsibility in this connection, and the architect may feel that his service has been made even more valuable than usual from the owner's point of view.

In this connection, there is available to the architect a form of service which should always be utilized wherever possible. This is the advisory service which is maintained by fire insurance brokers, agents or companies, known as "insurance engineering" and offering expert knowledge not only of local fire insurance and code requirements but of rating methods under which the establishment of certain safeguards in the construction and equipment of the building will earn insurance rate reductions which may considerably decrease the annual premiums, being in the end highly profitable.

Insurance engineering service, as rendered by the better insurance brokerage organizations, is handled through a special department without cost or obligation to the owner except requiring placing the insurance business through the particular organization which renders this service. From the point of view of the architect the procedure is to find out who handles the owner's fire insurance, and if that organization maintains such a service, it can be brought into advisory cooperation during the preparation of plans. Otherwise the architect can recommend to the owner the selection of an insurance agent who will render such service along the lines already described. This service can now be had anywhere.

Here is a fund of wide experience which the architect can employ without cost to himself and to the mutual benefit of all parties concerned. Tentative plans and specifications are first drawn up for the building, and these are submitted to the insurance engineer who will obtain the approximate rating and will submit a schedule of recommendations covering fire areas, exterior opening protection, fire doors, and similar precautionary structural measures which will earn rate reductions and render the building much safer from fire hazards. It is a well established fact that the indirect loss from fires in commercial or service buildings of any type may often be greater than the direct loss. While the direct loss is covered by insurance, the indirect loss, which means suspension of business, loss of trade, etc., is never compensated for, and it is part of the architect's responsibility to the owner to introduce every practical means of preventing such losses. In many instances this can be done thoroughly only by correct planning and construction, and structural conditions involving hazards are often almost impossible to cure at a later date, and then at considerable cost.

If insurance engineering service is not easily available under the plan here set forth, it is quite possible for the architect to obtain a copy of local insurance rating schedules which will furnish suggestions covering various risks against which the plans and specifications should guard. In addition to this insurance engineering phase of the problem, there must always be considered the requirements of local building codes and fire regulations. These can be readily ascertained through the proper city or town departments, and before the building is planned a complete schedule of such requirements should be had as part of a preliminary planning analysis to give some idea of the type of requirements which are often mandatory by local regulations, or advisable because of local insurance ratings. There will be suggested in these paragraphs a few examples or factors which must be considered during the early stages of planning and specification writing for a garage building.

The first basic requirement which is to be found in almost every community where a public garage would probably be erected is the provision of fire
walls to restrict the so-called fire areas of the building. The maximum unit of space permissible in a fire area varies in different localities, and this point should be determined before plans are developed. For the same purpose of protection, fire walls are called for around all vertical openings such as elevators, ramps, and stair shafts. These fire walls are to be of approved masonry construction, and all openings in them must be protected with automatic fire doors and fire shutters, so that flames may be absolutely confined to the area of origin and prevented from spreading from floor to floor. In the case of buildings constructed with a combination of ramp and staggered floors, a fire shutter is usually required at each point where the ramp passes through the wall. All door openings in elevator shafts must be protected with fire doors at each floor entrance. In most large communities a special code requirement calls for stairways located in fireproof shafts and placed in such a manner that no point in the garage is distant more than 100 feet from such means of escape in case of fire. Entrances to these smoke towers must, of course, be protected with fire doors, which are at all times kept closed through automatic control. The general construction of garage buildings is usually controlled by local codes and calls for masonry construction of approved thickness and type both for floors and walls. The structural members must be adequately fireproofed to prevent any danger of collapse due to failure of a member under conditions of temperature which might occur.

The inclusion of automatic sprinkler installation in garages is often optional from the viewpoint of the owner, although in some communities automatic sprinkler installation is mandatory under building conditions. As a rule such an installation materially reduces the insurance rating, and occasionally a compromise is effected by the installation of automatic sprinklers at points of special fire hazard. Fire-extinguishing and fire-fighting apparatus should be provided at various convenient points, and such provision may even be mandatory under local regulations. This equipment will also include installing necessary tanks and standpipes, while, because of the nature of grease and oil hazards, sand boxes are also requisite forms of fire-extinguishing equipment. At points where an exterior fire hazard, such as old wooden buildings from which fire might be communicated to the garage, exists, it is good practice and sometimes mandatory (especially from the insurance rating viewpoint) to install wire glass windows or fire shutters to prevent the communication of fire through such exterior openings. Importance of all of these preventive measures can
s easily be determined by an experienced insurance engineer, who will set them up in the form of a schedule for the guidance of the architect. A point of special fire hazard in the average garage building is the grease pit, which if sunk into the floor in the ordinary manner will form a dangerous well for the collection of inflammable gases. For this reason, such grease pits are prohibited in some cities, greasing racks being used in their stead. It may be noted, however, that the use of the common elevated greasing rack is often impractical because of the low headroom which is now almost standard in multi-floor garage design. When the ramp system, which involves staggered floor levels, is employed, it is quite possible to solve this problem in a very satisfactory manner because car spaces can be arranged against the dividing wall on the second level. Beneath this space, which constitutes the greasing rack, there is placed a pit arranged with a communicating door giving direct access to the bottom of the pit on the next lower level. This is not only a more convenient layout, but provides sufficient natural ventilation to offset the usual fire hazard. There will be found upon this page a sketch illustrating this type of grease pit, and it may be noted that the removable pit cover permits the use of the floor space for car storage when it is not required for service work.

Another fire hazard of the average garage is to be found in greasy rags and dirt which often accumulate in corners unless proper provisions are made for their immediate disposal. An efficiently designed garage will incorporate the feature of dirt chutes into which such oily waste material may be thrown and carried to fireproof containers in the basement. This is a minor but important installation, which the architect should not overlook. A typical detail which is also often overlooked by architects is the provision of proper boiler room exits, which almost always earn a cut in the insurance rate. In every case at least one exit should be provided from the boiler room directly to the street. This important question of providing structural safeguards against fire hazards is one which should receive serious consideration by the architect, particularly in view of the fact that information regarding such safeguards is so readily obtainable.

In studying the plans of various garages, there have been noted a few points which may prove to be of importance when plans for new buildings are being drawn. These points are presented at random and may relate to plan, design or equipment. The most favored type of construction, and probably the most economical type, is of reinforced concrete throughout and designed to carry live loads according to various local requirements. The United States Department of Commerce has recently published a booklet on live load ratings for multi-floor garages, which contains the findings of a survey by the Building Code Committee. This report brings out a surprising number of variations in live load factors for garage floors, as specified by the building codes of various cities. This table (page 344) gives the requirements for garage floor loads in 90 cities.

The figures as given here take into consideration all types of garages, and the average for all the cities is 126 pounds per square foot. The consensus of opinion of experts in garage planning seems to be that the live load factor for a garage which houses passenger cars and light trucks should be about 125 pounds per square foot, while for heavy trucks the live floor load should be about 150 pounds per square foot. Calculations should be made on about this basis.
gested the use of a 24-inch or 3-inch concrete slab.

over the usual five-ply: waterproofing felt. roof

exceed 100 by 100 feet. These joints should be filled.

building: a saving in construction cost may result.

experts in garage designing: The minimum clear.

headroom necessary for the different types of

garages is (1) passenger car storage, 8 feet; (2)

truck storage, 13½ feet; (3) sales and service

space, 12 feet. Allowing 2 feet for the thickness

of the floor, depth of beams, pipe installations, etc.,

the figures for story heights, from finished floor to finished floor, will be obtained by adding 2 feet to each of the figures preceding. It is obvious that if these facts are kept in mind when designing the building a saving in construction cost may result.

Another point of economy in planning is the possibility of using the garage roof for parking purposes, and it would seem that in most instances this should be done either for emergency purposes or to increase the useful and revenue-producing space in the building. An investigation recently made by a large garage-designing organization brought out several interesting details of the construction of garage roofs of this kind. One roof was built of tee-beam construction with 2½-inch slab. Temperature bars were put in the concrete beams and reinforcing mesh in the concrete slab, which was then treated with three coats of waterproofing, coated with moist neat cement, and then a concrete top of 1-inch mortar, composed of one part cement and one part sand. This roof has been found to be absolutely watertight. One of the foremost construction companies in the East suggested the use of a 2½-inch or 3-inch concrete slab over the usual five-ply waterproofing felt roof covering. The slab should be constructed in sections not exceeding 5 feet in each direction and separated from one another and from the parapet wall by ½-inch joints filled with suitable material.

A suggestion by a structural engineer who has had a great deal of experience with garages is valuable. After the roof slabs are put in they are covered with a three-ply membrane waterproofing. Over this is placed 2 inches of cinder concrete, and the roof is then finished with 1 inch of concrete with integral waterproofing; 2-inch expansion joints should be provided around the parapet wall and along lines dividing the roof into sections not to exceed 100 by 100 feet. These joints should be filled.

The question of headroom is important in developing structural plans and is thus answered by experts in garage designing. The minimum clear.

headroom necessary for the different types of

garages is (1) passenger car storage, 8 feet; (2)

truck storage, 13½ feet; (3) sales and service

space, 12 feet. Allowing 2 feet for the thickness

of the floor, depth of beams, pipe installations, etc.,

the figures for story heights, from finished floor to finished floor, will be obtained by adding 2 feet to each of the figures preceding. It is obvious that if these facts are kept in mind when designing the building a saving in construction cost may result.

Another point of economy in planning is the possibility of using the garage roof for parking purposes, and it would seem that in most instances this should be done either for emergency purposes or to increase the useful and revenue-producing space in the building. An investigation recently made by a large garage-designing organization brought out several interesting details of the construction of garage roofs of this kind. One roof was built of tee-beam construction with 2½-inch slab. Temperature bars were put in the concrete beams and reinforcing mesh in the concrete slab, which was then treated with three coats of waterproofing, coated with moist neat cement, and then a concrete top of 1-inch mortar, composed of one part cement and one part sand. This roof has been found to be absolutely watertight. One of the foremost construction companies in the East suggested the use of a 2½-inch or 3-inch concrete slab over the usual five-ply waterproofing felt roof covering. The slab should be constructed in sections not exceeding 5 feet in each direction and separated from one another and from the parapet wall by ½-inch joints filled with suitable material.

A suggestion by a structural engineer who has had a great deal of experience with garages is valuable. After the roof slabs are put in they are covered with a three-ply membrane waterproofing. Over this is placed 2 inches of cinder concrete, and the roof is then finished with 1 inch of concrete with integral waterproofing; 2-inch expansion joints should be provided around the parapet wall and along lines dividing the roof into sections not to exceed 100 by 100 feet. These joints should be filled.

Another suggestion is made as probably the best. It may be noted in passing that while reinforced concrete construction is found desirable in many sections of the country, there are occasionally district conditions or other reasons why steel construction is to be preferred. For instance, there is always the consideration of the possible future use of a building for purposes other than that of a garage. In other words, when the success of the garage project is somewhat problematical or the trend of commercial activity in the particular district may point to an ultimate possibility of changing the nature of occupancy of the building, it is wise to use steel construction because remodeling then is simplified. Again, there are times when architectural design of the exterior becomes of particular importance, and it may be of a type which can better be carried out with steel construction and curtain walls. Another fact worth investigating is that in certain cities contractors bid much more favorably on steel construction for use in garage buildings.

Two other matters which the architect must watch carefully in developing his plans include special building and safety code requirements; the provision of proper floor drainage; careful designing of a proper ventilating system; and the installation of a supply system which will supply gasoline outlets on all floors. There are various special air-pressure, hydraulic, and power delivery systems for this purpose. Still another factor which primarily affects planning and introduces the element of economy in both construction and operation has to do with the proper arrangement of garage control facilities. The plan should primarily be based on a one-entrance system, and should be arranged in accordance with the logical sequence of operation and business administration as defined by the nature of the individual garage business to be housed.

The architect will find the designing of large public garages to be a much more interesting problem than might at first seem to be the case. On the other hand, it is less complicated than might be expected, because of the valuable types of advisory service which are available. It is obvious that with parking conditions growing constantly more difficult and with the vast increase in the use of automobiles, the garage problem is becoming vital to every community and every district, and for this reason every architect should give study to this question, because at any time such a commission may come to him.

There is another interesting phase of this subject which should be pointed out. Hotel owners, particularly those who are planning apartment hotels, realize that a garage structure may be an important adjunct to the property, and for this reason large garages are included in the plans of many such buildings. Similarly, department store and office building owners are giving more thought to this problem, so that in addition to the individual garage structure type, there are possible many interesting combinations which might involve such provision.
The Forum Studies of European Precedents

FRENCH AND ITALIAN COURTYARDS

COURTYARD, MUNICIPAL PALACE, VITERBO
DETAIL, COURTYARD, MUNICIPAL PALACE, VITERBO

The Forum Studies of European Precedents; Plate 66
COURTYARD, SPOLETO

The Forum Studies of European Precedents; Plate 67
SECOND COURT, CHATEAU CLERMONT, AT TONNERRE.

The Forum Studies of European Precedents; Plate 68
© The Architectural Forum

COURTYARD, OLD MONASTERY, OUTSIDE PORTA ROMANA, LICNA

The Forum Studies of European Precedents; Plate 69

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COURTYARD AT RIMINI

The Forum Studies of European Precedents; Plate 70
COURTYARD, ST. PETER'S

The Forum Studies of European Precedents; Plate 71
Once again the Architectural League of New York combined its annual exhibition, which this year was its forty-second, with an exposition of the allied arts at the Grand Central Palace. A great divergence of opinion exists among the architects of New York in regard to the advisability, advantage and propriety of thus merging an exhibition of architecture, sculpture and mural painting with a display of household decoration, furnishing, and equipment, together with building materials of every sort. There seems to be no definite, satisfactory or conclusive answer to satisfy those members of the profession who would prefer to see a separate and smaller exhibition restricted entirely to the three arts. Considering the general public and its recognized lack of knowledge and appreciation of architecture and its two sister arts, it might seem advantageous to combine them with the allied crafts and building materials in one exhibition in order to elicit a greater interest on the part of the public in architecture itself. To present the attitude of the Architectural League toward such a joint exhibition as has just ended in New York, it seems appropriate to quote from the foreword to this year's exhibition catalog by J. Monroe Hewlett, once president, and member of the exhibition committee.

"To the many arts and crafts allied with it, architecture should bring increased opportunities and broadened standards. Conversely, painting, sculpture and all the forms of imaginative craftsmanship should bring to architecture the sympathetic human qualities upon which its spiritual influence depends. These results can be accomplished only by simplifying, harmonizing processes to which the other arts must subject themselves in order to come into a proper relation to architecture. Such processes have been sadly interrupted during recent centuries. Excessive specialization in education and practice has gone far in destroying the mutual understanding and sympathy essential to intelligent collaboration among designers. Our greatest artistic problem today is the re-creation of a point of view, the restoration of the unity of all the arts of design."

"To many New Yorkers the Architectural League exhibition is the most interesting exhibition of the year because it is at once the most varied in its exhibits and the most unified in its aim. However great the variety of the designs and objects shown, however marked the differences in the theory and practice of the designers, there is evident in this exhibition the subordination of these differences to a common purpose which is the enrichment of our architecture and, through that, the enrichment of our life. For forty-two years these exhibitions have recorded the growth of all the arts that minister to architectural progress. As the years have advanced they have become less and less mere exhibitions of architectural designs and more and more records of performance in all the branches of art which, coordinated, become architecture. They have mirrored the succession of architectural 'styles' from the remote to the recent past, and if today there is
a prevailing sentiment among the great body of artists that the time has come to look forward rather than back, to embody in our design less of the dead past and more of the living present, these League exhibitions should thereby acquire increased significance; and through them the designers, in whatever medium they render their designs, should come nearer and nearer to an answer to the age-old question, 'what is the relation of my craft to all the crafts of which architecture is the unified expression?'

Howard Greenley again acted as designer of the architectural setting of the exhibition, successfully transforming the vast open floor spaces and bleak interior architecture of the Grand Central Palace into a series of attractive halls, galleries and corridors. On the walls of this transformed interior were hung the diversified and interesting collection of architectural drawings, renderings, plans, photographs, mural paintings, and wall decorations of many kinds.

It was entirely fitting and appropriate that the Architectural League medal of honor in architecture should be awarded to Ralph T. Walker, and McKenzie, Voorhees & Gmelin, of which firm he is a member, in recognition of their genius and ability in designing the Barclay-Vesey Telephone Building in New York. The medal of honor in painting was awarded to J. Monroe Hewlett, architect and mural painter, for his two cartoons depicting "The Discovery of the Connecticut Valley." The medal of honor in sculpture was awarded to C. Paul Jennewein for his remarkable adaptation of the polychrome sculpture of the classic period to the requirements of modern monumental architecture as illustrated by the pediment figures and decorative details conceived and executed by him for the Philadelphia Museum of Fine Arts. For the best exhibit of landscape designs, the medal of honor was awarded to Bremer W. Pond. For the two very beautiful plaques showing an appreciation of both ancient and modern ceramic art, the medal of honor in design and craftsmanship in native industrial art was awarded to Hunt Diederich. The Michael Friedsam medal was awarded to Frederic Carder of Corning, N. Y., who for many years has been associated with the Corning Glass Works. This medal is awarded annually to an individual who has contributed in a marked degree toward the development of art in industry. For his figure entitled "Bird Bath," Olympio Brindesi was awarded the Avery Prize for Sculpture. This prize, the value of which is $50, is awarded annually to a sculptor under 30 years of age and is given for small rather than large pieces of work. The silver medal for general architectural work was awarded to Bertram G. Goodhue, deceased, and Bertram G. Goodhue Associates for a series of exhibits of work recently completed by this firm. The silver medal for intimate architectural work was awarded to Frank J. Forster on account of the house he designed for Mr. Karl Keffer at Scarsdale, N. Y. Honorable mention for intimate architectural work was awarded to Marion S. Wyeth and Frederick R. King for the house designed by them for Mr. Harris Hammond at Bordentown, N. J.

In conclusion, as one of the severest critics of this type of combined exposition of architecture and allied arts in a sort of "art and trade fair," Forbes Watson, editor of The Arts and one of the leading critics in this country, admits in speaking of the recent exposition, "when we come to reproductions of the works of the architects themselves, to the charming, domestic architecture and the exciting skyscrapers, the unhurried visitor can discover reasons enough why architecture is so often said to be America's most triumphant achievement in the arts. If this is so it is because architecture is meeting the vital needs of the people. Certainly a great deal of interest is being shown today in everything connected with it, and the crowds following architecture differ from those following painting and sculpture."
The Moorestown Trust Company, Moorestown, N. J.

By HAROLD DONALDSON EBRELEIN

The casual observer, passing through the small towns of the Eastern and Middle Atlantic states, might be inclined to suppose that all the recent bank buildings to be found there had been patterned with scrupulous fidelity after one or two universally accepted models. He might also reasonably conclude that these standard models had been derived from the designs of several city banks by a process of compression or distillation, or something of the sort; likewise, that all that was needed to accommodate them to their immediate local requirements was judicious expansion or contraction, according to the dimensions of each particular site and the cubic space called for by the bank officials. Of course there are notable exceptions to this monotonous sameness in small bank architecture but, notwithstanding this occasional—and very welcome—relief, there is undeniably enough likeness among buildings of this class to justify the ridicule poked at them by a supposititious Japanese student, a little more than a year ago in the pages of one of our architectural journals. "'Arch's Handy Designer,' showing all standardization plans for buildings mostly alike," a compilation urgently recommended in the satire, might well have been the parent of a numerous progeny. The absurd uniformity of this decent but dull "job lot" of small town banks seems to point either to poverty of invention on the part of the architects who fathered them, or to poverty of imagination on the part of bank officials,—or perhaps to both, for at times both seem equally to blame.

When we meet with a small bank building designed to accord with the character of the community it serves rather than in perfunctory compliance with a stereotyped and hackneyed convention, it is worth examining for the factors that give it its distinction and make it stand out from among its fellows. Moorestown is a long-established, quiet country town, strongly entrenched in its own local traditions. Its old houses, set in spacious grounds, are for the most part of Georgian or Colonial derivation and affinities. The prevalent atmosphere of the
place, besides taking its tone from its gracious architectural sobriety and amplitude, is distinctly domestic and distinctly rural. A bank building reminiscent of city styles, and appearing indeed to be but a city bank in small, would have been manifestly at variance with the spirit of the town. It was, therefore, plainly in order to catch and incorporate as far as possible the domestic breadth and simplicity of the environment and to preserve the intimate domestic quality that dominate the neighborhood. This has been done.

How far the architects have succeeded in doing this may be judged from these illustrations. One feature that has appreciably contributed to the desired result is the arrangement of the officers’ desks on a slightly raised platform at one side of the banking room. Here the officers are readily accessible to customers, and from here, at the same time, they can have in full view all that is going on. The scheme of furnishing, too, as may be gathered from the illustrations of the interior, has helped not a little toward the same end. The exterior is of orange-red brick with columns and trim of stone,—a tawny cream limestone marked with rusty red-brown veins, from the quarries near Mount Vernon that once belonged to George Washington and were worked by his slaves. Within the portico the walls are stuccoed and painted. The warmth of coloring in the exterior materials adds to the general air of geniality. Inside, the walls are finished with travertine, and the paving is of blue-stone flagging with a narrow band of marble to define the edge. The grilles and other items of metalwork are of wrought iron and brass in exceptionally pleasing combination. In strong contrast with the creamy travertine of the walls, the curtains are of thin sage-green stuff with orange valances, taking up the tones found in the mural painting. Much of the furniture was designed in the early American manner, the keynote of inspiration in this particular being derived from the tall-case clock which stood in the board room of the old bank, and which is cherished as a valued relic.

It will be seen that in point of style the architects have at all restricted themselves by close adherence to historic precedent. Neither have they indulged in any whimsical or flamboyant radicalism. In other words, knowing and honoring tradition, they have used the body of precedent not as a taskmaster but as a servant. By so doing they have evolved a form of expression essentially modern and vital. It will also be seen that in their liberty of interpretation they have eliminated a number of customary but not absolutely essential details, partly in order to maintain that utter simplicity compatible with the spirit of a Quaker community, and partly in order to keep down expense and apply the appropriation where it would count the most.

The focus of interior interest occurs in the decoration painted on the end wall just above the opening into the vault,—a polychrome map of New Jersey, which at once catches the eyes of everyone entering the door. This mural by Edith Emerson emphasizes the very human quality that characterizes the whole interior. Orange, yellow, green, blue, and a somewhat nondescript but agreeable sea blue-sage green hue are the prevailing colors of the composition, which is enclosed within a Greek key fret and rosette border done in yellow, brown and dull red. A narrow fillet, diagonally banded with black and white, serves to divide the conventional border from the rest of the painting and also sharpens the definition by its iterative accent. Pennsylvania, portrayed without much working out of topographical detail, appears in gradations of orange, while New Jersey,—of course the incident of major interest in the scheme,—carries more trenchant accent through its yellow field surcharge with towns and cities, railways and roads, creeks and rivers, forests, lakes, bays and sundry other natural features of one kind or another that complete its surface.

The attitude of the architects toward the craftsmen and others who assisted in realizing the interior is worthy of note. Throughout the course of operations it has been the express aim of the architects to accord generous recognition to the craftsmen and their several functions, thus eliciting their enthusiasm and insuring their best endeavors. Instead of assuming a position of czarist absolutism, the architects have welcomed suggestions, subject to their approval, and fostered the spirit of initiative and collaboration on the part of their craftsmen assistants. The results obtained have justified this policy, through the spontaneity which is everywhere observable.
MAIN FRONT, MOORESTOWN TRUST CO., MOORESTOWN, N. J.

DAVIS, DUNLAP & BARNEY, ARCHITECTS
PLAN, MOORESTOWN TRUST CO., MOORESTOWN, N. J.

DAVIS, DUNLAP & BARNEY, ARCHITECTS
ENTRANCE DETAIL, MOORESTOWN TRUST CO., MOORESTOWN, N. J.
DAVIS, DUNLAP & BARNEY, ARCHITECTS
BANKING ROOM, MOORESTOWN TRUST CO., MOORESTOWN, N. J.
DAVIS, DUNLAP & BARNEY, ARCHITECTS
ONE END OF BANKING ROOM, MOORESTOWN TRUST CO., MOORESTOWN, N. J.

DAVIS, DUNLAP & BARNEY, ARCHITECTS
THIRTEENTH CHURCH OF CHRIST SCIENTIST, LOS ANGELES

ALLISON & ALLISON, ARCHITECTS
PLAN, THIRTEENTH CHURCH OF CHRIST SCIENTIST, LOS ANGELES

ALLISON & ALLISON, ARCHITECTS
DETAIL OF PORTICO, THIRTEENTH CHURCH OF CHRIST SCIENTIST, LOS ANGELES
ALLISON & ALLISON, ARCHITECTS
ENTRANCE FOYER, THIRTEENTH CHURCH OF CHRIST SCIENTIST, LOS ANGELES
ALLISON & ALLISON, ARCHITECTS
FOYER

AUDITORIUM
THIRTEENTH CHURCH OF CHRIST SCIENTIST, LOS ANGELES
ALLISON & ALLISON, ARCHITECTS

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House of Sherley W. Morgan, Esq., Princeton, N. J.

SHERLEY W. MORGAN, Architect

T is probable that the quality and extent of an architect's ability may be best judged by work which he does for himself, even though he be sometimes restricted by location or means. Whether large or small, an architect's own house is inevitably indicative of his individual taste. The well known Princeton architect, Sherley W. Morgan, has built for himself an attractive brick house in the Georgian style. The design is marked by refinement of detail and the excellence of its proportions. The effect as a whole is both domestic and dignified. One of the successful features of the design is the one-story brick garage connected with the house by an arched passageway. The care shown in the exterior of the design has also been taken with the plan and details of the interior. The ample height of the first floor ceilings adds to the character of the principal rooms. Interior walls are painted or papered and toned.

Photos, Tebbs & Knell

House of Sherley W. Morgan, Esq., Architect

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HOUSE OF SHERLEY W. MORGAN, ESQ., ARCHITECT, PRINCETON, N. J.
ENTRANCE, HOUSE OF SHERLEY W. MORGAN, ESQ., ARCHITECT, PRINCETON, N. J.
The ARCHITECTURAL FORUM DETAILS

PLAN

DETAIL OF
ENTRANCE DOORWAY
SHERLEY W. MORGAN ARCHITECT

APR. 1927
SCALE 1:4
9 IN FEET

WOOD PILASTERS
FLASHING
STONE
REPEAT

SECTION
WROUGHT IRON RAILING

DATE

The ARCHITECTURAL FORUM DETAILS
HERE is an interesting house designed by an artist for his own use. Although simple in construction and plan and of moderate cost, this English farm house type of house shows distinction and originality in design. The treatment of the covered living porch is particularly successful, due to the use of brick, stained timbers and a sharply pitched shingle roof, which has in fact the appearance of a kitchen extension made over for use as a living porch. The combination of brick, half-timber and stucco gives a pleasant variety to the front elevation, but it makes the house seem higher than it really is. The massive center chimney, designed in the English style, adds much to the character of the composition as a whole. The main room is of sufficient size to serve as both living and dining room. The window at the right of the front door is purposely left high to permit the placing of the sideboard.
OUTLINE SPECIFICATIONS

GENERAL TYPE OF CONSTRUCTION:
Balloon frame.

EXTERIOR MATERIALS:
Stucco; brick; oak and chestnut trim.

ROOF:
Wood shingles.

WINDOWS:
Metal casements.

FLOORS:
Oak.

HEATING:
Hot water.

PLUMBING:
Standard.

INTERIOR MILLWORK:
Specially designed.

INTERIOR WALL FINISH:
Plaster; living room, hall and stairwell, trowel finish; all other rooms smooth.

INTERIOR DECORATIVE TREATMENT:
Early American.

APPROXIMATE CUBIC FOOTAGE:
21,000.

COST PER CUBIC FOOT:
67 cents.

DATE OF COMPLETION:
November, 1926.

below it. The inclusion of a maid's room and bath on the first floor off the kitchen permits the use of the entire second floor for family bedrooms and bath. The shingles of the several roofs are stained various shades and are laid in irregular lines to give texture and character. Rough plastered walls and ceiling in the living room make a pleasant contrast to stained pine boarding with which the wall between the living room and the kitchen and stairway is sheathed. The fireplace, which is hospitable in its spaciousness, is sufficiently shallow to throw out heat rather than to send it up the chimney, as is usually the case with deep fireplaces. At the foot of the stairway, which is lighted by a window opening onto the living porch, a door is placed to conserve heat in the living room and prevent down drafts, which are the common fault of stairways opening directly into a large room. Heavy oak rafters carrying the joists of the second-floor are left exposed below the rough plastered living room ceiling, a characteristic feature of early American houses. In fact, the entire design of this house, considered broadly, suggests the early architecture of this country more than it does that of England itself.
It is a far fly from Long Island to Wisconsin, where we find this interesting house somewhat suggestive of the English cottage. The use of very rough joints and crudely laid brick gives a semblance of the style of brickwork known as "skintled," so popular today in the middle west. In this case the brick are actually laid to a fairly flat surface, but the protruding mortar of the joints produces a very crude effect which pleases some architects and their clients. The character and overhang of the roof were perhaps intended to resemble the heavy thatched roofs found on some of the old English cottages. Unfortunately, necessity required the introduction of a small dormer window high up on the slope of the long roof. How many architects struggle in vain to persuade their clients to sacrifice in-
FORUM SPECIFICATION AND DATA SHEET—167
House of Dr. William A. Mowry, Madison, Wis.; Law, Law & Potter, Architects

OUTLINE SPECIFICATIONS
GENERAL TYPE OF CONSTRUCTION:
Frame construction on concrete basement walls.

EXTERIOR MATERIALS:
Common brick veneering, stucco and shingles.

ROOF:
Stained cedar shingles.

WINDOWS:
Metal casements.

FLOORS:
Oak; tile in vestibule, hall and dining room.

HEATING:
Hot water; oil burner.

PLUMBING:
Porcelain fixtures.

ELECTRICAL EQUIPMENT:
General lighting and refrigeration.

INTERIOR MILLWORK:
Pine finish, birch doors, oak stairs.

INTERIOR WALL FINISH:
Sand-finished plaster.

INTERIOR DECORATIVE TREATMENT:
Woodwork stained; walls painted on first floor; on second floor, walls tinted.

CUBIC FOOTAGE OF BUILDING:
44,000.

COST PER CUBIC FOOT:
43 cents.

YEAR OF COMPLETION:
1926.

terior light and arrangement to the picturesque quality so often secured by long, unbroken roof slopes! The plan shows a garage incorporated as part of the design of the house, the projecting walls of which do not quite meet those of the house itself at right angles. Possibly this variation from the rectangular was necessitated by topographical conditions. The plan of the first floor is compact and interesting. On the second floor there are four bedrooms, two baths and a sewing room, and many closets.
HERE is another house at Madison, Wis., designed by the architects of that just illustrated. Somewhat larger in size and covering a greater square footage, this house shows a pleasing consistency in design and treatment. The high-pitched roofs of the main house and short wing are unbroken in their long sweeps. The single chimney is well placed at the angle between the main house and the short wing; in height and size it forms the distinctive feature of the principal elevation. The height of this house and the whitewashed "skintled" brickwork give a suggestion of the picturesque in its design as well as in its setting. The plan is interesting and shows careful study to give the living room and dining room as much privacy and as pleasant an outlook as possible. To accomplish this the entrance door is placed at what would seem to be the rear of the house and close to the wall of the garage, which slopes back at an angle from the main house, probably for the purpose of giving space and dignity to the approach to the main entrance. Stained wood trim and stained shingles for the gable ends of the house afford a pleasant contrast to the very rough whitewashed brickwork. Stucco and half-timber relieve the severity of the design under some of the second story windows. The double bay window at one end of the house, seen in the accompanying illustration, is quite English in its conception. Tall but shallow, this bay is logically roofed in a typically English manner. An open terrace on which is located the veranda or living porch overlooks a lake and distant landscape. The large trees on the property add much to the interest of the house by providing a pleasant, informal note of line and color in contrast to the rather severe and austere treatment of the building itself. The plan also shows how carefully the arrangement of the rooms has been adapted to the site. Off the entrance vestibule a
Front Entrance Detail, House of William W. Cargill, Esq., Madison, Wis.

Law, Law & Potter, Architects

rear hall leads back to the kitchen and garage. A spacious coat closet and a lavatory, as well as stairs, leading to the basement, open off this rear hall. The vestibule is separated from the living room by a short stair hall at a slightly higher elevation. The large living room opens directly into the dining room beyond it, both of these rooms having double doors leading to the veranda. The second floor shows three master bedrooms and a maid’s room and shower. As there is no servant’s bathroom provided in the basement, it would seem that the bathroom adjacent to the guest room on the second floor is intended for the maid’s use also. This paucity of bathrooms is rather surprising in so large and carefully planned a house as this. The numerous jogs and angles in the plan of the second floor are unfortunate, as is also the irregular shape of the kitchen on the first floor where the pantry and storage closet materially reduce its size and determine its irregular shape. The accessibility of the garage is to be especially commended.
ROUGH-CAST plaster and a good roof determine the character of this simple design, which emphasizes the charm of unbroken roof slopes. In plan this house is practically a "bungalow," since all the principal rooms are on the first floor. Although none of the rooms are large, the plan is so arranged that all of them are of adequate size. The small dining room or "alcove" with its corner cupboards and three windows, connected with the living room by an open archway, is cozy, cheerful and hospitable. On the left of the fireplace another arch leads back to the kitchen, main stairway and bedrooms. Ample closet space is provided, and a bath is accessible from both bedrooms. Above the main part of the house are two rooms and an additional bath. Although the windows are few enough to leave large unbroken wall areas, they are sufficiently large to provide adequate light and sunshine. Even the entrance vestibule with its interesting door has a small casement window at one side. Unfortunately, neither the illustration of the house nor its plan shows exactly how the valley between the roofs of the two projecting wings of the house is treated.
### FORUM SPECIFICATION AND DATA SHEET—169

**House of Peter A. H. Voorhis, Esq., Yonkers, N. Y.; G. Howard Chamberlin, Architect**

<table>
<thead>
<tr>
<th>OUTLINE SPECIFICATIONS</th>
<th>ELECTRICAL WORK:</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL TYPE OF CONSTRUCTION:</td>
<td>House wired throughout.</td>
</tr>
<tr>
<td>Stucco on concrete blocks; light buff color.</td>
<td>INTERIOR WOODWORK:</td>
</tr>
<tr>
<td>EXTERIOR MATERIALS:</td>
<td>Oak.</td>
</tr>
<tr>
<td>Stucco walls; rough finish.</td>
<td>INTERIOR WALL FINISH:</td>
</tr>
<tr>
<td>ROOF:</td>
<td>Cement plaster on metal lath throughout.</td>
</tr>
<tr>
<td>Wood shingles.</td>
<td>INTERIOR DECORATIVE TREATMENT:</td>
</tr>
<tr>
<td>WINDOWS:</td>
<td>Cement plaster, pre-colored.</td>
</tr>
<tr>
<td>Casements, steel cottage type.</td>
<td>APPROXIMATE CUBIC FOOTAGE:</td>
</tr>
<tr>
<td>FLOORS:</td>
<td>28,851.</td>
</tr>
<tr>
<td>Double floors.</td>
<td>COST PER CUBIC FOOT:</td>
</tr>
<tr>
<td>HEATING:</td>
<td>44-8/10 cents.</td>
</tr>
<tr>
<td>Hot water.</td>
<td>DATE OF COMPLETION:</td>
</tr>
<tr>
<td>PLUMBING:</td>
<td>March, 1926.</td>
</tr>
<tr>
<td>Brass water pipes.</td>
<td></td>
</tr>
</tbody>
</table>

This arrangement of one gable projecting beyond another is quite common in England, where snow is rare, but is seldom practical in the northern states of this country. Possibly there is a sloping jib or transverse ridge which prevents snow from piling up between the roofs of these two wings. Otherwise, the accumulation of snow in these areas would injure the roofing and flashing and cause leakage.

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*Living Room, House of Peter A. H. Voorhis, Esq., Yonkers, N. Y.*

G. Howard Chamberlin, Architect
Some of the chief characteristics of English cottage architecture, such as brick window sills, rough stone for the trim around the entrance door, rough-cast stucco and half-timber work, are found in the design of this house at Scarsdale. The high center gable with its long sloping roof successfully breaks the horizontal lines of the main part of the house. Half-timber work, which appears at only one point on the front elevation, might well have been repeated in the gable end of the living porch wing, which seems to need some more definite break between the stonework of the first story and the rough stucco of the gable above. The rough stonework around and adjacent to the entrance door might have been continued across the front of the center bay, thus serving to make a better tie between the stone walls of the living porch and the entrance door of the house. The purpose of this scattered use of stone was undoubtedly to give a picturesque quality to the walls of the house. The massive main chimney is logically placed at the point where the low roof of the living porch joins the long slope of the roof of the main house. The well thought out plan shows no waste space and no unattractive jogs or angles in any of the rooms. The projection into the living porch of the main chimney is naturally unavoidable. Although not unusual, the plan is convenient and compact. The coat closet and lavatory adjacent to the entrance hall are conveniences which should never be omitted in even the smallest houses. Three bedrooms, two baths and several large closets, as well as an ample sleeping porch make up the plan of the second floor. As a whole, the design shows originality and distinctive character.
### OUTLINE SPECIFICATIONS

**GENERAL TYPE OF CONSTRUCTION:**  
Wood frame.

**EXTERIOR MATERIALS:**  
Stucco on metal lath; brick and stone.

**ROOF:**  
Slate.

**WINDOWS:**  
Metal casements.

**FLOORS:**  
Oak and pine.

**HEATING:**  
Steam.

**PLUMBING:**  
Brass pipe, porcelain and enameled fixtures.

### ELECTRICAL EQUIPMENT:

**Lighting fixtures.**

### INTERIOR MILLWORK:

**Chestnut and pine.**

### INTERIOR WALL FINISH:

**Plaster.**

**INTERIOR DECORATIVE TREATMENT:**  
Main rooms, rough, antique-finished plaster.

### APPROXIMATE CUBIC FOOTAGE:

37,500.

### COST PER CUBIC FOOT:

48 cents.

### DATE OF COMPLETION:

April, 1925.
THIS house illustrates the possibility of relieving the bleak severity of a rectangular brick house by means of a dominant architectural feature. In this instance, a slightly projecting gable faced with stucco and half-timber and supported on heavy wooden brackets gives a certain importance to an otherwise stereotyped design. The spacing and paucity of the windows provide excellent wall surfaces, which always add architectural character to houses large or small. The care taken in the detail of the entrance door also indicates an effort to provide a few distinctive notes in an otherwise necessarily severe design. As in the plan of other houses here discussed, an arrangement of rooms is found in which there is no waste space, and the living porch is accessible from both the living room and the dining room. As is logical in small houses, a pantry between dining room and kitchen is omitted. The kitchen is of adequate size and is well lighted and ventilated by windows on opposite walls. The rear entry is large enough to accommodate not only an ice box and broom closet but also two laundry trays;
FORUM SPECIFICATION AND DATA SHEET—171
House in Westchester County, N. Y.; George Fulton, Jr., Architect

OUTLINE SPECIFICATIONS

GENERAL TYPE OF CONSTRUCTION:
Brick walls; wood framing.

EXTERIOR MATERIALS:
Brick; cypress trim; stucco on metal lath.

ROOF:
Slate, variegated.

WINDOWS:
Double-hung; wood.

FLOORS:
Oak in main rooms.

PLUMBING:
Fixtures enameled iron and porcelain.

ELECTRICAL EQUIPMENT:
Lighting fixtures.

INTERIOR WALL FINISH:
Plaster painted or specially finished.

INTERIOR DECORATIVE TREATMENT:
Bedrooms painted; painted trim throughout.

APPROXIMATE CUBIC FOOTAGE:
51,800.

COST PER CUBIC FOOT:
40 cents.

DATE OF COMPLETION:
November, 1925.

this is a better location for them than the kitchen itself. The cellar below and the maid's room and bath above are directly accessible from the kitchen by means of stairs located at one corner of the kitchen wing. The second floor, which is equally well planned, has four corner rooms of adequate sizes, good closet space, and two bathrooms. It might be suggested that a door connecting the maid's room with the main part of the house on the second floor might be desirable and convenient. Careful study of these plans indicates that this is an ideal layout for a small house, particularly in the suburbs.
HOUSE OF CHARLES H. CUNO, ESQ., MERIDEN, CONN.
FRANK J. FORSTER, ARCHITECT

IT is always a privilege to publish illustrations and plans of any house by this talented architect, of whose work anything but favorable criticism is seldom justifiable. Much of the charm of an old English house is suggested in this interesting design. The long, sloping pitch of the unbroken roof gives the necessary informal note to the design. The massive chimney with its double top breaks the design at the right place, balancing in a measure the projecting and overhanging gable at one end of the house. The low, one-story entrance porch which fills in the space between the chimney and the projecting bay has a roof similar in pitch and covering to the main roof above. The brickwork of this porch is skillfully tied in with the rough stonework of the main chimney, the character and quality of which might well be studied and copied by designers of houses supposedly following English precedent. The average size of the stones
FORUM SPECIFICATION AND DATA SHEET—172
House of Charles H. Cuno, Esq., Meriden, Conn.; Frank J. Forster, Architect

OUTLINE SPECIFICATIONS

GENERAL TYPE OF CONSTRUCTION:
Frame on concrete foundations; stone front wall.

EXTERIOR MATERIALS:
Brick veneer of selected common brick; stucco on wire lath; oak timber and half-timber; chimney and terrace wall of rubble.

ROOF:
Slate.

WINDOWS:
Metal casements.

FLOORS:
Random width oak floors in first story; 2\(\frac{1}{4}\)\(\text{ inch oak floors in second story; pine in service portion; cork tile in kitchen.}

PLUMBING:
Galvanized wrought iron pipe.

ELECTRICAL EQUIPMENT:
Special wrought iron lighting fixtures.

INTERIOR MILLWORK:
Oak; no trim at doors; oak doors, stairs, mantel and living room paneling.

INTERIOR WALL FINISH:
Smooth brown coat plaster in first story.

INTERIOR DECORATIVE TREATMENT:
Woodwork stained and waxed in oak rooms; woodwork painted elsewhere.

APPROXIMATE CUBIC FOOTAGE:
30,000.

used is in perfect scale with the brickwork and rough slates. The apparent length of the house is considerably increased by the several horizontal lines of overhanging eaves. Particularly is this true on account of the successful way the roof of the living porch extension has been made a part and continuation of the main roof of the house. Another detail showing the great care and thought exercised in this design is the low chimney which breaks the ridge of the main roof. Instead of constructing this chimney of rough stone or brick, as might have been done, stucco has been used to make it lighter and less important in effect. The plan is as convenient and consistent as the exterior is homelike. The stair hall separates the large living room from the dining room and kitchen. The covered living porch as well as one corner of the living room opens upon an open paved terrace at the rear. As the house is located near the highroad, this paved terrace provides the necessary privacy and seclusion. The servants also have a spacious porch back of the kitchen. Although the house is irregular in outline, the three master bedrooms on the second floor are all rectangular and devoid of breaks and angles. There is one large master's bath, located near the center of the second floor, and another bath between the smallest bedroom and the maid's room. As this bath connects with both rooms, it is possible for the maid's room to be used for a nurserymaid or governess and the bedroom as a nursery. The high pitch of the roof makes it quite possible for additional bedrooms to be placed in the gable ends of the third floor, if necessary.
THIS house at Great Neck is such a good example of the combination of simplicity of plan and originality of elevation that it seems desirable to include it in this group. The use of rough plaster, which relieves the monotony of too much brick wall surface, is satisfactory and successful. Even the dormers on the rear slope of the roof above the kitchen extension are so well proportioned and designed that they add to rather than detract from the artistic quality of the house. As usual in Mr. Forster's work, the tall chimneys which are dominant notes in this design are so well placed and so carefully balanced that they are perhaps the most important feature of the exterior. The brick walls with their studied texture and roughness are even more beautiful in reality than in the illustrations, from which, unfortunately, no idea of their color can be obtained. Another consistent and logical detail is the use of rough plaster in the jib formed by the top of the living porch and the low sloping continuation of the high hip roof. Although this jib is practically a continuation of the front facade, it is neither good construction nor pleasing in effect when brick is used for wall surfaces supported by wood beams over open spaces. The same logical use of stucco is found in the rear elevation, and in the sleeping porch above the pantry. The variety and proportions of the several well placed windows add much to the effectiveness of the design. At the rear of the house an open terrace permits an uninterrupted view of the distant landscape. The plan is straightforward and well balanced, having a cen-
House of Mrs. Grace M. Burnham, Great Neck, N. Y.; Frank J. Forster, Architect

OUTLINE SPECIFICATIONS

GENERAL TYPE OF CONSTRUCTION:
Frame construction on concrete foundations.

EXTERIOR MATERIALS:
Common brick veneer; stucco on wire lath; cypress, solid and half-timber.

ROOF:
Slate.

WINDOWS:
Wood sash; part double-hung; part casements.

FLOORS:
Pine, random widths.

PLUMBING:
Galvanized wrought iron pipe.

INTERIOR MILLWORK:
Oak; no trim at doors; oak doors, stairs, and mantel.

INTERIOR WALL FINISH:
Rough plaster in main first story rooms; white coat plaster elsewhere.

INTERIOR DECORATIVE TREATMENT:
Woodwork stained and waxed in oak rooms; painted elsewhere; white coat plaster painted; quarry tile floor in hall.

APPROXIMATE CUBIC FOOTAGE:
37,000.

The interior hall with living room and dining room on opposite sides. The kitchen, pantry and garage are in a wing by themselves. Although actually built into this service wing, the garage has no direct connection with the house itself but is approached through an open porch at the rear of the kitchen. A lavatory and coat closet, which are always essential features of a well planned house, connect with the main stair hall on the first floor. The second floor has a large master's bedroom, dressing room and sleeping porch, which occupy one entire side of the house. A second bath and sleeping porch are connected with another large bedroom. The second floor of the service wing contains two servants' bedrooms and a bath. The plan of the second floor is sufficiently individual to indicate that the house was designed for a family without children, which observation brings out the fact that every successful house is planned to meet the requirements of the household which will occupy it, a fact well demonstrated here.
The charming little Empire library of this hotel has already been presented in this series of articles. The subject of this study, a room of exceeding dignity and fine proportions, formerly served as the dining room. In design it is a curious mingling of the work of two different periods. The double doors on either side, with their bold ornamental mouldings and heavy, decorated architraves, are of the Louis XIV epoch, while the over-panels of the doors with their bold and yet delicately designed and executed swags and plaques are distinctly Louis XVI. The niches, which are the predominant features of the room on either side, very refined in design and detail, are also Louis XVI. The detail of the supporting brackets and of the modillions of the cornice and pediments of these niches is exquisite and should be particularly noted. The well spaced and proportioned panels of the room are also Louis XVI. The cornice, however, bold and vigorous and profusely decorated in free and almost crudely executed detail, is Louis XIV in design, as is also the series of mouldings occurring at the junction of the cove and ceiling. The extreme height given to the room by the addition of the cove adds greatly to its dignity. The room is executed in plaster and marbleized in pinkish yellow with mauve, gray and red veins.
DEVELOPED GS PE
DETAIL AT "B" SEC. 17

SEC. 4

DETAIL AT "C"

SEC. 5

SEC. 6

SEC. 7

"D"

SEC. 8

SEC. 9

SEC. 19

1/2 FULL SIZE DETAILS
SALLE A. MANGER
HOTEL DE CHAULNES
PARIS

DETAIL AT "D"
SALLE A MANGER
HOTEL DE CHAULNES
PARIS

ELEVATION AT "N"

SIDE VIEW

1/2 FULL SIZE DETAILS

1/6 FULL SIZE DETAILS