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## THE BROCHURE SERIES IN 1903: ANNOUNCEMENT

$T$
O prepare any full Prospectus for a magazine of the character of $\mathrm{T}_{\mathrm{He}} \mathrm{B}$ воchure Series is, of course, impossible; but a brief mention of the articles planned for early numbers of the 1903 Volume (which, from the material already in hand, the editor believes will prove exceptionally valuable) may be of interest.

- A A MONG SUBYECTS FOR EARLT NUMBERS may be named some very charming examples of Village Churches and Farmhouses of Normandy; a group of little known specimens of English Half-Timber Houses; and a number of the specimens of English Rural Cottages that afford so much picturesque suggestion for small country houses.
- A AMERICAN COLONIAL ARCHITECTURE is to be considered in several articles, all illustrating uncommon subjects, such as the excellent Early Colonial Vildage Churches; the Work of Charles Bulfinch; and a series of papers dealing with some of the most notable individual Colonial Mansions of America, their surroundings and rooms.
- INTERIORS of unusual suggestive value will be illustrated in papers on the Italian Rooms as Depicted by the Early Italian Painters; some rarely photographed English Domestic Interiors of the best periods; another charming group of the unique Interiors of the Tyrol; and many examples of the treatment of interior decorative detail in various styles.
© MORE HISTORICAL SUBYECTS will be the great Cathedrals of Spain; some unusual views of that almost "unphotographable" building, the Taj Mahal at Agra, India; the Abbeys of England; the great Roman Monuments at Nimes and Arles in France, and many others.
C. OTHER ARTICLES which the editor hopes to present in early numbers will treat of the Italian Brick and Terra-cotta Romanesque, a style which has proved so well adapted to American conditions; and of the smaller and comparatively unknowon French Chateaux. Italian Fountains will be very copiously illustrated, and there will be presented some charmingly picturesque views in the Villages of South France and North Italy; etc.
-1. THE COMPETITIONS in which The Brochure's subscribers manifest so lively an interest will be continued into the 1903 Volume.
© THE GENERAL PLAN of the magazine will be, as heretofore, to present adequate photographic illustrations, with descriptions, of the world's best examples of architecture, decoration and ornamental detail. The range of subjects will be wide; but it will be the editor's endeavor to include, among the nearly four hundred illustrations which the Forthcoming Volume will contain, none that is not worthy of preservation in such a library of standard architectural illustration as The Brochure's past volumes have become.


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## for 1903

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DETAILS OF
GREEK DECORATIVE SCULPTURE


# The Brochure Series 

OF ARCHITECTURAL ILLUSTRATION

VOL. 9
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NO. 1

# THE TAJ MEHAL 

AGRA, INDIA

AS has, necessarily, been several times repeated in these columns, Mohammedan architecture has no such individuality and homogeneity as have the other recognized architectural styles. It was rather an assimilation than an impetus. Neither the Arabs who conquered the shores of the Mediterranean, nor the Osmanli Turks, nor the Monguls who overran Persia and India, were essentially artistic or building races. They were religious fanatics, who enforced their doctrines by the sword, and who left the building of their necessary shrines and temples pretty much in the hands of their newly conquered subjects, who naturally continued to build at first much as they had built before their conversion, merely adapting their old styles to the uses of their new religion. But in the course of time the common Mohammedan influence produced a certain uniformity, and evolved certain traits and aptitudes in design which gave the developed Mohammedan art a form and spirit wholly unlike the arts upon which it had been founded, and thus makes it possible to group under the general heading of " Moslem" two buildings so widely different in aspect as the Alhambra of Granada in Spain and the Taj Mehal at Agra in India.
In India the Moslem style was derived almost directly from the Moslem archi-
tecture of Persia, which, in its turn, had been profoundly influenced by the remaining palaces of the great Sassanian empire, that from 226 to 641 had defied the power of Rome. To trace the gradual combination of these various influences and their culmination in the pearl of Indian architecture, the Taj Mehal (which has been pronounced by many writers, even with the Parthenon in mind, the most beautiful building in the world), would transgress the limits of the present paper. Suffice it, then, to briefly summarize, in the words of Professor Hamlin, the distinctive characteristics of the Mohammedan monuments of India.
"The Mohammedan monuments of India," he writes, "are characterized by a grandeur and amplitude of disposition, a symmetry and monumental dignity of design which distinguishes them widely from the picturesque, but sometimes trivial, buildings of the Arabs and the Moors. Less dependent on color than the Moorish or Persian structures, they are usually built of marble or of marble and sandstone, giving them an air of permanence and solidity wanting in other Moslem styles except the Turkish. The dome, the round minaret, the pointed arch and the colossal portal-arch are universal, as in Persia, and enameled tiles are also used, but chiefly for interior


THE TAJ MEHAL


decoration. Externally the more dignified if less resplendent decoration of surface carving is used, in patterns of minute and graceful scrolls, leaf forms and Arabic inscriptions covering large surfaces. The Arabic stalactite pendentive star-paneling and geometrical interlace are rarely if ever seen. The dome on the square plan is almost universal, but neither the Byzantine nor the Arabic pendentive is used, striking and original combinations
in the year 1630 by Shah Jehan, the founder of the present city of Delhi, the builder of the celebrated Peacock Throne and of the Pearl Mosque at Agra, during whose reign the Mogul empire attained its greatest magnificence. Begun as a pleasure palace, it was, after the death of the Shah's favorite wife, the Begum Mumtaz-i-Mehal, dedicated to her as a memorial mausoleum. Tavernier, in his "Travels,' states that twenty thousand workmen

of vaulting surfaces, of corner squinches, of corbelling and ribs, being used in its place . . . . The Jumma Musjid, the tomb of Mahmud, both at Bijapur, and the Taj Mehal at Agra, not only deserve the first rank among Indian monuments, but in constructive science combined with noble proportions and exquisite beauty, are hardly, if at all, surpassed by the greatest triumphs of western art."

The Taj Mehal, the name of which signifies "Gem of Buildings," was begun
were employed on the Taj for twentytwo years. All India furnished its materials. The marble, of which it is mainly constructed, came from one province, the sandstone from another. The Punjab sent its jasper; Ceylon gave sapphires and lapis-lazuli; and agate. onyx, turquoises and carnelians came from Thibet, Persia and Arabia. All the spandrels of the Taj, all the angles and more important architectural details, are heightened by being inlaid

with precious stones, combined in flowers, wreaths, scrolls and frets, as exquisite in design as they are beautiful in color; and relieved against the pure white marble in which they are inlaid they form the most beautiful and precious style of ornament ever adopted in architecture. Yet, rich as it is in detail, such is the care with which this ornament is dispersed, and such the homogeneity and balance of the general composition, the majesty of the design and the harmony of the setting, that the Taj, the Parthenon of Mohammedan architecture, makes at first glance but one unified impression - that of a white aërial vision of almost unearthly beauty.
The traveler approaches the Taj through a noble red sandstone gateway, inlaid with marble and engraved above the arch with the Arabian text, "None shall enter the Garden of God but the pure of Heart," which admits him to the great walled garden of nearly forty acres which enshrines the building; and having passed this gateway he sees at the end of an avenue, which stretches, broad and straight, away from his feet for nearly nine hundred yards, the Taj:
" A palace lifting to eternal summer,
" Its marble halls from out a glossy bower
" Of coolest foliage, musical with birds."
It stands on a raised platform, faced with marble, eight hundred feet square. At each corner of this platform rises a minaret of exquisite proportions. In the center, flanked on the east and west by graceful mosques, stands the mausoleum itself,- of purest white marble, one hundred and eighty-six feet square, with truncated corners, dominated by its great bulb dome, which is echoed by the smaller domes on the corner chapels
"At the back of a marvelous garden," writes M. André Chevrillon, "with all of its whiteness reflected in a canal of dark water, sleeping inertly among thick masses of black cypress and great clumps of red flowers, the perfect tomb rises like a calm apparition. It is a floating dream, an aërial form without weight, so perfect is the balance of the
lines, and so pale, so delicate the shadows that float across the virginal and translucent stone. The black cypresses which frame it, the verdure, the sward bathed in brilliant sunlight across which lie the sharp-cut silhouettes of the trees - all these real objects render but more unreal the delicate vision which seems to melt away in the radiance of the sky. As you walk towards it along the marble bank of the dark canal, the mausoleum assumes sharper form, and you find an increased source of delight in the beauty of its surface, where the light rests with a soft, milky splendor. One could never imagine that so simple a thing as surface could be so beautiful
" The garden complements the effect of the monument. The white marble pavements which lead to the Taj border canals of water, from which scores of fountains rise like silver sprays; lilies and lotus flowers dream on the dark mirror of their surfaces, and goldfish glint like jewels in their depths. These canals are bordered by the sombre greens of yews and cypresses. These stiff and sombre trees, with their trunks half buried in masses of roses, are surrounded by clusters of a thousand unknown and sweet-scented flowers which give light and joy to the silent solemnity of the whole, which unites the amorous and religious delights of the Mussulman paradise,- a poem in trees and flowers and marble.
" The interior of the mausoleum is at first as dark as night, but through this darkness you see, faintly gleaming, a grille of marble, a mysterious screen of marble-lace, showing faintly luminous in the golden dusk, which enfolds the tombs in which lie Shah Jehan and his wife.

Everything is aërial. Even sounds are unearthly. A note sung under the vault is echoed in the invisible hollow of the dome, first as clearly as the voice of Ariel, then growing fainter and fainter until it dies away to be echoed and reëchoed far above, until all is lost save a faint murmur which seems never to cease."
A. M. N



## DETAILS OF

## GREEK DECORATIVE SCULPTURE

THE Greeks, without question, trained their faculties of perception to a higher degree of perfection in discriminating the refinements of form and line than have any other nation. The delicacy of this discrimination is truly astounding when we consider the accuracy and skill displayed by the builders of the Parthenon. Nearly half a century ago, when the refinements of this building had just been brought to light through the investigations of Penrose and Cockerell, Fergusson called attention to the wonderfuk system upon
which the proportions of Greek temples were based. "Though," he says, "the existence of such a system of ratios has long been suspected, it is only recently that any measurements of Greek temples have been made with sufficient accuracy to enable the matter to be properly investigated and their accuracy proved.
"The ratios are in some instances so recondite, and the correlation of the parts at first sight so apparently remote, that many would be inclined to believe they were more fanciful than real. It


would, however, be as reasonable in a person with no ear, or no musical education, to object to the enjoyment of a complicated concerted piece of music experienced by those differently situated, or to declare that the pain musicians feel from a false note was mere affectation. The eyes of the Greeks were as perfectly educated as our ears. They could appreciate harmonies which are lost in us, and were offended at false quantities which our duller senses fail
to perceive. But in spite of ourselves, we do feel the beauty of these harmonic relations, though we hardly know why; and if educated to them, we might acquire what might almost be considered a new sense. Be this as it may, there can be no doubt but that a great deal of the beauty which all feel in contemplating the architectural productions of the Greeks, arises from causes such as these, which we are only now beginningto appreciate."

It is hardly necessary here to go deeply into the investigations which have disclosed the system of proportions and the exquisite refinements to which Fergusson refers, nor need we stop to trace the development of the Greek orders of architecture or to make an exhaustive analysis of them. These questions will be found fully discussed in special monographs and in the architectural histories and manuals of design; but in order to understand the character of the different ornamental forms employed, one should, at least, have a general idea of the system of proportions and refinements, a clear conception of the orders, and of the local conditions of climate and materials, besides a knowledge of the purpose of the buildings upon which the ornament was employed. Furthermore, the use of applied color had an important influence upon the
effect of plastic ornament, and must be taken into account in examining the subject as a whole.

The general arrangement and main features of Greek temples have already been described in previous numbers of The Brochure Series, where may also be found descriptions of the peculiar atmospheric conditions,- the clear, bright, but mellow light, and intensely blue sky, - which played so important a part in the general effect of Greek architecture, and influenced the development of its forms.

The beautiful softness and fine texture of the Pentelic marble used in the Athenian buildings upon the Acropolis made possible a refinement of execution which would have been out of the question in a coarser material. Together with these conditions we should bear in mind the concentration of artistic effort


CORINTHIAN CAPITAL
ELEUSIS

upon the development of a type of buildings which had become conventional and fixed, reaching its climax in the age of Pericles, when literature and all the arts had been brought to a marvelous degree of perfection, when the Athenians, at the close of the Persian wars, were rich and prosperous, levying tribute upon the whole eastern world.

To the Greek temple, the most perfect type of Greek buildings, we naturally turn to study Greek architecture. Here, in fact, we find a complete organism, the highest expression of the art, in which architects, painters and sculptors worked together to beautify the dwelling-place of the god, and make a harmonious whole, the unity of which is the result of the most definite rules.

These rules are not, however, the rigid formulas of the engineer, who might assume as the ideal of refinement that a straight line should be mathematically straight, that two parallel surfaces or lines should be actually parallel, and that horizontal and vertical lines should be exactly what they seem to be. The ideal of the Greeks was subtle, elastic and virile, but no less exact and minute than that of the engineer, corrected and perfected by means which we can now only infer from the works they have left us. Instead of mathematically straight or curved lines, and exactly vertical or
horizontal ones, we find the most subtle variations, so delicate, and often so minute, as to escape observation until detected by the most careful measurements. They are, in fact, so slight as to be imperceptible upon an architect's scale drawing.

In 1756 Stuart and Revett measured the Parthenon, and the other classic buildings of Athens, but never even suspected the existence of these refinements; and Lord Elgin, when he removed the sculptures of the Parthenon failed to discover them. Not until i8io was the entasis of the columns revealed by Cockerell; and Pennethorne in 1837 first discovered the curve in the steps. Later investigators have found that everywhere throughout this building the most surprising refinements and variations from mathematical rules have been employed. The main lines, though apparently horizontal, are all curved upward in the center; the side walls are slightly battered, while door-jambs and pilasters lean forward; the columns all lean inward, and no two adjacent ones are of equal diameter or spaced equally apart, and the abaci of those adjoining vary in size; no adjacent metopes are of the same size; the faces of the entablature are rarely vertical, the architrave, frieze and tympanum leaning backward


PILASTER CAPITAL
ATHENS


CORINTHIAN CAPITALS
ATHENS
and antelixes and faces of fillets, even the smaller ones, leaning forward.

This variation from mathematical exactitude is carried into all the details, and is evident even in the smaller ornamental forms. Here we are accustomed to look for and expect it, for in recent times we have learned to distinguish between the mechanical repetition of machine-made ornament and the craftsman's hand-work with all its accidental
irregularities. We find interest in the slight variations from uniformity which cannot be avoided even by the most skilful workman, and tire of the monotonous repetition of the machine. In the smaller details of Greek ornament, although the work is finished with the minuteness of jewelry, forms are rarely repeated with exactness, the opposite sides of an anthemion are not duplicated, one turn of a scroll will be a trifle

larger than its neighbor, and the continuity of line will frequently be broken even in the most perfectly finished work. The curves are never, even by accident, arcs of circles or conic sections. All this tends to give life and animation even to the smallest or most trivial details.

Architecture in all countries is influenced by the local building materials. Thus we see in Greece that an early wooden construction has left its impress
indelibly stamped upon the temple through all its forms from first to last. The stone entablature with its divisions of epistyle, frieze and cornice, although much modified to suit the new material, still retains the characteristic divisions and many of the minor forms of wooden roofs. This derivation of the classic orders has become a familiar commonplace to all students of architecture; it, however, explains many of the forms which would otherwise be meaningless.


IONIC CAPITAL

The Greeks, especially in the later periods, displayed extraordinary skill in the use of stone, both as builders and as sculptors. Their masonry was laid with extremely close joints, without cement, and was often strengthened by
not difficult to trace the influence of these various materials, even in the highly perfected work of the time of Pericles.

The natural distribution of enrichment upon a building has led to concen-


HONEYSUCKLE AND EGG-AND-DART ORNAMENT
ATHENS
metal clamps. In the earlier work rough stone was covered with a coat of fine stucco and enriched with painted ornament, which permitted the most delicate manipulation and refinement; while terra-cotta and gilded bronze were employed for applied ornament. It is
tration at certain points, and the use of moldings at the divisions between one member and another, or one surface and another; in other words, at the joints or articulations. This is preëminently the case in the Greek temples. As a whole the ornament is massed upon the



ACROTERIUM
ATHENS
upper part of the building, the pediment, the entablature and the walls. Here, at the junction of wall and ceiling, is the frieze of the cella wall, and at the top of the column its capital, emphasizing the change from vertical to horizontal; and the moldings dividing the entablature are placed where there is a change of direction or projection. As a result such enrichment has the maximum effect through the play of light and shade upon it, brilliantly lighted in the extreme projections and deeply shaded in the retreating parts. Thus, in addition to the important sculptured decorations which filled the tympanum of the pediment, and in Doric temples the metopes of the frieze, the cymatium, or upper member of the cornice was ornamented with lions' heads which served as outlets for rainwater, and was crowned by antefixes terminating the ribs of the roof tiles. The corners and apex of the pediment were ornamented with acroteria or pedestals supporting figures, sphynxes, vases, tripods, victories or lions. In every case the ornament was so placed as to tell to best advantage in the ensemble and in detail.

The idea that painted decoration could be applied to Greek temples was long opposed as unworthy of Greek art, and has not been admitted without violent contention. The main facts are now, however, beyond dispute ; the only doubt remaining is as to the extent to which this form of decoration was carried.

In early work, when stone and stucco were used instead of marble, the use of color was more general and the colors stronger than in later times, when carved ornament of extreme delicacy was employed. In the archaic Doric temples, such as that of Egina, strong red, blue, green and yellow in flat tones was applied to the stucco covering of the stone construction, and ornaments of gilded bronze added further enrichment. When the proportions of the temples became more elegant, marble was substituted for stone, the workmanship was more refined, and colors were applied with more reserve; while in the Ionic order the polychromy was probably scarcely more than tinting used to accent and bring out the forms. As Collignon has said, "How could the delicate tracery, the exquisite chiseling of the marble, which runs like lace-work over the neck of the capital and upon


EGG-AND-DART DETAIL
ATHENS

the abacus, be covered by a coating of color? The color ought only to relieve it by giving value to the whiteness of the marble in high light, and by adding to the strong tones of red and blue the sparkle of gold.'

Upon the Ionic order two colors, red
and blue, were most employed. The first was reserved for backgrounds and parts in shadow, which were thus intensified by the depth of color. Sometimes red was used to outline the darts of the tongue-and-dart or egg-and-dart moldings Blue, on the other hand, was em-


ployed for the lighter parts, upon the retreating surface of the egg in the egg-and-dart, while the projecting surface was left white. By this means a quiet but pleasing harmony was obtained, with warm and transparent shadows, blue softened by the brightness of the sun, while the fine chiseling and sharpness of modeling was kept in all the purity of the bright white marble.

The decorative motives employed by the Greeks are comparatively few and simple. In moldings the fillet, facia and channel, the torus or astragal, the cavetto, the echinus and the cyma or
bird's beak, with their variations and enrichments furnishes all that were required. For ornamenting these moldings and the plane surfaces between them, frets, guilloches, the wave ornament, egg-and-dart, tongue-and-dart, pearl or bead-and-reel, and the anthemion and acanthus ornaments were the main motives.

The form, number and disposition of moldings varied with the orders, and their character and effect was governed by their projection and the beauty of their profiles and ornamentation.

Frets were used upon facias, soffits,



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architraves, and in general upon plane surfaces; the guilloche upon the torus and upon architraves or facias; the egg-and-dart upon the echinus; and the anthemion, tongue-and-dart and acanthus upon cymas. The anthemion, or honeysuckle or palmette, is especially associated with the Ionic capital and with the ornament upon antefixes, although frequently employed elsewhere. When used as the enrichment upon a horizontal band it is frequently made
up of two alternating units growing from a base of connecting scrolls. It is, perhaps, withal the most highly developed and the most perfect decorative motive in existence. In all these minor ornaments and in every part of them are seen evidences of the same exquisite fineness of perception, rare judgment, vigor and skill in execution, which mark the matchless sculptures of the Parthenon and hold us spellbound by their beauty.
I. M. BELLOWS.


F. Wheeler Dow, Architect, Wyoming, N.7.

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## Brochure

## Competition Announcements

## Competition Y <br> CLOSES FEBRUARY 15, 1903

SUBJECT: A Headstone for a grave, to be executed in stone. Inscription to be indicated.
To be shown by a drawing in pen and ink, pencil, or wash, at the option of the competitor.

Award to be announced in The Brochure Series for March, 1903.

First Prize, $\$ 10.00$ in gold Second Prize, $\$ 5.00$ in gold Prizes offered by The Brochure Series.

## Competition Z

CLOSES APRIL 15, 1903
SUBJECT: A Log-Cabin Shooting Lodge for a Camp. To comprise a gun-room, kitchen, two sleeping rooms and a piazza. Plan and Exterior Perspective to be shown on the same sheet. Pen and black ink drawing only.

Award to be announced in The Brochure Series for May, 1903.

First Prize, $\$ 10.00$ in gold Second Prize, $\$ 5.00$ in gold
Prizes offered by The Brochure Series.

## Rules Governing Competitions

1. All drawings, unless otherwise stipulated in the conditions, must be in pen and black ink (neither pencil nor wash drawings will be considered) and on white paper or cardboard measuring 8 by io inches.
2. All drawings must be addressed, "Editor The Brochure Series (Competition), 42 Chauncy Street, Boston, Mass.," and must be received on or before the date set above for the close of the contest in which they are entered.
3. Each drawing to be signed by a pseudonym (not a device) only, the name and address of the competitor to be sent in an envelope, bearing on the outside the pseudonym only, and enclosed with the drawing. These envelopes will not be opened until after the award has been made.
4. Each drawing to be packed flat, not rolled.
5. The Editor reserves the right to publish any of the designs submitted. Drawings will be returned only when accompanied by sufficient return postage, enclosed in the envelope with the competitor's name.
6. Although open to all, whether subscribers to the Brochure Series or not, these competitions are held chiefly in the interest of the subscribers to the magazine, and therefore the prizes will be paid only to competitors whose names are on the subscription books of the Series at the closing of the competition If the best designs are the work of non-subscribers the fact will be so noted in the award, and the designs printed; but the prizes will be paid to those subscribers whose designs stand next in order of merit.

Brochure Series Competition W

## A Sign-post and Horse Trough

ANNOUNCEMENT OF THE AWART

THE problem set for Competition W was a combined sign-post and horse trough to stand in the middle of a village square This was to be executed in stone, wood and wrought-iron. The sign-post was to point the roads to four outlying towns.

The prize designs are printed herewith. The first prize was awarded to Mr, Robert W. Snyder, Scranton, Pa.; the second prize was awarded to Mr. Alfonso Mitterhausen, Milwaukee. Wis.


First Prize Design by Mr. Robert W. Snyder, Scranton, Pa.

Aside from the artistic quality of the design, the practical points to be borne in mind in solving this problem were, first, its suitability for use in a village (a consideration which would naturally prevent any very elaborate or expensive scheme) ; second, that in properly fulfilling its function, the sign-post should be capable of displaying its four signs so that they should be plainly legible, and might be read from as many view-points as possible; third, that the horse trough should be so constructed as to be easy of approach from various directions, unobstructed, so that a pair of horses might be watered together, and low enough in curb so that the pole of a harnessed pair would not prevent their access to the water. Although not specified in the state-


[THE buillder]

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Second Prize Design by Mr. Alfonso Mitterhausen, Milwaukee, Wis.
ment of the problem, a light so arranged as to make the signs legible at night would prove a practical advantage.

The most general criticism to be made on the designs submitted when considered as a whole is, that the first of the points named above was not sufficiently kept in mind. Too many of the drawings showed constructions so monumental in character as to be appropriate only for the most important city squares, and there were few out of the number submitted which were wholly appropriate to average village surroundings. Another general point of criticism is, that in perhaps the majority of the designs, the signs themselves were not large enough, or were so placed as to be readable only from a few standpoints.


Mentions in this competition are awarded to the designs of "Rambler," "Indigo Bones (2)," "Cross-roads," " Corneville,". "D D502 " "Meteor," and "Dolce far niente"

The announcement of Competition Y, for a design for a headstone, which closes on February ${ }_{15}$, is repeated in this issue; and Competition $Z$, for the design of a log-cabin shooting lodge, which closes on April 15 , is set for the first time. The award in Competition X, for the design of a Colonial church spire, will be printed in the next issue.

> Notes

The Chicago Varnish Co. is placing in the market a new preparation called Weathered Oak Wood-tint, one coat of which, applied upon the unfilled oak will give a weathered oak finish of great beauty. This new preparation is an Oil-Varnish Stain of remarkable properties, giving a perfectly dead finish of unrivaled beauty, and at a very small labor expense. The Stain is simply brushed upon the oak, and no other material or labor is necessary, as it dries hard in 24 hours, giving a durable finish which shows great resistance to water. It brings out all the beauty of the grain, and shows all the coloring that is seen in oak after it has been long exposed to the weather. If a slightly glossy effect is desired, a light coat of Liquid Wax can be applied and then rubbed to a gloss, although, of course, the wax coating has a tendency to show scratches.

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## NOTES

In these days of specialized efforts a firm's claim for distinction must go further to obtain consideration. I. P. Frink, 55I Pearl St., New York, Manufacturer of Reflectors, has made that industry his special study for over forty years, The business was started in 1837 and has kept step with every development in lighting, from oil to electricity; and in advance of all others in the manufacture of reflecting fixtures for the economical use of light. The trade generally appreciates the progressiveness of this house, which is evidenced by the continued growth of the business. This firm's products are made of the very best material, lined with silvered corrugated, mirror glass or opal, and only expert, competent workmen are employed. Lighting a church or public hall is not an easy task, but those who have entrusted the contract to Frink have been relieved from all anxiety, as when their recommendations are followed, success is assured. Over 20,000 lighting contracts for churches and public buildings have been successfully handled by them, and their special reflectors for interior, window and case lighting are installed in many of the leading stores of the country. As the energy of their establishment is guided by wide experience, we can safely predict that whatever lighting problems are offered will be solved to the satisfaction of the intending purchasers. "Frink" Reflectors are well known, having received highest awards wherever exhibited. They are fully described in a catalogue which should be in the hands of every architect, engineer and contractor who desires to offer the best devices to his customers. A request to the above address will bring a copy, together with suggestions and estimate on whatever lighting proposition you may have in hand.

The Russell \& Erwin Manufacturing Co. of New Britain, Conn., have placed the contract for the construction of a new manufacturing building fifty feet wide, two hundred feet long and seven stories high. The construction will be fire-proof throughout and the floors will have a capacity of two hundred fifty pounds per square foot, so that the building can be used for carrying all classes of manufactured goods. It is expected that this building will be completed and ready for use about February ist.
P. \& F. Corbin are making extensive changes in their plant, in order to increase their output. They have just completed a large sevenstory fire-proof building to be used for general manufacturing purposes, and a new foundry building sixty feet wide and six hundred feet long. These improvements will necessitate the employment of one hundred additional iron-moulders, seventy brass moulders and five hundred extra help in general manufacturing.

# Shades \& Shadores 

By M. JULES PILLET

TRANSLATED AND REVISED BY
JULIAN MILLARD


A N exposition of short and convenient methods for determining the shades and shadows of objects illuminated by the conventionally parallel rays, after methods in use at the Ecole des Beaux-Arts. The author, M. Jules Pillet, has succeeded in simplifying the practice of casting shadows by avoiding the use of more than the one plane of projection and by formulating simple and easily remembered rules for the shades and shadows of the more common forms.

O
RDINARY geometrical methods commonly applied in casting shadows are not adapted to the hurried conditions of architectural practice, with the result that shadows are commonly guessed at, merely because of insufficient time to laboriously work them out, causing many and misleading errors.

T
${ }^{\top}$ HE translator has deviated from the original only for the purpose of simplification and elucidation, and every effort has been made to place the subject within the grasp of any intelligent draughtsman. Several drawings have been added and the remainder redrawn at large scale. The book measures $91 / 2$ by $12 \frac{1}{2}$ inches and contains 43 text pages and $8+$ figures. Bound in blue cloth.

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## Notes

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enclosed with concrete and jackets, as in the bulkhead building. The floors of the piers are divided into three compartments by fire-proof walls with double automatic fire doors. The entire sides of the piers are made up of huge iron doors operated by an improved device for raising and lowering. Automatic sprinklers to operate at a certain temperature are installed, also an independent system of fire mains and hydrants. The Multiphase Cable system of automatic alarms, with loose coils of the same cable to lay over stored merchandise, will be used. Numerous improvements for the security and comfort of passengers are included in the terminal. The American Bridge Company is erecting the steel work of the bulkhead buildings, and the Pennsylvania Steel Co. that of the piers. The entire structural steel and metal work of bulkhead building and piers is protected with Dixon's Silica-Graphite Paint.
"The Doings of Expanded Metal," for January is, as usual, full of interesting information concerning expanded metal and concrete construction. While it is, of course, an advertising publication, the committee having charge of its preparation realize that definite examples of the successful use of this system of construction, with a straightforward statement of the methods used, are far more convincing than the blatant claims of superiority so frequently found in advertising publications. Any architect who is now building, or ever expects to build a dome, should read the description of the construction of the dome of the Bicentennial Buildings at Yale, of which Carrère \& Hastings are the architects.

## THE BROCHURE SERIES IN 1903: ANNOUNCEMENT

TO prepare any full Prospectus for a magazine of the character of The Brochure Series is, of course, impossible; but a brief mention of the articles planned for early numbers of the 1903 Volume (which, from the material already in hand, the editor believes will prove exceptionally valuable) may be of interest.
-1. AMONG SUBYECTS FOR EARLT NUMBERS may be named some very charming examples of Village Churches and Farmhouses of Normandy; a group of little known specimens of English Half-Timber Houses; and a number of the specimens of English Rural Cottages that afford so much picturesque suggestion for small country houses.

- AMERICAN COLONIAL ARCHITECTURE is to be considered in several articles, all illustrating uncommon subjects, such as the excellent Early Colonial Vildage Churches; the Work of Charles Bulfinch; and a series of papers dealing with some of the most notable individual Colonial Mansions of America, their surroundings and rooms.
C. INTERIORS of unusual suggestive value will be illustrated in papers on the Italian Roomsas Depicted by the Early Italian Painters; some rarely photographed English Domestic Interiors of the best periods; another charming group of the unique Interiors of the Tyrol; and many examples of the treatment of interior decorative detail in various styles.

C MORE HISTORICAL SUBYECTS will be the great Cathedrals of Spain; some unusual views of that almost "unphotographable" building, the Taj Mahal at Agra, India; the Abbeys of England; the great Roman Monuments at Nimes and Arles in France, and many others.

C OTHER ARTICLES which the editor hopes to present in early numbers will treat of the Italian Brick and Terra-cotta Romanesque, a style which has proved so well adapted to American conditions; and of the smaller and comparatively unknown French Chateaux. Italian Fountains will be very copiously illustrated, and there will be presented some charmingly picturesque views in the Villages of South France and North Italy; eqc.
C. THE COMPETITIONS in which The Brochure's subscribers manifest so lively an interest will be continued into the 1903 Volume.

व THE GENERAL PLAN of the magazine will be, as heretofore, to present adequate photographic illustrations, with descriptions, of the world's best examples of architecture, decoration and ornamental detail. The range of subjects will be wide; but it will be the editor's endeavor to include, among the nearly four hundred illustrations which the Forthcoming Volume will contain, none that is not worthy of preservation in such a library of standard architectural illustration as The Brochure's past volumes have become.

# LETTERS <br> \& LETTERING 

A Treatise with Two Hundred and Ten Examples by Frank Chouteau Brown, Architect. Intended to supply Architects, Draftsmen, and all who have occasion to draw letter-forms, with a Manual containing a complete and varied collection of standard and modern Alphabets, so arranged as to be most practically and conveniently useful

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V. The exceptional space devoted to the Classic and Renaissance Roman forms. These letters, the most useful for all architectural and formal work, are illustrated by a large number of alphabets, together with reproductions of many inscriptions, rubbings, etc.
VI. The great number of examples of the work of modern letterers. Typical specimens are shown of the work of the most notable contemporary designers, French, German, English and American. Among the Americans whose characteristic letter-drawing is shown, may be mentioned, Messrs. Albert R. Ross, McKim, Mead \& White, architects, Claude Fayette Bragdon, Bertram G. Goodhue, Bruce Rogers, Edwin A. Abbey, Edward Penfield, H. Van Buren Magonigle, Will Bradley, Maxfield Parrish, Addison B. Le Boutillier, H. L. Bridwell, Frank Hazenplug, Edward Edwards, Howard Pyle, Orson Lowell and others.
VII. The practical quality of the text. All historical and theoretical discussion has been omitted in favor of instruction, with many illustrative evamples, as to how lettering should be drawn, and the æsthetic principles of combination, spacing, and arrangement with reference to design. A separate chapter is devoted to the needs of the beginner, in which tools, materials, methods of procedure and faults to be avoided are discussed.

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## The Architectural Review

## for 1903

will follow closely the policy established during the year now ending, a policy which has nearly doubled its circulation. The principal features of the regular issues will be one or two illustrated articles, scholarly editorials upon architectural matters of timely interest, an illustrated critical review of current architectural work as shown by the principal European and American periodicals, photographic illustrations of wellselected modern houses, and last but by no means least the usual plates, reproducing for the most part working drawings of important buildings. In the discriminating choice of subjects and the quality of reproduction of its plates the Review has earned a reputation which is equalled by no other publication.

## Che first of the

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of lawns and trees, seem to touch and awaken the echoes of some bygone memory.

The obvious explanation, that we have gained accurate preconceptions of the homelier objects of English scenery through the history, the poetry and the fiction of a common tongue, until they have insensibly taken their places in the memory under the guise of things actually seen, can be only half the truth. Such preconceptions might account for the impression of familiarity, but not for the equally strong one, that




of being somehow at home in an alien land. It may be that this superadded feeling of kinship with English nature and objects springs in part from the common racial bent of the Anglo-Saxon, -his love of nature, of comfort, of order, of neatness, and of a certain type of the picturesque. But it is hard by any of
these formulas to explain the feeling, like the print of a recollection transmitted from some ancestral mind, that insensibly endears the scenes of rural England to the average American.

None of the objects in an English scene awakens this half-conscious sentiment more strongly than the wayside cottage.




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COTTAGE AT BIDEFORD, DEVONSHIRE
ENGLAND

It fits so absolutely into the landscape, despite its fresh coat of whitewash and neat kemptness, that we feel none of the jar that man's handiwork, even of the best, commonly stir: in us before any scene of natural beauty. The great cap of sheltering thatch. which, except for
an occasional dormer window, peering out as if from under a great shaggy eyebrow, covers it from end to end, gives it the air of a bird's nest or some such natural habitation, and blends it into kinship with the trees that overarch it and the grass that creeps up to its wall.



## LOUIS XVI. FURNITURE

|N his treatise on the furniture of the seventeenth and eighteenth centuries, M. Molinier protests against the use of the accepted terms "Style Louis xv." and "Style Louis xvi.," for the reason that "the productions which they characterize do not correspond with any exactness to the historic periods which are specified."
From the historical standpoint M. Molinier is, of course, right. The common use of the terms is misleading. During the reign of Louis xiv. the supreme authority of the court, as the fountainhead and arbiter of all things, artistic as well as political. imparted a homogeneity to the work produced during his time, so that here the name "Style Louis xiv." fits with sufficient exactness. But under his successors no such unifying influence radiated from Versailles. "Sire," said the aged Marshal de Rich-
lieu, to Louis xvi., " under Louis xiv. no one dared utter a word; under Louis $x v$. they whispered; under your Majesty they talk aloud!" The figure applies equally to the increasing spirit of independence in the arts. Year by year, from the accession of Louis $x v$. to the chaos of the Revolution, the royal dictum in art, as in politics, gradually lost authority, and the door for the entry of diverse and conflicting tendencies was set wider and wider open. For this reason it is, as M. Molinier protests, inexact to apply the names Louis xv . and Louis XVI. to the styles which were developed during the eighteenth century; and the change from the former to the latter style by no means corresponds to the change of reigns. The gradual triumph of the straight line and an increasing allegiạnce to classical motives may be traced throughout the


century; and we find the grotesque and the realistic, the classic and the rococo elements of design appearing with con-
fusing frequency, not only in pieces of furniture of the same date, but often in actual combination in the same piece;



LOUIS XVI SOFA
GARDE-meuble, paris

so that it is frequently difficult to draw any inference as to the time of production from points of detail, or even from broad characteristics of style.

Another confusion that has resulted from the inexactness of these terms, is a natural misjudgment of the influences and artists by which the changes from one style to another were brought about. The cabinet-makers of the later reign have in many instances been given credit for innovations which were due to their predecessors; and among the numberless romantic fictions that have clustered about the picturesque figure of Marie Antoinette must be added the impression that she was influential in shaping the "Style Louis xvi." That


LOUIS XVI ARM-STOOL VERSAILLES
woman, of far greater influence on the art of the time, and far more capable of

credit is due (in so far as it can be set down to any one individual) to another


LOUIS XVI STOOL
COMPIEGNF.
wielding that influence wisely - Madame de Pompadour.

The germ of the Louis xvi. modification of the previous style was a pseudo-classic reaction, stimulated by the discovery of Herculaneum and Pompeii, confirmed by the publication of Wincklemann's "Le Antichita di Ercolano," and popularized by the appearance of Le Roy's " Les plus beaux monuments de la Grèce" ; but it could not have become so immediately accepted and established without the support and impulse of the all powerful

Pompadour. "As long as she lived," writes Lady Dilke. "Madame de Pom.
sought perfection in all that was executed for her rather than the satisfaction

padour's influence on art was admirably felicitous. She undoubtedly possessed a sincere and instinctive love of art, and
of mere personal luxury." Her taste secured for France some compensation for the extravagance of her king. That
quality of her nature which led her to reject all but the most perfect and distinguished work, coupled with her definite apprehensions of style, enabled her, during the twenty years of hersway, to contribute in no unworthy fashion to the development and progress of the applied arts. "She seems to have been one of those who, by inborn instinct, can more than match the calculations of those who have what is called ' the right to judge'; and her death deprived the
great group of artists who were employed by the Crown of a court of appeal, the decisions of which were ruled by a taste finished to the point of genius." It was she, not Louis xv. nor Louis xvi., not the Duc d'Aumont, nor Marie Antoinette, who was incontestably the presiding genius of the change in the art of the eighteenth century. As the historian M. Courajod informs us, even when she had placed the construction of her châteaux or hôtels in the



LOUIS XVI CABINE.
hands of the foremost architects of France, she yet reserved to herself their final perfecting in furnishing and interior decoration, showing in these departments, at least," a horror of the meretricious, the commonplace, or that which lacked distinction" that is the best justification of her reputation. On the other hand the style called the Louis xvi. was already in vogue when Marie Antoinette, still a child, arrived in France from Vienna. She had nothing to do but to accept it; and if it found in her a generous patron, she cannot claim any
vERSAILLES
real share in its development and growth.

But though from the standpoint of dates the terms "Style Louis xv." and "Style Louis xvi." are often misleading, they have passed into the nomenclature of art, and cannot now be dislodged. Moreover, in my opinion, they are properly retained because they are essentially correct from a broader point of view than that of historical exactness, since each style mirrors the fundamental characteristics of the reign for which it is named.
M. Taine has laid down the dictum (and it has not yet been superseded, in spite of the attacks made upon it) that "the work of art is determined by an aggregate made up of the general temper of mind and surrounding manners "; and I think we should have far to seek to find a more characteristic manifestation in art of the temper of mind and condition of society during Louis xv.'s reign than the style of decoration to which his name has come to be applied; or so exact a reflection in handicraft of that change in mental attitude and social manners which differentiated the reign of his successor than in the type of furniture illustrated in this article, and known by the name of Louis XVI.

Under Louis xv. the drawing-room
had become the center of the whole social system. The court was sunk into a gorgeous sensualism unparalleled since the days of Rome. The restraint and vigor which had survived through the firmer reign of Louis xiv. had disappeared. Brilliancy at any cost, nay, costliness for its own sake, and a superficial and tawdy magnificence was the one all-consuming desire. Lawlessness and self-gratification were elevated to the rank of moral principles. As plainly as "a Venetian chair, made of three straight planks and carved into a stately intricacy of beauty tells that it was used for no inert and enervated race," so these round, cushioned and downy seats, this avoidance of all restraint of line, this studied lack of symmetry, this won-



LOUIS XVI CABINE
GARDE-MEUBLE, PARIS
derful superficial dazzle of gilded curves in Louis xv. furniture is typical of the extravagance and corruption, the lassitude and luxury of the court of that vicious monarch, whose mistress could cry, " Après nous li" déluge!"

But the Deluge, in the guise of the Revolution, did not follow at once, and could it but have been averted for a decade or two might never have followed at all, since already under Louis xvi. the reaction had set in. Society



LOUIS XVI CABINET
LOUVRE, PARIS
felt a revulsion of disgust at the lawless profligacy, the unbridled libertinism, the uncurbed desires of the preceding reign. The conception of self-restraint
was born again in men's minds; they began anew to inquire into fundamental laws. There was a return-hysterical and theatric though it was - towards



LOUIS XVI CABINE
PETIT TRIANON, VERSAILLES
nature. The classical conceptions of form, and philosophic clearness of vision, began to permeate the fine arts as they
had already permeated literature and the drama. And of all this we may find token in the healthier simplicity, the



COMPIEGNE
increase of refinement, the restraint of vulgar opulence, and the classic obedience to the laws of form of Louis XVI.
furniture, while it still retained in full measure that studied elegance that marks the manners of the time.
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## Brochure

## Competition Announcements

## Competition Z <br> CLOSES APRIL 15, 1903

SUBJECT: A Log-Cabin Shooting Lodge for a Camp.
To comprise a gun-room, kitchen, two sleeping rooms and a piazza. Plan and Exterior Perspective to be shown on the same sheet. Pen and black ink drawing only.

Award to be announced in The Brochure Series for May, 1903.

First Prize, $\$ 10.00$ in gold Second Prize, $\$ 5.00$ in gold
Prizes offered by The Brochure Series.

## Competition AA

CLOSES JUNE 15, 1903
SUBJECT: A Plan for a Formal Garden,
To fill a level, rectangular plot of land, measuring 132 feet north and south, by 96 feet east and west, in which is a disused, rectangular cellar, which measures 48 feet north and south by 32 feet east and west, and which lies parallel to the bounding lines of the plot, 16 feet from the north boundary and 16 feet from the east boundary; this cellar the owner wishes to utilize as an ornamental water basin. The whole garden is to be surrounded by a five foot brick wall. Plan to be rendered in pen and ink at a scale of onesixteenth of an inch to the foot.

Award to be announced in The Brochure Series
for July, 1903 .
First Prize, $\$ 10.00$ in gold Second Prize, $\$ 5.00$ in gold
Prizes offered by The Brochure Series.

## Rules Governing Competitions

I. All drawings, unless otherwise stipulated in the conditions, must be in pen and black ink (neither pencil nor wash drawings will be considered) and on white paper or cardboard measuring 8 by ro inches.
2. All drawings must be addressed, "Editor The Bro. chure Series (Competition), 42 Chauncy Street, Boston, Mass.," and must be received on or before the date set above for the close of the contest in which they are entered.
3. Each drawing to be signed by a pseudonym (not a device) only, the name and address of the competitor to be sent in an envelope, bearing on the outside the pseudonym only, and enclosed with the drawing. These envelopes will not be opened until after the award has been made.
4. Each drawing to be packed flat, not rolled.
5. The Editor reserves the right to publish any of the designs submitted. Drawings will be returned only when accompanied by sufficient return postage, enclosed in the envelope with the competitor's name.
6. Although open to all, whether subscribers to the Brochure Series or not, these competitions are held chiefly in the interest of the subscribers to the magazine, and therefore the prizes will be paid only to competitors whose names are on the subscription books of the Series at the closing of the competition. If the best designs are the work of non-subscribers the fact will be so noted in the award, and the designs printed; but the prizes will be paid to those subscribers whose designs stand next in order of merit.

Brochure Series Competition X
A Colonial Church Spire
ANNOUNCEMENT OF THE AWARD

TIIE specifications in this competition called for a design of a spire suitable for a village church built of wood. Many drawings were received, and in general the designs were well proportioned and graceful in effect. Lack of originality was not considered by the judges as a sufficient cause for barring out of consideration otherwise


First Prize Design by Mr. H. S. Waterbury, New York City.
meritorious designs, since they recognized the difficulty of combining a limited number of accepted motives into a combination which should not seem reminiscent. They did not, however, feel called upon to consider a number of designs which reproduced, feature for feature and proportion for proportion, the spires of such familiar churches as St. Martin in the Fields, some of the better-known towers of Sir Christopher Wrenn, or that of St. Michæl's Church at Charleston, S.C., for instance, since the problem was not one of rendering but of design. Nor did it seem to them that the idea of turning the cupola of Faneuil Hall in Boston or that of the City Hall in New York into a church spire without any perceptible modification, showed evidence of sufficient originality to be ranked as an individual treatment of the problem.


none of the drawings showed evidence that their authors had surpassed Sir Christopher Wrenn and his rivals, or even the better carpenter architects of our own Colonial days, in the homogeneity, grace and distinction of their spires, there were yet a number which


Mention.
"Giorgian."
were well adapted to fulfil creditably the requirements of the problem.

The first prize was awarded to Mr. H. S. Waterbury of New York City; the second to Mr. Ben J. Lubschez of Kansas City, Mo. ; and in addition to the other drawings reproduced, mentions, are awarded to the designs of "Colony," "Halcyon," "Omega," "First Parish," "Shirley," " Idelphi" and "Helge." The announcement of the conditions of Competition Z, which closes on April I5, Igo3,

CONTINUED OX NEXT PAGE.


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" 1903 ."
is repeated in this number, and there is also set a new Competition "AA" for the plan of a formal garden under certain fixed conditions, presenting a problem that will tax the ingenuity of the competitor.

## Shades \& Shadores

By M. JULES PILLET
TRANSLATED AND REVISED BY
JULIAN MILLARD


A N exposition of short and convenient methods for determining the shades and shadows of objects illuminated by the conventionally parallel rays, after methods in use at the Ecole des Beaux-Arts. The author, M. Jules Pillet, has succeeded in simplifying the practice of casting shadows by avoiding the use of more than the one plane of projection and by formulating simple and easily remembered rules for the shades and shadows of the more common forms.

0
RDINARY geometrical methods commonly applied in casting shadows are not adapted to the hurried conditions of architectural practice, with the result that shadows are commonly guessed at, merely because of insufficient time to laboriously work them out, causing many and misleading errors.

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Masters in Art for March is devoted to Watteau, and Masters in Music has Gounod for its subject. The subjects of the April issues will be Raphael's frescos and Mendelssohn.

The Chicago Varnish Co. has recently produced an entirely new finish for Georgia pine, which is claimed to be much superior to any other finish hitherto used on pine. Sample panels in different shades will be furnished to architects on application.

On another page of this issue will be found Bruno Hessling's announcement of three standard books, already possessed by many architects. One of the three is Meyer's Handbook of Ornaments - a never failing source of suggestions, and a work that has never been approached by any similar publication. It is now in its fifth edition.

Since Mr. Abbey's series of decorative paintings in the Boston Public Library have been completed, it has been apparent that some more satisfactory method of lighting the delivery room was needed. The action of the trustees in calling upon I. P. Frink of New York to install proper fixtures, and the extremely satisfactory way in which the work has been done adds one more to the large collection of laurels Mr. Frink
has won in the field of picture lighting. On the quality and satisfactory character of his work in this line it is safe to say he has no competitor.

The Goheen Mfg. Co., of Canton, O., have issued under the title "Hitch your Wagon to a Star," a pamphlet illustrative of the structural iron and steel work that has been treated with their Carbonizing Coating, which is a protection from rust and corrosion. It is applied in the same manner as paint and has the endorsement of many prominent railroad companies, structural engineers and various departments of the Government. The pamphlet shows a selection from many large manufacturing plants, bridges, officebuildings, etc., with endorsements of the wearing quality of Carbonizing Coating.

The Architectural Review for February contains the first of Frank Chouteau Brown's articles entitled "A Journey in Search of the Picturesque," and is devoted to Normandy. Twenty-two "Kodaks" illustrate the article. The house of Mrs. Robert W. Lesley, Haverford, Pa., is illustrated by five photographs and sketch plans of the house and grounds. The house was designed by Lindley Johnson, and the grounds by Nathan Barrett. Mr. Alpheus Williams Chittenden is represented by thirteen views, exterior and interior, of the very attractive new club house of the Detroit Boat Club-a successful adaptation of Venetian motives to American work. Important among the plates are reproductions of several large-scale drawings of details of the New York Custom House, by Cass Gilbert. The regular critical departments are this month supplemented by a review of recent architectural books of particular interest.

## THE BROCHURE SERIES IN 1903：ANNOUNCEMENT

$T$O prepare any full Prospectus for a magazine of the character of $\mathrm{T}_{\mathrm{H}} \mathrm{E} \mathrm{B}_{\mathrm{R}} \mathrm{O}-$ chure Series is，of course，impossible；but a brief mention of the articles planned for early numbers of the 1903 Volume（which，from the material already in hand，the editor believes will prove exceptionally valuable）may be of interest．
－AMONG SUBYECTS FOR EARLT NUMBERS may be named some very charming examples of Village Churches and Farmhouses of Normandy；a group of little known specimens of English Half－Timber Houses；and a number of the specimens of English Rural Cottages that afford so much picturesque suggestion for small country houses．

【．AMERICAN COLONIAL ARCHITECTURE is to be considered in several articles， all illustrating uncommon subjects，such as the excellent Early Colonial Village Churches；the Work of Charles Bulfinch；and a series of papers dealing with some of the most notable individual Colonial Mansions of America，their surroundings and rooms．

C．INTERIORS of unusual suggestive value will be illustrated in papers on the Italian Rooms as Depicted by the Early Italian Painters；some rarely photographed English Domestic Interiors of the best periods；another charming group of the unique Interiors of the Tyrol；and many examples of the treatment of interior decorative detail in various styles．
© MORE HISTORICAL SUBYECTS will be the great Cathedrals of Spain；some unusual views of that almost＂unphotographable＂building，the Taj Mahal at Agra， India；the Abbeys of England；the great Roman Monuments at Nimes and Arles in France，and many others．

C．OTHER ARTICLES which the editor hopes to present in early numbers will treat of the Italian Brick and Terra－cotta Romanesque，a style which has proved so well adapted to American conditions；and of the smaller and comparatively unknown French Cha－ teaux．Italian Fountains will be very copiously illustrated，and there will be presented some charmingly picturesque views in the Villages of South France and North Italy；etc．

【．THE COMPETITIONS in which The Brochure＇s subscribers manifest so lively an interest will be continued into the 1903 Volume．

【．THE GENERAL PLAN of the magazine will be，as heretofore，to present adequate photographic illustrations，with descriptions，of the world＇s best examples of architecture，deco－ ration and ornamental detail．The range of subjects will be wode；but it will be the editor＇s endeavor to include，among the nearly four hundred illustrations which the Forthcoming Volume will contain，none that is not worthy of preservation in such a library of standard architectural illustration as The Brochure＇s past volumes have become．

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VI. The great number of examples of the work of modern letterers. Typical specimens are shown of the work of the most notable contemporary designers, French, German, English and American. Among the Americans whose characteristic letter-drawing is shown, may be mentioned, Messrs. Albert R. Ross, McKim, Mead \& White, architects, Claude Fayette Bragdon, Bertram G. Goodhue, Bruce Rogers, Edwin A. Abbey, Edward Penfield, H. Van Buren Magonigle, Will Bradley, Maxfield Parrish, Addison B. Le Boutillier, H. L. Bridwell, Frank Hazenplug, Edward Edwards, Howard Pyle, Orson Lowell and others.
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## in The Architectural Review for 1903



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THIS WORK will be found most constantly helpful by all architects who admire the English Style of this period, and adapt it in their work. The author's object has been to present examples illustrating the various phases and developments of architectural woodwork, ranging from the dawn of the Renaissance through the Elizabethan and Jacobean periods up to and including the true Renaissance. The plates have all been reproduced from measured drawings laid down on the spot in nearly every instance. An endeavor has been made to show, in as many instances as possible, the entire treatment of the room ; the doors, fireplaces, panels, etc., sketches of key plans being included to show the general arrangement and relation of the measured details.

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# The Brochure Series 

OF ARCHITECTURAL ILLUSTRATION

VOL. 9
MARCH, 1903
NO. 3

## THE CHÂTEAUX OF TOURAINE FRANCE

THE movement to which we give the name of the French Renaissance may be divided into two fairly distinct periods, the first beginning with the middle of the fifteenth century and extending to the reign of François i., the second beginning here and ending in 1589 with the death of Henri iII. The artistic side of this revolution was both coincident with and plainly effected by the growing centralization of the government in the hands of the king. This policy of centralization had been inaugurated by Louis xi. and continued to shape itself throughout succeeding reigns, until when François I. came to the throne, he found his paramount authority definitely established: he was king in fact as wẹll as in name, and from his court flowed the initiative, both in politics and in art. Meantime, and during this process of centralization,


Chatteaux of chinon the entrance
a deeper-lying change was leavening the nation,- a waking from sleep as it were, a half-conscious struggling in the bands of mediævalism. The repressed instincts towards a wider and freer life were already chafing in the cocoon of mid-dle-age ignorance and ecclesiastical repression. The printing press had begun to scatter its disquieting seeds far and wide; the discovery of a new continent across the Atlantic had kindled imaginations hitherto content in ignorant quiescence; and it needed but the discovery of the state of æsthetic and moral civilization that existed in Italy, through the expeditions of Charles viir. and Louis xil. to fan the smoldering fire into flame.

It was thus a social and moral revolution that brought about that artistic awakening we call the French Renaissance. France suddenly realized that her previous existence had been not


CHATEAU OF LOCHES
TOWER OF AGNES SOREL
life but mere being. She had discovered in Italy what life might be were it enfranchised by freedom of thought, and adorned with graces of social intercourse, and above all with art; and the most immediate form of expression derived from this discovery was in her architecture. Her nobles and princes immediately began to body forth their new-found sense of life in stone; building no longer
the fortified châteaux which had served during the previous barbaric ages, when strife was the main outlet for vitality, but palaces, maisons de plaisance, which might express their dawning delight in mere existence, and minister to it.

Now it chanced that as Louis xi. and his immediate successors, Charles vili. and Louis xil., dwelt for the most part not at Paris but at Tours, Touraine, or
to speak more exactly, that lovely garden region of France which is watered by the River Loire and its tributaries, became the center of this new movement. The same movement was, of course, active elsewhere, but Tours took the lead; and it is to Tours that we must look for the clearest and most striking manifestations of Renaissance architecture in France, until, with the reign of François i., the second period of that movement commenced, and the center of activity was transferred, with the court, from Touraine to Paris. It is in

Touraine, therefore, that we can most plainly observe the course of the transition from the old feudal strongholds to the completely developed maisons de plaisance, watch the old traditions of defence gradually being cast aside, and trace the passage of the slowly developing style, step by step, from Langeais to Blois, and thence to its complete enfrancisement in Azay-le-Rideau,- - the other chateaux in the pleasant valley marking and illustrating the steps of interval.

The ancient province of Touraine cor-


CHATEAU OF LOCHES
CHARLES VII. AND LOUIS XII. FAÇADES


responds nearly enough for practical purposes to the modern division of France called Indre-et-Loire, though in the present paper we shall stretch the limits within which a strict interpretation of our title would have confined us sufficiently to include Chambord on the east. All the places to be described lie within this narrow area, either directly upon the River Loire, or not far from the mouths of its three tributaries, the Vienne, the Indre and the Cher, which empty into it from the south between Cinqmars and Saumur. "Up to the end of the sixteenth century," writes Mr. Cook, "this region was covered with a multitude of chateaux, for beside the old feudal towers, whose strength had saved them from destruction in the happier times of peace, the nobles of later days had raised more elegant abodes, in which they strove to preserve only what had been picturesque in the earlier fortified dwellings. But by the wars of religion and the disturbances of the Fronde a great number of the châteaux were ruined or defaced; and by the Revolution many of them were within an ace of being destroyed forever."

Chinon, the crumbling remains of which are situated on the River Vienne,
nine miles above its junction with the Loire, more than any other castle of the region gives an impression of antiquity. It is now but an enormous crumbling ruin, a mediæval fortress of almost the magnitude of a city, which was the favorite residence of Henry II. of England, where Richard Cœur de Lion seized upon his father's treasure, and where two and one-half centuries later Joan of Arc, the Maid of Orléans, held her memorable first interview with


Chàteau of lañgeals
Entrance

Charles vir., with a result that began to turn the tide of English success in France. But delightfully picturesque as Chinon is, it is architecturally too
and spires from the summit of the hill which it covers to the base. Sullen massive and magnificent, it scowls across the fertile river meadows and the vine-


CHATEAU OF LANGEAIS
CORNER OF THE COURT
ruinous to detain us long; and the Château of Loches, of much the same type, is far more interesting.

Loches lies in the valley of the Indre, lifting a confusion of ramparts, towers
clad slopes, perhaps the best preserved of the true fortress châteaux of France. The buildings which compose it are grouped into three distinctly marked divisions. In the midst rises the col-


legiate church, to the east are the donjon and prisons, and on the west the actual chateau, which is still in part inhabited. The portion of the edifice which leaves the deepest impression upon the traveler's imagination is perhaps the donjon, that Bastile of Central France It was here that the idea having been suggested to the ironical Louis xi. that he could make torture more cruel by confining his prisoners in iron cages, he promptly carried it out by confining in the first of them the Cardinal de la Balue who had prompted the notion, The château itself was used as a royal residence by Charles vir., Louis xi., Charles viil. and Louis xii ; but the fell spirit of Louis xi. overshadows all other memories. Donjon, palace, church, even the busy little trading town below, seem to reflect something of the alert suspicion, grinding terrorism, craven piety, and commercial eagerness that combine to make up the memory of this gloomy despot. Yet Loches cherishes one sweeter memory;
it guards the tomb of Agnes Sorel, the belles des helles, whose patriotic influence was largely responsible for Charles viI.'s struggle against the English. Indeed, as Mr. Henry James has said, "Charles seems rather a privileged mortal to stand up before posterity between the noble Joan and the gentille Agnès, who has somehow seemed always to have enjoyed a fairer fame than most ladies who have occupied her position."
The view of Loches on page 50, shows at the extreme left of the edifice, a spire of the collegiate church, next rises the tower of Agnes Sorel, next is the dark-colored façade of Charles viI, and adjoining it the portion built by Louis xil. The change in spirit between the Charles vir. façade and that of Louis xil. not too striking to produce any discordant note in the design as a whole. is yet sufficient to foreshadow the change from war to peace, from buttresses and loopholes to wide light-giving windows.

Langeais, which lies down the Loire on the opposite side from Tours, is



FROM THE RIVER
also a type of fifteenth century fortress château. Its construction is attributed to Louis XI., but it bears upon its walls traces of the coming transformation which the Renaissance was to work. The problem which the architect had here to solve was, evidently, how to conciliate the necessities of defence with the already increasing demands of domestic life. We see the former evidenced in the single gate which affords sole access to the interior court, in the massive towers which flank it, in the portcullis which defends it, and in the massive towers at the angles, pierced only at irregular intervals by narrow openings - all these speak of mediævalism. But upon the façade which looks upon the court within there is evident an illusive touch of elegance. Four small towers, inside which spiral staircases give access to the different stories, break the monotony of the front; and above the roof runs no heavy parapet but a bold projecting cornice, no longer a battlement, but a true cornice developed out of a battlement, takes its place. Here the battlement melts into the cornice on the inner court of the castle only; it was destined soon to replace it on the outside also in other structures, and at Chenonceaux, Azay-le-Rideau, at Blois and

Chambord we find that this bold projecting line has become merely an ornamental crown. In a word, the whole castle of Langeais is still built on feudalism, but it is evident that those foundations were already shaken.

Historically Langeais is equally interesting. It was here that the Duchy of Brittany was first incorporated with the kingdom of France by the marriage of Charles viii. to Anne of Brittany in 1492; and in a house opposite its gate lived François Rabelais.

The Château of Chaumont, though as a building somewhat dismal, is magnificently situated upon the Loire a group of gray towers rising above the village and the church spire. It was originally constructed, following the feudal plan, in the form of a quadrangle, but the fourth side was pulled down in I739, and the space thus opened forms a lordly terrace, looking out upon the Loire, and backed by the main buildings of the castle. Chaumont dates from the fifteenth and sixteenth centuries. Architecturally it forms a wellmassed and interesting bulk, looking something like an enormously magnified villa, rising from every point of view majestic and royal.

One of the most beautiful of the

Touraine châteaux is Chenonceaux. Partly because of its unrivaled setting it is like a fairy palace, with Catherine de' Medici in the role of the bad fairy, a place seen in a dream; and may, perhaps, be considered the architectural gem of the region. It is a sweet relic of beautiful bygone France, with sunnier memories than those of most of the French houses of renown. More than four hundred years ago the slow-flowing River Cher reflected on this site only a mill, but the mill and an estate and an old mano hard by, fell into the hands of one Thomas Bohier, a Norman tax collector, and, it must be, a man of no slight imagination, for on the foundations of the mill he built, in ${ }^{1515}$, this splendid house, dreaming, no doubt, of founding a princely family. But so beautiful was the resulting palace of Chenonceaux that King François I. coveted it, and on some trumped-up pretext forced Bohier's son, in compensation for a so-called deficit in the accounts of the late tax collector, to surrender it to him. François made a very splendid hunting-box out of it; but with Henri il. began the days of its greater splendor as the home of

Diane de Poitiers, who played very eagerly with her new toy, and laid the foundations of the remarkable bridge which makes Chenonceaux unique. When Henri died, however, Madame Diane was obliged to submit to the long-deferred revenge of Catherine de' Medici, who had been obliged to chafe in silence for years at her ascendency. Catherine went through the polite form of giving Chaumont to Diane, took Chenonceaux for herself in exchange, and continued the foundations of the spans across the Cher, and over them built a long straight gallery of two stories, which is the great feature of the place - a bridge, which within forms a charming two-storied corridor illumined from either side by the flickering river light.

The château itself is one of the most delicately finished things in Touraine. Its design is attributed to Pierre Nepveu, alias Trinqueau, the audacious architect of Chambord. Here we find the transformation from the old militant château to the pleasure palace, or villa, far advanced - for we may call Chenonceaux neither castle nor palace; it has the look, at least, of being in-


CHATEAU OF CHENONCEAUX


tended for a life of civilized On approaching it from the eye is caught by a confused spires, minarets and cupola lines of its roof seem lost be luxuriant growth of shafts up to the sky. Tourelles break the massive walls at points $w$ cease to suggest the flankin which they originally reple every turret and every pi crowned with some fantastic $c$ The angles at which the $g$ forth here and there from th and carved work that surrou are selected with the express of misleading the eye, yet $t$ cones which surmount the larg and thrust through the o which flame about them, $b$ sense of order into troubled pl where every element of desi absent.
"A few hautes chambres $t$ writes Mrs. Pattison, "mig for the needs of Jean Bourré raised the Château of Langeai wants of Thomas Bohier, as t

## ROCHURESERIES

bleasure east, the edley of till the eath the pringing ut from ere they towers ed, and nacle is nament. bles jut pierced ds them, ntention e heavy $r$ towers naments ing the ces, even n seems when he but the ey stand
expressed in Chenonceaux, were far more complex; and not only does this château, among the others of the great nobles of Touraine, give evidence of the rapid change in the manners of the day, but even the less pretentious hôtels and country places of private personages present the same striking differences." Nevertheless, in spite of its soaring gaiety of aspect there is still a taint of the spirit of Catherine about Chenonceaux. There is no friendliness in it; and one fancies that even to this day the villagers may be a little shy of going down its avenue and of passing the tremendous pride and scorn of those sphinxes that guard the entrance to its court of honor.

Amboise, like Tours, lies on the left bank of the Loire, half-way between the latter town and Blois. It rises above the village like another Acropolis above a smaller Athens, and in position is supreme among the old palaces of the Loire. Its associations are very various. It has been the scene of many tragedies, murders and imprisonments from the days of Cæsar (its reputed


founder) to the present time. Here Clovis and Alaric met ; here lived Louis xi.; here Charles viil. was born and here he died through striking his head against a low door which leads from the turret. It was within these walls that his widow, Anne of Brittany, spent the first years of her widowhood, until she dispelled her grief by a union with her husband's cousin and successor, Louis xir. ; and here Charles v. visited François I. During the sixteenth century Amboise was the frequent resort of the French court, and here the young Mary Stuart spent many hours during her first marriage. Here the bodies of the Huguenots hung in rows from the balcony that overlooks the Loire ; and here, according to rumor. Catherine de' Medici and the young queen watched them drown in the Loire. But the most distinguished name connected with Amboise is that of Leonardo da Vinci, whose body lies buried in its garden.

In the architecture of Amboise we find the clearly marked footprints of the Renaissance in progress; for it is
recorded that when Charles viir began to build the château as it now exists, he brought from Naples many "excellent workmen of different crafts to labor on it," and a state document of 1495 records the payment of "one thousand five hundred and ninety-three livres for the conveyance from Naples to Amboise of eighty-seven thousand pounds of tapestries, books, paintings, stones, marbles and furniture for the decoration and furnishing of the said château, and also for nourishing twenty-two workmen for thirty-four days, at forty sols per day, whom the said king had caused to come from Naples to work at the château at his device and pleasure."

Amboise as we now see it dates mainly from the fifteenth to the sixteenth century. White and gray and stately in the sunlight, it stands high on its rocky plateau above the town, its platforms and bastions and terraces and highperched windows and balconies, its hanging gardens and crenelations majestically scanning the immense horizon.

Blois is one of the most beautiful and

elaborate of all Touraine's royal residences. Even in its present rather overrestored state it cannot but warm the traveler's imagination as he approaches it from the town and sees the long façade, with its deeply recessed and balconied windows, rising upon the summit of the hill. Blois has already been described in detail in this Series,* and it will, therefore, only be necessary here to roughly indicate the main points in its architectural history. The component parts of the château, which surround an irregular quadrangular court, belong to three distinct periods The wing on the northeast, one of the most charming examples of transitional French Gothic architecture, belongs to the time of Louis xil. The wing of François I., a harbinger of the Renaissance style in France, followed in the sixteenth century, and in 1635 the southwest wing was added as the palace of Gaston d'Orléans, who had overthrown the various buildings of the fifteenth century that had previously occupied the site. This southwest wing was the work of François Mansard, and it had been Gaston's plan to allow him to make over the whole palace; but this, as Mr. Henry James has said, "a kind Providence did not allow . . . . But partially performed the misdeed is not altogether to be regretted; for as one stands in the court of the castle and lets one's eye wander from the splendid wing of François I.which is the last work of free and joyous invention - to the ruled lines and blank spaces of Mansard's ponderous pavilion, one makes one's reflection upon the advantage, in even the least personal of the arts, of having something to say, and upon the stupidity of a taste which has ended by becoming an aggregation of negatives."

Historically Blois is perhaps the most interwoven with the national history and yet the least personal of all the royal castles on the Loire. In its heyday, three hundred years ago, its history was in truth the history of France; yet one cannot connect it with the private life

[^1]and fancy of any particular king or queen; for all the stately procession of bad and good alike have walked through its corridors and courts and through its richly painted rooms; Charles d'Orléans, Louis xir., Anne of Brittany, François i. and his guests, Catherine de' Medici who died here (struck with horror and remorse after the murder of the Duke of Guise), Henri iv., Marie de' Medici, Louis xiv.,Stanislaus Leszcynski, and, in later days, Napoleon and Josephine, and Marie Louise and her son, have taken a place in its history.
The Château of Chambord has, like that of Blois, already been described in these columns.* It stands back from the river in the great lonely plain-a complex and fantastic mass of towers, turrets, pinnacles, soaring gray roofs, high ornamental windows, and chimneypots, all fretted and relieved in the wonderful Renaissance manner with the crowned " $F$ " and the salamander. It has been well called the Versailles of the feudal monarchy. It is in fundamentals an ancient Gothic château, tricked out according to the fashion of the Renaissance. Nowhere else is the transition from one style to another more plainly revealed. Essentially feudal in its plan, recalling by its tower-flanked enclosure and the breadth of its heavy mass the mediæval manoirs, it is Gothic as far as the platform, Renaissance above. The simile of M. Loiseleur is so picturesque that it may well bear repeating. "Chambord," he says, " may be compared to a rude French knight of the fourteeth century, who wears upon his cuirass some fine Italian embroideries, and on his head the plumed felt of François I.-assuredly an incongruous costume, but not without character."
At Azay-le-Rideau we find the old fortress type at last entirely discarded. Here is no attempt, as at Chambord, to fuse the feudal castle and the hunting seat. It is a type of pure early French Renaissance architecture, untouched by the Italian influence of Primaticcio. While the architect of Chambord was

[^2]


attempting a task that from its very nature could not but be doomed to failure, the walls of Azay-le-Rideau were rising in perfect consistency. It is as beautiful a dwelling-place as could well be imagined, only such details of fortress architecture being here retained as should serve to give solidity to the whole, and add a picturesqueness to the various parts. Its unsymmetrical ground plan (built in the form of an "L" with the entrance where the
beautiful and perfect of them all, so its beauty gains by its association with all that is best and most attractive ; for in the shrine of Azay is gathered the whole gallery of faces of those who have made the history of Blois, of Amboise, of Chenonceaux, of France ; and the château, that is happy in its own lack of history and intrigue, gathers up within its sculptured walls the memories of all that was worth keeping of the old life that throbbed and struggled


CHATEAU OF AZAY-1.E-RIDEAU
INNER FAÇADE
long arm of the letter meets its base) is a reminiscence of those earlier days, which are also recalled by the elegant tourelles that complete its angles; but in every other respect Azay is a continuation of the intention manifest in the François I. wing of Blois, and in its exterior aspect as a whole, with its charming proportions and profuse yet not extravagant sculpture, there is something both tranquil and pure, in spite of its gaiety.
"Azay-le-Rideau," writes Mr. Cook, "should be seen last of the châteaux of Touraine, for as it is perhaps the most
in the larger châteaux, and left them ruined or defaced. If the traveler who has seen the hot sunshine of the summer beat upon the walls of Loches and Chinon, or light up the halls of Blois, is so fortunate as to come to Azay in the cool, clear air of autumn, when the delicate coloring of its carven balconies is framed in the gold and crimson of the changing leaves, he will find, as we found, just such an ending to his own travels, just such a completion to his memories, as his imagination could desire."
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## Brochure

## Competition Announcements

## Competition Z

CLOSES APRIL 15, 1903
SUBJECT: A Log-Cabin Shooting Lodge for a Camp.
To comprise a gun-room, kitchen, two sleeping rooms and a piazza. Plan and Exterior Perspective to be shown on the same sheet. Pen and black ink drawing only.

Award to be announced in The Brochure Series

$$
\text { for May, } 1903 \text {. }
$$

First Prize, $\$ 10.00$ in gold Second Prize, $\$ 5.00$ in gold
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## Competition AA

CLOSES JUNE 15, 1903
SUBJECT: A Plan for a Formal Garden,
To fill a level, rectangular plot of land, measuring 132 feet north and south, by 96 feet east and west, in which is a disused, rectangular cellar, which measures 48 feet north and south by $3^{2}$ feet east and west, and which lies parallel to the bounding lines of the plot, 16 feet from the north boundary and $\mathbf{1 6}$ feet from the east boundary; this cellar the owner wishes to utilize as an ornamental water basin. The whole garden is to be surrounded by a five foot brick wall. Plan to be rendered in pen and ink at a scale of onesixteenth of an inch to the foot.

Award to be announced in The Brochure Series for July, rgo3.

First Prize, $\$ 10.00$ in gold Second Prize, $\$ 5.00$ in gold
Prizes offered by The Brochure Series.

## Rules Governing Competitions

I. All drawings, unless otherwise stipulated in the conditions, must be in pen and black ink (neither pencil nor wash drawings will be considered) and on white paper or cardboard measuring 8 by io inches.
2. All drawings must be addressed, "Editor The Brochure Series (Competition), 42 Chauncy Street, Boston, Mass.," and must be received on or before the date set above for the close of the contest in which they are entered.
3. Each drawing to be signed by a pseudonym (not a device) only, the name and address of the competitor to be sent in an envelope, bearing on the outside the pseudonym only, and enclosed with the drawing. These envelopes will not be opened until after the award has been made.
4. Each drawing to be packed flat, not rolled.

5: The Editor reserves the right to publish any of the designs submitted. Drawings will be returned only when accompanied by sufficient return postage, enclosed in the envelope with the competitor's name.
6. Although open to all, whether subscribers to the Brochure Series or not, these competitions are held chiefly in the interest of the subscribers to the magazine, and therefore the prizes will be paid only to competitors whose names are on the subscription books of the SERies at the closing of the competition. If the best designs are the work of non-subscribers the fact will be so noted in the award, and the designs printed; but the prizes will be paid to those subscribers whose designs stand next in order of merit.

Brochure Series Competition Y

## A Headstone

ANNOUNCEMENT OF THE AWARD

This Competition called for the design of a Headstone for a grave, with an inscription indicated.
More than sixty sketches were received; and although none of them was, in the opinion


First Prize Design by Mr. Frank C. Brown, Boston, Mass.
of the judges, deserving of unqualified commendation, on the average the designs were far superior to those which commonly disfigure our cemeteries. The problem was not an easy one; the limitations being rather


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hampering, except in the matter of ornamental detail, and such detail could not, from the nature of the drawings required, be more than sketchily indicated. Yet it was in the conception and placing of the ornament to which the majority of failures was attributable. The inscriptions, too, proved evident


Mention. "Magi."


Mention. "Campo Santo."


Mention. '"Mountaineer.'
(Continued on the following page.)


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## (Continued from page 12)

stumbling blocks; it was only in exceptional cases that they enhanced the general effect.

The first prize is awarded to Mr. Frank C. Brown, Boston; the second to Mr. G. Morris Whiteside, 2d, Philadelphia. In addition to those contestants whose drawings are reproduced, mentions are adjudged to "Carrara," "Cech," " Runic," "Nemo," "Maestro," " Mailliw," "Emerson," "Cosmus," "In Memoriam," "Skeptic," "Poeta," "Als-ikran " and "Igno."

The Competition Z, for the design of a Logcabin Shooting Lodge, which is announced in another column, closes on April 15.

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A SCENE-PAINTER'S EUROPE
A SET OF VIEWS


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OF ARCHITECTURAL ILLUSTRATION

VOL. 9

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NO. 4

## ROMAN REMAINS AT ARLES AND NîMES, FRANCE

THE French government has under its direct care and supervision at the present time more than nineteen hundred edifices known as Monuments Historiques. These buildings, silent chronicles in stone, are reminders, more vivid than any written records, of the advent and decline of those races which, during sixty generations, have
made French history, and one after another have set their seals of passing dominion upon the land.

Widely scattered dolmens bear witness to the presence of the Gallic tribes, who may have been the aboriginal settlers. Then up the valley of the Rhone, and thence throughout the land, marched the Roman legions, bringing with them


the splendid civilization of their worldsubjugating empire. The conquering Romans and the conquered Gauls grew to be Gallo-Roman, and the broad Rhone valley was for generations rich and filled with people. Rome, that had spread its laws and arts through Italy spread them here and throughout France, producing works remaining, though too often ruined, to our days. Throughout the land were bridges, roads, and cities furnished with long aqueducts, with baths, with temples and with theaters, without which no one once a Roman seemed to feel life possible. But to this people, powerful and civilized, so widely spread and long established, came at length disaster. From the vast Germanic reservoir of modern European races, poured the rude, halfbarbaric hordes of Visigoths and Ostrogoths, Franks and Alamanni, to oust the Romans. Still later from the distant north came the Normans. Then, the compass of change now pointing to the south, the Arabs poured into France from Spain, and surged northward as
far as Tours, only to be succeeded, after a long interval, by the English, the last of the foreign rulers of France. To the presence of these races, as well as to the accompanying sequence of changing manners - the strifes of feudalism, the imaginative faith and fervor of medieval religion, and the classic revival of the Renaissance - the Monuments Historiques bear witness. It is to those of them in Southern France which most splendidly evidence the Roman rule that the present article is devoted.

The Romans made their entry into Gaul, more than a century before the beginning of the Christian era, from the Mediterranean coast. Their main highway was the valley of the Rhone, and here their greatest works were constructed, and the chief relics of them are now to be found.

Arles, the Arelate of the ancients, was, under Julius Cæsar, so architecturally embellished that it was nicknamed the "Rome of Gaul." Here the Emperor Constantine often resided; and here Christianity is said to have first been
introduced by Trophimus, the disciple of St. Paul. Under the Emperor Honorius, the prefect who ruled Gallia had his seat here. Arles is now shrunk in population to about twenty thousand, and its present fame rests chiefly upon its splendid Roman ruins, and the beauty of its women.

The first attraction for the visitor is the great Roman Amphitheater, the largest of the kind in France, although not so well preserved as that at Nîmes, which is presently to be described. Its elliptical foundations are about five hundred yards in circumference, and the arena is seventy-five yards long by forty-three yards wide. The outer wall shows two high arcades, the lower, massive Doric instyle, the upper, Corinthian. The entablature, however, is nearly all torn down as far as the upper arch stones. The interior shows a large sunken arena, from which once rose to the outer wall forty-three tiers of seats, capable of holding twenty-six thousand spectators. Upon the ground level, beneath the
seats, two corridors run around the building, the outer of which had a ceiling of flat stones which formed the floor of another corridor above, which was also finished with a ceiling. Beneath the edifice are subterranean passages, and dens in which the savage beasts that were to fight with the gladiators were caged. After the Roman period, the Amphitheater was used successively as a fortress by the Goths, the Saracens, and finally by Charles Martel, who expelled the latter. The whole Amphitheater stands on sloping ground, and to make a level foundation for it the Romans cut a great excavation into the underlying rock on one side, and built an immense masonry platform on the other.

Near the Amphitheater stands the Theater, a much dilapidated but very picturesque ruin. It is said to have been begun under Augustus, but was not finished until the third century. Its dimensions must have been very extensive, for the old foundations measure three hundred and thirty-seven feet


from north to south, and its effect, even in ruins, is extremely imposing. It is built of the pale grayish stone of the region, and like all Roman work is wonderfully massive in construction. The most perfect remaining part is the stage wall or scena, which formed the back scene of the Roman theater. This, according to the usual custom, had three doors for the various exits of the actors, and in front of it ran decorative colonnade of fifty rich columns, of which only two still stand. In front of the stage is a semi-circular area, corresponding to the orchestra circle of the modern theater, and behind this rise the steplike seats in widening semi-circles. The outside wall, two stories high and semicircular in plan, was ornamented by frieze and cornice, arches and pillars, and was fronted by a tower containing the main entrance. Many fragments of rich decoration testify to the ancient magnificence of this theater, and it was here (where possibly it had served to adorn some niche) that the beautiful statue of the "Venus of Arles," now
one of the treasures of the Louvre, was discovered.

If in imagination we rebuild and repeople this ruinous theater, fill its tiers of seats once more with an eager audience, and its silent stage with masked actors playing the comedies of Plautus and Terence, picture a splendid Roman city sweeping about it, and, beyond, the densely peopled rural regions, we may gain some idea of the pitch of civilization to which Rome could, in the comparatively short period of its dominion, raise a city of half-civilized Gaul.

To the northeast of Arles lies the now unimportant little town of St. Remy, once the Glanum of the Romans, which was destroyed by the Visigoths in 480 . Here remain two extremely interesting relics - a Triumphal Arch, and a Mausoleum called the " Tomb of the Julii." The Arch, though not large and much injured, is well proportioned and beautifully ornamented, witnessing the spread of art traditions in an empire under which it was possible to erect so
stately a structure in a town of so little importance. The Arch dates from the first or second century of our era.

The Mausoleum, which stands near it, has gained its name of the "Tomb of the Julii," from an inscription on the architrave. It is sixty feet in height, pyramidal in form, and consists of three stories - a square base with bas-reliefs at the top, surmounted by a rich arrangement of porticos with fluted half columns, and, above a small round temple of ten Corinthian columns, within which stand two draped statues. This graceful structure probably dates from the time of Cæsar (first century B.c.), although it may perhaps be later.

Nîmes, about twenty miles from Arles, the Nemausus of the Romans, and the center of one of the principal Roman colonies in France, contains Roman relics unsurpassed north of Italy. The Romans took an evident delight in adorning the city. We know that it had a capitol, temples to Apollo and Augustus, a basilica, a theater, a circus, an amphitheater, baths, a great
aqueduct, an extensive line of ramparts, a forum, etc. Of all these relics the best preserved and most worthy of attention are the Amphitheater, the remains of the Roman Bath in the present Public Garden, the so-called "Temple of Diana," the " Maison-Carrée" and near by the Pont du Gard.

The Amphitheater, probably built ahout I38 A.D., though smaller than those of Rome, Capua, Verona or even Arles, is in better preservation, at least externally, than any of them, the outer wall being almost entire up to its very top. This wall, seventy feet in height and constructed throughout of large blocks of stone laid without mortar, bricks or rubble, is pierced by two great tiers of arches, sixty in each tier, the Doric columns of the lower projecting like buttresses, the upper ornamented with engaged Corinthian columns. The great arena seems almost as complete as when the Romans used it. Underneath its center is a large excavation (now covered by a timber roof supporting earth) and into this run gutters



Nîmes
leading the rain from all parts of the building. This excavation was evidently intended for sham sea fights and other nautical spectacles - a form of amusement of which the Romans were very fond. The outside rim of the arena was encircled by a narrow canal which could be flooded to protect the spectators from the wild animals used in the combats. Above the arena rise the seats (which could accommodate twenty-four thousand spectators) in three divisions, the lowest for the nobles, the second for the middle classes, and the highest for the common people. The upper seats were marked by lines that radiated from the center of the structure. They were grooved into the stone, and still remain to show the exact amount of space appropriated to each person. Each, in places, sat with a shoulder overlapping that of his next neighbor, thus economizing room, diminishing the inconvenience, and securing a direct view of the entire arena.

The Public Garden of Nìmes, called the Jardin de la Fontaine, is a small but
beautiful park, built around an ancient Roman Bath, which was discovered sunk below the surface of the ground. This ancient Bath, which was surrounded by a portico of Doric columns with large niches and recesses in the enclosing wall, is now partly filled with water; the columns have been roofed over; gravel walks, balustrades and trees surround the old excavation, and a platform has been built in the middle of it, forming a most attractive public garden.

Near this Garden stands a very picturesque and interesting ruin, called the Temple of Diana, but which was more probably originally part of the great Bath. The façade still shows three arches, and within, the massive walls which support nearly one-third of the round-arched ceiling, are entire except upon one side. Corinthian columns and square-headed niches for statues surround the interior. The "Temple" was erected during the reign of Augustus.

The gem of Nimes is the celebrated "Maison-Carrée," an exquisite example
of the early imperial style of architecture, and one of the finest and best preserved Roman temples extant. It measures seventy-six feet long, forty feet wide and forty feet high. Steps lead to a portico of which the pediment is supported by six detached columns. On each outer side wall of the cella are six engaged columns, each end has four,
and each angle one, making, with those of the portico, thirty in all, surmounted by capitals of admirable workmanship. The entablature is very rich, and, like the rest of the decoration, in exquisite taste. The interior has been modernized and converted into a museum of antiquities. This splendid building, one of the most complete and beautiful of all



MAISON-CARREE
the existing sacred edifices of the Romans, probably dates from about the second century. It is supposed that it once formed a portion of the extensive forum at Nìmes.

A short distance from Nìmes, spanning the River Gardon, are the mighty remains of the greatest monument in France of the skill and power of the Romans, namely, the so-called "Pont du Gard"-a portion of an aqueduct more than twenty-five miles long, built
of view, one of the finest conceptions of Roman imperial architecture. Its immensity, its solidity, the constructive genius shown in it, and its grandeur give us a vivid realization of what the character and abilities of its builders must have been.

Indeed, all these ruins of Southern France cannot but make clear to our imaginations something of the power of that wonderful race, which in a recently conquered colony, among semi-barbari-


PONT DU GARD
to convey water to Nîmes. Few other Roman works anywhere rival this bridge in grandeur and impressiveness. Eight hundred and eighty feet long, one hundred and sixty feet high, it is composed of three tiers of arches of decreasing width, the whole constructed of massive blocks of stone. No cement was used in the structure, except for the open canal, barely five feet wide, on top, through which the water ran. Piled arch on arch, striding majestically from bluff to bluff, this bridge is both from a constructive and from an artistic point
ans, and so far from the center of the empire, could rear such edifices; building fitting temples for the religion they introduced, commemorating their conquests by triumphal arches, providing public places of amusement on a scale never since approached, building aqueducts unsurpassed by our greatest engineering achievements, and, in short, making every city they founded, in a greater or less degree, a miniature Rome, sharing her civilization and her art, and serving as an outpost of her superabundant power.
G. M. TILSON.


# A SCENE-PAINTER'S EUROPE 

A SET OF VIEWS

I$N$ the quiet hours of a contemplative evening before the study fire when the inclement winds sing in the chimney, the mind becomes reminiscent, and harks back by contrast to summer days and to summer lands, to the wanderjahre of times past, when each hour brought new impressions, when the future was not only unforeseen, but was not even a matter for speculation, when the day was sufficient unto itself, and each night framed a completed picture. And whichever episode shone clearest, whichever memory clung longest, it was that which was always associated with a mise en scène - a certain scenic completeness, which formed a satisfying background to events. Whether moments were tragic or humorous, of consequence or ephemeral, the thought, the action seemed often a mere pattern woven in the midst of landscape - the country road or village lane, hills, sky and sea, as after all the most permanent factors in the memory. These are the environments which lend character to the act. the characteristic details which finish the picture. On the mimic stage the essence of such factors is still more accentuated; the concentrated spirit of the land, the symbols of its life and of its past are focussed upon one canvas.

It is but seldom that one point of view sufficiently includes an adequate number of characteristic details; but by judicious wandering in lanes and out upon jettees, up hillside paths and into terraced church-yards, one encounters from time to time points of view so replete with association that they seem the very epitome of the land and place. Intimate little scenes, where one involuntarily pauses in passing, and to which one goes back in mind and in body with pleasure - lovable corners beneath the shadows of a tree which frames the
hills beyond, doorways which would fitly open for a Juliet or a Passerose balconies and lattices, terraces and hanging windows, which might well be peopled by the romance of youth and of chivalry. So full of imaginative interest are such scenes, so saturated with romantic chance do they become, so characteristic are they of action, that they are associated with the drama in the memory, and the facts of long ago seem played upon a stage, and part of a theatrical repertoire, and these backgrounds are recognized as peculiarly applicable to the focussed action of the drama itself.

A series of such views, which were made by a scenic painter, are shown in this number. Gathered from the villages on the Moselle and from the Italian fishing towns of the Riviera, and the like, they might well have been selected for the setting of the " Cloches de Corneville " or for " Masaniello" or "Cavalleria Rusticana." Full of charming composition, with picturesque silhouettes against the sky, a scale that is not too overwhelming for a background for one or two figures, nor too small to embrace a crowd of people, concentrated in interest and local in flavor, they are an admirable selection, and are also sufficiently suggestive in their grouping and sky lines to members of the Village Improvement Societies that are growing up all over the land; although it is perhaps too much to ask that American towns shall have so definite a character. Their life is more complex, their interests more scattered, their purposes more vague. But there is no doubt of the pleasure such scenes give, and of their suggestiveness, whether they be on the world's stage, or merely upon its mimic representation, the theater, and as a background to dramatic art.
C. H. W.






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the traffic from Italy to the north merchants with their retinues of servants, artists and craftsmen, carrying into Germany year by yegar the refinements of the home of the masters of the Renaissance And these were met by men from the north, who became as skillful in their turn, and who had that love for nature and all its moods which

close association with it brings. The Italian bore the burden of the tradition of the past, of an architecture with its forms established, the precedent of canons of art, a decoration of adjust-
peopled them with gnomes and elves, surrounded them with legends, and drew inspiration from rock and tree. from leaf and flower.

At the heights of the passes, the


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TYROL
ment of proportions, an intellectual appreciation of form for itself apart from reminiscence; while the Teuton, not far removed from the days of nomadic wanderings, knew the mountains and the rivers and loved them,

Brenner and Cortina, these streams met - the culture of the south and the romanticism of the north. It was the land of the Hohenstaufens and the Hapsburgs, divided and subdivided into petty principalities and dukedoms,
nominally subject to the emperor, actually free beyond the verge of license. Each town had its feudal lord, with his citadel sometimes within its walls, but more often perched high above it on a
for, failing the blackmail or worse brigandage which was meted out to the passing merchant, the citizens were made to stagger under taxes of which the constant visible symbol was the castle


SCHLOSS VELTHURNS, NEAR BRIXEN
TYROL
neighboring height, guarding the marches, but equally on guard against surprise from the towns-people themselves; for these little nobles were predatory by nature, and their toil was one which took much and gave little;
looming above their homes, ostensibly a protection, actually a menace.

East and west from the highway across the Brenner, and north and south from that other highway from Franzensfeste to Salzburg, lay the ranges of

snow-capped peaks, seamed with valleys, and at the gate of each, a castle, or schloss, reared its head. From its parapets the land spread out to view, a field of undulating hills and valleys, threaded with streams, beside which ran the paths to the towns. Whoever passed paid toll - if not with a show of willingness and alacrity, none the less surely under the necessity of force. And castle fought castle, and town stormed town, and the land seethed with petty strife, so that the peaceful arts of trade and of craftsmanship had an intermittent existence, and shifted from place to place vainly seeking for security. The armorer was always in demand and received special privileges and protection, and the arts of working iron, of chiseling steel, of casting bronze were in high regard; but looms found little activity in these valleys; and the painter even if immured in a cloister over which the turmoil of the time passed unheeded, found small work for his brush, and sought it elsewhere.

Little by little the times changed. The stronger barons absorbed the weaker, and elected the emperor from among themselves, at first with the politic purpose of elevating one of their number who would leave them uncontrolled; but the office soon made the man ; and when Rudolph of Hapsburg came to the throne the iron hand descended. Not only from one end to the other of the Rhine, which for centuries had been a gauntlet of robbers, were the barons crushed, but nearer at home, in the Tyrol, the petty counts were forced to keep the peace. Dukedoms were held subject to the good behavior of their occupants ; cities were fostered; the taxes were remitted to a great extent, not of Vienna only but of town after town in the Tyrol. With a stronger government came greater security in the arts. The taxes might not be less than before, but at least they were known quantities, and paid into but one treasury. The men-at-arms of the petty nobles were no longer so numerous;
and instead of constant internecine warfare between nearly equal forces, of which the result was always precarious, any broil was now followed, sooner or later, by a cavalcade of the emperor's troops, winding down through the valleys, better armed, better led than all opponents, and meting out quick and rude justice. The towns became stronger fortresses than the castles, and grew and flourished inside their own walls. The
arts arose ; and from the south came the Italian, skilful in intarsia and in delicate arabesques ; from the north the metal-worker, and the wood-carver, with brains replete with grotesque fancies. The romantic German Gothic of the thirteenth century, always interesting but never of superlative quality, began to suffer a change into an equally romantic Renaissance, freed largely from conventions, and having a charm


of its own. And in the sixteenth century the Tyrol had developed its individual art - a charming union of the fancies of the north and the delicacy of the south, totally unlike the heavy Renaissance of Germany which followed the Reformation.
In the latter part of the fifteenth century there were two great emperors who were Hapsburgers - Frederick III., and his son, Maximilian, who was styled "The Last of the Knights." Both were extremely fond of the Tyrol, and both were active patrons of art. Æneas Sylvius, an Italian born at a little town in Etruria, twelve miles from Montepulciano, and to which he later gave the name of Pienza, became Pope Pius ir. He had been the confidential secretary and friend of Frederick III., and it is his history which forms the series of magnificent frescos by Pinturicchio in the library of the Cathedral of Siena. Frederick III. appears in these frescos, though with the profile and beard of Cesare Borgia, Frederick himself having
had no beard, and resembling more an ecclesiastic than a swash-buckler. Frederick did much for the Tyrol. He strengthened the towns of the Innthal, and was especially fond of Sterzing and Salzburg. His brothers were "Ferdinand of the Empty Pockets," who embellished the palace at Innsbruck and built the loggia of the Goldne Dachl, and Sigmund, who built the Ducal Castle of Meran, and occupied the castle called Sigmundskron near Botzen. He appears to have been a quaint, thoughtful man, scholarly in his tastes, desiring peace and quiet, who abdicated in favor of his nephew, Maximilian, after the Emperor Frederick's death, and retired to the seclusion of his castles ; and there is a suspicion that he was so constantly irritated by the importunities of Maximilian's opponents, who wished him to dispute the succession, that he finally, at an advanced age, committed suicide to escape the political coils of the time which for a Catholic prince was a very strong and doubtful remedy.


CEILING, CHURCH OF ST. NICHOLAS, BURGEIS
TYROL

But it was Maximilian himself who was the greatest friend of the Tyrol, and who loved every inch of it, constantly withdrawing from his battlefields or from his court at Augsburg to hunt on its mountains and to occupy its castles. Always impecunious, and always requiring money for his wars against theVenetians or Charles of Gueldres, or to obtain dowries for his daughter that he might make an alliance with the House of France, he absolutely declined, again and again, to tax his Tyroleans, and insisted instead upon his daughter Margaret wresting the money from the burghers of Ghent and Malines, never having forgiven the Netherlands for his imprisonment in Bruges as a youth. He had the most intimate relations with all the neighboring states. His first wife was Marie of Burgundy, daughter of Charles the Bold ; his second, Maria Bianca Sforza of Milan. His son Philip married Joan, daughter of Ferdinand and Isabella of Spain, whose son was

Charles v. His daughter Margaret was for years Regent of the Netherlands, and the most astute woman of her time or any other. These were the days of Louis XI., Charles the Bold, Francis I. of France, Henry viir. of England, of the Field of the Cloth of Gold, of the luxury of Rome under Leo x., of Ferdinand and Isabella in Spain, of Lorenzo de' Medici in Florence, and of Luther in Germany. Maximilian was a conspicuous personality amongst his peers, the personal friend of Dürer and of Peter Vischer, and with Sesselschreiber who designed the greater number of the bronze figures in the Hofkirche at Innsbruck as his court painter, he thoroughly knew the art of Germany. A frequent visitor at the Court of Milan, and carrying his wars in the Lombard plains up to the gates of Padua, he had seen the work of the great Italian masters. A versatile writer, an omniverous student, equally at home in the field and the tourney, in the council hall or in the
library, a fairly good draftsman, an excellent mathematician, gallant, vigorous and enthusiastic, and with a fine presence, Maximilian well graced the title of "The Last of the Knights."

His fondness for the Innthal led him
sonality of the lords who ruled in the little castles on the spurs of the mountains. Count Rudolph, with the braided moustaches and the mien of a bird of prey, and Ernst the Iron, stalwart, inexorable, live again and hold mimic court

to select Innsbruck as the place for his mausoleum. It was for his prospective tomb there that he had the famous figures of his ancestors designed and cast at the gun foundery at Muhlau; and a glance at these grim armored figures on either side of the nave of the Hofkirche gives a vivid idea of the per-
in the halls high upon the mountain side.

But by Maximilian's time the castles were no longer warlike; in fact in many cases they had become merely the summer residence of the dukes, or at times of ecclesiastics, such as the Archbishops of Brixen. The portcullises were rusted,
the gates were always open, grass grew in the courtyards, and vines clambered on the walls. The nobles, enriched by the wars, or with well established and freely given titles for their support, led
and inlaid and painted. Door architraves became rich imitations in wood of the elaborate marble frames around Italian portals. Friezes and walls were decorated with allegorical scenes in the


SCHLOSS FREUDENSTEIN, EPPAN
TYROL
more peaceful lives than of old; and the rooms began to have more the appearance of homes and less of fortress-chambers. Floors were tiled, walls covered with wainscots, ceilings were not merely rude beams, but coffered and molded

Italian fashion; and during the sixteenth and seventeenth centuries the interiors of these castles were more and more ornamented. Elaborate furniture takes the place of rude utilitarian forms, and finally the faience and majolica stove

makes its appearance, and becomes quite a feature of the room.

As the land became more quiet and secure the small holders or vassals increased in importance. They became free-holders, in some cases squires, of their over-lords, and were knighted for bravery; and many a peasant family in the Tyrol retains its coat-of-arms over its doorway, and is proud of its descent.
an extremely interesting series of early drawings of the Nibelungen myth in a little schloss near Botzen) are of the fifteenth century, and in the elaborated foliage of the Gothic style.

Such, for example, are the decorations of the gallery over the main wall in the hall of the castle of Meran, which was built by the archduke Sigmund, the uncle of Maximilian, about the middle


Here as in Holland, articles of furniture descended as heirlooms, and were part of the dowry of a bride. Beds and armories, elaborately carved and inlaid, became special works of art, which accounts for the fact that often the peasant's house contains some one or two articles that are of equal merit wîth those in the castle.
The older castles were in most cases founded after the crusades, in the thirteenth century, and what decoration is left upon them (with the exception of
of the fifteenth century. The wall at the end of the gallery and that of the room within, is covered with polychromatic leaf-scroll ornament, of the one constant type of leafage, evidently resembling the wrought-iron work of Nuremberg and other German towns, the coloring being of dull greens, blue, red and yellow on the white ground. It suggests the natural growth and luxuriance of foliage, but is rather crude work, with, however, the romanticism of the love for intricacies of natural form.

The floor tiles in the room are of unglazed terra-cotta, each with a rosette in relief at its center. The paneling of the doors has the simple ogee curves of Gothic flamboyant work that have been
lery of Schloss Dornsberg in the Vintschgau there is still later Gothic work. The ceiling is covered with a painted lattice, of which the main lines follow the ribs of the vaulting, and the inter-

so grossly exaggerated in the Nouveau Art. The ceiling is simply beamed and paneled, with burnished brass nail-heads at regular intervals on the beams, and the windows are filled with bird's-eye lights.

In the arcaded and cross-vaulted gal-
vals between are filled with lanceolate leaves. This Schloss was built in the thirteenth century by the nobles of Tarant and was for many years their residence, and the four-sided capitals have their coats-of-arms carved and painted at the corners.

One of the earliest examples is that of an extremely decorative ceiling in the church of St. Nicholas at Burgeis in the Ober Vintschgau, which is supposed to have been done in 1325 , but is probably

Tenczl, and in the sixteenth century by Georg Ilsung. Later it was the home of the counts of Tannenberg, and for a time of Fugger of Nuremberg. The coats-of-arms are, as usual, over the


SCHLOSS VELTHURNS, NEAR BRIXEN
TYROL
at least one hundred years later in date. The ceiling panels were painted in blue, red and green, the patterns outlined in black, as is the inscription.

All of this work is thoroughly German, as is one room in the Schloss Tratzberg, which, built in the thirteenth century, was enlarged in 1498 by Jacob and:Symon
door; and the extremely delicate wrought-iron door hinges are in the same style as those in the town hall at Sterzing and the chapel at Schwaz. The remainder of the work in Schloss Tratsberg belongs to the restoration of Georg Ilsung, and is heavy and almost rococo Renaissance, more German
than Italian. The bed has some fine inlaid panels.

Quite a number of the interiors shown are from the Schloss Verthurns near Brixen in the village of Feldthurns, which was built in 1580 on a noble site by the Archbishop Freiherr von Spauer, and served for a long time as a summer residence for the Archbishops of Brixen. It has no fortress quality, and being so late is consistently Renais-

Another room with allegorical figures between heavy consoles, and with a richly paneled ceiling, is treated entirely in the tones of the wood and gray. In fact, contrasts of deep browns and black and white are as frequent in Tyrolese work as they are in Dutch. The corner window, with its vaulted niched head, is picturesque and charming.

The Schloss Churburg near Schluderns, in Vintschgau, is of still later


CASTLE OF MERAN
TYROL
sance in style, and with thoroughly Italian feeling, but with northern picturesqueness. The so-called "Princes' Chamber" has several remarkably fine doorways, pilastered, columned and pedimented; and the ceiling, which is very rich, is decorated with gilded moldings and modillions, and polychromatic intarsia of stained woods, which is extremely delicate and refined. Above the high arcaded dado is a series of gold-framed panels containing frescos representing the Seven Wonders of the World. The doors are particularly fine, with very beautiful gilded hinges.
date in its decoration, though built in 13II. It was, after I5IO, the home of the Counts of Trapp. The ceiling shown is very heavy, and rich in form and color. The walls are frescoed, and the door shows a most peculiar and fantastic mixture of Gothic grotesque and classic motives, with scarcely a structural line in it.

In several of these views are shown the huge faience stoves, often veritable works of art, that in the Schloss Freudenstein in Eppan being the most elaborate and richly carved.

In the view of the house at Klausen,
the stove has a rail around it serving as a clothes-horse for drying garments. The doors are heavily but simply paneled, as is the ceiling, and the family coat-of-arms is over the door the whole room giving evidence of a certain dignity.

In fact, these halls and rooms have the charm of the distinction of work
erected both in cities and in small towns, and in many cases as country residences.

There is a similar source of inspiration in Elizabethan interiors; but as far as refinement of detail is concerned those of the Austrian Tyrol are superior to those of England, as in most cases, the details, from closer propinquity

which is carried far enough but not too far. The rooms are not large, and the motives are simple; and there has been much loving care put into. every detail. No one thing has been forgotten. Floor, walls and ceiling, door and win-dow-openings, all are treated and all are harmonious, and through all run two qualities - one of homeness and intimacy, at times a humorous appeal which tends towards contentment; the other the refinement of well-studied design. For these reasons they are peculiarly adapted to give inspiration for interiors in dwellings which are not palatial, but are more than utilitarian, in fact, just such dwellings as are being
with the Italian palaces, are more delicate than either the entablatures or the moldings of English work. The Elizabethan style bears somewhat the same relation to the Tyrolese Renaissance that the style of the Tudors does to that of Francis I. It has all the essentials of mass, dignity and scale, but a comparatively crude development of minor details; in fact, it lacks the subtler modulations. There is in the Tyrolese work also an element of that best of picturesqueness which comes from accident. In many cases these interiors have been developed from rooms which were entirely utilitarian in plan, and consequently full of surprises, such as
queer corners and somewhat uncouth windows; and the decoration has been so well applied, advantage has been so skilfully taken of each accident, that the result is especially charming, perhaps even more so than if the rooms had been monumentally planned. They hold the flavor of the past, of romance and picturesqueness, and leave a lasting memory of pleasant associations.

A sojourn in this land of mountains and valleys, of walled towns and towered castles, with the peaceful peasant life of the villagers, is one long to be remembered; and the present fate of the castles seems a fitting one, as they have become either small museums of industrial arts, or are still held as country-seats by the more wealthy of the Austrian families.
C. HOWARD WALKER.



# THE FONT AND PULPIT OF THE BAPTISTERY OF PISA 

NO other history is comparable, for scope, verity and interest, to that written imperishably in the monuments of architecture. They reveal in every stone, every column, every bit of cunning ornament, with the truth of unconscious testimony, the status of their builders, and the place these occupied in the great world-current we call history.

No buildings in the world are more interesting, and none are likely to be more beautiful, than those which thus tell us that they arose at the meeting place of great currents of national influence, blending alien styles into novel beauty, as, for example, in St. Mark's at Venice - " the central building of the world." Nor is it less interesting to find
the stones whispering of the welling of a new influence, hardly tingeing the older current at first, but gradually rising to overwhelm it from more vital springs. Such a beginning of a new influence, which is to supersede an outworn style, we may see illustrated within the circumscribed area of the Baptistery of Pisa, by the Byzantine Baptismal Font, carved in 1246 by Guido Bigarelli of Como, and the Pulpit executed by Niccola Pisano in 1260. These two monuments bear witness to the supersedure of the Byzantine man. ner in Italy through the rise of a school of sculptors who drew a new inspiration from a more ancient source, and at the same time to the encroachment of Gothic influence from the north.



The Font is in shape a simple octagon, ornamented on each face by a panel of different design, exquisitely carved in the richest and most complex Byzantine manner. It is perhaps the flower of that wonderful decorative art which arose when the culture of Rome was transferred to Byzantium (henceforward to be known as Constantinople), where Roman art was refined by the subtlety and delicacy of the Greek and enriched by Oriental love of intricate detail, until there was evolved a new style which we call Byzantine, uniting the Roman instinct for mass,
the Greek sense of form, and the Oriental love of luxury. Now, at the time the Baptistery at Pisa was being built all sculpture and carved decoration, indeed all good ornament, everywhere throughout Italy was in this Byzantine style; and perhaps this font, with its eight superb panels, may be considered as the high-water mark of Byzantine decorative detail.

But there was a pupil of the Byzantine Greek sculptors, who were carving the font, the ornaments and the statues for the Baptistery, and for the Cathedral nearby, called Niccola Pisano, who
was to catch an inspiration from another style than this moribund Byzantine which was flowering its life away so exquisitely; and it is from him that we may date the dawn of Renaissance sculpture.
" It chanced that as Niccola was thus carving at Pisa, as a pupil under the Byzantine masters," so Vasari tells the tale, " that among the spoils of marble brought by the Pisan fleet for the ornamentation of the buildings, there were several antique sarcophagi, one of which, the Chase of Meleager and the Calydonian Boar, was cut with great truth and beauty, the nude as well as
the draped figures being perfect in design and executed with great skill. Niccola was attracted by the excellence of this work, in which he greatly delighted and which he studied diligently, imitating the admirable manner of these works with so much success that no long time had elapsed before he was esteemed the best sculptor of the time." And the first fruit of this admiration, study and imitation was the Pulpit, which stands but a few feet from the Byzantine font which his former masters had carved, - the first true work of the Italian Renaissance.

Mr. Ruskin has told its story vividly


" You are," he says, " in mid-thirteenth century; i200-I 300 . The Greek nation has been dead in heart upwards of a thousand years; its religion dead for six hundred. But through the wreck of its faith and death in its heart, the skill of its hands and the cunning of its design instinctively linger. In the centuries of Christian power, the Christians are still unable to build but under Greek masters and by pillage of Greek shrines; and their best workman is only an apprentice to the 'Græculi esurientes' who are carving the Baptistery. Think of it. Here has the New Testament been declared for 1200 years. No spirit of wisdom, as yet, has been given to its workmen, except that which has descended from the Mars Hill on which

St. Paul stood contemptuous in pity. But there are Greeks and Greeks. The Greeks of the twelfth century are to be summed up under the general name of Byzantines; their work in sculpture and painting at least showing specific characters of attennate and rigid design, to which Vasari's epithets of 'that old Greek manner, blundering, disproportioned ' are naturally applied by all persons trained only in modern principles. Under masters then of this Byzantine race, Niccola is working at Pisa.
"Among the spoils brought by her fleets from Greece is a sarcophagus with Meleager's hunt on it, wrought 'con bellissima maniera,' says Vasari. You may see that sarcophagus, any of you
who go to Pisa. Not far from it stands Niccola's pulpit. Within fifty yards of it stands the Byzantine font.
"The sarcophagus is not, however (with Vasari's pardon), in 'bellisima maniera' by any means. But it is in the Classical Greek manner instead of the Byzantine Greek manner, and the nature and matter of the former is easily summed - as those of natural and unaffected life. To Niccola, the difference between this Classical Greek school and the Byzantine was as the difference between the bull of Thurium and of Delhi. Instantly he followed the natu-
ral fact and became the Father of Sculpture, the Master of Naturalism in Italy, - therefore elsewhere; of Naturalism and all that follows.
"And, moreover, behold! between the capitals of the pillars and the sculptured tablets there are interposed five cusped arches, the hollow beneath the pulpit showing dark between their folds. You have seen such cusped arches before? Yes, you have, but the Pisans had not. And that intermediate layer of the pulpit means for Italy the rise of her Gothic dynasty: the Duomo of Milan instead of the Temple of Pæstum."



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## Brochure Competition Announcements

## Competition AA

CLOSES JUNE 15, 1903

## SUBJECT: A Plan for a Formal Garden,

To fill a level, rectangular plot of land, measuring 132 feet north and south, by 96 feet east and west, in which is a disused, rectangular cellar, which measures 48 feet north and south by 32 feet east and west, and which lies parallel to the bounding lines of the plot, 16 feet from the north boundary and 16 feet from the east boundary; this cellar the owner wishes to utilize as an ornamental water basin. The owner wishes to utilize as an ornamental water basin. The wholl. Plan to be rendered in pen and ink at a scale of onesixteenth of an inch to the foot.

Award to be announced in The Brochure Series for July, r903.

First Prize, $\$ 10.00$ in gold Second Prize, $\$ 5.00$ in gold
Prizes offered by The Brochure Series.

## Competition BB

CLOSES AUGUST 15, 1903
SUBJECT : A Pier and Boat-landing for a Gentleman's Country-place on a Lake.
To be built in any style and of any material. To be shown by a perspectuve pen and ink drawing only.

Award to be announced in The Brochure Series for September, 1903.

First Prize, $\$ 10.00$ in gold Second Prize, $\$ 5.00$ in gold Prizes offered by The Brochure Series.

## Rules Governing Competitions

1. All drawings, unless otherwise stipulated in the conditions, must be in pen and black ink (neither pencil nor wash drawings will be considered) and on white paper or cardboard measuring 8 by to inches.
2. All drawings must be addressed, "Editor The Brochure Series (Competition), 42 Chauncy Street, Boston, Mass., " and must be received on or before the date set above for the close of the contest in which they are entered.
3. Each drawing to be signed by a pseudonym (not a device) only, the name and address of the competitor to be sent in an envelope, bearing on the outside the pseudonym only, and enclosed with the drawing. These envelopes will not be opened until after the award has been made.
4. Each drawing to be packed flat, not rolled.
5. The Editor reserves the right to publish any of the designs submitted. Drawings will be returned only when accompanied by sufficient return postage, enclosed in the envelope with the competitor's name.
6. Although open to all, whether subscribers to the Brochure Series or not, these competitions are held chiefly in the interest of the subscribers to the magazine, and therefore the prizes will be paid only to competitors whose names are on the subscription books of the SERIES at the closing of the competition. If the best designs are the work of non-subscribers the fact will be so noted in the award, and the designs printed; but the prizes will be paid to those subscribers whose designs stand next in order of merit.

Brochure Series Competition $Z$

## A Log-cabin Shooting Lodge for a Camp announcement of the award

THE requirements in this Competition called for pen and ink sketches of the perspective and plan of a log-cabin shooting lodge, suitable for a camp. The plan was to comprise a gun-room, a kitchen, two sleeping-rooms and a piazza. A large number of drawings were received.
It seemed so apparent to the judges that the first quality aimed at in a structure of the given specifications was absolute simplicity, that they began by discarding all those designs


First Prize Design, by Mr. D. A. Clous, New York City.
-and there were many of them - which could be called log-cabins only by the widest courtesy. It seemed self-evident that no one would choose to build a cabin of logs in a spot where the usual more easily handled materials would be accessible, and where they could be used more cheaply and with better results. It was regrettable that, considering the definiteness of the stated requirements, so large a number of designs were obliged to be thus debarred. Drawings of houses were among them which would be considered fairly elaborate in the ordinary suburban town, and in which tiled dormers, carved barge-boards and leaded windows - nay, even in one case, columns with classic capitals - were combined with a purported to be log construction.
For the same reason those designs were eliminated in which the plans showed a similar unsuitable elaboration and included not only rooms uncalled for by the program, but of a character absolutely out of keeping in a cabin of such intentional simplicity.

The remaining drawings, considered as a whole, showed as the most common and gen-



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eral defect, a lack of that lowness and compactness which the material specified would, if used in a natural way, have brought about. Too many drawings showed a lightness of effect only to be attained by the use of saplings instead of logs, or were so elaborated by jogs


Second Prize Design, by Mr. Garrett Van Pelt, Jr., Milwaukee
and projections that their construction of logs, while not impossible, would have been both difficult and laborious.

In regard to the plans, the judges considered the simplest arrangements - those in which passageways and isolated rooms were avoided,


[^4]"Pitch Pine Point."
and which allowed the greatest continuity of wall outline - the best. One of the favorite and most successful types of plan was that illustrated in the first and second prize drawings, in which the grouping was as compact as possible, and in which the bed-rooms could be heated directly from the kitchen stove or gun-room fireplace, though in the second prize design the doors opening on opposite sides of the gun-room might have a tendency to split that room in two, and make it less desirable as a comfortable lounging place, as is also the case in the plan submitted by "Pitch Pine Point."

The gun-room was in some plans made the largest apartment and living-room. In others it was hardly more than a closet intended for the storage of the guns. The judges considered that the indefiniteness of the specifications warranted either interpretation.

The First Prize has been awarded to Mr. D. A. Clous, New York City; the second to Mr. Garrett Van Pelt, Jr., Milwaukee, Wis. Mentions are awarded to the drawings signed "Sauvage," " Lynx," "Cabin," "Grizzly," " Crescent," "Alpha," and " Debsconeag.

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#### Abstract

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#### Abstract

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In the article on Bulfinch in the present issue, the illustrations of the McLean Asylum, formerly in Somerville, are from negatives by Pach Brothers, Cambridge; and those of the church and pulpit at Lancaster, Mass., by Mr. James Macdonald of that town.

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CHARLES BULFINCH, ARCHITECT

THE HALF-TIMBER HOUSES
OF ENGLAND

# The Brochure Series 

OF ARCHITECTURAL ILLUSTRATION

VOL. 9
JUNE, 1903
NO. 6

## CHARLES BULFINCH

## ARCHITECT

THE name of Charles Bulfinch is one to be honored in the history of American architecture, not only for his personal achievement but for his influence at a critical periodin the æsthetic progress of the nation. The Revolution had put an almost entire stop to building, and the return of peace found the people not only impoverished but with such other pressing and immediate tasks before them that they had little time for building except the simplest. Not until the end of the eighteenth century was the bur.den of penury and depression sufficiently lightened to warrant the resumption of indulgence in architecture. It was at this unsettled time, when the old traditions had, in a measure, been lost sight of, and a new spirit of national self-suffi-
ciency had arisen in the stead, that Charles Bulfinch began his career. Although his work was limited almost entirely to Boston and New England, that section of the country then maintained a preëminence which it has since, in a great measure, lost; and perhaps no American architect has ever stood so prominently before the nation at large, or been so influential in shaping its architecture. It is therefore to his lasting credit that, though he drew his models from England, his native refinement made him avoid the manner of Hawksmoor, and some of the less conspicuous followers of Wrenn, who, working in the decadence of the first English Renaissance style, seemed to be striving to secure startling results by an extravagant application of the

same devices that Wrenn had used so successfully. Bulfinch found his inspiration rather in the more restrained and refined works of the later builders Sir William Chambers and the Adam brothers, for instance.
Charles Bulfinch was born in Boston in 1763. At the age of eighteen he graduated from Harvard College and entered a counting-house. But the business of the town being paralyzed by the war, he had abundant leisure, which he apparently employed in reading such works on architecture as were then accessible. From time to time he found practical opportunity to exercise his bent by making minor changes in his father's and neighbors' houses: but he did no work professionally until after his return from abroad, whither he went at twenty-one.

He traveled for a year or two in England and on the Continent, evidently making a careful study of the architectural monuments, and buying many architectural books, and returned to Boston in 1786. At this time there was no professional architect in the city, nor indeed probably elsewhere in America. Boston was a town of about
eighteen thousand inhabitants, its houses stood detached in the midst of pleasant gardens, and its few public buildings had been erected from the imported designs of London architects. Indeed, Bulfinch himself did not at once begin to practice in an openly professional way; but his accomplishments had become known, and he was consulted in regard to any local building of importance.

His first work was a column erected on Beacon Hill to replace the actual


beacon which had been lighted in early times to warn the townspeople on the approach of the enemy. Beacon Hill was then a round knoll at the northeast of the present State House. It was cut away in 18 II and Bulfinch's column disappeared with it. Our illustration, taken from an old print, shows the hill crowned by the column during its removal, and its position in relation to the State House. Five years ago (I898) a reproduction of Bulfinch's column was erected on the site of the original, which was a Roman Doric shaft, standing on a pedestal and surmounted by a globe bearing an eagle.

The first theater in Boston was projected in 1793, and Bulfinch furnished


THE CENTRAL BUILDING, FRANKLIN CRESCENT
From a drazing by Bulfinch
the design. This theater stood at the corner of Federal and Franklin Streets, a detached building, - graceful, simple and restrained, yet not without a certain appropriate festal character. We can form some judgment of its aspect from a medal, now in the possession of the Bulfinch family, which was struck at the completion of the enterprise in recognition of his services, and is here reproduced.

At about this time Bulfinch joined several other gentlemen in a speculation which resulted in one of the most interesting features of Boston during the earlier half of the century. This was the construction of the so-called "Franklin Crescent," the first attempt in Boston at building residences in a block. If the present-day visitor will glance down Franklin Street as he passes its juncture with Washington Street, he will observe the large rectangular sweep of the buildings on the right, which follow a geometrical curve. This curve is all that now remains of Bulfinch's original plan. The site was in his day a swampy pasture, and the original scheme embraced the laying out thereupon of two blocks of houses, planned in similar crescents, which were to enclose an elliptical grass plot. The impossibility of obtaining all the necessary land compelled the substitution of a straight line for the northerly crescent, but the companion block was successfully built. This block comprised sixteen three-story houses. The two at each end were brought slightly forward


MASSACHUSETTS STATE HOUSE, DORIC HALL
BOSTON
as pavilions, and the central structure was carried higher by a low attic crowned by a pediment, and its basement stories were pierced by three openings which admitted the passage of a street beneath the central archway, and of sidewalks beneath the two flanking openings. Over the central passage used to hang the sign "Arch Street," and Arch Street is still there, though all visible reason for its being so called has long since disappeared. A fair idea of the aspect of the crescent may be gained from Mr. Bulfinch's drawing for the central pavilion, and from the plan and elevation reproduced from a print of 1794 . As a whole the Franklin Crescent, though extremely simple in scheme, gives evidence of much judgment and skill on the part of the designer; and, in spite of its simplicity, the effect is distinctly architectural, with its sky-lines broken by the superior elevations of the center and the ends, the archway in the middle, and the central curve of the whole line.

But architecturally successful though it was, the enterprise was financially a failure. Boston was not yet able to support so large a number of expensive dwellings; forced sales followed; and Bulfinch found himself reduced to bankruptcy. This seeming misfortune proved, nevertheless, a blessing, for it was the cause of his adopting architecture professionally instead of practising it partly as the recreation of an amateur. His previous efforts had, however, gained him an enviable reputation, and his practise grew rapidly.

His next work - the Massachusetts State House - proved to be the most successful of his career. The government had outgrown the little building at the head of State Street and in 1795 the corner-stone of the new edifice was laid on Beacon Hill. We can hardly realize now-a-days how stately and magnificent the new State Capitol was then considered to be. Colonial architecture in Philadelphia and New York had produced few large buildings; there

was nothing worthy of comparison in Washington; and the Massachusetts State House when finished was hailed with hardly a dissenting voice as an unrivaled performance.

By no means a large building, and without richness of material, since brick and wood served all purposes of construction and decoration, its proportions are so judicious, its general treatment so broadly simple, its ornament so sparing, correct and well applied, that it produces a remarkable effect of size, dignity, elegance and grace; and this, in combination with its admirable site and perfect adaptation to that site, gives it, to an unusual extent, a monumental character.

Bulfinch's practise thereafter included public and private buildings of almost every description, although most of them were confined to Boston and its vicinity. His first church was the Roman Catholic Cathedral, called the Church of the Holy Cross, which stood in Franklin Street just below the Crescent. This was completed in 1803 . It soon proved too small for its congregation, and was long ago pulled down. We may, however, form a very fair idea of its appearance from the similar New North Church in Hanover Street, which was dedicated during the subsequent
year and which is the only church known with certainty to have been designed by Bulfinch, now standing in Boston.
The English builders of Bulfinch's day were using the Renaissance forms in churches much as they had been used in the smaller churches of Italy, and more after the fashion which Inigo Jones had set, than after the mode which Wrenn later introduced. But English prejudices demanded a spire of some sort, and the architects seem to have compromised upon a low cupola. We may see the influence upon Bulfinch of this contemporary work in England in the New North Church.

On Church Green, the junction of Summer and Bedford Streets, in Boston, Bulfinch built what seems to have been considered the most successful of his city churches, the New South Church, reproduced in our illustration from an old print of 1835 . Its octagonal plan gave the design an unusual character, and in it Bulfinch departed from the model he had used in the Franklin and Hanover Street churches by adorning the front with a portico of Doric columns and crowning the whole by a high and graceful spire. The interior was,

according to contemporary accounts, especially successful; and we must greatly regret that in 1868, the pressure of business interests compelled the removal of so interesting a structure.

The last of Bulfinch's Boston churches was that in Federal Street, in which he attempted a spire in the Gothic style. For this style he was, however, unfitted, both by taste and training, and the result was one of his very few failures.

Bulfinch also built the present spire of Christ Church in Salem Street, Boston, to replace a former steeple which, had been blown down in 1804 . He had previously tried his hand at the reconstruction of an existing edifice by enlarging Faneuil Hall, but as in this case he merely doubled the width and correspondingly increased the height of the original, without changing its features or character, the "Cradle of Liberty" as it now stands cannot be considered as his design, although it serves to exhibit his judgment and skill in the difficult rôle of restorer. In the Christ Church steeple, however, though he followed the general lines of the old spire, he improved upon it in grace and lightness of effect.

During his career Bulfinch built several churches outside of Boston; a stone one in Washington, and wooden ones at Pittsfield, Taunton and Weymouth, Massachusetts, and one of brick at Lancaster, Massachusetts. The latter which has been lovingly preserved, is probably the most satisfactory example of his churches now standing. It has, like the Franklin Street and New North Churches, a cupola without a spire, although in this case the cupola is more elaborately designed; but differs from both in having an arcaded portico. The interior, and especially the beautiful pulpit, gives added evidence of the exceptional lightness and grace of Bulfinch's touch in interiors-very few of which, alas! remain.

In 1815 Bulfinch built University Hall for Harvard College, Cambridge, which stands unique among the college build-
ings to this day, and which remains externally in its original condition except that it at first had an open colonnade or piazza of wood along the western front.

About 18I7 he built the Boylston


CHRIST CHURCH, SPIRE
BOSTON
Market, an attractive structure demolished but a few years since.

In 1818 the McLean Insane Asylum at Somerville, formerly Charlestown, was opened for patients. The trustees had previously purchased as the nucleus for the institution, the country-seat of Mr. Joseph Barrell which had been designed


BRICK CHURCH LANCASTER, MASS.
by Bulfinch, and he now made the requisite additions of two plain brick wings. The central building and one of its apartments are shown in our illustrations. The latter is a characteristic specimen of Bulfinch's interior work. The two divisions of the original and curious staircase ascend from opposite ends of a rectangular hall to meet upon a platform supported by four fluted columns, with an elliptical arch beneath. These buildings have, within the last ten years, been torn down.
In i8i8 Bulfinch designed the Massachusetts General Hospital in Boston. Two wings were later added to his work, and the Hospital has recently been enlarged and extended. Although not to be ranked architecturally with the State House, it is an excellent and straightforward piece of design; and it is an interesting evidence of the strictly "classic" taste of the time, that it was considered when finished, from the more classical character of its portico and dome, to be the finest building in the Commonwealth, even surpassing the State House.

While drawing the plans for the Hospital and the McLean Asylum, Mr

Bulfinch visited other cities to inspect similar institutions, and in Washington had some pleasant intercourse with President Monroe, who had then just been elected to office. When, later, the President visited Boston on his northern tour, Mr. Bulfinch, then Chairman of the Selectmen of the town, received him officially and showed him his various works with the result that he was shortly after appointed architect of the Capitol at Washington, which had been half burned by the British during the war of I8I2. As architect of the Capitol Mr. Bulfinch lived in Washington for about a dozen years, remaining in charge until his work was completed in 1827.

Many architects had labored upon the Capitol since the laying of the cornerstone in 1793 . Hallet, Hadfield, Hoban and Latrobe - all had worked upon it; and Bulfinch received not only a partially completed building but a legacy of plans and drawings from his predecessors, so that it is difficult to decide


[^6]exactly how much of the portion he built should be credited wholly to him. The north wing and the south wings had been completed in 1814, but they were practically isolated blocks, only connected by a wooden gallery. Later Latrobe commenced the construction of the central building, but resigned in I8I7, leaving it incomplete; and in this state Bulfinch took charge. He erected the present nucleus and central part of the whole composition. How far he followed the plans of his forerunners in the architecture of the great central portico and the dome is uncertain; but it seems unquestionable that the succession of terraces and steps which make the approach on the west front, toward the city, so imposing, was his work.

The little sketch here reproduced shows the Capitol as completed by Bulfinch in 1830. The long wings built afterwards give it a very different appearance today, and Mr.Walters' magnificent dome changes its aspect still more. But even had the extent of the building in Bulfinch's time been what it is now, it is probable that his low dome would have accorded better with the


BOYLSTON MARKET
BOSTON
"classical" taste fashionable in his day nay, his dome was criticised by his contemporaries not for being too low but


for being too high and too prominent! On his return from Washington Mr. Bulfinch was an old man. The only conspicuous building he afterwards designed was the State House at Augusta, Maine. In 1828 Maine, recently become a State, appointed a committee to obtain plans; and in the resolution of a year later, in which Mr. Bulfinch's plan was accepted, the design is referred to as
"representing the Boston State House, but reduced in dimensions."

Sufficiently like the Boston State House to show that at the end of his professional career Bulfinch was willing to abide by that design in general, he altered it far enough to exhibit an interesting change in his taste. The portico is similar in both schemes, but its treatment in detail is more regular

in the Maine building; the columns are single, and the pediment is the full width of the portico and rests directly upon it. In the dome and its support
and urbanity of his manners, and the integrity and purity of his character. His public service was by no means limited to architecture, for he served from

the departure from the earlier design is more striking.

This was Mr. Bulfinch's last work. He died in I844 at the age of eighty, having completed forty-three buildings in addition to the Capitol at Washington.

In personal character Mr . Bulfinch was distinguished for the gentleness
the age of twenty-seven as a Selectman of the town of Boston, and for twentyone years was Chairman of that board, a position which he relinquished only when he left Boston to become the architect of the Capitol at Washington. The Chairmanship was the principal executive office of the town, and that he


THE CAPITOL AT WASHINGTON AS COMPLETED BY BULFINCH IN I830
discharged its burdensome duties to the full satisfaction of his townsmen is demonstrated by the length of his continuance in the office.

In an introduction to the "Life of Charles Bulfinch" by the architect's granddaughter, Mr. Charles A. Cummings has admirably summed up the qualities of Bulfinch's work as an architect as follows: "Of the character of his buildings, regarded as works of architecture, it is sufficient to say that while in most of them, from the necessities of the case, a little architecture was
made to go a great way, they were invariably marked by sincerity, refinement of taste, propriety, an entire freedom from excess or affectation, and an intelligent adaptation to their various needs.

One danger, it is true, Bulfinch es-caped-a danger ever present to the architect of these later days - the danger of excess, of extravagance, of that affectation which is in our day the bane of art and literature. How hard it is for the architect of today to use his embarras de richesses with the stern self-restraint and the cool judgment which so vast a choice of materials enjoins on him, none but himself can know. . . . That temptation Charles Bulfinch never knew. But out of his slender resources he created nevertheless in his day a body of architecture which possessed the grand qualities of simplicity, dignity, repose, not without a certain modest elegance which was of the nature of the man himself. It is sorely to be regretted that the march of progress has left so little of his work." S. F. N.



## ENGLISH HALF-TIMBER HOUSES

|N previous articles upon the domestic architecture of England the qualities which make this class of buildings distinctive, their adjustment to surroundings, their expression of homely fitness and their relation to the life of the English people have all been discussed. It has also been shown that although by reason of our inheritance and the similarity of conditions in America we may more naturally look to England for inspiration and example than to any other country of the old world, it is nevertheless unreasonable and even futile to attempt to transplant bodily to this country the forms which have grown up and been perfected there. There are, however, certain characteristics which can be adopted with advantage, and certain forms
which are as appropriate to our time and country as they were and are to England. We shall find this especially true of the cottage architecture, and more particularly that in which wood construction is used.

Despite the practical objections which stand in the way of adopting the constructive methods used in early halftimber work the architectural and decorative forms there found are still adaptable to modern purpose and modern design. Originally they were the simple and straightforward expression of the direct employment of the most easily available local building materials, the work of craftsmen who lacked, to be sure, the knowledge and resources at our command, and intended to serve the needs of a social condition quite


different from ours, yet they may furnish us with models in design which, if intelligently interpreted, may be of the greatest value. Mr. Ralph Nevill in his book upon the cottages of Surrey says: "The great lesson to be learned from the study of these old examples is, I take it, the extreme value of simplicity. It is a lesson peculiarly needed since, even when an architect is anxious to work on such lines, it is seldom that his client is content to let him. There is far more beauty in a cottage of the simpler form, with its roof bright with lichens and its front covered with creepers, than we shall ever get from modern examples, tortured as they are into fantastic shapes where all repose and simplicity are lost." Although some of the examples chosen to illustrate this article are outside the class of simple buildings referred to by Mr. Nevill, and are possibly dangerous models in the hands of inexperienced or untrained designers because of their irregular picturesqueness, they are all, the simpler and the more complex, very
evidently the spontaneous and unconscious result of working in the easiest and most direct way to accomplish a desired purpose. The picturesqueness is merely accidental, while the method is simple, natural and unsophisticated. If, in adopting any of these forms, we can follow the same method, making our designs an evolution from the older ones, not mere copies of them, preserving only what fits our present-day needs and is consistent with our advanced knowledge of building materials and the greater variety of materials available, then we may reasonably expect to profit by the examples before us.

In looking for the origin of this homely, unpretentious class of houses we find that they grew up quite naturally from the needs of the people, during the decay of feudalism. What we know of the early domestic architecture of England relates chiefly to the castles of the feudal lords. The dwellings of the common people were scarcely more than huts or hovels, and all trace of them has gone. Gradually, however,


ORLETON
as the feudal system declined, civil wars became less frequent and the country grew more settled; the larger houses were built upon a less defensive
plan, and the retainers, once lodged in the great halls of the castles, were encouraged to build separate dwellings outside the castle walls. Down through



> ORLETON

HEREFORDSHIRE
the fifteenth century all architecture was Gothic and of stone; the great cathedrals, churches and the fortresses of princes, prelates and nobles are all
we know of the buildings of this time. In private houses, both in town and country, stone was little used; it was expensive to work, and as brick must

also have been costly, the lesser houses before the Reformation were of timber or even less durable material, and have vanished, leaving littie trace behind them.

The period of half-timber construction in England is said to have begun about half a century before the reign of Queen Elizabeth and to have been extended about half a century after itsclose. During this time stone and brick were
lieved that the superstructures of Roman villas and other Roman buildings in England were largely of oak. Until the wholesale destruction of the forests in the sixteenth century the supply had been ample for all uses; but then it began to grow scarce, and serious alarm was felt as to the supply available even for ship-building; and oak timber ceased to be a cheap and convenient building material. The


ORLETON
HEREFORDSHIRE
employed for the more important structures, when the owners were rich, while half-timber work, consisting of a frame of timbers filled in with clay, plaster, brick or other materials, was used for the houses of minor importance and by the less prosperous. Oak, in the early part of the period, was cheap and easily obtainable, and it was employed to the exclusion of all other woods for framing. From its hard, durable character and freedom from attack by destructive insects it has always been an important building material; indeed, it is now be-
growing scarcity began to attract attention as early as the time of Edward vi., and Blomfield points out that the Mayor of Rye in Somerset reported in 1549 upon the great consumption of oak wood by the iron mills. In 1573 Christopher Baker made a report upon the destruction of the forests in Sussex, Kent and Surrey by their iron mills and gave a list of the furnaces and owners in the tree countries. In other parts of England the same destructive process was going on. Camden mentions that the Forest of Dean, which was

"the Leys," weobley
HEREFORDSHIRE
almost impenetrable in the reign of Henry vi., was in his time much thinned because of the discovery of rich veins of iron ore, and the consequent use of wood for smelting. In Essex also, by the middle of the seventeenth century
a large part of the country had been cleared and converted into farms. So it will be seen that the decline of halftimber construction was not due to a change of taste, that it was in reality occasioned by the high price and

scarcity of oak timber It occurred when half-timber construction had about reached its maturity, and when, if not for this forced scarcity of material, the
style might have been expected to continue for an indefinite period. There seems no reason why, with modern methods and materials, we may not con-


WEOBLEY
HEREFORDSHIRE

tinue it from this point, carrying out the spirit of the early builders.

The greater number of small English cottages and manor houses now remaining date from the sixteenth and the first half of the seventeenth centuries. The older cottages of timber had fallen into decay and been swept away. Moreover there was probably no great demand for cottages between the period of the Black Death and the destruction of the monasteries. But in the sixteenth century great changes in the ownership of land took place, as well as in the mode of life. Previously laborers on estates had lived in farm-houses and mansions, eating and often sleeping in the large halls, while the abbeys and priories also sheltered many of the laboring class. It was in fact a tenement system of living. All this was now gradually changing, and in the reign of Elizabeth, cottage building was given a great impetus.

Half-timber construction had many advantages. It was strong and durable and not so costly as masonry ; but it
had one great drawback, for after a time the timbers shrank from the filling, leaving cracks which let in rain and wind. As a remedy for this the rich hung their walls inside with tapestries, and afterwards paneled them in wood. Finally, as a last resort, the walls were plastered over externally.

In the ancient examples the timbers were large and near together, showing quite as much wood as intervening plaster; but as oak became more expensive posts were put farther apart and the panels made larger. The panels were in the beginning first filled with wattles, which were then plastered over with clay. In later times brick and more durable materials were used, and in many cases weather-boards and tiles have been applied entirely covering the old construction. Another recent change in the appearance of many old houses is due to the use of black tar as a preservative for the timber, which was never used in earlier times. In the better houses the main panels are filled with ornamental quartering, but this was.

not done to any extent before the latter part of the sixteenth century. In the older examples of half-timber houses, the
plaster is invariably flush with the posts. The timber framing on the north and east sides of these buildings is generally


"'THE OLD BELL INN,’' LUDFORD
HEREFORDSHIRE
still as sound and sharp on the edges as the day it was put up; but on the south and west sides often all that is left of
the posts is the hardened skin and the very hardest parts of the heart of the oak. J. A. SCOTT.




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# The Brochure Series 

OF ARCHITECTURAL ILLUSTRATION

VOL. 9
JULY, 1903
NO. 7

## PUBLIC FOUNTAINS IN ITALY

IT is not surprising that a thing so beneficent as a spring of water should be connected with religion, and among the early Greeks such springs were commonly enshrined in temples, and dedicated to gods and goddesses, nymphs and heroes; so that we may clearly trace the beginnings of the architectural adornment of fountains from the Greek shrines built over favored sources.

We lack any very definite descriptions of these early fountain-temples, but their elaborate construction is evident from
the brief mentions made of them. The Spring of Pirene at Corinth, for instance, a city of many fountains, was surrounded, we are told, by "white stone" from which the pleasant water flowed from a number of outlets into an open basin; and at the spring near the statue of Bellerophon the water jutted from the hoofs of the winged horse, Pegasus. Another Corinthian spring was adorned by a bronze statue of Neptune standing on a dolphin from the mouth of which the water flowed. A


fountain built by Theagenes at Megara, was remarkable for its size and decoration; and one at Lerna was surrounded by pillars within the enclosure of which a number of seats formed pleasant resting places in the heat of the summer.
religious associations with its sources, the Greeks clearly recognized the necessity to man of wholesome water, and of its transportation and distribution in constancy, purity and plenty thoughout the populous quarters of the cities; so


We know too that a fountain at Patræ was reached from without by flights of descending steps; and that the water flowed from the fountain of Enneakrounos at Athens through nine pipes.

Indeed it is evident that, long before they had outgrown their primitive
that it is not surprising to find Pausanias naming the presence of fountains as a test of civilization, and asking with reference to Panopeus, if it could be properly entitled to rank as a city when it had no public fountains of water.

As to the Romans, one of the greatest



FOUNTAIN OF THE ROYAL PALACE
CASERTA
manifestations of their practical power was in the arrangements they made for the water supply of the Capital, and the
more important stibject cities. The remains of the aqueducts which stretch across the Campagna are amongst the


most striking monuments in Italy ; and the importance which the Romans attached to the subject is attested by the minute particulars given by Vitruvius of the methods they employed in the discovery, testing and distribution of water, and their investigations into the medicinal properties of different springs.

The great aqueducts fed the baths and fountains of Rome; and though there were a few private water-pipes (from the renting of which the city derived considerable revenue), the majority of the people obtained their water from the public fountains, as the poorer classes in Italy still do today. In Rome, therefore, fountains must have been large and very numerous, and we know from ancient writers that they were considered important architectural features of the city, and were often elaborately decorated with sculptures and bas-reliefs. We know, too, that fountains were a common adornment of suburban Roman villas and country houses, and that in such private fountains the water often fell from a high
jet into a large marble basin with, at times, a second fall into a still lower receptacle, much after a usual modern form of arrangement.

Among the relics at Pompeii (to which we are indebted for so many details of specific knowledge concerning the customs and works of the ancients) not the least interesting are the numerous public and private fountains, supplied by leaden water-pipes from the main reservoirs; the private ones elaborately decorated and beautified with bronze and marble figures or mosaic work, while those for public use were situated in almost all the open spaces and cross-ways of the city, the water spouting through the mouths of human or animal heads set into a wall, and falling into a basin beneath, or rising from some architectural setting in a jet d'eau, as at the eastern end of the peristyle of the Fullonica.

The Italians came therefore by natural inheritance to delight in fountains; and there is no country richer in them, either of medieval or modern construction.



They form one of the most characteristic features of Italy, and memories of them dwell long among the traveler's impressions. "What fascinating visions," says a recent writer, " the very
perhaps seen through slender columns against a background of intricately interwoven design, where the water, after escaping from the jets, flows with gentle lapses along conduits of marble

phrase 'Italian Fountains' suggests to the imagination, which forthwith unrolls before the inner eye in long sequence a chain of delightful memories! Visions of sparkling water and lucent marble,
between beds of flowers; or as in the grandiose later-Renaissance fountains, where tritons wind their conches with swelling cheeks, and nymph and naiad enring the chariot of Neptune drawn



FOUNTAIN OF NEPTUNE, PIAZZA DELLA SIGNORIA
FLORENCE
by strange sea-beasts; or, again, where gods and goddesses attitudinise with futtering draperies above the place
where the water spouts forth in ceaseless flood with a noise as of a cascade; or where the simple basin without orna-


ment, moss-grown and water-stained, overflows with noiseless trickle beneath the shade of the ilex trees; basins of quaint shapes and unfamiliar material and appearance, supported by single figures or groups; designs so informal as to be almost licentious, or so purely architectural as to be a trifle frigid; broadly spreading surfaces of lovely marble chequered with shadow from overhanging trees, or elaborate pieces of interwoven metal-work standing boldly out in the market-place. All these, and many more, pass before the mind in endless panorama, while one almost seems to hear the jingle of the bells as the horses or mules shake their heads and plunge their noses in the cool water with which man and beast wash the dust from their parched throats; or the chatter of the women as they linger, bright spots of color with kerchief and apron, and the tinkle of the water as the water-pots fill; while pigeons flutter and splash in the upper basin, or circle round on widespread pinions, waiting till the fountain be again left solitary."

Writers on architecture have made numerous attempts to classify fountains into more specific categories than those afforded by the broad general divisions of the architectural styles; but no such attempt has proved at all conclusive. The features of which fountains may be composed are so many, and the ways in which these features may be combined are so various, that it is more likely that any given example, other than the very simplest, will fall between two such classifications than fit completely within the bounds of any rigid definition of a type. No classification has, therefore, been attempted in the present paper; the subsequent brief descriptions merely follow the order of the illustrations.

The Fountain of the Tortoises, with its graceful design of bronze youths, tortoises and dolphins, is one of the most charming in Rome. Indeed, it is not surprising that the design was for long attributed to Raphael, although actually it is the work of Giacomo della Porta, an architect who did much work in Rome.



The Great Fountain in the Piazza del Duomo at Perugia, dates from 1277. It, with its three admirable basins adorned with biblical and allegorical reliefs, is perhaps the most beautiful medieval fountain which has come down to us. An inscription states that it was completed in 1280; and its beauty is not to be wondered at, considering that it was the work of Niccolà and Giovanni Pisano and Arnolfo di Cambio.

The Fountain of Sepali, at Viterbo, was erected in the Gothic style in 1206, and is unusually fine even for Viterboa town celebrated for its fountains, and called by the Italians "the city of beautiful women and beautiful fountains." The name "Sepali" is said to be a corruption of senza pari, meaning "without equal."

Another fountain at Viterbo, of great distinction of general design, although clumsy in some of its proportions, is that in the Piazza Vittorio Emanuele. The beautiful gardens of the Royal Palace at Caserta, which were built in 1752 by Charles in., contain a series of fountains, of which two are shown in our plates. The rather complex groups of statuary, which represent various classic myths (that shown in our plate represents Acteon being pulled down by Diana's hounds), are the least satisfactory portions of the whole. The fountain was designed jointly by Vanvitelli,Violani and Brunelli.

The simple, and beautiful fountain in the Piazza di S. Pietro in Rome, was designed by Stefano Maderna.

The fountain of unusual design in the Piazza della Rocca at Viterbo is ascribed to Vignola.

The statues of the Fountain of the Ocean in the Boboli Gardens, Florence, are by Giovanni da Bologna.
The Gothic Fountain of the Piazza della Morte, in Viterbo, shows the same breadth of style as the others in this town, distinguished by that quality from the Gothic fountains of more northern Italian cities.
In the Fountain of Neptune, Florence, the bronze sea-horses by Giovanni da Bologna, are entirely overwhelmed by a clumsy and inartistic statue of Neptune carved by Ammanati, the disciple of Michelangelo. This figure was ridiculed by the Florentines from the first, and they have a versified saying concerning it: "Ammanati, Ammanati, you have ruined a fine block of marble."

The celebrated Fonte, Gaja in Siena, though not particularly interesting in general form, is one of the masterpieces


FOUNTAIN, PALAZZO VECCHIO
FLORENCE

of" Italian sculpture. Its bas-reliefs (which unfortunately cannot be clearly seen in any reproduction of the whole) represent the Christian Virtues and
was nicknamed "Jacopo of the Fountain." The original bas-reliefs, which were becoming badly weathered, were recently removed by the authorities to

scenes from the Old Testament, and were executed by Jacopo della Quercia, assisted by other Sienese sculptors, between 1409 and risg. The fountain was so highly esteemed that its designer
safe keeping under shelter, and careful reproductions have been substituted in the fountain itself.

The fountain at Cesena, well massed and making a particularly effective

silhouette, in spite of its ornateness, was constructed in the sixteenth century by Francesco Massini.

The most sumptuous of all the fountains by Bernini - that eminent builder of fountains - is that of the Four Rivers, at Rome. This majestic composition, from which rises a pyramid (not included in the illustration) shows, seated on a group of cunningly handled rocks, four gods, representing rivers of the four quarters of the globe.

A simple but very effective fountain behind the Pitti Palace, Florence, adorns one end of the amphitheater used for public festivities, and beyond can be seen the rising terraces of the Boboli Gardens.

The exquisitely-graceful fountain in the courtyard of the Palazzo Vecchio, Florence, was designed by Vasari; but the beautiful little figure of the cupid holding a dolphin which surmounts it is by Verrocchio. This figure was not originally made for the fountain; but when the Palazzo Vecchio was renovated for the wedding of Joanna of Austria and Franceso dei Medici, the statue was taken from the garden of Lorenzo the Magnificent, which it then adorned, and placed here.

Rather over-ornate in character and overladen with allegorical figures and

The imposing fountain in the Piazza Pretoria, Palermo, was originally designed for the villa of the Viceroy Garcia da Toledo, and is the joint work of many artists, among them Naccherino, who was a pupil of Giovanni da Bologna.

The Fountain of the Mercato Nuovo in Florence, consists of an excellent copy, by Pietro. Tacca, of an antique bronze, now in the Uffizi Gallery, representing a reclining boar.

The Fountain of Trevi in Rome, marks the termination of an ancient Roman acqueduct. The water, celebrated for its purity, is conducted by a subterranean channel, fourteen miles long, built by the Emperor Agrippa in I9 B.C., to supply his baths. In 1453 Pope Nicholas v. increased the water supply (which now yields above thirteen million cubic feet daily) by conducting hither the main stream of the aqueduct instead of a branch of it, and the fountain then exchanged its ancient name of "Aqua Virgo"-derived from a tradition that the spring was discovered by a maiden - for that of "Trevi," from its three outlets. The water apparently springs from the elaborate architectural façade that forms one of the walls of the Palazzo Poli. In the central niche is Neptune, flanked by statues of Health bas-reliefs, the Fountain of Montorsoli at Messina is nevertheless light and effective in general aspect. It was executed between 1547 and 155 I.

The Fountain of Neptune at Bologna was designed by a painter, Tommaso Lauretti, but owes its chief celebrity to the very dignified statue of Neptune which surmounts it. This statue was executed by Giovanni da Bologna, plainly working under the influence of Michelangelo, and is considered his masterpiece.




FOUNTAIN OF THE TRITON ROME
and Fertility. The design of the present fountain, which was completed in 1762, was long supposed to be by Salvi, an otherwise unknown artist, but recently a
design by Bernini has been found from which Salvi evidently closely copied. In spite of the great celebrity of the Trevi Fountain and the undoubted magnificence of its general aspect, it lacks unity of effect, and is overloaded and over-ornate. This is the fountain into the basin of which sentimental travelers throw a coin, that their future return to Rome may be assured.

Perhaps the most wholly satisfactory, and yet the most modest fountain which Bernini has left us is the Fountain of the Triton, named from its figure of a triton borne upon a dolphin and blowing his horn into the heavens.

The little fountain embellished with bronze figures in the Piazza Vittorio Emanuele at Faenza dates from 1621 .

The town of Fano was founded as "Fanuin Fortunæ" by the Romans, who erected there a temple to Fortune. This fact is commemorated by an unusually graceful fountain surmounted by a figure of the goddess. The fountain proper was finished about 1576: the statue is of more recent origin.





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First Prize Design, by Mr. Alfred Cass, New York City
size, and in a stipulated position; the whole to be surrounded by a five-foot brick wall.

The conditions of the Competition were purposely so framed as to give the designer



Second Prize Design, by Mr. R. I. Swezey, New York City
liberty to assume such surroundings, relation to the owner's house, and degree of elaboration as he chose. In consequence the judges were obliged to establish a separate standard for every individual drawing, and estimate the possibilities of its success or failure when worked out. It may easily be imagined that this was no easy task when so much might depend upon the way the indications of the plan should be practically executed.

As a "formal" garden was stipulated, the problem was primarily in the choice, disposition and proportion of the architectural features; secondarily, one of planting and the use of materials. The rectangularity of plot and basin made it manifestly desirable to treat the design upon axial lines.

Many drawings were submitted, a number of them of quite exceptional excellence and ingenuity. Indeed it was remarkable how many satisfactory solutions of quite different characters were devised.

The first prize design, submitted by Mr . Alfred Cass of New York City, seemed to the judges upon the whole the simplest and most straightforward of the better solutions. By dividing the garden into two distinct portions, and placing entrance, pergolas and pavilions at the ends of the long axes of the basin, it makes the most of the longest dimension of the garden, and disposes the features where they will be effective from any point of view.

The second prize design, by Mr. R. I. Swezey, New York City, is much more ambitious in every way. The long, raised, pergola-covered walk, with an entrance at either end, and the separation of the enclosure into two distinct portions by paths and hedges is a skilful means of overcoming the difficulty caused by the location of the pool. The small scale resulting from this arrangement is well preserved throughout, and the details, such as the alley across the south end with its hermæ and trimmed hedges, and the little wistaria-covered bridge across the pool, suggest fascinating possibilities.

Of the other designs it is impossible to speak individually. Their shortcomings mainly arise from the disregard of qualities which have been especially commended in the two prize drawings. In addition to those repro-

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VOL. 9

## THIRTEENTH CENTURY

## FRENCH GOTHIC CATHEDRALS

THE great Gothic cathedrals of Europe are so impressive as monuments of human achievement, that at sight of them the questions spring irresistibly to our lips: "What manner of men were they who planned and built them? What conditions of society made such efforts possible ?"

The answer has its beginning centuries before, in the wreck of civilization that followed the breaking up of the Roman Empire in the fifth century. Goths,

Huns, Franks and Burgundians, sweeping in successive waves over the western world, had extinguished all lights of culture, overturned all traditions of law, wiped away all ancient national boundaries, and, intermingling with the native populations, set up that whirlpool of races and social conditions that gave rise to the Dark Ages.

But authority of some sort is a necessity in human development, and in the absence of any national or central



powers, this need gave rise to that subdivision of control we call the Feudal System. Strong men gathered clans and tribes about them, seized and fortified towns, and made war upon one another throughout France and Italy. In Germany the "robber barons" built their strongholds upon the banks of the Rhine or in the Black Forest, and pounced down to levy tribute upon the merchant or traveler. Such distracted and lawless conditions naturally made any popular or united effort, and in consequence the undertaking of any work of permanent value in the arts. impossible; and it was not until the general overthrow of the feudal system in the eleventh century that any great movement in architecture became possible.
But the overturning of feudalism, although in the last event accomplished with comparative suddenness, was the result of a long period of evolution. As the wanderings of peoples gradually ceased, and vagabond tribes settled down into permanent abodes, Europe commenced in the tenth century to
assume a new aspect. In Germany, Henry the Fowler established the line of the Saxon kings. In England, Celt and Saxon, Angie and Dane, under the successors of the noble Alfred, were becoming English. Beneath the rule of Hugh Capet Gaul was becoming France.
In the same way new national languages were being wrought out. The Roman tongue had suffered a slow corruption. "Rudeness and barbarism had wrought their worst with it," writes Professor Norton. "It broke up into various dialects; the dialects themselves were in process of constant change. In the South as well as in the North the elements of Teutonic tongues became more and more mingled with it. The time came when no layman used Latin in his daily conversation. At length, after this long confusion, after unforeseen and unintended transformations and mutations, new languages were found to exist - languages supple, fresh, differing in composition and in virtue, sufficient not only for the transient needs of intercourse, but for the perma-

nent ends of literature, - each not a degraded ancient language, but a new language with qualities of its own."

There was meantime going on a like change in the traditions of architecture, for architecture, "that one among the arts which has alike the closest and widest relation to the life of the people," can never completely die out, no matter how trivial or temporary its expression; and indeed the history of its transformation during these Dark Ages is curiously analogous to that of language. The earliest post-Roman structures were only imitations of the Roman models; but, gradually, in response to the needs and desires of peoples controlled by ideas, sentiments and emotions widely different from those of the ancient world, they diverged, till finally men could no more build in the old Roman fashion than they could speak in the old Roman tongue. In other words, out of the Roman through the Romanesque, the Gothic style was in process of development.

But all this leavening and transformation, -the coagulation of vagrant peoples into nations, the differentiation of languages, the transformation of the forms of art, the evolution of order out of chaos, the increasing stability of con-ditions,-though patent enough to us from our vantage ground of centuries, was extremely slow and subtle. Insecurity and disorder everywhere filled the immediate foreground. The common people, little better than slaves to the various over-lords, were dragged into constant wars with other over-lords, or with the king, whose increasing power these seigniors contested inch by inch. There was but one institution in the world throughout the entire Dark Ages that rose superior to the daily clash and turmoil, that stood for the security and unchangeableness for which all men long. And this institution was the Church.

It is almost impossible for us of today to comprehend the fervor of devotion which the people felt for this great, immutable Church and the religion
which she taught. Whatever the differences of race, custom or language, there was no difference of faith. All men were bound together by the Church in one common rule of daily life; all attended the same prayers and heard the same services repeated in the same language. All acknowledged her supreme authority, for within her pale, though nowhere else in the world, there was no distinction of birth or power. Her discipline exacted equal obedience of all men, king or yeoman, baron or serf; and all were taught and believed that the dearest thing to their souls, salvation, was in her keeping, and to be gained only through her sacraments. Was it remarkable, then, that when after all these years of dumbness men once more felt the need of expression through the forms of art, the subject of that expression should have been the glorification, in the soaring marvels of the cathedrals, of the omnipotent Church?

But the constitution of the Church herself throughout the Dark Ages prevented any popular manifestation of this devotion. She too was a feudal institution. Up to the end of the twelfth century her power was divided among great monastic establishments. All the intelligence and learning of the time was concentrated in her abbeys and monasteries; but each of these institutions stood jealously apart. Each was a little separate feudal domain, protected by its feudal seignior; and so the Church offered no common leadership or guidance to the people.

And yet these feudal monastic establishments contributed the chief share in preparation for that outburst of national consciousness which was to result in the cathedral building of the thirteenth century, for they wrought out the means by which this outburst could be given an adequate expression in architecture. Protected by their sanctity, enlightened by their learning, and so enriched that at one time they owned nearly half the land of Europe, they had begun as early as the eleventh century to tear down

their old churches and rebuild nobler ones, perfecting the forms of religious architecture with each successive trial. Theirs was a sort of preliminary and
monastic establishments that erected them. They were the sole property and built for the use of the clergy; and though the laity were admitted to them


CATHEDRAL OF BEAUVAIS
MAIN PORTAL
secular activity that broke out the paths for the great popular activity which was to follow.

But almost all these were abbey churches belonging exclusively to the
they had no right to be there and took no part in the ceremonies performed.

So, throughout these Dark Ages, while order was gradually growing out of chaos, permanency of abode and safety

of life becoming established, wealth accumulating in the hands of individuals and communities, until men were eager
to embark on enterprises which should outlast their brief day, and transmit their remembrance to their successors,


CATHEDRAL OF LE MANS
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architectural forms had been evolved which were fitted to give expression to the highest æsthetic aspirations Meantime, the minds and hearts of the people were choked and seething with spiritual and artistic emotions which had been so long denied utterance by social and political conditions that they may be compared to steam pent in a boiler,ready to burst forth into energy if a way could be found to give vent to them.
The way was found in the crumbling away of the Feudal System in Church and State during the twelfth century. The kings saw that the moment had arrived to claim the power and influence which, as the heads of the nations, rightfully belonged to them; the bishops saw that the same opportunity was theirs to resume, as the spiritual heads of these nations, the powers which had meantime fallen into the hands of the religious orders. And suddenly the people realized that, no longer the distracted serfs of various petty lords, they had all at once become common members of nations, and that their mighty and adored Church was no longer the property of the monastic orders, but had been handed over to their keeping. In a word, national and local pride and affection, and religion - motives that have ever been the most effective in the production of noble human works,- sprang jointly into action and in the highest force. For the first time since Rome's downfall the people of a nation, or of any community in a nation, could now unite, shoulder to shoulder, under a common impulse in a common work, to which all alike. rich and poor, noble and commoner, could contribute; and for the first time was there sufficient architectural knowledge to allow this united impulse to express itself in a form so noble as a Gothic cathedral.

Like all great artistic epochs, the thirteenth century was, therefore, a time of the culmination and fruition of many diverse and stimulating influences, intellectual, political, social and emotional; and the result was that unparalleled activity in cathedral build-
ing which burst forth simultaneously all over Europe and rendered the thirteenth century perhaps the most brilliant era of any in the history of architecture. Not even the age of the Ramses in Egypt, nor that of Pericles in Greece, nor the great period of the Roman Empire, will bear comparison with it, whether we consider the size and number of the buildings executed, their wonderful variety and constructive elegance, the daring imagination that conceived them, or the lofty religious feeling that is expressed in every part of them.

The movement developed first and was most fruitful in France, where the social, political and artistic conditions were furthest advanced, beginning there about the middle of the twelfth century and reaching its climax with the opening of the thirteenth.

Thirty or forty French cathedrals of the first class owe their magnificence to this century. Some of them, it is true, were commenced in the twelfth, and many were not completed until after the fourteenth; but their principal features, as well as their more important beauties, belong to the thirteenth century.

The illustrations of the present paper are devoted to some of the principal French cathedrals which owe their chief beauties to this thirteenth century activity, with the exception of those of Paris, Rouen, Reims and Amiens, which have been illustrated in previous numbers of this Series.*

Chartres Cathedral (the Cathedral of Notre Dame) ranks as one of the greatest, most imposing and most beautiful of Gothic buildings. Its size, the simplicity and completeness of its design and the richness of its detail, especially in the porches and spire, combine to make it one of the most noteworthy churches, not only in France but in the world. The crypt is all that remains of an early building destroyed by fire in the eleventh century. About inzo the work of rebuilding was begun with great pop-

[^8]

ular enthusiasm, the people even harnessing themselves to carts for drawing the stone; but in ilg4 another fire destroyed the greater part of it; and the present building dates, in all probability, from the first half of the thirteenth century. The lower portion of the façade was erected in the twelfth century, the rose window in the thirteenth, and the upper parts in the thirteenth and fourteenth centuries. The spire of the north tower was added in 1507-14; and the elaborately carved porches and portals were the work of the thirteenth and fourteenth centuries. Fergusson calls the spire of the north tower the most beautifully designed in Europe.

The Cathedral of St Etienne at Bourges dates, as it now stands, mainly from the thirteenth and fourteenth centuries, but was not finished until the sixteenth century. Although one of the largest and finest of its class, its plan is short and broad, having five aisles instead of three, and no transepts. In spite of this departure from type, it is so exquisitely beautiful that it ranks with the cathedrals of Paris, Amiens,

Chartres and Reims as the finest in France, The façade is rich and imposing. The principal portal and the two on the right of it were built in the thirteenth century, and those on the left in the sixteenth. The south tower, one hundred and ninety feet high, dates from the fourteenth century ; that on the north, two hundred and ten feet high, from the sixteenth. The latter, called the "Butter Tower," was partly paid for by sums contributed by the faithful for permission to use butter during Lent.
The Cathedral of Notre Dame at Bayeux was built upon the site of an earlier church, founded in the eleventh century by Bishop Odo of Bayeux, halfbrother to William the Conqueror. It dates chiefly from the middle of the thirteenth century, although portions of eleventh century Romanesque work and early Gothic still remain. The western towers are Romanesque below with Gothic spires. The chevet of chapels about the apse, with its graceful turrets, is one of the most beautiful examples of early Gothic in France.

The Cathedral of St. Pierre at Beau-
vais is still incomplete, nothing but the choir and transepts having ever been built. It is, however, on so grand a scale, - the exterior height to the ridge of the roof being two hundred and twenty-five feet, which is the highest
vault in France,- and the building, so far as completed, is so imposing, that in spite of manifest defects it justly ranks among the great French cathedrals. It was begun in 1225 and in great part completed before 1267 .


The Cathedral of Le Mans, dedicated to St. Julian, the traditional founder of Cenomanian Christianity, and the first bishop of Le Mans, consists of two distinct parts differing widely from each other. The nave, built partly in the eleventh and continued in the twelfth century, is of the early Gothic style with some later features of the transitional period, while the choir (the
largest in France) was rebuilt in the thirteenth century, and the transepts in the fourteenth and fifteenth. Despite this mingling of styles the general effect of the structure is one of great nobility.

The Cathedral of Notre Dame at Coutances dates mainly from the first half of the thirteenth century, having been begun in 1205 Its central tower and lantern is of unusual boldness and


CATHEDRAL OF POITIERS


WEST PORTAL
beauty, while the spires of the west towers are among the earliest examples of the fully developed Gothic spire.

The choir of the Cathedral of St. André at Bordeaux was built between 1260 and I310. The lower part of the nave is the oldest portion, dating from the eleventh century, and has Romanesque arches surmounted by a sixteenth century vault; while the towers at the north portal together with the transepts belong to the fourteenth century. The nave, without aisles, and the chevet of chapels are especially fine. The two transept spires are unusual features and are of great beauty.

The Cathedral of St. Pierre at Lisieux is a type of the transitional Norman style, and was built largely in the twelfth and thirteenth centuries, although the spire of the south tower was rebuilt in the sixteenth and seventeenth, and other portions, including chapels, were added in the fourteenth, fifteenth and sixteenth. The nave is the oldest portion and is exceptionally harmonious, being all the work of a single architect;
and the western façade as a whole is of remarkable beauty.

The Cathedral of St. Peter at Poitiers was begun in 1162 by Henry II. of England. It was nearly completed in $\mathbf{1 2 0} 4$, but not consecrated until 1379. Some parts are Romanesque, but the greater portion is Gothic. The west façade dates from the thirteenth century, and the upper part of the north tower from the fifteenth century. Its plan is of the simplest type, but is peculiar in that the side walls converge towards the east, while the roof is also lower at this end, giving a false perspective to the interior and the effect of increased length.

At Angers the Cathedral of St. Maurice is a mingling of Romanesque and Gothic design with even the addition of Renaissance work in the façade. The lower part of the nave walls was built in the eleventh century, and the domical vault in the middle of the twelfth century, but the principal part of the nave, transept and choir belongs to the thirteenth. The towers of the west front were added in the sixteenth century.



## THE GIRALDA TOWER

SEVILLE

THE Giralda Tower - which is to Seville what Giotto's Tower is to Florence - consists of two distinct parts of widely different styles, one grafted upon the other-a Spanish Renaissance superstructure crowning a Moorish prayer tower; but the result, even if accidental, is of such harmony that the Giralda ranks as one of the world's most graceful structures.

For two thirds of its total height of about three hundred feet an absolutely plain, massive square tower of a beautiful rose color, it relaxes its severity about eighty feet from the ground in a surface decoration of panels, diapered with Arabesque net-work, pierced with twin windows and relieved by light balconies; yet on the whole, it never quite abandons its solid massiveness of aspect, until suddenly it blossoms into a light open-work superstructure of cream
colored stone-an airy apparatus of diminishing stages, balustrades, pilasters and cupolas,- topped by a gilded statue. The result is a curiously mingled impression of stability and lightness. It seems as massive and imposing as an Egyptian pyramid, yet as gay and graceful as a garden kiosk.

The Moorish part of the structure was originally the minaret or prayer tower of the mosque of Abu Ya'kub Yûsuf, and was probably built between 1184 and ing6, its architect being, according to tradition, no other than the renowned Arabian astronomer, mathematician, chemist, and reputed inventor of algebra, Geber. In plan it is a square, fifty feet on each side; and its walls, faced with pale red tiles, were originally crowned, at the height of two hundred and fifty feet, by a battlement, as is shown by an old altar-painting of 1555 ,



THE GIRALDA FROM THE CALLE BORCEQUINERIA
now preserved in the cathedral. From this battlement rose an iron standard bearing four immense brass balls of graduated sizes, the largest so enormous that the gates of the city had to be widened to admit it. In 1395 these balls were thrown down by an earthquake; but the minaret and the mosque stood in their original state until 1402 .

Meantime, on St. Clement's day, November 23, 1248, after a siege of six months, Seville had fallen before the
arms of St. Ferdinand, who thereupon expelled the Moors; and the victory of the Christian arms was proclaimed from the old Moslem prayer tower. The Spaniards at first contented themselves with consecrating the ancient mosque as their cathedral; but when after nearly two hundred years of Christian service it had fallen into despair, they determined to build on the same site the present cathedral " upon so magnificent a scale that coming ages might proclaim them
mad to have undertaken it." The church was finished in 1506, but the tower which adjoined it was permitted to stand unchanged until 1568 , when the architect Hernan Ruiz was commissioned to build the present ornamental upper section upon the Moorish base.

It is somewhat surprising that Ruiz, whose Renaissance choir forever destroyed the interior harmony of the Mosque of Cordova, should have here succeeded in crowning the old prayer
tower with a superstructure so absolutely harmonious with it; but succeed he did, and the result was the present Giralda, - perhaps more exquisite in outline and harmonious in proportion than any other similar edifice.

The Renaissance superstructure begins with a rectangular belfry in which hang twenty bells. From the corners of this stage rise four huge sprays of iron lilies, - attributes of the Virgin, the patroness of the city. The remainder

consists of three light receding lanterns, the last topped by a shimmering globe, on which stands a gilt bronze statue of a woman holding in one hand a palm branch and in the other a banner.

In spite of its weight of a ton and a quarter, this figure, which stands over three hundred feet from the ground, is the weather-vane, or giraldillo which gives the tower its name of Giraldapronounced he-ral'-dar. The subject of
the statue is a stock butt for all the wits of Seville "We call her Faith," they will exclaim, "yet she is not only a woman, - that perhaps might be par-doned,- - but a weathercock into the bargain, to represent what should be steadfast as the set hills!" It would, however, ill behoove the traveler to say a word in dispraise of the statue or the tower itself, which all Sevillians recognize as the chief beauty of their city.



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## Brochure

Competition Announcements

## Competition CC

CLOSES OCTOBER 15,1903
SUBJECT: The Façade of a City House, in the Colonial Style.
The house to be situated in the middle of a block, and to measure twenty-four feet wide. It is to be four stories in height, and to be built of brick with stone trimmings. The façade only is to be shown by an elevation, drawn to scale in pen and black ink.

Award to be announced in The Brochure Series for November, 1903.

First Prize, $\$ 10.00$ in gold Second Prize, $\$ 5.00$ in gold
Prizes offered by The Brochure Series.

## Competition DD <br> CLOSES NOVEMBER 15, 1903

SUBJECT : The Design and Lettering of a Bronze Tablet to be set into the Vestibule Wall of a County Court-house.
This tablet is to measure 24 inches by 32 inches over all (the longer dimension to be the base), and is to contain the following inscription:-
"Erected by the County of Avalon. mdcceix. God has given Commandments unto men. From these Commandments men have framed. Laws by which to be Governed. It is Honorable and Praiseworthy to Serve the People by Administering these Laws.'
To be shown by an India-ink wash drawing, at the scale of three inches to the foot.

Award to be announced in The Brochure Series for December, 1903.

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## Rules Governing Competitions

[^9]Brochure Series Competition BB

## A Pier and Boat-landing

ANNOUNCEMENT OF THE AWARD

The subject for this Competition as announced was: A Pier and Boat-landing for a Gentleman's Country-place on a Lake, to be built in any style and of any material.

Naturally such latitude in the conditions resulted in the greatest diversity in solution; and designs of all degrees of elaborateness


First Prize Design, by Mr. Hugh Chrisp, Rochester, N.Y.
were submitted. Some of them would not have disgraced the château of Count Borromeo on Lake Maggiore, while others would not have seemed over-elaborate as the adjunct to a frame summer cottage on a New Hampshire pond. All the designs submitted, however, fulfilled the stipulated conditions (although the conception of what was intended by the word "pier" might have debarred some of them from practical usefulness), and several showed a praiseworthy originality in conception. The most common lack was, perhaps,


Second Prize Design, by Mr. Julian Greenwell, Honolulu, H. I.
the failure to grasp the possibilities of site, and the attempt to make an effective solution


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of the problem on a flat shore by sheer force of architecture, when any amount of slope or terracing was to be had for the invention of it.

The first prize is awarded to Mr. Hugh Chrisp of Rochester, N.Y.; the second to Mr. Julian Greenwell of Honolulu, Hawaii; first mention to the design of "Still Water"; and mentions to those of "Esquisse," "Sunnycroft," "North Shore,"' "Attic," "Montlake," " Anchor" and "Nautilus."
Two subjects for forthcoming competitions are announced on another page. "Competition CC," to close October 15 , sets a problem interesting because of its familiarity and its limitations - the design for the façade of a mid-block city house in the Colonial style.


It is specified that this house shall have a frontage of twenty-four feet, be four stories in height, and be constructed of brick with stone trimmings. "Competition DD," closing November I $_{5}$, involves the arrangement and lettering of a given inscription in a given space - a task which every architect has from time to time to undertake, but one which, despite its seeming simplicity, is rarely accomplished with complete success. The subject is the design for a bronze tablet bearing an inscription and date to commemorate the erection of a county court-house, into the vestibule wall of which it is to be set. The design is to be rendered by a wash drawing in India-ink to a given scale.

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## THE ALEXANDER SARCOPHAGUS

IN the spring of 1887, Mohamed Sherif, a wealthy inhabitant of Sidon, was engaged in the excavation of a plot of land, situated to the northeast of the city, a few hundred yards from the Mediterranean Sea. In the course of this excavation his workmen discovered a rectangular pit, hollowed in the solid limestone, which they at first took for an ancient cistern. But when the earth had been cleared away, it was found that this pit was the open court of a series of sepulchral chambers carefully hollowed out of the rock.

In the north, east and south chambers sarcophagi of various periods were discovered, some of them so remarkable, both from an artistic and an antiquarian point of view, as to mark an epoch in archæological discovery; but all these were immeasurably surpassed by one found in the western series of chambers. This coffin, the treasure of the Seraglio Museum at Constantinople, and one of the most beautiful pieces of Greek art in the world, is generally called the Sarcophagus of Alexander the Great, for reasons to be discussed presently.

It is carved out of a single block of white marble, yet measures no less than eleven feet long by five feet eight inches high. Its lid is nearly three feet high.

As was often the case with tombs of noted warriors in ancient days, the scenes depicted in relief upon it represent the heroic actions of peace and
war - a battle and a hunting scene, each occupying one side and one end. The battle depicts a cavalry conflict between Greeks and Persians, probably the Battle of Issus, from its similarity to a mosaic showing that battle found at Pompeii. The Persians, clothed in national garb, are evidently being defeated; while the Greeks, wearing the Grecian helmet and bearing the round Greek buckler, fight with the calm faces of assured victors. At the left a Greek general is about to lance a Persian who is trying to free himself from his falling charger. At the opposite end rides the Persian leader. Between are the figures of fighting and wounded soldiers, mingled in spirited confusion. The combat is continued over one end of the tomb.

In the hunting scene a lion, driven to bay, has fastened his claws upon the bleeding breast of a horse; the Persian rider thrusts with his spear to rescue his steed: on the left a Greek general, distinguished by a crown, is about to give the lion his death blow; another rider hurries up on the right; footmen hasten to join in the struggle; and at the extreme left a bowman takes aim with his arrow. On the right of the frieze two huntsmen are dispatching a stag, and the contrast between the two engagements is expressed with the most admirable skill. On the end which continues this scene a group of Persians are engaged in killing a panther.


Not less perfect than the sarcophagus itself is its marble lid. It is shaped like a slanting roof, with shell-pattern tiles. The ridge and eaves are adorned by rows of human heads each surrounded by a species of halo, - a most uncommon if not a unique feature in Greek decoration. At the corners are crouch-
ing lions, and between the haloed heads along the cornice rams' heads form a kind of gargoyles. In the tympana at the ends, reliefs on a smaller scale repeat the motives of those below.

The architectural portions of the sarcophagus are enriched by delicate egg-and-dart, leaf-and-dart and torus mold-

ings, with bands of fret, and conventionalized vine-pattern.

No photograph can afford an adequate idea of the stately beauty of this masterpiece, preserved, in its subterranean chamber, from the erosions of weather and the destructiveness of human hands in all its exquisite perfection of finish. The name of its sculptor is unknown,
and from some inequalities in the workmanship (for the end reliefs are not as fine as those on the sides), it is probable that he was assisted by pupils; but the freedom and spirit with which every part of a complex design is treated, the mastery of the grouping, the individuality given to each figure as if it were a likeness, the expressiveness of the faces,

the life and spirit of the combatants, the unsurpassed beauty of the horses, and the exquisite refinement of the finish of the marble, prove that he must have ranked with the greatest of those whose names have come down to us. It has been conjectured, and not improbably, that it was Lysippus, for the characteristics of the sculpture - the elegance, precision in details and in portraiture, energy of action, and dramatic movement - are exactly those of Lysippus' style, as described by Pliny.

The coloring of the coffin is, however, its most striking feature to modern eyes, for unlike any other Greek relic of the first rank, this seems here as fresh and complete as when it left the artist's hand. There has been in many appreciative minds a latent reluctance to accept the unavoidable conclusion that the Greeks colored their statues and reliefs - they cannot believe that such coloring could have been as beautiful as the purity of the unstained marble. To such, however, the Alexander Sarcophagus affords a sufficient answer. Here, blended into a subtle harmony, we see dull gold, the regal splendor of Tyrian purple and the delicate glow of Lebanonean ochre - tones only familiar to us heretofore in the pages of classic writers - and many other pigments, tinting every part of the reliefs except the human flesh. Even the irises and pupils of the eyes are colored, and yet the color is used in such a masterly fashion and with such delicacy of gradation that there can be no question between the relative beauty of the reliefs so tinted and even the most exquisite natural tones of marble.

The sarcophagus has, from the time of its discovery, been called that of Alexander the Great. The skull found within it was evidently that of an old man, while Alexander was only thirtytwo at the time of his death; but as all the tombs in the cemetery had evidently been rifled and the bodies of their original tenants removed, this cannot weigh as evidence. The commonly accepted tradition that Alexan-
der was buried at Alexandria would, if well founded, make it impossible that this sarcophagus, found at Sidon, should have been his; but when we examine the evidence for the tradition, we find that not only has his sepulcher, in spite of careful search for it, never been discovered at Alexandria, but that there is no reliable testimony that it ever was there. What does seem historically true is, that Alexander's body was removed from Babylon, where he died, with the intention of burying it in Ægae in Macedonia, and that during the progress of the journey thither the route was altered toward Egypt. In this case the funeral procession would almost certainly have arrived at Sidon, and it is by no means impossible that some event may have arrested its progress there, with the result that his remains may have found an unexpected but permanent resting-place among the royal sepulchers of Phœnicia.

As for the evidence afforded by the sar cophagus itself, it is manifest, from its size and the art expended upon it, that it was intended for a princely occupant of the highest rank. Its style shows that it belongs to a period corresponding to Alexander's later years, and its workmanship strikingly suggests that of Lysippus, who was his favorite sculptor, and who executed the famous likenesses of him. The strongest point of evidence is, however, that the main relief probably represents the Battle of Issus, one of Alexander's most decisive triumphs; and above all, it is unquestionable that the general at the left of the battle scene and that the crowned horseman who is about to dispatch the lion in the hunting scene are indisputable likenesses of Alexander.

None of these points of testimony are, of course, conclusive, and until further evidence is forthcoming it would be rash to allege that the visitors to the museum at Constantinople behold in this splendid sarcophagus the actual tomb of Alexander the Great; but at least it is not impossible, and many curious points of testimony make it seem not even improbable.
M. P .


# THE FORUM ROMANUM <br> ROME 

IN all periods the city dwelling-houses of the Romans must have been comparatively unimportant affairs, their walls being merely designed to secure privacy and to shut out the noise and rattle of the town from the apartments which faced inward upon inclosed courts. The majority of them were doubtless but one story high, with flat roofs, rare windows, and doors opening on narrow streets. The lack of development of domestic architecture among the Romans, as among the Greeks, was due to the fact that they spent their time mostly in the open air and in places of public assembly, the amenity of the climate making it unnecessary, as in colder climes, that the house should become a place of social intercourse. In consequence, civic life concentrated itself in great open squares where the people assembled to hear the decisions of their rulers and met for the transactions of business. Around these squares the shops and markets would naturally congregate; and when architectural skill began to develop, public monuments and temples would be set about them and upon them. Such, in brief, were the conditions which resulted in the forums of Roman cities.

The most ancient and important of the forums which Rome possessed (for there were several) was the Forum Romanum. The newer forums were planned more symmetrically and on larger scales; but neither historically nor architecturally did they compare in interest with the Romanum. Its ultimate arrangement was of slow growth. Originally a mere marshy battlefield, it became, under a united rule, and when drained by the great cloaca which traversed it, a convenient site for political meetings and commercial transactions, for the pageants of rich men's funerals, and for the gladiatorial games. For these purposes, therefore, a central space, though a small one, was reserved; but
even this space became gradually occupied by an ever-accumulating crowd of statues and other honorary monuments. On three sides the limits of this space were marked by paved streets, and these were originally lined by rows of simple wooden shops; but as the importance of the Forum increased, these shops were gradually replaced by stately temples and public buildings. Indeed, so many and so famous were the edifices finally set upon it that their heaped-up ruins are not sufficient for all the names that have been handed down to us by history. But in spite of all that has been destroyed, and all that is still buried, much remains to be seen, and almost every relic has its story. In Balzac's striking phrase: "The very stone you tread upon here may have been part of the god of Cæsar or of Pompey."

The archæological and architectural study of the Roman Forum is a matter of immense perplexity, made still more involved by the succession of public edifices which have occupied its site, for each period of Roman history gave rise to a different set; but without entering into those vexed archæological questions which have filled the volumes of Canina, Bunsen, Niebuhr, and many others, we may briefly summarize the history of the Forum Romanum by saying that, from the earliest times, and throughout the periods of the Republic and the Empire, it was constantly adorned with successive edifices; and that it appears to have continued to exist, after a fashion, throughout the various barbarian invasions down to the eleventh century A.D. Its total ruin dates from the advent of Robert Guiscard, the Norman, who, called to deliver Pope Gregory viI. from the Emperor, Henry IV., sacked Rome in 1084. Abandoned thereafter for many centuries, the Forum became a receptacle for rubbish, which gradually raised


THE FORUM ROMANUM
LOOKING SOUTHEAST FROM ABOVE THE TEMPLE OF VESPASIAN
the level of its soil till the depth which had to be uncovered before the modern excavators could reach the ancient pavement varied between twenty-four and forty feet.

The first systematic excavations were begun in 1547 by Pope Paul ini. His work was sporadically continued by various successors, but most of the noteworthy discoveries made before 1876 were due to the interest and generosity of Elizabeth, the English Duchess of Devonshire. After the temporal fall of the popes, however, the investigations were increased, and in recent years they have been systematically and scientifically pursued. Nevertheless, streets and buildings too valuable to remove still cover many historic foundations.

The Forum is an irregular oblong area occupying a valley extending from the foot of the Capitoline Hill to the northeast part of the Palatine, its longest axis running approximately northwest and southeast. The common consensus of opinion makes its length from the Arch of Septimius Severus to the Temple of Antoninus and Faustina;
its breadth from the present Church of S. Adriano to the steps of the Basilica Julia.

Perhaps the clearest method of examining the ruins shown in our illustrations, and of locating the sites of others which have disappeared, will be to begin our survey from a given standpoint,say at the northwest corner, made prominent by the Arch of Septimius Severus,and consider first the buildings which bordered the Forum ; then, this circuit completed, to return to those structures which occupied the central open space.

If we stand beside the Arch and look northeast, we shall see before us the mediæval Church of S. Adriano. Just here was the site of the ancient Curia or Senate House. In the time of Gracchi, the Curia was capable of holding six hundred senators. From the Curia a flight of steps led down to the Comitium, a large platform which extended to the north side of the Arch of Septimius Severus. The Comitium originally adjoined the Forum, much as the Piazza and Piazzetta at Venice now adjoin each other; and in early days the former


was the meeting-place of the patricians, while the Forum served the same purpose for the common people. Within the Comitium grew the famous fig tree, sacredly preserved in commemoration of the tree under which Romulus and Remus were suckled by a wolf, and under its branches stood a bronze representation of the wolf and the children. It was here that the survivor of the Horatii was condemned to death, but saved by the voice of the people; and here stood the ancient tribune or Rostrum till it was rebuilt on the Forum proper, in 44 в.с., by Julius Cæsar.

Behind the Arch of Septimius Severus to the west, and, with the Temple of Vespasian, closing the northwest end of the Forum, stood the Temple of Concord. Traces of the cella walls, the foundation of a great flight of steps, and patches of a pavement of colored marbles alone remain to mark its site. This temple was first built by Camillus in 367 b.c.; restored by the brothers Tiberius and Drusus out of the spoils gained in Germany, and rededicated in Io A.D. It contained a large collection of pictures, engraved gems, gold and silver plate, and other works of art, and was frequently used in early times for meetings of the Senate.
Side by side with the Temple of Concord, and to the south, stood the Temple of Vespasian, of which three beautiful Corinthian columns, bearing a fragment of their sculptured entablature, are still standing. One of these belonged to the northeast corner of the lateral range of columns, two to the front range of six columns. The temple was built by Domitian, about 94 A D., in honor of his father, Vespasian, and a part of the word restitvervnt, inscribed on the entablature, refers to the fact that the temple was restored by Septimius Severus.
The remains-eight columns on a high basement-of the Temple of Saturn, the ancient god of Rome, occupy the southwest corner of the Forum. The first temple on this site stood upon the foundation of a prehistoric altar to Saturn. This original temple was restored
in 44 B.C.; but the present columns belong to a subsequent restoration, made, very carelessly, in the time of Diocletian. Some fine columns, evidently parts of the earlier structure, were re-employed, but these were fixed upon rude bases and surmounted with clumsily carved capitals; the entablature was awkwardly patched together, and, indeed, so shiftless was the whole work that one of the shafts stands wrong side up.

From the earliest times the Temple of Saturn was the depository of the public treasury, and it was before its door that Metellus flung himself in a vain attempt to defend the treasure from Julius Cæsar. Before it sat Pompey, surrounded by his soldiers, to listen to the orations which Cicero delivered from the neighboring rostrum.

Just to the east of the Temple of Saturn, and spanning the Sacra Via,- the avenue which bounded the open area of the Forum on the south, - stood the Arch of Tiberius, erected in 16 A.D. to commemorate the defeat of the Germanic tribes. Its foundations alone remained to mark its site, and even these have recently been removed.

Practically the whole of the southern side of the Forum was bounded by a large rectangular structure, more than one hundred yards long by fifty yards wide, called the Basilica Julia. This Basilica, begun by Julius Cæsar, was completed by Augustus, who dedicated it in honor of the sons of his daughter Julia. In plan it was a large double portico, open on three sides, with a range of rooms two or three stories high on the side away from the Forum. A flight of six steps ascend to its floor level The central court was surrounded by a twostory arcade of arches with engaged columns, vaulted to form interior galleries whence the spectators might hear the law cases conducted in the area below. This central area, unroofed, but probably sheltered by an awning, was richly paved with variegated marbles. Parts of this pavement and the bases of many of the piers remain, and these relics together with the higher structure


THE FORUM ROMANUM THE TEMPLE OF VESPASIAN, ARCH OF SEPTIMIUS SEVERUSAND TEMPLE OF SATURN



THE FORUM ROMANUM
TEMPLES OF ANTONINUS AND FAUSTINA, OF CASTOR AND POLLUX, OF ROMULUS
of the rear part may be distinguished in the accompanying illustrations. It was on the roof of the arcade of this building that, according to Suetonius, the mad Caligula used to stand and throw money into the Forum for the people to scramble for.

The southeast corner of the Forum was occupied by the Temple of Castor and Pollux, now represented by three beautiful columns of Parian marble. Their Corinthian capitals and the entablature are of very superior design and workmanship. This Temple was most famous during the Republic, and was often used for meetings of the Senate. It was dedicated to Castor and Pollux in gratitude for their aid, which, according to tradition, enabled the Romans to defeat the Latins at the Battle of Lake Regillus in 496 B.c. Originally erected by Postumius about 484 B.C., it was afterwards rebuilt by Tiberius, and reconsecrated in the year six of our era. Here in the ides of July, at the anni-
versary of the Battle of Lake Regillus, costly sacrifices were always offered, after which the Roman knights, clad in full panoply, crowned with olive and bearing their trophies, rode past it in military procession. The edifice stood upon a base raised about twenty-two feet from the pavement of the Forum, and was approached and flanked by flights of eighteen steps. It had eight columns in front and probably thirteen on each side.

The eastern end of the Forum was closed by the small Temple of Cæsar, of which little but the concrete core of the once lofty basement remains. This temple, erected by the Emperor Augustus in honor of his uncle, Julius Cæsar, - the first in Rome dedicated to a mor-tal-fronted inward toward the Forum, facing the Temples of Concord and Vespasian at the opposite end. It was of the Ionic order, surrounded by a colonnade of closely set columns, and surmounted by a statue of Cæsar. Before


its site Cæsar had previously built an oratorical tribune, called the Rostra Julia, and it was from this tribune that Mark Antony pronounced his celebrated oration at Cæsar's funeral, which wrought so powerfully on the passions of the excited populace. Portions of the foundations of this Rostrum still remain.

Between the Temple of Cæsar and the Temple of Castor and Pollux, spanning the Sacra Via, and forming the archi-
tectural termination of that street at the east end of the Forum, may be traced the foundations of a Triumphal Arch of Augustus.

An avenue, corresponding to the Sacra Via (and sometimes called by the same name), but on the opposite side, running along the north wall of the Temple of Cæsar and thence straight beneath the Arch of Septimius Severus, bounded the Forum on the north. Behind this avenue, and facing inward
toward the open space, thus balancing, in a measure, the Basilica Julia opposite, stood a large edifice which occupied most of the northern side of the Forum. This was the Basilica Emilia, built in 176 B. c. by the censors, M. Fulvius and M. Amilius Lepidus. According to Livy it stood behind a line of silversmiths' shops and butchers' stalls, and from one of these stalls Virginia's father seized the knife that he plunged into her heart. It was subsequently restored under the name of Basilica Pauli.

The Basilica Æmilia was adjoined on the west by the Basilica Porcia, founded by the elder Cato in IS4 B.C., but this together with the Curia, which flanked it on the western side, was burned at Clodius' funeral.

We have now completed the outer circuit of the Forum, having come back to the site of the Curia, previously described. It still remains to consider the buildings that stood upon the central paved space which formed the Forum proper. This space was paved with travertine, much patched at various dates, and so many clamp-holes mark where statues and other ornaments stood that it is evident they must once have thickly crowded a great part of the area, and the recorded number of them is very great.

Just in front of the site of the Comitium stands, diagonally across the northwest corner of the Forum, and spanning the before-mentioned avenue which led from the Temple of Julius Cæsar along its northern side, the beautiful Arch of Septimius Severus. Though its large crowded reliefs of victories show decadence from the best period of Roman art, it is the most imposing of the Forum's present ruins. It was erected in 203 A.D. in honor of the emperor whose name it bears and of his two sons, Caracalla and Geta; but after Caracalla had succeeded to power in 21 I he murdered his brother and effaced that part of the inscription which related to him. The Arch is seventy-five feet high and eighty-two broad, and was originally
surmounted by a bronze chariot with six horses on which stood a statue of Severus crowned by a Victory. In the spandrels of the main arch are figures of Victory and of the Seasons; over the side arches are scenes from the wars of the emperor, and at the sides stood originally statues of Caracalla and Geta. In front of this Arch was the famous statue of Marcus Aurelius, now in the Capitol.

Most of the western end of the Forum is filled by remains of the orators' stage or Rostrum, which replaced the original Rostrum that had earlier stood upon the Comitium. This new Rostrum was an oblong platform, about seventy-eight feet in length, completely faced with slabs of Greek marble. To the front of it were affixed the bronze beaks of ships captured in war (called rostra, whence


THE FORUM ROMANUM COLUMN OF PHOCAS
the name of this and similar classic platforms), and along the front edge ran a marble screen. Here Marius set the head of Octavius, and here also were affixed the head and hand of Cicero by Antony, when Fulvia, widow of Clodius, spat in the dead face of the orator, and pierced his inanimate tongue with the pin she wore in her hair.

Behind the Rostrum was a curved platform (conjecturally called the Græcostasis) of the same level. It is probable that this platform, where the foreign ambassadors stood to hear the speeches, was moved at the same time that Cæsar transferred the Rostrum from the Comitium to the Forum. At the northern end of the curved wall which divided it from the Rostrum are the remains of a pyramidal structure of concrete faced with brick, usually identified as the famous Umbilicus Romæ, or central point of the city, from which all distances within the walls were measured. At the opposite, or southern, end of the wall probably rose, to balance the Umbilicus, a marble column, sheathed in gilt bronze, called the Milliarium Aureum, on which were inscribed the names and distances of the chief towns on the great military roads that radiated from the thirty-seven gates of Rome.

In front of the Rostrum, and a little to the south, stands one of the most con-
spicuous, though not one of the classic, remains of the Forum - the Column of Phocas. This is Byron's "nameless column with a buried base "; but it is no longer nameless nor buried, for it was excavated in 1813 , and its rude pedestal of blocks of tufa bore an inscription which showed an unexpected origin. It was raised in 608 by the exarch Smaragdus in honor of the tyrant Phocas of the Eastern Empire, and was crowned by a gilded statue of him. The pillar itself was not designed for this use, but was borrowed from some ancient temple. Though not interesting as an architectural relic, the column of Phocas is historically noteworthy, as it marks, perhaps, the last addition to the Forum before the complete downfall of the ancient civilization; and, since its base rests upon the ancient pavement, proves that at the beginning of the seventh century A.D., the former center of Roman life was still unencumbered by ruins.

Along the south side of the Forum, lining the Sacra Via opposite the Basilica Julia, may be discerned the remains of seven square pedestals of brick. These pedestals, probably erected during the reign of Constantine, bore large granite columns surmounted by statues.

Not far from the east corner of the base of the Column of Phocas two low marble ballustrades, evidently of the time of Trajan, were discovered incorporated


THE FORUM ROMANUM: ANAGLYPHA TRAJANI
TRAJAN REMITTING TAXES


THE FORUM ROMANUM: ANAGLYPHA TRAJAN
with the foundations of a mediæval building. They are called the Anaglypha Trajani. They either formed part of the decoration of the balustrades of the steps ascending to the Rostrum, or, according to some authorities, were the barriers between which the Roman freemen passed to vote. They are adorned with admirable reliefs in excellent preservation, and deserve a foremost place among the relics of the Forum. The inner surface of each of them is carved with the pig, ram and bull, which were sacrificed at the ceremony to which their united names gave the title of Suovetaurilia. The outer side of one relief represents the Emperor Trajan establishing the "Alimenta," or institution for poor children; while that of the second, shown in our illustration, represents Trajan remitting the arrears of taxes, the records of which are being burned. Both reliefs depict events which took place in the Forum, and their backgrounds have proved of great assistance in determining the location of several edifices.

On the central axis of the paved space, and near its eastern end, are the remains of a large pedestal which is conjectured to have borne an equestrian statue of the Emperor Constantine. Between this statue and the site of the Temple of Julius Cæsar are the ruined foundations of an oblong brick structure, which was, however, not erected during classi-
cal days, and probably dates only from the third or fourth century A.D.

We have now considered all the more important monuments which surrounded the Forum proper or stood upon it. There are, however, four edifices which, though situated outside its strict limits, stood so near that they must have contributed to the general architectural aspect, and accordingly should be considered in connection with it. All these buildings stand beyond the eastern end of the Forum. To the north of its main axis was the Temple of Antoninus and Faustina, flanked by the Temple of Romulus; and opposite them, south of the axis, was the famous Temple of Vesta, and the Atrium Vestæ - a kind of convent for the Vestal Virgins.

The Temple of Antoninus and Faustina is represented by ten standing columns of cipollino, forty-three feet high, supporting a frieze. Six of these columns formed the façade of the Temple, and part of the cella walls are still standing; but within these walls, and behind the columns, was built, in 1602, the hideous church of S. Lorenzo in Miranda, which greatly detracts from the present appearance of the Temple's ruins. It was erected by the Emperor Antoninus Pius in memory of his wife, the licentious Faustina, whom a servile senate elevated to the rank of goddess; but as her husband died before its completion
he was associated in her honors, and the inscription on the entablature reads: "divo antonino et divet favstine EX. s. c."

To the east of the Temple of Faustina we may discern, in two standing columns and in the body of the round church of

SS. Cosma and Damiano, the remains of the Temple of Romulus - not the Romulus who founded Rome, but the son of the Emperor Maxentius. The façade of this temple had originally four columns; but only two occupy their old pedestals. Its cella was round, and was

utilized by Pope Felix IV. in building the little church which he erected on the site in 527 .

On the south side of the Sacra Via, opposite the temples just described, are the remains of the foundations of the Temple of Vesta and those of the Atrium Vestæ with its surrounding structures. The Temple of Vesta, as its classic title "Ædes Vestæ" implies, was a small circular shrine rather than a temple proper. It was founded, according to tradition, by Numa; and no edifice in Rome was equal to it in sanctity. Here burned the sacred fire, kept ever alight by the Vestal Virgins, and here were preserved the relics on which the welfare, nay even the existence, of Rome was supposed to depend. The Temple consisted of a circular cella surrounded by eighteen columns, with a domed roof. Only the core of the substructure now remains. The Temple was destroyed or burned and restored four times, its last rebuilding being by Severus.

To the south of the Temple of Vesta, and almost adjoining it, are the massive remains of the substructure of the

Atrium Vestæ. On this site originally stood the Regia, or official residence of the Pontifex Maximus of Rome. In the Regia lived Julius Cæsar while he held that office, and from it he went forth to his murder. When Augustus succeeded to the office in i2 B.c., however, he built himself a large palace on the Palatine, and gave the Regia over to the Vestal Virgins, who were guardians of the rites in the neighboring temple. The Regia was subsequently demolished to make room for a larger house for the Vestals called the Atrium Vestæ. This edifice consisted of a large rectangular colonnaded court (the "atrium," that gave its name to the rest of the structure), which probably contained fountains and flower beds; and around this were grouped the dwelling-rooms, baths, kitchens and store-rooms of the Vestals. The extant ruins show that the building was in two stories. Of the structure, part of the upper floor, massive walls of concrete covered with brickwork, portions of columns, and patches of tessellated pavement remain.
H. L. DRESSLER.




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VOL. 9
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NO. 11

## SPANISH GOTHIC CATHEDRALS

THE critical traveler in Spain will look in vain for any genuinely indigenous Spanish art. It would seem, indeed, as if the arts of all the European schools except that of Spain were represented; and that the ancient Spanish monarchs and grandees at whose commands the various edifices arose, showed their enthusiasm for architecture as the Orientals do their delight in dancing, merely by looking on at the performance of others. "Though endowed with the love of architecture, and an intense desire to possess its products," writes Fergusson, "nature seems to have denied to the Spaniard the inventive faculty necessary to enable him to supply himself with the productions so indispensable to his intellectual nature." Each new school of architecture in Europe, indeed, called into being an imitative school in Spain; and while it is, of course, impossible that work done in Spain should not bear at least some superficial impress of the national genius, it still remains basically foreign.

The Pyrenees formed no ethnical barrier between Southern France and Spain, and it is therefore easy to understand that the earlier architecture of Spain should, in general, be closely akin to that of France, and that when the Gothic style was introduced the Spanish examples should reproduce very closely the noble and severe forms of the French cathedrals. Gothic building in Spain began about 1100 and continued into the early sixteenth century. This era may be
divided into three periods; the first, dating from inoo to the first quarter of the thirteenth century; the second, or middle, period occupying the remainder of the thirteenth and the whole of the fourteenth century; and the third, or late, period comprising the fifteenth century and part of the sixteenth.

The churches and cathedrals of the first period were for the most part begun in the Romanesque epoch, but assumed an early Gothic character before they were completed. In the middle period, the developed style of the thirteenth century French Gothic was introduced, and we find the Cathedrals of Burgos, Toledo, and a little later that of Leon, built closely after French models, probably indeed by imported French architects.
Spanish Gothic may be said to culminate at the time of the building of Seville Cathedral (very possibly the work of German architects) about the opening of the fifteenth century. During the subsequent late period, it became extraordinarily floral in detail, especially in the ribs of the vaulting and the enrichment generally. As examples of this late work we may name the New Cathedral of Salamanca and the Cathedral of Segovia, begun when the Renaissance had already set in.
The one characteristic which perhaps most widely differentiates Spanish cathedrals in outward aspect from those of corresponding date in France, is that the large windows of the French cathedrals

were soon found to be unsuitable under the burning sun of Spain, and hence were first walled up and afterwards replaced by very much smaller openings. For this reason Spanish Gothic appears at first sight less airy, less Gothic than that of any other land.

Salamanca boasts two cathedrals, an older one of the twelfth century, called the "Catedral Vieja," and a new one of the sixteenth, called the "Catedral Nueva." The old cathedral nestles beneath the vast bulk of the new church in such fashion that it is difficult to obtain a photograph which at all reproduces its effect; but the first impression that it makes is one of great boldness and vigorous massiveness of effect, well deserving the epithet "the strong" as applied to it by the famous saying, in which the principal Spanish cathedrals are grouped together as "Toledo la rica, Salamanca la fuerte, Leon la bella, Orviedo la sacra, e Sevilla la grandeToledo the rich, Salamanca the strong, Leon the beautiful, Orviedo the sacred and Seville the great." The best view is from the Patio Chico, a small plaza adjoining the New Cathedral, which shows the fine exteriors of the eastern apses, the turret to the east of the transept, and above all, the magnificent and celebrated lantern over the crossing.

We have put the Old Cathedral of Salamanca first among our illustrations because it shows the transition from the Romanesque to the Gothic style. Indeed, it is quite as possible to consider it a late Romanesque as a Gothic edifice; its exterior would almost wholly bear out the former attribution; but the vaulting of the interior, wherein the main arches are everywhere pointed, the details of the carving, and a certain indefinable something in the general effect, mark it as distinctly touched by Gothic influence. It was founded, probably about iloo, by Count Raymond, a native of Burgundy, but was not finished until one hundred years later.

Another cathedral which is a brilliant example of the transition from the Romanesque to the Gothic style is that of

Tarragona. Unfortunately, as is the case with most Spanish churches, it is so closely hemmed in by surrounding buildings that no general view is obtainable. The main body of the church, begun soon after ini8, dates mainly from the end of the twelfth and the first half of the thirteenth centuries, and thus belongs to just that short transitional period in which the pointed Gothic arch was used where greater strength was required, while the round Romanesque arch was still retained for smaller openings in the walls. But additions were made to it from the fourteenth to the eighteenth centuries; and the capitals throughout the church are sculptured in such well-developed Gothic that it is impossible to consider the Romanesque influence as paramount.

The west façade is shown in our illustration. Although begun in 1278 it was evidently not finished until late in the fourteenth century, and is completely


[^12]

Gothic in aspect. In the center is a deep portal flanked by massive buttresses, and surmounted by a tympanum pierced with geometrical tracery of very

The Cathedral of Burgos brings us to the fully developed Gothic style. It was founded in I22I, the best period of early Spanish Gothic, but was not finished for


CATHEDRAL OF BURGOS, SPAIN
THE APSE
delicate execution. Above the portal is a finely wrought rose window. In spite of the incompleteness of its great gable, the façade taken as a whole is very imposing in effect.
more than three hundred years, and the towers of the main façade, built by John of Cologne, date from 1442 to 1458 ; the octagonal lantern above the crossing was completed by a Burgundian archi-

tect in 1567 ; and in 1790 the lower part of the west façade was remodeled in the Renaissance style, to its great detriment. But the western steeples and the central lantern are so elaborately picturesque
discerned from the view of the apse shown on page 247 .

Burgos is in some respects inferior to the Cathedral of Leon; but, on the other hand, it has the distinction of being far


CATHEDRAL OF TOLEDO, SPAIN
WEST PORTAL
that they rather overshadow the nobler scheme of the thirteenth-century body of the church, and give, at first sight, a wrong impression as to its general age and character, which may better be
more Spanish in detail and in general effect and is so nobly picturesque in aspect that one cannot well find fault.

The Cathedral of Toledo was founded in 1227, and its construction proceeded

almost continuously for more than two hundred and sixty years. In general style the Cathedral is of the early Gothic, of Northern France, though late Gothic,
huge doors, and its fine windows, makes an impression of most imposing mass. The west façade, shown in our general view, is flanked by two projecting


Renaissance, and, occasionally, Baroque features bear witness to the long duration of its building. In area it is about equal to Cologne Cathedral; and the exterior, with its flying buttresses, its
towers, of which that to the north has alone been finished. This tower was built between 1380 and I440.

Comparing the three great Spanish cathedrals built in the French style -

those of Toledo, Burgos and Leon Mr. Street awards the palm to Toledo. "Undoubtedly," he writes, "it lacks height, and later additions have shorn it of some of its attractiveness; nevertheless, with all its alterations for the worse, it is one of the most impressive churches I have ever seen." Its original architect is named in the Spanish account "Perez" - probably merely a transla. tion of the French "Pierre" - and at any rate he was thoroughly acquainted with the best French churches of his time; for, like Burgos and Leon, Toledo is an example of those edifices which suddenly sprung up in Spain in the fully developed Gothic style without any connection with other work in the country, yet with the most obvious features of similarity to contemporary churches in other lands. Unfortunately scarcely a foot of the exterior has been left unaltered and in consequence its effect has been much injured, even were there sufficient open space about to obtain a general view of its noble structure. The principal portal, on the west side, dates from 1418 to 1450 , and in spite of alterations is still an admirable example of the Gothic style. It consists of three doors, over each of which is a relief. Above the doors, the façade is adorned with numerous statues; and extending from buttress to buttress between the upper window and the gable of the great central doorway, is a sculptured representation of the Last Supper. The upper part of the façade is almost modern, dating from 1787 .

The Cathedral of Leon is one of the finest examples of Gothic architecture on Spanish soil; and although smaller than the cathedrals of Toledo, Burgos and Seville, exceeds them in delicacy of execution. From beginning to end it is French in every part - French in detail, French in plan, French in general design. The churches which come nearest to it in style, and cannot be far from it in date, are the Cathedrals of Amiens and Rheims. It is probable, therefore, that Leon Cathedral was planned between 1230 and 1240 , although it was not finished until the close of the following
century. The building has been repeatedly "restored," but the discrepancies of style, visible mainly on the exterior, produce no unpleasant effect.
"Regarding the cathedral as French rather than Spanish," writes Mr. Street. " and giving up all attempt to make it illustrate a chapter in Spanish architectural history, it is in almost every respect worthy to be ranked among the noblest churches of Europe. Its detail is rich and beautiful, its plan excellent, and the sculpture with which it is adorned quite equal to that of any church of its age."

The Cathedral of Avila, a massive castle-like structure, was commenced in rogr, and, according to tradition, was completed in sixteen years, nineteen hundred laborers having been engaged upon it. The only parts of the present structure which can be as early as this, however, are the external. walls of the apse; and in general character Avila is now to be ranked as of the end of the thirteenth or of the early fourteenth century. The appearance of the western façade is determined by the two fortresslike towers which mark the ends of the aisles. The south tower is unfinished; but the northern one is a fine work of the fourteenth century, with its bold buttresses, enriched at the angles with ball-carving, and its belfry lighted by two windows on each side, with tall crocketed pediments above them. The façade owes much of its effect to the contrast between the stolid simplicity of the general scheme and the enrichment and delicacy of the doorway, with its recessed portal, and the ornamentation above it.

Valencia is another Spanish cathedral which is so closely hemmed in as to be almost unphotographable. Fortunately its most interesting portions - the elevation of the north transept, in which is the main entrance, and the fine lantern over the crossing - may well be seen from the Plaza de la Seo, from which our view is taken.

Valencia was founded in 1262 and finished in 1482. The east end, the south transept, and a part of the sacristy date from the thirteenth century. It is im.


possible to determine accurately the date of the façade of the north transept and the noble lantern; but it is probably safe to consider them as of the latter half of the fourteenth century. The transept elevation is extremely rich in detail. The great portal is carved with four rows of figures, and over the arch rises a gabled canopy, the spandrels of which are filled with tracery and figures. Above, and set back from the face of the doorway, is a rose window, filled with intricate tracery; and over this is a crocketed pediment with tracery in the spandrels. The lantern, probably somewhat later than this façade, is one of the finest examples of its class in Spain, being very noble in general effect.

The Cathedral of Seville, of which the interesting Giralda Tower has been illustrated in a previous issue of this Series, is unquestionably one of the largest and richest Gothic churches in Christendom. It was begun in 1402 and finished in 1506, probably by German architects.

In his picturesque description of the cathedral, published in 1804, Cean Bermudez compares it, as seen from a distance, to "a high-pooped and beflagged ship, rising over the sea, with harmonious grouping of sails, pennons, and banners"; and another Spanish writer, Caveda, has well described its general aspect: "The effect," he says, " is truly majestic. The openwork parapets which crown the roofs; the graceful lanterns of the eight winding stairs that ascend in the corners to the vaults and galleries; the flying buttresses that spring lightly from aisle to nave, as the jets of a cascade from cliff to cliff; the slender pinnacles that cap them ; the proportions of the arms of the transept and of the buttresses supporting the side walls; the large pointed windows that open between, one above another, just as the aisles and chapels to which they belong rise over each other ; the pointed portals and entrances - all these combine in a marvelous effect, although they lack the wealth of detail, the airy grace and the delicate elegance that characterize the cathedrals of Leon and Burgos."

The construction of the New Cathe-
dral or "Catedral Nueva " of Salamanca was begun in ri509. In $I_{513}$ one Juan Gil de Hontañon (later the builder of Segovia Cathedral) became supervising architect; but numerous interruptions occurred, and the work was not finally completed until I733. The cathedral, therefore, affords, not wholly to its artistic advantage, a record in stone of the changes of taste in Spain; and the lateGothic, Plateresque and Baroque styles may all be studied here, side by side. "There is," writes Street, "but one point about it that can be given hearty and unstinted praise-the magnificence of the general idea and the noble scale and proportion of the whole; for the detail is mediocre throughout, fairly Gothic in its character inside, Gothic mingled with Renaissance outside, but everywhere wanting in vigor and effect.

The Cathedral of Segovia, unrivaled in situation, crowns the highest point of a hill about which the city is built. It is, however, more interesting from its place in the history of Spanish art than as a work of architecture; for it is perhaps the latest Gothic building erected in Spain, and yet shows but little Renaissance influence. Its architect was the same Juan Gil de Hontañon who built much of the New Cathedral of Salamanca; and under his direction the cor-ner-stone was laid in 1522 . He was succeeded by his son.Rodrigo; and probably the greater part of the Cathedral was finished before Rodrigo's death in ${ }^{1} 577$.

In design Segovia Cathedral very closely follows the New Cathedral of Salamanca, but it has the advantage of having a great chevet in place of a square east end. Its general character, however, is extremely similar. There are the same pinnacles and buttresses, the same parapets, the same concealment of roofs and roof-lines everywhere, the same domed lantern over the crossing, the same lofty tower at the west end. In brief, so general are the points of similarity that Mr. Street believes that portions of the two works were executed from the same plans.



# RENAISSANCEWALLTOMBS 

IN ROME

THE distinctive type of Renaissance mural tomb-a shallow niche, flanked by elaborately carved pilasters and roofed by a semicircular arch, containing a marble coffin, set on an ornamented and inscribed pedestal, upon which lies an effigy of the occupant - became so common, particularly during the fifteenth century, that there is good reason to suspect that such monuments, like the sarcophagi of the ancient Romans, were often mere articles of manufacture, made wholesale, like our gravestones, and bought "ready-made," a commission being given to some sculptor for a portrait of the deceased to be set upon the already executed sarcophagus, to which an appropriate inscription need be the only addition. Indeed, so numerous were the tombs of this general design during
the fifteenth century, that there is hardly an important church in Italy that does not possess one or more of them.

The constant repetition of a single type of monument by many contemporary artists had the same result that similar repetitions have had everywhere in the history of art - namely, that, as the effect of constant practice and rivalry, the type was brought to a high degree of general perfection, resulting in a great number of beautiful examples; but that side by side with these stand others, which, though technically skilful in execution, are yet mediocre in effect because executed perfunctorily, and as imitations rather than original works of art. Considered as a whole, however, these fifteenth-century mural tombs are unusually excellent, and form, perhaps, the most general and representative


TOMB OF CARDINAL BERNARDINO LONATI: THE SARCOPHAGUS S. MARIA DEL POPOLO, ROME


TOMB OF MARCANTONIO ALBERTONI
S. MARIA DEL POPOLO, ROME
manifestation of plastic art during the latter part of the fifteenth and the early sixteenth centuries.

The motives constituting the type were arrived at by a curious sequence of historical steps. The kernel of the whole, the stone coffin, was invented by the Egyptians as a receptacle for the bodies of their dead; and the general shape of sarcophagus they devised has come down to us almost unaltered.

From the Egyptians, the sarcophagus was borrowed by the Etruscans, who decorated it with bas-reliefs, and finally with effigies of the dead; and, being a race of marked realistic tendencies, they often made these effigies more or less faithful portraits. Thus adorned, the sarcophagus passed from the Etruscans to the Romans; but they, though elaborating and perfecting the workmanship, did not change the funda-
mental conception or forms. The niche and its semi-circular arch were contributed by the early Christians of Rome. The Christian places of burial were the catacombs -long underground tunnels with vaulted roofs. In the sides of these tunnels, round-arched niches were constructed, and within them the dead were laid on shelves, their bodies hidden from sight by flat stone slabs on which appropriate inscriptions or em-
blems were carved. But when it became no longer necessary for the Christians to conceal their burial places they adopted the Roman fashion of enclosing their dead in sarcophagi of more or less elaboration, and set these sarcophagi within the round-arched niches of the catacombs, from which the recesses and arched canopies of the Renaissance tombs were imitated.

The early Christian sculptors, how-



TOMB OF STA. MONICA
S. AGOSTINO, ROME
ever, took one step more. The Romans and Etruscans had never, in their effi-
gies, represented the occupants of the sarcophagi as dead, but as engaged in


[^13]SS. APOSTOI, 1, ROME
some lifelike occupation, usually as saying farewell to their friends. But the Christian custom of laying out the body for burial in stately garb, and exhibiting it thus to the sight of the mourners, transformed the Roman conception of the effigy, and resulted in the recumbent and formally attired portrait-statues of the Renaissance monuments.

So conceived, the tomb afforded an unrivaled opportunity for delicate and ingenious architectural detail and emo-
of Mino da Fiesole and his pupils; for Mino from the extreme delicacy in detail of his work, the spirituality and strong emotional feeling of his sculpture, and above all his remarkable skill as an architectonic composer, was particularly fitted for such achievements. His visit to Rome occurred about 1473, and though many excellent tombs of a similar type had previously been erected in that city, there is evidence that a great impetus in the building of such


TOMB OF FRANCESCO TORNABUONI
tional portrait sculpture, and, moreover, was well calculated to gratify that thirst for personal fame and the strong family pride which were marked features of Renaissance life. To the fact that it thus suited the genius of Renaissance artists, and also fulfilled the desires of their patrons, we doubtless owe the great popularity of such monuments.

The type of tomb shown in our illustrations was first perfected in Florence and thence imported to Rome, probably in part at least, through the influence
monuments took place about this time.
Of all the Roman churches S. Maria del Popolo possesses the largest nuinber of these mural tombs. The first of our illustrations shows the sarcophagus from the sepulcher of Cardinal Bernardino Lonati, in that church. It is a beautiful piece of late fifteenth-century workmanship, and the effigy is one of striking individuality. The second example, from the same church, shows the tomb of Marcantonio Albertoni, constructed about 1485. Also in S.

Maria del Popolo is the monument to Giovanni della Rovere, dated 1483 . The painted lunette above is attributed to Pinturicchio

The Church of San Agostino, Rome, dedicated to St. Augustine, the celebrated Father of the Latin church, contains the body of his mother, Santa Monica. Her tomb, erected in 1566 , is the work of the famous Isaia of Pisa.

In the tribune of the Church of SS. Apostoli, Rome, stands the monument erected by Pope Sixtus IV. to his nephew, the Cardinal Pietro Riario, whose sarcophagus and effigy is shown in our illustration. It bears the date 1474, and is attributed, at any rate in part, to the hand of Mino da Fiesole.

The Church of S. Maria Sopra Minerva,

Rome, - the only Gothic church of any importance in the city, - contains many striking monuments, and one of the most beautiful among them is that of Francesco Tornabuoni, a Florentine who died in Rome in 1480 . It is unquestionable that this tomb was executed by Mino da Fiesole.

The earliest in date of the tombs shown in our illustrations, and especially remarkable for the beauty of its recumbent figure, is that of Cardinal Stefaneschi, in S Maria in Trastevere, Rome. The cardinal died in 1417 ; and his tomb is the work of Paolo Romano, an eminent sculptor of the latter part of the fourteenth and early fifteenth century, whose style was imitated from that of Isaia of Pisa.
P. R. D.


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## Brochure Series Competition CC THE DESIGN FOR <br> A Colonial City House Façade

ANNOUNCEMENT OF THE AWARD

Messrs. Joseph Everett Chandler, Hubert G Ripley, President of the Boston Architectural Club, and Louis C. Newhall, Chairman of the Exhibition Committee of the Boston Architectural Club, the architects appointed to judge this Competition, have awarded the First Prize, among seventy competitors, many of whose drawings were unusually interesting, to Mr. William Adams, of Boston, and the Second Prize to Mr. George Clarence Johnson, of Philadelphia. The most general criticism which it is possible to make of designs so various in character, is that they showed too frequently a lack of knowledge as to exactly what constitutes "Colonial" detail, and too often a ten-


First Prize Design
Mr. William Adams, Boston


Second Prize Design
Mr. George Clarence Johnson, Philadelphia
dency to coarsen this detail, the essence of which is delicacy and refinement.

To comment briefly in detail, on the drawings here reproduced, the First Prize design is both well proportioned and well studied, while its detail is both good and legitimately Colonial throughout. The Second Prize design also shows good and characteristically Colonial detail, and its proportions are excellent, with the exception of the cornice, which the Judges considered to be a trifle heavy. Were it not for the heaviness of the proportions of this cornice, the Judges would have found some difficulty in deciding which of these drawings should have ranked first.
The First Mention design, by "Colonial," is good in detail and well drawn, although the scale of the openings is not quite satisfactorily proportioned to the mass. The Second Mention, by "Salem,". although well drawn, lacks Colonial feeling in the upper story, and betokens a certain lack of repose throughout. The Third Mention design, by "Device," although one of the best façades submitted, cannot be considered characteristically Colonial in its detail. The well-proportioned

Fourth Mention design, by ""Mephisto," is unfortunate in the detail about the second story windows.

Other drawings submitted of which brief mentions should be made are those by "Crescent," in which the cornice is heavy and the second story windows somewhat coarse for Colonial work; by " Beacon Hill," well drawn and well proportioned, but too coarse and suspiciously "Frenchy" in detail; the designs of "Deerfield,"'"Oak Dale,""ArchieTect" and "MCMIII" all may be characterized as well drawn, well proportioned and interesting, but lacking in Colonial quality in their details. In the façade by "Washington" the openings are well proportioned and the whole design is effective, but the detail lacks delicacy. The design by "Gander" is, on the other hand, excellent in detail as well as in proportion, but wants Colonial feeling, and is rather ordinary as to the entrance; "Higginsworth's" façade is badly drawn and the entrance is weak, but mass,


First Mention
detail and window openings are all excellent

It is proposed to hold an informal exhibition of the drawings submitted in this Competition at the Architectural Club, Boston, provided the competitors agree to allow their designs to be shown. If any contestant is unwilling that his drawing should be so exhibited he will confer a favor on the Editor of The Brochure SERIES by notifying him immediately.

The award of Competition DD, set in previous issues, for the design and lettering of a bronze tablet bearing a given inscription, and intended to be set into the vestibule wall of a county court-house, closed on November 15. This Competition, which is in the main a problem in the drawing and arrangement of lettering. promises some interesting results, for lettering seems to be an altogether too much neglected portion of the equipment of the usual architect. The award will be announced in The Brochure Series for December.


Second Mention


Third Mention
[Device]


Fourth Mention
" Mephisto"

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is rather a historic survival, a reminde of the days when the college was in fart what it still is in theory, a family scholars, sharing fraternally their lod ings and their table as well as the learning. And above all it is a soci; 1 function. The hall is as venerable and characteristic an institution as the chapel or the library, and perhaps more highly esteemed than either by the undergraduates.
The student at Oxford or Cambridge eats his breakfast in his own room - or in a friend's room - though it has been cooked for him in the college kitchen. He probably lunches frugally in the college buttery. It is not until evening that the great hall is occupied. Then, summoned by the college bell, (or at Queen's college, Oxford, by the sound of a trumpet), the undergraduates troop into the fine old hall, and seat themselves upon benches before the long oaken tables which run up and down the room. Across the farther end runs the high table, generally elevated upon a platform, at which the fellows or "dons" sit. They come in after the students are all
placed and their entrance is traditionally welcomed by a mighty banging of fists and beer mugs upon the table.

The fare is substantial and well cooked, and is moistened with liberal draughts of the college ale, for each college has its own cellar, and of its reputation the undergraduate is quite as jealous as he is of his alma mater's fame for scholarship or athletic prowess. Each college serves its dinner with its own solid silver plate, stamped with its coat of arms and the date of its gift or purchase - generally in Restoration times There are a few colleges which have their original plate older by two centuries or more; but they are the Puritan colleges which refused to give up their silver for the usedfering Charles during the Parliamentary wars. The universities are aristocratic, and there were not many instances of such indifference to the royal necessities.

Dinner is usually eaten in a dignified though by no means a formal manner. The most amusing custom which obtains, at Oxford at least, is the payment of "sconces" for such offences as profanity, punning, or late arrival at table. In case of reasonable doubt, the culpability of the accused is solemnly referred to the judgment of high table, and from the decision of the dons there is no appeal. Found guilty, the victim must either pay a shilling to the college library or order a tankard of bitter beer. This he may either kiss and send around the table as a loving cup, or attempt to
drain at a single draught. If he succeeds in the latter undertaking the beer must be paid for by the man who "sconced" him ; if he fails he must buy more beer for the table.
Dessert, coffee and wine are not served in the great hall; for these the dons withdraw to their common-room, and the undergraduates repair to the college store for fruit or pastry, and to their own rooms for coffee and tobacco.

Architecturally the halls are of very various ages and styles. Some, like that of New College and the old hall of Balliol, go back five hundred years or more, to the period of the Middle Gothic; more are built in the Perpendicular style, for the fifteenth and sixteenth centuries were famous for the founding and building of colleges; others are Tudor or Jacobean; several were designed by Sir Christopher Wren or his contemporaries in the Italianized manner of the Restoration; and a few, lately built, are excellent examples of the Gothic revival.
But in spite of these differences there are, of course, a great many features which are common to nearly all of them.
There is first of all the heavy oak paneling, rich in color and beautifully carved; there are the timber ceilings, in the use of which English architects have, perhaps, excelled all others, black with age, yet designed with a skill which gives them grace as well as solidity; there are the brilliant windows of stained or painted glass, which give the needed touch of color to an interior which might otherwise be thought rather too somber; there are the coat-of-arms of the dead and gone masters of the college blazoned upon the dark wainscot, and there are the rows of portraits hanging against the walls, the counterfeit presentments of distinguished fellows and graduates.

Some of these halls are picture galleries of no mean order; that at Christ Church, for instance, contains two of Holbein's paintings - Henry viir. and Cardinal Wolsey - and portraits by Van Dyck, Lely, Hogarth, Gainsborough, Reynolds, Kneller, Romney, Watts and others. That at Trinity College, Cam-
bridge, if less notable for the artists who have painted its portraits, is quite as remarkable for the fame of the men whose faces look down upon the room they knew so well, centuries, perhaps, ago, for no college in England has a roll of distinguished sons to equal Trinity's. There is hardly a hall in either university that does not contain two or three pictures of unusual artistic as well as historic interest.

The hall of Christ Church, which has been called the grandest mediæval hall in England, save only Westminster, is rich too in its historic associations, for here Henry vir. held a state banquet, here Elizabeth, James I. and Charles I. saw dramatic performances, and here, in the heart of loyal Oxford, Charles met in 1644 the members of Parliament who still clave to his drooping cause

It must not be supposed that all college halls are dining halls, though most of them are used for that purpose. There are examination halls as well, and of these the hall of the Divinity School at Oxford is one of the most interesting examples. It is built in the Perpendicular style, dating from the middle of the fifteenth century, and the illustration gives a good idea of its chief beauty - the rather low but magnificently carved and groined ceiling. This hall, having fallen somewhat into decay, was restored by Wren, and it is remarkable that one who had so mean an opinion of its style of architecture should have done the work so sympathetically. It was in this room that Cranmer, Latimer and Ridley were tried for heresy in 1555 , and in Broad Street, only a few steps away, they were burned.

The halls of the great English public schools, Eton, Harrow, Winchester, Rugby, are, of course, modeled upon those of the colleges at Oxford and Cambridge, and do not suffer by comparison with them. The hall of Eton in particular is a noble and lofty room, built at the beginning of the sixteenth century, and famous for its splendid paneling and its beautiful windows.

Nowhere is the antiquity of the Eng-
lish Universities so forcibly impressed on the visitor as in their libraries. We are accustomed in America to the most progressive methods in the administration of great collections of books. We put them in fireproof buildings on shelves of iron, which stand on floors of plate glass. We prepare with great labor, exhaustive and accurate card catalogues, and distribute the books to readers by means of a careful system of rules and officials. They do things differently in England. From the most famous library of them all, the Bodleian at Oxford, it is almost impossible to draw a book, and though reading is permitted among the shelves, it is not much encouraged. The libraries of the various colleges - some of them are very largeare more easily come at, but they are all of them housed in venerable and musty rooms, built before fireproof construction was heard of, and they are not always well catalogued. Some of them are well endowed and exceedingly rich in certain departments of learning, while others, small and neglected, have had scarcely a dozen new books added to their shelves in fifty years. But the bookloving undergraduate is free to browse about them all at his will, which is likely to afford him more gratification than he could find in our well-ordered and stricty administered libraries.
In connection with several of them there are interesting collections of paintings, statuary, as well as of curios and curiosities; and it is not necessary to say that both at the Bodleian and the University Libraries at Cambridge there are manuscripts, missals and early printed books, the value of which is almost beyond computation, since their loss could never be made good.

But whatever are the shortcomings of the English libraries on the side of administration, they are fascinating places to visit, particularly the really old ones, which date back to Plantagenet or Tudor times. The low, dimly lighted rooms, crowded with book shelves of the same dark, richly carved oak which supplies the roof-timbers above, have
an air of age, of mystery, of scholastic seclusion which carries one back in imagination to the days of the cowled and sandaled mediæval scholars and churchmen who first read and studied there. Some of these libraries, we must remember, were built before printing was invented, when the only books were those laboriously written on vellum by the patient toilers in the monasteries. Books had such a value then as we cannot today conceive of, and at Merton College, Oxford, or Trinity Hall, Cambridge both of which go back in their present buildings to the fourteenth century, they will show you the bars and chains by which the few precious volumes, which then constituted a library, used to be securely chained to the shelves.

Almost as old and quite as interesting, is the library of Duke Humphrey of Gloucester, the oldest part of the Bodleian. This was founded in 1445 , though in its present condition it is only three hundred years old, Sir Thomas Bodley having restored and refitted it in 1598, after a half-century of neglect and deI spoilment. Nor should any one, who can gain admittance, fail to see the quaint collection of books and prints left to Magdalene College, Cambridge, by its worthy alumnus, Mr. Samuel Pepys. Here is his own cipher copy of the famous diary, and all the volumes and portfolios are in his own cases as he himself arranged them.

There are, both in Oxford and Cambridge, a few libraries built in the Italian manner of the eighteenth century. The most conspicuous is the Radcliffe Camera, an impressive rotunda now used as a reading-room for the Bodleian Library close by. Two of the handsomest rooms of this period are those at Christ Church and Queen's College, Oxford, both shown in the illustrations. The wood-carving in the latter by Grinling Gibbons is especially fine, and the library itself is the largest which any of the Oxford colleges possess, and nearly as large as that of Trinity at Cambridge.

Henry S. Chapman.



DINING HALL, CHRIST CHURCH COLLEGE




HALL OF THE DIVINITY SCHOOL




LIBRARY, ST. JOHN'S COLLEGE

## ITALIAN BRIDGES

OF all architectural sins the building of an ugly bridge is, perhaps, the most egregious. Structures of other sorts may be overshadowed by charitable neighbors or shrouded by trees and vines; but a bridge, whether part of a river landscape in the country, or a thoroughfare and landmark in the city, always ends the vista and fills the eye. On the other hand, a beautiful city bridge, stately and monumental, often affords, with the sweep of its arches, the only graceful structure among the surrounding marts; while in the country it may complete and humanize, with the touch of man's hand, a natural scene, and thus become an architectural achievement that is a joy more likely to "endure forever" than most objects to which the trite phrase has been applied; for thoroughfares of travel once established are inflexibly conservative.

To attempt to classify bridges into types would be hopeless. A bridge may be anything, from the mere plank or slab of stone that crosses a rivulet, to a structure as elaborate and architecturally rich as the Waterloo Bridge in London, or such a triumph of engineering skill as the Brooklyn Bridge in New York City. From time immemorial, however, architects have instinctively felt the æsthetic possibilities that lay in bridge-building, and have always striven to make their bridges something more than mere viaducts.

In no country are the bridges more varied or more excellent than in Italy. The views which follow show, perhaps, a representative selection of types (though they might be supplemented by scores of others equally meritorious and suggestive), ranging as they do from such a simple high-arched span as that over the Nervia in the little town of Dolceaqua to the monumental Ponte S. Angelo at Rome, and from such
rural simplicity as the Ponte Vecchio at Calci, to that other Ponte Vecchio in Florence, which, lined on both sides with shops, is a veritable city street in itself.

The examples shown which may need a word or two of historical comment are the Ponte di Pietra at Verona, the Ponte S. Angelo, Rome, the Ponte Vecchio, Florence, and the bridges to the Isola Tiberino, Rome.

The Ponte di Pietra replaces a Roman bridge, and the two arches next the left bank are mainly of the original construction. The present beautiful structure is the work of Fra Giocondo, the famous fifteenth-century architect, who built also the Pont Notre Dame at Paris.

The Ponte S. Angelo at Rome was originally erected by Hadrian in 136 A.D. to lead to his tomb - now the Castle S Angelo, shown in the view. It was subsequently rebuilt, and in 1688 Bernini adorned it with ten colossal statues of angels, which, though formerly much admired, are, to say the least, mediocre works of art.

The Ponte Vecchio, the most important of the four ancient bridges of Florence, is also said to have existed from the Roman period, but was rebuilt, after repeated demolitions, by Taddeo Gaddi in 1362 . The graceful Ponte S . Trinità above it, which may also be seen in the photograph, was constructed in its present shape in 1567 , from a design by Bartolommeo Ammanati.

The bridges leading from the Isola Tiberino, Rome, are said to be among the oldest in the city, one of them having been erected by Fabricius in 62 B.c., as an inscription records. During the middle ages it assumed the name of Ponte de, Quattro Capi, from the four-headed hermæ which adorn its balustrades. The other bridge is called the Ponte S. Bartolomeo. Both have been repeatedly patched and restored. C. D.


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Brochure Series Competition DD Design, and Lettering for a Bronze Tablet

ANNOUNCEMENT OF THE AWARD

The subject for this Competition was the design and lettering of a bronze tablet, measuring twenty-four by thirty-two inches, bearing a given inscription, and intended to be set into the vestibule wall of a county court-house.

The number of drawings was not as large as is usually called out by The Brochure Series'


First Prize Design, by Mr. Stephen Olney Hawkins, Brooklyn, N. Y.

Competitions, and none of those submitted was found wholly satisfactory by the judges Mr. Frank Chouteau Brown (author of "Letters and Lettering ") and the Editor of The Brochtre Series. It was evident that the drawing and arrangement of effective lettering was not within the capacity of the majority of the competitors; and it was interesting to note


Second Prize Design, by Mr. Alfred Condie Dalmas, New York City.


Mention.
"Florida."
that where the greatest ability in abstract design was shown, as in the decorative border of the panel, there the lettering was likely to be weakest; while on the contrary, some of the panels which had no ornamental border at all contained the best lettering. The most common weaknesses in the drawings submitted were, lack of ability to draw letter-forms of pleasing types, or to render any forms firmly and effectively; the choice of letter-forms not adapted to execution in bronze; and, finally, a want of grasp of the principles of arrangement and composition of lines necessary to give the inscription its due appearance of balance, dig-


Mention.
"Nolava."
nity and decorative effectiveness. (In passing, it may be noted that the number of egregious errors made in spelling the simple words of the inscription was, to say the least, amusing.)

The judges awarded the First Prize to Mr. Stephen Olney Hawkins of Brooklyn, N.Y. Mr. Hawkins' design, while by no means remarkable, shows a type of letter adapted to casting in bronze, and an adequate border. The lettering, however, looks crowded against the lower bosses, and the arrangement of the inscription seems weak owing to the need of longer lines in the center of the lower division.


Mr. Alfred Condie Dalmas, of New York City, was awarded the Second Prize. This design, although depending wholly for its effect upon the lettering, has a dignified and masculine aspect. The type of letter used is adapted for bronze, and is of good character in itself and well drawn. The division of the inscription into lines, and the spacing between words is commendable, although the long lines seem crowded at the ends.

The design of "VIctor" (reproduced) shows a letter of good type, well arranged, especially in the length of lines; but the whole appears somewhat weak for the weight of the panel. The first two lines might have been given more importance with advantage.
"Nolava" (reproduced). The lettering, though intelligently arranged, is crowded in the long lines; and the letters themselves are too thin in the light strokes to be reproduced effectively in bronze.

"Ionic" (reproduced). Panel design rather original in conception, and well rendered, but lettering despicable.
"Florida" (reproduced). Letters too small in scale for proper legibility in bronze.
Among the designs not reproduced the following may be selected for brief comment : "Enamel Letters." Design neat in gen-
eral appearance, and letters effective as pendrawn types, but not adapted to bronze.
"Hoots Mon." Border too pretentious, and the heavy fasces rest upon nothing. Lettering huddled and crowded.
"Leges." With more care to make margin around inscription equal, and to avoid split words, the design might have resulted well.
"Elm.". A pity that the care and skill shown in rendering the border should not have extended to the lettering.
"Omega." Interesting in first effect, but will not bear examination.
"Cesar." Carefully rendered, but commonplace.
"S.P.Q.R." Hard and commonplace.
" JuDGE." Letters of a good style, but the lower part of the inscription is badly arranged, both as to logical division and for effect.
"Concours." The breaks in the lower part of the inscription do much to harm an otherwise commendable design.

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[^2]:    * See Brochure Series for October, yoo

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