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## THE BROCHURE SERIES DURING 1902

WITH this number The Brochure Series concludes its Sixth Volume. The editor believes that he can promise those subscribers who continue the magazine's company during 1902, twelve most attractive numbers. In general the plan of the Series will remain unchanged. It will continue to present illustrations of such works in architecture and the allied arts as have been proven excellent by the test of time, with brief, but accurate historical and critical comments. In the forthcoming Volume much space will be devoted to subjects which, while intrinsically excellent, have the additional charm of novelty.

## NOTES

The catalogue of reflecting fixtures recently issued by I. P. Frink is to be particularly commended for not being an "art book." It is a business-like presentation of a special line of goods by a business house, and aims to give architects, in the quickest, most concise and yet most complete way, the information they may need regarding sizes, styles and prices of reflecting shades, clusters, chandeliers and special reflectors for special purposes, such as the lighting of store windows and art galleries. Few firms have met with more pronounced success in this last line of work. With but two or three exceptions, every public and private picture gallery of importance in this country has been lighted by the Frink system, and nearly every large dealer in pictures uses the Frink reflectors to light his stock. The same style of reflector, adapted to show window lighting, has been adopted by hundreds of the largest stores all over the country.

The authorities of the Louisiana Purchase Exposition, which is to be held in St. Louis in Igo3, have opened a prize competition to all designers for a symbol or emblem to be used for the seal, stationery, etc., of the Exposition. Eight sculptors or medallists are to be invited to compete and are to be paid $\$ 250$ each for their designs; but all other artists, without exception, are eligible to compete, and their designs will be considered on an equal basis with those of the eight invited competitors. A prize of $\$ 2500$ will be awarded to the most successful contestant. No rules are laid down as to lettering, style or size, but the emblems must symbolize the historical event which the Exposition is to commemoratethe acquisition by the United States in 1803 of the Louisiana Purchase. Six months will be allowed for the competition, which was planned by Prof. Halsey C. Ives, the art director of the Exposition. The Press Department of the Louisiana Purchase Exposition, St. Louis, Mo., should be addressed for further details.

## THE

# ARCHITECTURAL REVIEW <br> for 1902 

$T$HE GENERAL POLICY of the Review is so firmly established and so well known to its readers, that it is sufficient to announce its continuance with such changes in detail as may result from constant effort towards improvement. The Editorial Page which has always been authoritative, the department of "Current Periodicals" acknowledged to be the best critique of current architectural work, and the insert plates, reproducing for the most part scale drawings from the best offices, will be features of all regular numbers.

$T$HE LEADING ARTICLES, always a strong feature, will be well up to the established standard of interest, as the subjects and writers secured for the earlier issues indicate. Mr. C. H. Blackall will write upon the Esthetics of Architectural Construction, considering the principles which underlie constructive design, and illustrating the subject by comparative examples of historic and modern work. "English Farm Buildings," by Mr. R. Clipston Sturgis, will be illustrated with photographs by the author ; Mr. Myron Hunt will write upon the planning and design of Suburban Apartment Houses; HalfTimber Work, and its use in this country, with illustrations of construction methods will be the subject of an article by Mr. Lawrence Visscher Boyd.

GARDEN DESIGN is a subject to which the Review has always given considerable attention, and it now offers a series of short articles, descriptive of the work in this line that Americans are accomplishing, illustrated by photographs and drawings.

$T$HE BEST ENGLISH WORK does not, as a rule, find its way into the architectural papers of that country; arrangements are nearly completed for a quarterly correspondence which will keep Review readers informed upon the very best work of English architects. The illustrations will be from original drawings and photographs not published elsewhere.

DOMESTIC ARCHITECTURE will receive more attention than heretofore and interesting examples will be illustrated by the grouping of a number of photographs on one page, as several times done in recent issues. Frequently, these pages will supplement insert plates, giving that most useful combination of scale drawings and photographs of the executed work.

$T$HE ONE MARKED INNOVATION of the year will be the publication of from three to four large numbers devoted exclusively to special classes of buildings. So far as it is possible to make them, these numbers will be complete and exhaustive treatises, edited with the assistance of specialists who are acknowledged authorities. The price at which these numbers will be sold to non-subscribers will make a regular subscription the cheaper way of securing them.
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## 

ASTERS IN ART" for 1902 will follow the same plan and will contain all the features included in the previous issues; and the publishers believe that the Third Volume will surpass its predecessors in interest and attractiveness.
$\mathbb{4}$ Early in the year two numbers will be devoted to the greatest of the Greek Sculptors, Phidias and Praxiteles. The paintings of Tintoretto, the intrepid draughtsman and majestic colorist of the Venetian school; of Luini, who in the fascination of his work stands so close to Leonardo da Vinci; and of Perugino, "whose figures belong to the Renaissance, their souls to the Middle Ages," ensure issues of the greatest beauty. Giotto, who "first gave life to art by making his works truly reflect nature," will be a most interesting figure to the student of art history. Hogarth, moralist and satirist, will stand as the most original exponent of the English school. Paul Potter, whose pictures deserve to be more widely known, will represent animal painting, and Turner, to prove whom the world's greatest landscapist, Mr. Ruskin, wrote " Modern Painters," will represent landscape. In this Volume a number will, for the first time, be devoted to drawings, and the exquisite sketches of Hans Holbein have been chosen for this purpose. The remaining painters to be treated during the year will be announced later.
©The chosen opinions of the best critics, in conjunction with a life, will, as before, give a complete estimate of the genius of each master considered. No pains will be spared to make every reproduction in the magazine of the highest artistic excellence.

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## IMPORTANT LITIGATION RELATING TO MAGNESIA COVERING PATENTS

THE KEASBEY \& MATTISON CO., the owners of the patents for magnesia covering, have commenced a suit in the United States Circuit Court for the Southern District of New York against the Philip Carey Mfg. Co., George D. Crabbs, J. E. Breese, Schoellkopf, Hartford \& Hanna Co., J. F. Schoellkopf, Jr., James Hartford, W. W. Hanna, C. P. Hugo Schoellkopf, Jesse W. Starr, C. W. Trainer Manufacturing Company and C. W. Trainer, to restrain the defendants from making and selling magnesia covering for boilers and steam pipes containing more than 50 per cent of magnesia, and especially coverings containing 85 per cent of magnesia.

The bill prays for a preliminary writ of injunction, to be continued during the pendency of the suit, and upon the final determination thereo to be made perpetual, and also demands an accounting and damages.
(买 All persons are respectfully requested to refrain from purchasing covering infringing these patents, as such purchasing must of necessity lead to suit.

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GOTHIC ARCHITECTURE IN THE TYROL
ITALIAN WELL-CURBS
THE AHMEDIYEH MOSQUE
CONSTANTINOPLE


# The Brochure Series 

OF ARCHITECTURAL ILLUSTRATION

V OL. 8
JANUARY, 1902
NO. 1

## GOTHIC ARCHITECTURE

## IN THE TYROL

PERHAPS no region of a similar area in Europe is so rich in relics of the feudal period as the Tyrol; but, to the over of things mediæval,
preëminent in all the more delicate ornamental arts, also served later to deprive her of her treasures,
The Tyrol was the great mediæval


A ROOM IN THE ROYAL CASTLE OF MERAN
TYROL
the country is as exasperating as it is fascinating, for the same unique geographical position that, at the end of the fifteenth century, made the Tyrol
highway connecting the Netherlands and Italy. The rich Flemish trader, wending his way to Italy, passed through the Tyrol, and paused there to recoup

himself for the imposts levied upon him by the native barons by selling them the art products of his country. The Flemish artist, too, passed through the Tyrol on his way to his apprenticeship in the great art schools of Italy ; and on
have speedily acquired a degree of skill as wood-carvers, painters, sculptors, glass-stainers, metal-workers and jewelers as made them unrivalled in Europe. Nor were patrons lacking to employ their best skill, for the feudal barons of


Gothic chest, schloss tratzberg
his return journey tarried, often for months, to profit by, and incidentally to dispense, his new-won knowledge.

It is not remarkable, then, that the Tyrolese artists should, having such means of constant intercourse with the two most æsthetic nations of Europe,
the Tyrol not only levied toll upon all travelers, but also owned what were then the richest silver mines in Europe. In the Tyrol, hardly a dot on the map of Europe, there are, even now, centuries after the destructive invention of gunpowder, ruins of more than five


hundred old castles, whose picturesque outlines seem to have become a part of the scene, scores of monasteries and cloisters, and hundreds of churches; and up to the first quarter of the sixteenth century these strongholds were filled to overflowing with the choicest treasures of woodwork and decoration.

But, as has been said, though the geographical position of the Tyrol had served to enrich and enlighten her, it also proved her ruin. In the centuries that followed the great "religious mobilization" of Europe she became the highway for war as she had been the highway for peaceful traffic, and most of the art treasures which had accumulated during the two preceding centuries were either carried away or destroyed by the armies which successively ebbed and flowed through her valleys. In our later modern years a despoiler, less violent but more insidious, the collector and dealer in antiquities, has bid fair to rob the Tyrol of her remaining treasures, so that the traveler must visit
many of her crumbling castles and deserted monasteries before he shall find one room still wholly mediæval in its aspect. On the other hand, he will be richly rewarded for his search. At almost every turn some carved chest, some frescoed wall, some enriched ceiling or panelled wainscot, or some old doorway will greet him in an otherwise dismantled or modernized farmhouse, castle or cloister.

Enough Tyrolese work of the Gothic period remains, however, for us to be able to study its manifestations, particularly in domestic buildings, and to judge in what respects it differed from the Gothic style in other countries.

Architecturally, it frequently manifests a disregard of that primary form of the pointed arch which is distinctive of the whole style. Square windows, flat ceilings and square-headed doors are common, and sometimes the squat Tudor arch is most effectively employed.

The inner sides of the doors were usually partly covered with large and elaborate wrought-iron hinges, skilfully
worked into conventional plant-form designs; for, as we have said, iron-working (an art probably borrowed from the Flemings) attained great importance in the Tyrol. Often this iron fretwork
according to the richness of the interior. When not thus panelled the walls were commonly frescoed with arabesques in quaint, highly colored designs. Figures of stags and huntsmen, or similar sub-


CARVED DOORWAY, SCHLOSS TRATZBERG
TYROL
was gilded and picked-out with brilliant colors.

The walls of the rooms were generally panelled with plain boards, the panels being framed in with narrow carved borders, more or less elaborately wrought
jects suggestive of the life of the time and country, were the favorite motives. An elaborate example of this kind of wall decoration is shown in the plate on page 7 , of a wall of the Castle Tratzberg, which represents the family

tree of the Hapsburgs, and contains one hundred and forty-three half-size figures, showing the descendants of that house from Rudolph I. to Philip the Fair, each group having a legend of

The prime quality, however, in which the Tyrolese Gothic is unrivalled, is its extraordinary diversity of ornamental carved patterns. Devoid for the most part of spires, pinnacles, bosses and


A ROOM IN THE SCHLOSS ENN, NEAR MONTAN
TYROL
scroll-work beneath it. It was probably commenced, and in the main part finished, in the first decade of the sixteenth century, in honor of the great Imperial sportsman, Maximilian, the Emperor of Germany, whose favorite place of residence was the Tyrol.
other elaborate ornamentation projecting from the surface, its designers seemed to have lavished all their skill upon the invention and execution of an infinite variety of designs based upon plant forms with which they filled the panels and mouldings of their ceilings,
and ornamented the hundreds of chests, tables, stalls, retables and the like, in which, despite the "collector," the country is still so rich. Purely geometrical or "compass-Gothic" ornament
imagination shown by the Tyrolese carvers; the simplicity of the framework serving to emphasize the richness and variety of the design. The Jöchelsthurn was completed in 1469 , and is, for


GOTHIC WASHSTAND, BURG REIFENSTEIN
was but little employed, its place being filled with varying and individual tracery in which some plant growth twines along a staff or otherwise fills the allotted space.

The ceiling of the Jöchelsthurn, on page 12, is an example of the wealth of
the Tyrol, excellently preserved, though its surroundings are today of a comparatively poor description. The town council has turned the room which contains the ceiling into an office, and in the last century some vandal covered the ceiling itself with whitewash.


## THE AHMEDIYEH MOSQUE. CONSTANTINOPLE

THE history of Constantinople is too familiar a tale to require an extended rehearsal in these pages. Its later architecture, with which we are here concerned, is that of the Turks, who since the fifteenth century have occupied the city.

The Turks, originally from Central Asia, gradually forced their way westward into Asia Minor until, in the middle

Wherever the Mohammedans have settled they have at once adopted the architectural forms of the new country and modified them to conform to their own special requirements. They seem nowhere to have brought their style with them or to have thought of forcing one upon their subjects. The Turks upon entering Constantinople at once set to work vigorously to establish them-


EXTERIOR, THE AHMEDIYEH
of the fifteenth century, Mohammed II. at the head of the Osmanli, or Ottomans, overcame the Seljûks, another branch of the race, and after a siege of seven years conquered Constantinople. They attempted to carry their conquest further, and for more than a century the fate of Europe hung in the balance; but in 1683 they were repulsed in the siege of Vienna, and have ever since gradually but surely been losing ground, and with every year their dominions have dwindled in power and extent.
selves by appropriating a number of the principal churches, among them Aya Sofia, and by building new ones. The old buildings required few changes to fit them for the ceremonies of the Mussulman faith; the Christian emblems were merely stripped off or covered up, and the mosque at once came into being by the introduction of the mihr $\hat{b} b$ or niche to indicate the kibleh or direction of Mecca, and the slender pulpit or mimber with its long flight of steps, from the top of which the korran is read. Outside there


EXTERIOR, THE AHMEDIYEH
must be a fountain for the ablution of worshippers, and one or more minarets from which the muezzin may call the faithful to prayers. The Byzantine basilica, thus adopted and adapted, has become the type of all later Turkish mosques. Variations have been made in detail and ornamentation, but not in the fundamental design.
Ahmed I., the eighth sultan of Constantinople, or Stamboule, as the old city is still called by the Turks, ascended the throne in 1603 at the age of fifteen. In order to deprive his turbulent soldiers of every pretext for dethroning him, he caused his own brother to be strangled, after having first put out his eyes. His next act was to build a mosque; and as he was determined that it should exceed in beauty Aya Sofia and the great Mosque of Soliman, he ordered that it should be distinguished by six minarets, a number at that time equaled only by El Haram, which surrounded the sacred Kaaba at Mecca. This led to difficulties, so the story
goes, which he only overcame by adding a seventh minaret to the Kaaba. With an enthusiasm like that of Justinian at Aya Sofia, Ahmed came on foot every Friday to toil with the workmen, and paid them their wages with his own hand.

Of the hundred mosques of Constantinople no other except that of Sultan Mohammed II. occupies so immense an area as does the Ahmediyeh, or Mosque of Ahmed I. The area of no other extends over such historic spots. It includes part of the territory of the Augustæum, chief of Byzantine forums, of the great Palace of Constantine, abode of Byzantine royalty, and of the Hippodrome, place of reunion of the Byzantine people. It is strange that among the seven sultans who reigned before Ahmed I. in Constantinople none had recognized the superb prominence of this site. It may be doubted if any other mosque built by an Ottoman sovereign is visible for so great a distance and from so many points of

view. Aya Sofia and the Ahmediyeh stand side by side, the one the highest achievement of Christian and the other the masterpiece of Mussulman art. From far upon the Marmora, or from the European and Asiatic hills, their
of the many great religious and civil ceremonies which it has witnessed. It has been the scene of innumerable state and church observances, but it never presented a more thrilling and dramatic sight than when, in 1826 , the sacred flag


INTERIOR, THE AHMEDIYEH
CONSTANTINOPLE
sky-resembling domes and sky-reaching minarets commingle. The Ahmediyeh is simpler than the great Mosque of Soliman, but is the most impressive and harmonious of all those built by the Ottomans. Its size and the immensity of the open space about it have made it especially adapted to the celebration
of Islam was planted at the top of the narrow pulpit. That day was the crisis in the life of Mahmud II., the reformer. The very existence of his empire was at stake. From the pulpit steps the fetva was read, denouncing the crimes of the Janizaries and ordering the extinction of the corps. The sultan called
upon the faithful to rise at the voice of their religion and country. They rallied to the mosque around their sultan, their flag and their faith. The opposing forces seemed almost equally powerful. Nevertheless, at night Mahmud's victory was complete. Six thousand conspirators had been slain or burned in their barracks. In a ghastly pile in front of the mosque were heaped more than two hundred corpses of the ringleaders. From an enormous sycamore near the central door to the harem, still called the "tree of groans," dead men hung " like the black fruit of a tree in hell."

In plan the Ahmediyeh is much nearer square than Aya Sofia or the Mosque of Soliman, and is in this respect less satisfactory as compared with them. The external effect is, however, more pleasing than the interior; the way in which the smaller domes and semi-domes lead up to the centre produces a pyramidal effect that gives a very pleasing air of stability to the outline, and the

' 'MIMBER", OF THE AHMEDIYEH CONSTANTINOPLE
six tall minarets go far to relieve what otherwise might be monotonous. It is, withal, what may be considered the greatest architectural achievement of the Turks. - I. M. BELLOWS



## ITALIAN WELL-CURBS

ALTHOUGH it has accomplished a vast saving of labor and an incalculable improvement in sanitary conditions, the introduction of modern methods of water supply has robbed us of much that was beautiful and picturesque. This is nowhere more forcibly brought to mind than in Italy, where the public well or fountain is met with on every hand, now often deserted and unused, but still reminding us of its former importance, and suggesting to the imagination pictures of the life of the past which have no counterpart today.

Everywhere in Italy the well or the fountain has been the meeting place for gossiping, where the women, young and old, have exchanged scraps of scandal, loitering over their great copper water jars. In Greece the wells were rendezvous of love or gallantry, or tale telling. The young women came singing from them with water pots on their heads and were met by their lovers who relieved them of their burdens and joined their


WELL, CHURCH OF S. BIAGIO,


WELL, CHURCHOFS.CRISTINA, BOLSENA
voices in the chorus. They also danced around the wells, the dance being accompanied with songs in honor of Ceres.

The Greek and Roman well-heads resembled those we now find in Venice, and were generally circular and cut out of one stone, as may be seen in the Museum of Naples, which possesses several examples, and in the British Museum, where there is one of marble from the ruins of one of the villas of Tiberius at Capri. The Greek wellheads were often of quite small dimensions, some twenty inches across, and with an orifice of but nine inches diameter, showing that the vessels used to draw water must have been very small, and that probably they were intended only to supply water for drinking and cooking. The mouth was sometimes protected by a massive marble cylinder placed over it, or by two pieces of marble cramped together, a similar custom to that referred to in the Mosaic books. Sometimes the water was raised by a huge lever, great stones being used as


WELL, PALAZZO DEL DUOMO, PIENZA
a counterpoise at the other end; but that this was not at all a general usage is proven by the marks of the ropes seen on the well-head in the British Museum, and in many others, just as they are seen on those of later date in the Museo Civico at Venice.

The Roman wells were generally larger, the top of the curb being from three to four feet from the ground, and were sometimes square. They were called putealia, and were common in the Roman villas, where, as luxury increased, the wealthy proprietors often employed Greek sculptors to ornament them. It was such a puteal that Cicero desired for his Tusculan villa. In some cases sacred places were surrounded by an enclosure open at the top, and from the resemblance which they bore to putealia they were also called by that name. There is a small temple at Pompeii of open columns upon a basement of steps, enclosing a hollow altar, which must have been erected around such a spot of ground, probably a place which had been struck by lightning, as the Romans considered it a profanation to cover over such spots.

When we come to mediæval Italy we at once turn to Venice for examples of
wells, for among the most prominent objects which force themselves upon the attention on every hand, occupying the centre of each campo and visible in most of the courtyards, are the wellheads, which are really the mouths of underground cisterns. These early Venetian wells were, however, for the most part, simple stone curbs, without the overhead features of the later Italian wells to which this article is devoted. The Venetian well-heads are evidently the direct descendants of the Greek and Roman puteatia. They were as a rule without covering, but in recent years most of them have been supplied with a lid and padlock, and in many cases a mechanical contrivance with a chain and bucket for raising the water. Originally they all had the simple rope and bucket to be raised by hand.

Venice is preëminently the city of wellheads, but there were formerly a good many of similar type to be found in the cities which were under her dominion. Of these many have disappeared during the last twenty years, just as they have in Venice itself, either having been sold or destroyed or moved to museums. In


WELL, S. MARIA DELLA QUERCIA, VITERBO

Verona a considerable number still remain in the courtyards of the houses. In the towns which are seated on the lower spurs of the hills fountains take the place of wells.
With the advent of the Renaissance, and its accompaniment of luxury, the old method of raising water from the wells by means of a simple rope and bucket was superseded by an easier one, at least in the more important public and monumental wells, where a chain and pulley were used, supported from an ornamental canopy of wroughtiron or from a stone superstructure. The wrought-iron canopy was often very beautiful in design; but few of the


Well, piazza del duomo
MONTEPULCIANO
finer examples still exist. In Germany, at Nuremberg, for instance, and in some of the cities of Belgium are still to be found wrought-iron well canopies of this period. The two specimens which are here illustrated from the cloister of the Monastery of Sassovino near Foligno and the public wellat Montepulciano are of a simpler type. When made of stone or marble the superstructure usually took the form of a lintel carried on two columns, generally a section of a classical entablature with classical columns, and was, as a rule, designed to accord with the buildings surrounding it. This construction

well
MONASTERY OF SASSOVINO, FOLIGNO

was the simplest and most direct possible for the purpose, intended merely to support the pulley and chain for raising the bucket. A beautiful example of this treatment is shown in the well or fountain which occupies the middle of the central courtyard of the Monastery of Montecassino. The lintel was often separated from the columns, in the earlier examples, by a sort of corbelling. as shown in the well of S . Cristina at Bolsena, or in a still simpler way, as at the Monastery of Monte Oliveto Maggiore. Of yet more simple form is the rude canopy over the well at the Monastery of La Verna in the upper valley of the Arno. Nothing could be more appropriate to the surroundings; and it would be difficult to find a more picturesque or characteristic setting for the simple, severe lives of the monks who spent their days in this mountain retreat than this quaint old group of buildings.

Perhaps nothing could be more suited to the courtyards of our larger public buildings or the squares of our cities


WELL, MONASTERY OF MONTECASSINO
than the covered well-curbs of the type shown in our illustrations; and it is interesting to observe that they are already finding a place in America as architectural accessories useful in the embellishment of private gardens.
S.F.N.



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$B y$<br>CLARENCE A. MARTIN<br>Assistant Professor of Architecture at Cornell University

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## The Architectural Review

## January I 902 Special Library Number

The introduction to this number is an article on ' Modern Library Buildings,'" by Mr. Charles C. Soule.

The author of this article is a Counsellor and a Trustee of the American Library Association, which unanimously endorsed his "Points of Agreement among Librarians as to Library Architecture" at its conference in 1891. He is the author of the article "Library" in Russell Sturgis's " Dictionary of Architecture and Building," and of the "Tract on Library Rooms and Buildings," which has just been issued by the Library Association.
Following are over fifty pages of illustrations, showing plans, elevations, sections, perspectives and photographs of all classes of libraries. Principal among them are the following:
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## February I 902 <br> Lower Fifth Avenue

By Joy Wheeler Dow


THE leading article describes in an interesting way the domestic architecture of Fifth Avenue, New York, in the vicinity of Washington Square, and the illustrations, from photographs by the author, do full justice to these charming old houses.
$\mathrm{T}^{\mathrm{WO}}$ pages are given to photographs of exteriors, interiors and furniture of a house at West Manchester, Mass.
A large photograph and scale drawing of an altar by Maginnis, Walsh \& Sullivan, is a feature of special interest.
$T$ HE plates and editorial and critical departments are up to their usual standard of interest.

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## "Masters in aret" for 1902

(19)ASTERS IN ART" for 1902 will follow the same plan and will contain all the features included in the previous issues; and the publishers believe that the Third Volume will surpass its predecessors in interest and attractiveness.
【Two numbers will be devoted to the greatest of the Greek Sculptors, Phidias and Praxiteles. The paintings of Tintoretto, the intrepid draughtsman and majestic colorist of the Venetian school; of Luini, who in the fascination of his work stands so close to Leonardo da Vinci; and of Perugino, "whose figures belong to the Renaissance, their souls to the Middle Ages," ensure issues of the greatest beauty. Giotto, who "first gave life to art by making his works truly reflect nature," will be a most interesting figure to the student of art history. Hogarth, moralist and satirist, will stand as the most original exponent of the English school. Paul Potter, whose pictures deserve to be more widely known, will represent animal painting, and Turner, to prove whom the world's greatest landscapist, Mr. Ruskin, wrote " Modern Painters," will represent landscape. In this Volume a number will, for the first time, be devoted to drawings, and the exquisite sketches of Hans Holbein have been chosen for this purpose. The remaining painters to be treated during the year will be announced later.
CThe chosen opinions of the best critics, in conjunction with a life, will, as before, give a complete estimate of the genius of each master considered. No pains will be spared to make every reproduction in the magazine of the highest artistic excellence.


## IMPORTANT LITIGATION RELATING TO MAGNESIA COVERING PATENTS

THE KEASBEY \& MATTISON CO., the owners of the patents for magnesia covering, have commenced a suit in the United States Circuit Court for the Southern District of New York against the Philip Carey Mfg. Co., George D. Crabbs, J. E. Breese, Schoellkopf, Hartford E Hanna Co., J. F. Schoellkopf, Jr., James Hartford, W. W. Hanna, C. P. Hugo Schoellkopf, Jesse W. Starr, C. W. Trainer Manufacturing Company and C. W. Trainer, to restrain the defendants from making and selling magnesia covering for boilers and steam pipes containing more than 50 per cent of magnesia, and especially coverings containing 85 per cent of magnesia.

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BELGIAN GOTHIC ROOD-SCREENS
MEDIAEVAL TOWN HALLS OF ITALY


# The Brochure Series 

OF ARCHITECTURAL ILLUSTRATION

VOL. 8
FEBRUARY, 1902
NO. 2

## TYROLEAN

RENAISSANCE CEILINGS

THE predominant architectural feature of the Tyrol is its castle, or to be more exact, its schloss, for the German word signifies not only castle but manor-house as well. The mountainous nature of the Tyrol made it immediately apparent to the early barons that the most easily defended, as well as the most commanding form of fortification was the castle, which, set on a precipitous steep above the highroads of travel that followed the hollows of the valleys, placed all travelers from either direction at the mercy of the lord of the schloss. Indeed, so early were the defensive and offensive possibilities of strongholds which could command the narrow Tyrolese passes recognized, that on more than one height that frowns down upon the main highroads of travel are still to


CEILING OF A MANOR-HOUSE OSSANA, TYROL
be seen towers built there by the Romans, which towers have, in many cases, been incorporated with the mediæval castles. Most of the Tyrolese castles, however, originated during feudal times; for nowhere did the feudal lord flourish more magnificently than in the Tyrol, where owing to the impregnable steeps, a handful of men-atarms might serve to uphold the rights of the self-constituted baron as well as twenty times that number in more level lands.

It has thus come about that, in a country whose total population is less than that of the State of Maryland, contains no less than five hundred and thirty-seven old castles, in various stages of ruin, each bearing in its outward aspect someth ng of the character of the middle ages and of the mountains,-massiveness, defiance, security and simplicity.


When, with the extension of royal power, the decline of the feudal system began, and the mediæval castles lost their militant uses, they were at first used merely as secure dwelling-places
doned altogether. The state of society, too, had changed. The nobles, desirous of more commodious and luxuriant domestic arrangements than the interiors of their rude hill-fortresses could afford,


CEIIING: " THONVINISCH HOUSE",
KAITERN, TYROL
by their noble owners; but, in still later days, as the art of war advanced, and artillery, bombs and shells rendered many such a castle, in spite of its situation, as weak as if it had been erected on the plain, most of them were aban-
abandoned them for courts and cities. Time and tempest were left to do their insidious work, until in the course of a century or two, most of these picturesque old castles became complete ruins, where the bat flitted and the owl roosted.

The shells, however, still remain perched on the inaccessible heights in every valley, for though in more thickly populated countries, such as England and France for examples, the feudal castles, when their period of usefulness as fortresses had passed, were either pulled to pieces for such building materials as could be incorporated into farm or country houses, while the plough obliterated their foundations from barbican to donjon-keep, in the sparsely settled Tyrol, where wood was plenty and building materials were not needed and where the ground on which


CEILING OF A MANOR-HOUSE PIANO, TYROI.
they stood was of no value, the mediæval battlements were rarely molested by the hand of man, and they still frown down upon the traveler in almost incredible numbers.

Though the history of most of the Tyrolean castles is one of decline, ruin and desolation, there are, nevertheless, a number which are still occupied as residences by their wealthy and noble owners; and many of these are, as we saw in the previous article in this Series ("Gothic Architecture in the Tyrol;" Brochure Series for January, 1902), veritable treasure

houses of decoration and carving. One of the most interesting features of these castle and manor-house interiors are the carved and paneled wooden ceilings. The illustrations of this article show those which are marked by the Renaissance influence, for the Tyrol was too close to Italy not to early submit to the all-pervading spread of the Renaissance.

In our foregoing paper three examples
chiefly to the Archduke Ferdinand, an enthusiastic lover of art, who became governor of the Tyrol in 1653 and who embellished his château and filled it with treasures of art.

The small Schloss Velthurns which dominates a little village near Brixen, is outwardly unnoticeable, but contains many remarkable rooms in the Renaissance style, especially that shown in our illustration (page 31), with its elaborate


CEILING: SCHLOSS TRATZBERG
TYROL.
were shown of the remarkable Gothic decorations of the Schloss Tratzberg. In our present illustrations, on pages 30 and 32, are shown two Renaissance ceilings from the same castle; that on page 32 betraying the Italian, that on page 30 touched with German influence.

The ceiling from the Schloss Ambras (page 34) is typical of the richly carved ceilings of the district which surrounds Innsbruck. Parts of the exterior of Schloss Ambras date from Roman times, but the present building was erected in 1564. It owes its interior adornment
wall-paneling, its frescoed frieze depicting the seven wonders of the world, and its ceiling of dark wood relieved with gilded moldings.

The cut on page 35 shows the "Rittersaal " or Knight's Hall in the picturesque Castle of Trostburg, which, from an eminence of two thousand and forty feet, commands the entrance to the Grödnerthal. This castle was originally built upon the ruins of a Roman fortification, but did not attain its present magnificence until the sixteenth century. Its interior apartments are not


CEITING: THECHURBURG
TYROL


CEILINGFROM A MANOR-HOUSE
EPPAN, TYROL
surpassed by any in the Tyrol; and the "Rittersaal" ceiling, with its intricate paneling and painted and gilded coats-of-arms, suggests a comparison with the
on page 33, which dates from 1619 . It is of black walnut with gilded bosses.

Another elaborate ceiling, shown on the same page, is from "The Chur-


CEILING: SCHLOSS AMBRAS
TYROL
work of the Flemish Renaissance. The illustration on page 36 shows this ceiling in detail.

A former manor-house, now a private residence, at Eppan, some eight miles from Botzen, contains the ceiling shown
burg," a château in the Vintschgau, which dates from mediæval days, but which was redecorated during the early Renaissance. The white painted carved ornaments are relieved against the black walnut ground. "The Churburg," now
the residence of Count Trapp, is one of the best preserved châteaux of the Tyrol.

On page 28 is shown a room, decorated in the late Renaissance style, from a
central ornament of the ceiling of this room is shown on page 27 .

The small cut on page 30 shows the centerpiece of a Renaissance ceiling


CEILING: THE TROSTBURG
NEAR WEIDBRUCK, TYROL,
mediæval manor-house which is now a private residence. It is situated at Ossana, a little town in the Val di Sole in the Wälsh - or Italian - Tyrol, a region in which remain some of the most fascinating edifices in the country. The
from a manor-house at Piano in the same Val di Sole.

The illustration on page 29 shows a ceiling from the so-called "Thonvinisch House" at Kaltern, the capital of Ueberetsch.


## BELGIAN

## GOTHIC ROOD-SCREENS

sCREENS or railings have in one form or another, from the time of the early Christian basilicas, been an essential part of the surroundings of the sanctuary in Christian churches. In those intended for parochial worship and the use of the people, the choirs and altars were surrounded by openwork
trade on the western side of the choir. These screens or galleries gradually became more elaborate and were extended across the full width of the nave, and ornamented with sculpture. The reading of the gospel always began with a benediction in the words: "Jube Domine benedicite," from which the

screens of metal to shut them off from profanation, while in cathedrals, collegiate and conventual churches, intended more especially for ecclesiastics, solid screens were used which gave seclusion and shelter from draughts to those who were often compelled to remain in the church for hours. Not only every chancel and choir, but each chapel, and even altar, was thus enclosed. During the middle ages it became the custom to read the gospel and epistle from a gallery which was built above the balus-
name " jube." now generally applied to these screens, was derived. In England the same form was called a rood-loft.

The exact date when such rood-lofts were first erected is difficult to determine but it must have been early, for the one in the church of Aya Sofia, the Basilica of Constantine at Constantinople, was large enough to enable the emperors to be crowned in it. At a later time in Rheims Cathedral the French kings always ascended the jube for their coronations.



ROOD-SCREEN
The Gothic rood-lofts, or jubes, were usually built with a solid wall towards the choir, containing either a central opening with gates and curtains, or two entrances, one on each side. Towards the nave they had open arches, and one or more altars appointed for the service of the laity. On the choir side were

CHUKCH OF NOTRE DAME, AERSCHOT
staircases for ascending to the loft or platform above, while supported in the centre was the rood, or crucifix, with figures of the Virgin and St. John.

The marvelous intricacy and lacelike lightness of flamboyant Gothic tracery is seen in its fullest and most extreme development in France, and more par-

ticularly in Normandy; but in Belgium the work of this style is hardly less elaborate. It lacks some of the refinement which belongs to the best French examples, but is nevertheless often extremely beautiful; and in size and gorgeousness and in general interest the flamboyant cathedrals of Belgium rank almost with those of France.

The Church of St. Pierre of Louvain was begun in 1425 and finished in 1497. The choir is separated from the nave by
built in 1635 by Henri Van Prée of Brussels. It is of white carved stone supported upon columns of black marble. Upon each side are represented scenes from the Passion, and each column bears upon its face the statuette of one of the evangelists flanked on the sides by the fathers of the Church.

In the church at Tessenderloo the beautiful carved stone screen is placed, not in the choir, but at the end of the principal nave, towards the tower.


ROOD-SCREEN
CHURCH OF ST. GOMMAIRE, LIERRE
an elaborate stone screen or rood-loft, finished in r490, which is surmounted by a lofty crucifix, on the two sides of which are placed colossal statues of the Virgin and St. John.

At Lierre, a suburban town near Antwerp, is the Church of St. Gommaire, which is also to be considered one of the finest examples of late flamboyant Gothic in Belgium. The church was begun in 1425 and completed in 1557. At the entrance to the chancel is the magnificent screen, said to have been

The Church of Notre Dame at Aerschot also has a remarkable stone rood-screen placed across the entrance to the chancel. The church is of moderate size, and was built between 1331 and I337, although the screen must have been added at a much later date. Of most elaborate design and workmanship, it is one of the richest of its class.

At Walcourt, in the pilgrimage church of Notre Dame, is another example of the work of this period, which bears the date 153 r .
J. G. G.

# THE MEDI压VAL TOWN HALLS OF ITALY 

DURING the dark ages, while Europe was sunk in superstition, overrun by the barbarous hordes from the North and constantly at war, there were no skilled workmen, no arts, and, outside the monasteries, no learning. In consequence there was little building done, and the few scattered re-
with the gradual increase of wealth, there came also civic pride and a spirit of independence resulting in local municipal organization; and in spite of the constant and devastating war from which the cities were rarely free, there ensued a time of extraordinary activity and enterprise, both public and private,

mains from which we may judge show this little to have been of the simplest and rudest sort. In Italy only the superstition of the barbarous conquerors prevented them from despoiling the churches, and but for this we should have nothing left after the constant petty warfare and pillage. Of civic architecture we have but scanty evidence. In the cities of the North, where commerce had slowly grown up, the first signs of outgrowing the depressing influence of feudal barbarism were shown. Here,
throughout northern Italy. Outside the cities the feudal lords occupied great fortified castles, levying tribute upon commerce, and keeping up continual warfare among themselves, until early in the twelfth century when they were compelled, by more or less concerted action, to give up their strongholds and come into the cities. But this did not stop their turbulence. Prompted by the same spirit as before, they built strong castles within the city walls, and fortified them with towers, sometimes


THE BARGELLO
FLORENCE
of extraordinary height. These towers grew so rapidly in number and strength, and enabled their owners to so far defy the civic authorities, that it was at last found necessary to restrict their number and height by law, for in some cities they were even counted by hundreds; and the erection of such private fortresses naturally led to the adoption of similar ones for public use.

Thus with the establishment of local self-government began the remarkable series of town halls, with which we are here especially concerned. The earliest
examples have disappeared; but a great number still remain scattered over Italy, little changed after five or six centuries of use, and still in a general way serving the purpose for which they were originally intended. The conditions which gave rise to them were, of course, various, and it is difficult to get any clear conception of the different forms of civil government which followed each other so rapidly in these restless communities. In general, however, under the German sovereignty, the city was ruled by a podestà, an official at
first appointed by the emperor and later elected by the citizens. He seems to have had extraordinary powers,-civil, judicial and military. In Sismondi's "History of the Italian Republics" the following picturesque account of the functions of this official is given:-
" When the podestà got news of any offense on the part of a citizen against the dignity of the state, he hung out from the windows of his palace the gonfalon of justice, called the citizens
to arms by the sound of trumpets, issued forth on horseback surrounded by his guards and followed by all the people, and proceeded to lay siege to the house of the offender: When the house was taken it was destroyed to its foundations. In the execution of this duty the criminal was sometimes made to suffer the extreme penalty, but even in such cases there was nothing of the forms of legal procedure,- nothing to suggest the liberty of a well ordered republic. In a


community whose members were independent, and constantly at war among themselves, the chief of the state himself declared war against rebellious citizens, and it was by the means of a rally of all the people that he maintained a kind of subordination. Every man depended upon his own energy and spirit for his personal liberty, and upon the government only to repress disorder when it became excessive."

Under such conditions it was but natural that the palace of the podestà should, like those of the citizens, be a fortress as well as a residence.

The Bargeilo in Florence, built for the podestà in 1250 , may be taken as a type of the town halls of the thirteenth century. It is about one hundred and ten by two hundred feet in size, and is built, in the usual fashion, around an interior courtyard. What is probably the older
portion (the portion shown in the illustration) has three stories of rough rockfaced masonry of which the second or piano nobile is the principal one. The lower story has simple square doorways with heavy lintels and pointed relieving arches above, and small windows high up in the wall. The second story windows are larger, but are still small and comparatively few in number. They are round-arched enclosing two pointed lights separated by a column. Such
windows, although in many cases with. a greater number of openings, are seen in most of the town halls of this period, and are common in all of the secular architecture of the time. The wall of the upper story is irregularly broken by windows of different shapes and sizes. The interior courtyard is surrounded on three sides by an open arcaded gallery, and has a straight open stone staircase on the fourth. As a whole, the building is a beautiful and characteristic


THE PALAZZO DELLA RAGIONE
example of the best civil architecture of Florence.

In 1298 the Palazzo Priori, or as it is now called, the Palazzo Vecchio, was built in Florence. Therehad been a gradual change in the government of the city, by which the heads of the seven principal trade guilds were, under the name of priors, given control in place of the former podestà. For their use a new building was erected from the designs of Arnolfo di Cambio. In general character and in detail it closely resembles the Bargello, although even more severe and fortresslike. The bold construction of the enormous corbelled


THE PALAZZO DEI PRIORI VOITTERRA.
cornice with the front wall of a tower three hundred feet in height, flush with its face and resting upon it, was a daring feat of engineering skill.

Siena has, in its Palazzo Pubblico, a town hall more ornate and graceful than the Palazzo Vecchio and of lighter construction, although begun in 1287 , eleven years before it. The tower, which is about two hundred and eighty-five feet high, was added between 1325 and 1345 . The whole structure, including the tower, is of brick. In Siena there was never, on the whole, the high degree of cultivation


THE PALAZZO DEL COMUNE
PIACENZA
nor the commercial supremacy attained in Florence; but, on the other hand, the Sienese did most of their fighting outside the city walls and against alien foes, and were comparatively free from
which are here chosen for illustration, they follow one type pretty closely, modified in each case by local conditions or tastes. Some have entirely disappeared, others have been ruined, and others still


THE BROLETTO
the domestic broils so common in Florence. This in a measure explains the difference in the architecture of the two town halls.

In the other cities of northern Italy there were many town halls of this period, and, as will be seen from those
rebuilt or remodeled at some later date.
At Fano the old town hall, or Palazzo della Ragione, has but two stories, the lower one of which is arcaded, and a comparatively low tower with an open belfry. This building is of brick and terra-cotta, and dates from 1299. The

Palazzo dei Priori at Volterra, and the Palazzo dei Consoli at Gubbio are again of the fortress type, similar to the Bargello at Florence.

The Palazzo del Comune at Piacenza is one of the largest and one of the most interesting of the town halls of the smaller cities. It measures about one hundred and forty-five by eighty-eight feet. The arcaded lower story is of dressed stone with brick walls above.

The name " Broletto" was given to the smaller town halls, which were usually of the very simplest plan, with an open arcaded gallery, used as a market, below, and rooms above The Broletto at Como, built in ${ }_{1215}$, is one of the earliest. It is faced with colored marbles. The Palazzo Giurenconsulti at Cremona is one of the smallest of these buildings. It is not, however, certain for what purpose it was built, but is supposed to have been intended for the Broletto, although it lacks the balcony, or ringhiera, in the centre of the façade from which decrees of the government were read and from which the magistrate addressed the


THE PAIAZZO GIURENCONSULTI CREMONA
people. This balcony, reached usually through a small window leading from the main room of the second story, was one of the most constant features of the Italian town halls, both large and small.



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#### Abstract

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## NOTES

Our readers will be interested in the full page advertisement of Edward J. Jones, Jr., which appeared in the February issue and to which attention is directed. Mr. Jones' large collections of photographs are well known by the profession generally, but none will be found of greater value to the Architect and Draughtsman than those embraced in his offer, full particulars of which appear in his advertisement.

The 1902 volume of Masters in Art, published by Bates \& Guild Company, has, in the three issues for January, February and March, illustrated respectively the works of Phidias, Perugino and the Windsor portrait drawings of Holbein the younger. These last subjects (Holbein's drawings) are remarkably adapted for reproduction; and are printed in the magazine in sepia and tint, making them almost perfect facsimiles of the crayon drawings. So unusual is their quality that the publishers have printed a small number of extra sets of the ten chosen drawings shown in Masters in Art on one side of the paper only, without text or titles, and have mounted them on rough-surface green mounts ready for framing. This set of ten reproductions will be sent for 50 cents, postpaid.

The editor of The Brochure Series desires photographs of old American farm-houses of some picturesque and architectural value, both exteriors and interiors, for use as illustrations in The Brochure Series. He also desires photographs of village colonial churches, both exteriors and interiors. Photographs found suitable for the desired purpose will be paid for by arrangement with the
contributor. Prints may be of any size and on any photographic paper, except "blue print." Send photographs until May i packed flat, not rolled, and enclose postage for return if not accepted.

American Gardens, published by Bates \& Guild Company, which owing to the unusual care of its printing has been delayed in making its appearance, is now ready for delivery. This book, the first on its subject, will be a surprise to those who do not know what has recently been accomplished in garden making in this country. It shows that American designers, forced by climatic conditions and surroundings, have developed an original and native type of garden which is not inferior in beauty to that of Italy or of England. The book contains two hundred and twenty-seven charming reproductions of specially taken photographs, showing, with plans, sixty-one of the best private gardens, the majority of them designed by such of our foremost architects and landscape gardeners as the Olmsted Brothers, Mr. Charles A. Platt, Messrs. Carrère \& Hastings, Mr. Wilson Eyre, Jr., Messrs. Keen \& Mead, Messrs. Parsons \& Pentecost, Mr. Daniel W. Langton, Mr. E. Hamilton Bell, Mr. A. F. Manning, Messrs. Little \& Browne, Messrs. McKim, Mead \& White, Mr. Nathan Barrett, Messrs. Cope \& Stewardson and many others, as well as scores of non-professional garden lovers. To the planner of gardens the book will be invaluable. The introduction by Mr . Guy Lowell, lecturer on landscape architecture at the Institute of Technology, deals specifically with the garden in America. Two hundred and sixty-eight pages, $10 \times 12$ inches, bound in green and gold, with a cover design by Mr. Henry McCarter. Price \$7.50 net.

## The Architectural Review



THE ISSUE FOR MARCH
has an interesting article by Mr. R. C. Sturgis, on Somerset Barns, with illustrations of the old barns of Glastonbury, Pilton, Wells and Wellow. Some of the late work of Mr. A. C. Schweinfurth is illustrated, including several views of the very charming house at Berkeley, Cal. (which is here shown), the residence of Mrs. Hearst at Pleasanton, Cal., The Examiner Building, and the "Little Jim" Hospital at San Francisco. There are nearly fifty illustrations in addition to the inserted plates.

T${ }^{\top}$ HE FEBRUARY ISSUE contained a readable article by Mr. J. W. Dow on the architecture of Lower Fifth Avenue, New York, with twelve illustrations from photographs by the author ; photograph and scale drawing of a very beautiful altar by Maginnis, Walsh \& Sullivan ; two pages of exterior and interior views and specially designed furniture of a house at West Manchester, Mass. ; elevation, section, and exterior and interior photographs of Alex. Brown \& Sons' bank in Baltimore ; scale drawings of a large residence in the English style by Messrs. Clarke \& Howe of Providence ; perspective of Grace Lutheran Church, Milwaukee, by Messrs. H. C. Koch \& Co.; an interior study by Mr. Elmer Grey ; measured drawing of the Pavillon de Flore, Palais des Tuileries, and the usual critical and editorial departments

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VOL. 8
MARCH, 1902
NO. 3

VENETIAN BRIDGES

THE local conditions with which the earliest inhabitants of Venice had to deal were such as might seem singularly unpropitious to the growth of either commerce or architecture. The rude fishermen who fled from the successive barbarian invasions to the mud islands that extended along the northwestern shore of the Adriatic, found merely a group of barren saltencrusted marshes, whose soil was untillable, and which possessed no mineral
wealth. The thickets which here and there diversitied the surface produced no serviceable timber, and even drinking water was hardly obtainable. Yet it is these very physical limitations which have made Venice, the great enchantress of the sea, so to "shine where she stands." The wonderful brightness and dreamlike iridescence of her great palaces, "solid and splendidly built, so to speak, on nothing, the wonderful glory of light and reflection about her;


BRIDGES, CANAIE DEI CARMINI
VENICE
the glimmer of incessant brightness and movement; the absence of all those harsh artificial sounds which vex the
the mist of ages, like a bloom of eternal youth, upon them, her delicate pinnacles and balconies, and fretted outlines that

ear in other towns, but which are here replaced by harmonies of human voices and of the liquid waves; her walls with
strike against the sky and shine with an ever varied, fantastic, enchanting: glimmer of responsive brightness from
the blue circle of the sea that brims upward to her very doors, under a sky that, radiant with an answering tone of light, sweeps in widening circles above her" - all this glamour of effect is due to her growth between the water and the sky.

For some centuries Venice must have been only a few groups of wooden huts
merely planks resting on boats which were moored to either shore. As the city increased in size and importance better facilities of communication between the islands were needed, and in the thirteenth and fourteenth centuries municipal decrees were passed which related to the care and alteration of the narrow water-highways which served

scattered among the many small grassy islets that lie off the coast of Venetia; and at first the sole occupation of her inhabitants must have consisted merely of fishing and preparing salt by evaporation. But, as they grew rich, through the possession of large numbers of coasting vessels in which they transported the merchandise and troops of foreign races at very remunerative rates, the Venetians became exposed to the inroads of the rapacious Dalmation pirates; and strongly defended castle-like houses began to be built of stone or brick.

The earliest bridges, however, were wooden structures, many of them

Venice in the place of streets. For many years, however, her bridges continued to be rude wooden affairs, which have long since disappeared. Indeed, up to 1591, when the present structure was built, even so commercially important a bridge as the Rialto - the first to span the Grand Canal which separates the two great groups of islands into which Venice is divided, and up to IS54 the only connecting link across that artery - was of wood.

Its present name, " Rialto," was derived from Rivo alto (or "deep stream ") which was the title first used by the early chroniclers to designate the site


CANAREGGIO BRIDGE
VENICE
of the ancient city, and was later specifically applied to the largest island of the group when, in the ninth century, they selected it as their official seat of government. This section of the city must always have been a busy one. In the middle ages it was the meeting place of the trade-gilds, and still contains the fish and vegetable markets, which swarm
with picturesque activity. In 1180 Nicolo Barattiere, a Venetian engineer, built the first permanent wooden bridge at the Rialto. In 1260 this was replaced by another wooden structure containing a draw, and this bridge is represented in Carpaccio's famous picture of the "Miracle of the Cross," now in the Venice Academy. But, as Venice

steadily grew in wealth and poptration a wooden bridge was found inadequate to serve as the sole passage from one main division of the city to another; and after several unsatisfactory attempts at repair, the Senate, in 1587 , called for
the equivalent of $\$ 150$,000 in our money upon it. Sansovino records that ten thousand piles of eim-wood, driven sixteen feet into the mud were required for the foundations of the abutments. The Rialto consists of a single graceful

competitive designs for a new structure. Twenty-four plans were submitted, one by Michelangelo among them it is said, - and the work was assigned to Antonio da Ponte, who got his nickname "da Ponte" from the circumstance. He consumed three years in building the present Rialto, and spent
arch of marble, about ninety-one feet in span, and seventy-two feet wide. It rises twenty-five feet above the water at the highest point, to allow, it is said, a fully armed galley to be rowed beneath, after her masts had been taken down. In the middle of the bridge under $a$ large open arch there is a level platform.



BRIDGE OF S. GIOBBE
VENICE

This is reached by an easy stepped ascent from either side, divided into three footways which are separated by two rows of shops built under the arcade; so that in reality the bridge forms a suspended street. The largest
and most important of the Venetian bridges, the Rialto, is an example of a custom, common in the middle ages, of making bridges something more than mere viaducts - a type of which the Ponte Vecchio in Florence, which is

covered with houses from end to end, will serve as a familiar example.

Only two other Venetian bridges will

Paglia, situated at the southeast angle of the Ducal Palace, was one of the earliest in Venice to be built of stone.

bridge opposite the scuola di s. marco
VENICE
require separate mention, - the Ponte della Paglia, and the famous "Bridge of Sighs." The former, the Ponte della

It was founded in 1360 , and is still the most popular lounging place in a city of loungers. Its name, the " Bridge of

Straw," appears to be derived from the fact that it was built with money derived from the tax on straw, large quantities of which were used to thatch the early houses in Venice, much after the same fashion that the old London Bridge was paid for by a duty on wool.

The "Bridge of Sighs" owes much of its celebrity to its suggestive name and to Lord Byron's rather ignorant senti-
being more than mere bridges - the one being a covered passage and the other a row of shops sustained on an arch.

None of the remaining bridges of Venice require individual mention. There are three hundred and seventyeight of them, connecting the one hundred and seventeen small islands which make up the city ; and they form constant

mentalizing about it, for the present structure has scarcely ever felt the foot of a prisoner, and is, in truth, as Mr. Howells has called it, "a pathetic swindle." It was designed by the builder of the Rialto, Antonio da Ponte, and was completed about 1597 by Antonio Contino. It connects the Ducal Palace with the Carceri, or prisons, and is divided lengthwise by a partition so that the passengers going and coming might not meet. Though of late workmanship it is very graceful in its light solidity; and Mr. Ruskin has called attention to the fact that very much of the effect both of the Riaito and of the "Bridge of Sighs" depends on both
and ever varying features of the vistas up to the winding canals; but all the main types are represented in our illustrations. As there was no such traffic in Venice as made it necessary to consider the difficulty of drawing heavily loaded vehicles over a steep rise - a utilitarian consideration which deprives our modern flat bridges of much effect,-and as room for the passage of boats was required beneath even the lowest of them, the Venetian bridges were raised in the centre to an unusual degree, and upon this high curvature depends much of their invariable beauty, for they are seldom ornamented, and frequently lack even a parapet.
S. F. N.


# CHURCH OF S. NICOLA 

GIRGENTI, SICILY

SOME five centuries before the Christian era, when the little Sicilian town of Girgenti bore the Greek name of Acragas and was accounted "the most beautiful city of mortals," the remorseless tyrant Phalaris set up there his great brazen image of a bull, and having heated it red hot cast human victims into it as a sacrifice to Molech, likening their groans to the bellowings of his beast god. Near the spot where, according to tradition, these sacrifices took place, now stands the tiny shrine of San Nicola - one of the most picturesque of the many picturesque churches of Sicily.

It consists merely of one bare, paved and arched room, with a small connecting oratory. In its present state it is a Gothic rebuilding of an older Romanesque structure, the remains of which may be seen incorporated with the wall behind the altar. When the original Romanesque church was erected, or
when the present one supplanted it is unknown. The Gothic portion is, however, clearly one of the oldest examples of that style in Sicily; and its exterior had so far fallen into decay that a restoration was recently found necessary.

The interior, however, has remained untouched; and with its bare vault and arches, its peeling frescos whose original harsh reds and blues have faded into harmony with the soft warm tones of the stone, and its altar, garish with tinsel and glass, and usually heaped with the bright Sicilian wild flowers, forms a delightful picture for the sketch-book of the traveler. The altar, dedicated to the patron saint, Nicholas, is cluttered with silver trinkets and copper thank-offerings; for the saint is here accorded great healing powers, and his shrine is hung about with plaster casts as commemorative tokens of distorted legs which he has righted or twisted wrists which he has straightened. A M. n.



## THE GARDENS OF

## V ERSAILLES

THE extravagant praise and the equally unmeasured condemnation which the gardens of Versailles have received from the adherents of one or the other of the two modes of garden design - the formal and the naturalis-tic-should both be accepted with reservation. We must surely feel like protesting when Mr. William Robinson says: "Away, then, with the affectation of pretending to enjoy, with the ignorance which believes that there is some occult beauty in, or excuse for, such a garden as this!" And it is possible we may not entirely agree with M. Théophile Gautier that "Versailles remains without a rival in the world; the supreme formula of a complete art and the expression in its highest power of a civilization arrived at its final blossoming." Many more of us might share the opinion of Mr . Robinson were it not evident that such magnificent pleasure grounds as these at Versailles, where formality was carried almost to the utmost verge,
truly reflected the luxurious and courtly life for which they were intended as a setting, and with which they were in such perfect accord. Voltaire has truly said: "Il est plus facile de evitiquer Versailles que de le refaire." It is unquestionably true that here much, and sometimes all, the free and natural beauty of trees and flowers is subordinated, or even entirely sacrificed, in the endeavor to secure symmetry and formality; but we should not allow ourselves to be misled to the conclusion that there is no beauty but that of wild and untrained nature. There is an appropriate place and justification for both kinds of beauty, for the wild growth and for the ordered symmetry of the architectural garden.

A full recognition of this question of appropriateness leads us back to picture in imagination the royal court of Louis XIV., the "Grande Monarque," as it was, with its incomparably brilliant life amidst all the elegance which the arts


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could afford, its grand manners and superb display, such as no other court in Europe has equaled before or since, but with a surface glitter, as of tinsel, all typified by the king's chosen emblem, the sun, personified in Apollo the sun god who emerges in his car from the waters of the central basin of the garden. We cannot justly separate Versailles from the time of Louis XIV. and judge it alone; nor can we take the Versailles of today - the mere shadow of its
stroyed, and, most important of all, only a small number of its many fountains remain. We should, therefore, do what we can to restore in imagination what is now lacking in material form before we venture to appraise the artistic value of this truly wonderful production. Let us constantly bear in mind, as Gautier has said, that " this garden was indeed the garden of this château, and that there is a wonderful harmony in this ensemble of regular forms, where

former self, grand and imposing as it is - and suppose that we have before us the masterpiece of its architect, Le Notre; for its trees and shrubs have twice been destroyed and replanted according to current fashions, once in 1775 after the advent of the present naturalistic school when everything was cut down to the ground, and again in 1860, when through neglect and decay it became necessary to undertake a thorough renovation. Furthermore, most of its sculptures have been de-
the life of the times could easily display its majestic and measured evolutions," and furthermore, as the poet Gray, who was struck with its splendor when filled with company, said, quoting Lord Byron, "Such symmetry is not for solitude."

Fortunately we do not lack evidence and documents for the reconstruction. The skeleton remains in the garden itself, and we need only clothe this skeleton with the help of such evidence as has come down to us. In its prime the park
was a marvel to all who beheld it. The ambassador from siam could not believe that so much gold and bronze and marble could be put into a garden. As Dussieux says, it must have been very beautiful and very sumptuous to have resisted destruction for two centuries at the hands alike of revolutionists and of systematic architects.
Originally its alleys were broad walks of green turf or white gravel, bordered with hedges from fifty to sixty feet in height in which were cut niches for statues, vases and seats, while trees were trimmed to regular forms and bosquets framed with trellises. The parterres were filled with beds of flowers and enlivened with sparkling fountains, and a thousand ornaments of marble, bronze, copper, gilded iron and lead were set everywhere with lavish profusion. Rare trees and plants were imported at great expense, an army of sculptors was employed for nearly a quarter of a century, and engineers were kept busy in devising and constructing the ingenious hydraulic machinery of fountains and bosquets. Indeed the task of supplying water for such an elaborate system of ponds and fountains must have taxed
the skill and resources of the ablest engineers. At first the supply was led from the nearby hills, but when this proved inadequate an aqueduct was begun for bringing the waters of the Eure some thirty miles across the country. But this again was abandoned, and a new supply obtained from Marly, where a machine was built that raised the water five hundred feet from the Seine into a reservoir whence it was carried in aqueducts to Versailles.

The essential elements of the plan of Versailles are simple and easily grasped (see cut below). The palace is set upon a terrace, and consists of a central block of buildings with long wings running to north and south. It is entered through a grand court on the east from the Place d'Armes, or public square of the town. On the west it presents to the park a façade nearly a third of a mile long broken by the projection of the central block. The gardens occupy the portion of the park nearest the palace, and take up a space approximately threefifths of a mile square, arranged on either side of a central axis, continuing the main axis of the palace, which runs a little to the north of west. The garden


ends on this central axis in the Grand Canal, an artificial basin nearly a mile in length, into which drain the waters from the numerous fountains of the garden, and which once served for boating
and water pageants. This is crossed at its centre by a second canal having at one end the Trianon and at the other the Menagery. To the north of the Grand Canal are the grounds and garden of

the Trianon, and to the south a wooded park, through both of which broad treelined avenues radiate from the basin at the east end of the Grand Canal.

Parallel with the façade of the palace, and arranged upon a secondary axis at right angle to the main one, are terraces and parterres, ending at the north in the basin of Neptune and at the south in the Pièce des Suisses - a formal basin next in size to the Grand Canal. Below, and to the west of this terrace the remainder of the garden is divided by broad paths or alleys into twelve nearly equal rectangular plots or bosquets containing fountains and the innumerable special features which went to make up the attractions of the garden. In some of these bosquets enough remains to suggest the original intention and effect, but in many all vestige has gone.

As one steps from the palace out upon the broad fronting terrace, the whole garden, park and distant landscape beyond are spread out in magnificent perspective. In the immediate foreground are the two basins of the Parterre d'Eau occupying a nearly square space as wide as the central block of the palace. Beyond, a broad flight of steps leads down to the Parterre of Latona, a sort
of hemicycle hemmed in with trees and bounded on either side by a curved ramp in the form of 'a horseshoe. In the centre of the Parterre is the Basin of Latona with its fountain, and on either side are two smaller basins called the Basins of the Lizards. Beyond this again stretches the green lawn of the Allée Royal, or Tapis Vert, with the Basin of Apollo at its further end, balancing that of Latona. Over the fountain of Apollo, which stands in the centre of its basin, can be seen the waters of the canal with a background of distant woods and hills.

This main prospect bears some faint resemblance to the view which Louis XIV. might have seen from the same point, for the disposition of the principal features is the same as in his day; but many changes have been made in the details. In fact, at scarcely any time in its two and a half centuries of existence has the garden remained long without some important alteration. Louis XIV. was constantly adding new features and changing old ones. The Parterre d'Eau, for instance, is shown on the plan made by Silvestre in 1680 as a group of basins arranged in a geometrical pattern which would justify the
name parterre; but in 1684 all this was destroyed and the basins were laid out in their present form. Since then the parterre has been robbed of many of its decorations and the existing great expanse of gravel walks and the uncompromising severity of the two great basins give an effect of bareness which is hardly in keeping with the original design. Indeed the change which has taken place here may be regarded as typical of what has occurred throughout the garden.

It is impossible here to describe in detail, or even to enumerate the many features of the garden. Fountains, great and small and of every imaginable diversity of form were set everywhere. Some of the larger and more simply constructed of them are still used, but the more complicated and elaborate ones were short lived, and have long since been ruined. Of the latter type were the Arc de Triomphe, made of gilded iron and covered with jets and cascades of water to bring out the form ; the Marais, an iron tree, every branch and leaf of which spouted water; the Théâtre d'Eau, in the shape of an amphitheatre; and the Labyrinth, which contained a number of small fountains each of which
illustrated one of Asop's fables. The Obelisk, an enormous column of water made up of smaller jets, the Three Fountains and the Fountain of the Giants each once occupied the centre of a separate bosquet. The Salle du Bal arranged in terraces was built as a setting for one of the elaborate garden fêtes; the Bosquet des Domes, with a fountain in its centre surrounded by balustrades and trellises and with two domed classical pavilions, was one of the simplest and most effective of these features. Another famous fête was held in the Isle Royal, a bosquet in the southwest corner of the garden, since transformed into the Jardin du Roi. Here upon a small island in the basin a play was enacted, and at its close the whole stage-setting disappeared in a burst of fireworks.

The king arranged an itinerary of the garden which was carefully followed in conducting his guests through its many wonders. One of the portions in which he took especial interest was the Orangery adjoining the south wing of the palace, where hundreds of orange trees, collected at great expense, were arranged, and sheltered in winter. After leaving the Orangery the visitor was taken to a great semi-circular space

called the Demi Lune in the centre of the garden between the Parterre of Latona and the Tapis Vert. Here was a spot known as the Point de Vue from which a more complete idea of the garden and its relation to the palace could be obtained than from any other point, for the effects were most carefully studied in all directions. To the west was an unobstructed vista down the Tapis Vert, lined with vases and statues relieved against the background of trees trimmed evenly into a great hedge which
XIV. however, found it pleasanter to live here than at Paris, and set about transforming the simple building and its grounds into a becoming royal residence. In 1662 he began the work of beautifying the gardens, and in 1686 had well nigh completed his plans. The changes since made have been destructive of the original plan, although in recent years there have been attempts to restore portions which had been destroyed.

According to Dussieux, the plan of

led in long parallel lines to the canal and hills beyond. To the north and south, down the alleys of Summer and Autumn, the vista was broken by the fountains of Ceres and Bacchus, and on every side some feature was so placed as to arrest the eye or carry it insensibly along the wall of verdure to a more distant view.

The Château of Versailles was built by Louis XIII. as a hunting lodge, and was occupied by him only occasionally and for but a few days at a time. Louis

Versailles was not, as is generally asserted, originated by Le Nôtre, but was that of Lemercier and Boyceau, which Le Nôtre enriched and beautified. To have done only this would have been sufficient to establish his fame, yet this was but a small part of his achievement. Le Nôtre had, together with Levau, Lebrun and La Quintinie, been employed upon the gardens at Vaux, and it was here that Louis XIV. found him and brought him to Versailles. The success of his work was so great that soon Louis made
him Controlleur des Batiments du Roi, and he was called on to furnish designs not alone for the royal châteaux but for many estates belonging to the aristocracy both at home and abroad. In fact the elaborate open-air fêtes with which the king was wont to entertain his guests became the vogue, and Le Nôtre and his assistants were kept busy in supplying the demand for gardens in which such fêtes could be held. This popularity was but the signal for decline. Le Nôtre's imitators exaggerated what was theatrical in his work, and pushed mere formality in garden making to such an extreme that the style fell into disre-
while there he designed the gardens for the Villa Ludovisi, the Villa Albani, the Quirinal and the Vatican. Even in England and Germany his influence was strongly felt.

Le Nôtre has often been held responsible for the absurd and extreme formality of his time,-for the trimmed yews and grotesque figures of birds, ships, hunters and endless other absurdities carved out of green foliage. On the contrary, he is known to have opposed such work and to have carefully kept it out of his gardens when possible. Many of the extravagant features at Versailles were not really his; the Arc de Tri-


THE ORANGERY
VERSAILLES
pute and was succeeded by a reversion to the naturalistic or landscape type of the jardin anglais.

Besides Versailles and the neighboring gardens of Trianon, Clagny, St. Cloud and Marly, Le Nôtre furnished designs for Vaux, Chantilly, Meudon, Sceaux, portions of the Tuilleries, St. Germain, Fontainebleau, and many others. In 1678 he was sent to Italy by the king to get new inspirations, and
omphe, for example, was the idea of the king, and the spouting tree of the Marias, that of Madame de Montespan. Le Nôtre was a trained architect and a man of cultivated taste, and his designs all show a remarkable grasp of the conditions, breadth of general treatment and subordination of parts to the whole. He died in 1700 at the age of seventy-seven, still in full vigor, after a life of most exceptional achievement. I. T. GUILD



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THE RENAISSANCE

## VILLAS OF ROME

I$N$ the issue of this magazine for May, 1899, an account was given of the villa gardens of Italy, which, although primarily concerned with the gardens, also included a general description of the buildings; for it is impossible to separate one from the other, each being essential, and each governing as well as depending upon the design of the other. It is therefore unnecessary to repeat what was there excellently presented in regard to the history and development of Italian villas.

It was shown in the article referred to that the villas of the sixteenth century were inspired by, if not directly imitated from those of ancient Rome, probably through the fashion of imitating Roman customs and modes of life quite as much as from the revival of the classic arts and the study of ancient literature.

Both in the days of the Empire and during the Renaissance, Rome was the centre in and about which clustered the finest and most important villas, although in the latter period many were built in Florence, and some in other Italian cities. Rome, as the seat of the papal aristocracy, was the centre of social as well as of political life. Moreover, with the accession of each new pope another family was added to the wealthy aristocracy, and new palaces and villas were needed to meet the requirements of this constantly increasing
class; so that after the fashion of building them had once been set the number grew with surprising rapidity.

Within the city, where space was limited, the grounds of these villas were not of great extent, and the buildings were either modified palaces, fitted for the elaborate entertainments for which they were intended, or were, more frequently, casinos, filled with works of art and intended for temporary use, but not as dwellings. Within the city there were few opportunities for obtaining distant views, and the elaborate terraces and extensive use of water possible in the country were not here practicable. All these conditions combined to give the city villas a different character from those in the suburbs.

In passing, it may be well to note that "casino" is a term somewhat loosely used, but there seems to be no better one to apply in general to the principal villa building, whether great or small. "Villa," as used by the Italians, includes both grounds and buildings, as a whole; and "palace" is applied to a distinct class of buildings, although it is sometimes difficult to say to which of these two classes a particular building belongs.

Outside the city the villa grounds were more extended, and the gardens with the casino and its accessories, to which the formal treatment was confined, could be divided from the park,

which was left in a more natural state. A hillside site was the favorite choice. The casino was placed upon a broad terrace well up the slope in order that each terrace below might command a view. In front, the terraces with connecting ramps or flights of steps were adorned with fountains, grottoes and cascades, and beds of flowers in trim box hedges, statuary and balustrades relieved against dark foliage, and here and there a small pavilion or exedra closing a vista or accenting the crossing of two paths made up a kaleidoscopic picture changing with every step. Behind the casino the water from the slope above was often brought in a long cascade or "château d'eau" into a court surrounded by an arcaded gallery.

Upon the interiors of the casinos a wealth of decoration was lavished. In the Villa Madama, for instance, which was designed by Raphael but never completed, the plaster walls and ceilings were ornamented in relief and fresco by Giulio Romano and Giovanni da Udine, and they rank among the most beautiful decorations of the Renaissance. The
foremost artists of the day were employed upon the enrichment of these sumptuous apartments, and as each new villa was erected its owner strove to outdo all before him.

Many of these villas, both urban and suburban, were built upon the sites of those of earlier times, and in some cases may have been restorations, following as closely as possible the ancient models and preserving such features as could be recovered. Such, it is claimed, was the Villa Pia, built upon the site of the Villa of Nero. In all the villas free use was made of classic sculpture, columns and fragments from older buildings, which were found in great abundance in the archæological researches then being prosecuted.

If there is one characteristic which is likely to force itself more strongly than any other upon the architectural student who examines these villas, it is the essential unity of the design - the unmistakable fact that the buildings and the gardens were planned together. From this consideration one is led to inquire about the architects, and it is found that


among them were Raphael, Michaelangelo, Sansovino, Giulio Romano, Vignola, Peruzzi and Vasari; men of no narrow specialty, but renowned for achievements in other arts besides architecture. It is not then surprising to find everywhere the hand of a master.

The Villa Medici, from its association with the French Academy, by which it was purchased in 18or, is one of the most familiar of the Roman villas. Fortunately, too, it is one of the best preserved. It was erected in 1540 by
among the hedged walks, and set off by arcaded walls, fountains and other architectural features. To the north is a small wooded park; and to the south a second but less elaborate formal garden cut into small plots by walks at right angles.

The Villa Borghese was erected from the designs of Vasanzio in 1615 for Cardinal Scipio Borghese, nephew of Pope Pius V. The casino and gardens are upon a hill reached by passing through an extensive park which gradu-


VIlla borghese, Garden
ROME

Annibale Lippi for Cardinal Ricci da Montepulciano upon the western slope of the Pincian Hill overlooking the city. The western side of the casino is bare and uninteresting, but that facing the terrace and garden is finely composed, with two belvederes, and walls richly ornamented with panels and niches of plaster filled with fragments of classic sculpture. The grounds are divided into three portions, a central one upon which the casino faces, consisting of a broad terrace and a garden filled with trees and shrubs regularly disposed
ally grows more formal as the buildings are approached. The casino is ornamented, like that of the Villa Medici, with plaster reliefs and decorations. Its rooms are lined with colored marbles or hung with silks or tapestries as a setting for the rare collection of pictures and antiquities which they contain.

The Villa Pamphili-Doria is the largest of the villas in or close to the city of Rome. It was built in 1644 by Alessandro Algardi for Prince Pamphili, nephew of Pope Innocent $X$, , and is located upon the site of the gardens of



the Emperor Galba, south of the city. Before the casino, the slope of the hill is arranged in a series of terraces adorned with statuary, grottoes and balustrades, while behind it there is a garden on a lower level laid out in beds of fantastic design and set with fountains and statuary. The greater part of the grounds is occupied by a park.

The Villa Albani is the newest of the fine villas of Rome, and was built about 1760. The grand and imposing casino, with its flanking low colonnades, stands at one end of the garden, balanced at the other by a semi-circular arcade. In the centre is a fountain surrounded by flower beds edged with box. The buildings are filled with the valuable collection of antiquities brought together by Cardinal Alessandro Albani.

The Villa Pia was designed by Pirro Ligorio, and built in 1561 for Pius IV. (Bernardino de Medici). It closely adjoins the palace of the Vatican, and is especially noteworthy for the elaborate use of plaster in the decoration of the casino and the loggia which faces it on the opposite side of the elliptical,
slightly raised court. The villa is simply a pleasure resort, with no provision for residence. The enclosure is divided into two portions, one a rectangular space regularly laid out with straight paths, and the other exhibiting a carefully considered plan, but one in which the trees have been allowed to grow freely. From a central space in this second portion, in which are situated the casino and loggia, radiating paths lead out among the trees. From the shelter of the buildings charming glimpses may be had of the gardens, the court and the shaded paths.

The design for the Villa of Papa Giulio is supposed to be largely that of Vignola, although several other architects are known to have been consulted in regard to it. The casino was built about 1550 by Pope Julius III. The lower and outer portion of the building has much the character of a gate-lodge, giving access to a court from which a semi-circular ramp leads to the main portion above, reached through a loggia. Beyond this on the upper level is a second court with arcaded walls on


villa papa giulio, casino, Court façade
either side, ending in a semi-circular pavilion with an open colonnade in the lower story, and reserved for the private apartments of the pope, who spent much of his time here, surrounded by all the splendors of the papal court.

The Villa Mondragone is at Frascati, a village at the base of the Alban Hills,
a morning's journey from Rome. The casino was built in 1567 for Cardinal Altemps, nephew of Pope Pius IV., by Martino Lunghi. It is two stories in height on the rear, and four stories on the front, an arrangement made necessary by the steeply sloping hill. Below it is a great terrace, from which there


is a fine prospect across the Campania to the distant city of Rome. The garden is carried up the slope at the rear of the casino, with terraces, loggias and pavilions, but the chief distinction of the villa, which is now used by the Jesuits as a school, is its magnificent avenue of cypresses, shown in our view.

Of all the Roman villas, probably the Villa d'Este at Tivoli, in the environs of Rome, is the one most frequently described and illustrated. The casino, as in a number of the suburban villas, is not attractive, and evidently was never completed. It overlooks the garden, which is composed of several terraces arranged on the steeply sloping hillside,


VILLA D'ESTE, GARDEN
TIVOLI
and most abundantly supplied with water. The villa is badly dilapidated, and has lost all its finest sculptures.

The Villa Aldobrandini at Frasscati is built upon the slope of the hill which faces the little public square of the town. From the entrance to the park opposite this square, three parallel avenues lined with ilex trees lead to the terrace below the casino, which is raised upon a second terrace. Behind the ugly casino is another terrace with a semi-circular gallery with niches containing fountains and statues; and above this is a grotto from which issues the water that supplies the whole park below.

ISAAC M. BELLOWS.




# THE IMPERIAL ARCHITECTURE 

## OF PEKING, CHINA

THE photographs which illustrate this article were made by an American officer during the recent occupation of Peking by European troops. Neither the buildings within the "Forbidden City" nor those of the "Temple of Heaven" (which, with the "Temple of Agriculture," are the only architecturally important structures in the city, and, indeed, the most noteworthy existing examples of Chinese architecture) were ever photographed before; and as the court has now returned to Peking, they are, as in the past, practically closed to foreigners.

Peking was made the imperial city during the reign of Yung-lo, who transferred his residence to the "northern capital" (as the name Pe king signifies), between 1403 and 1425. It consists of two parts, one of which is known as the Chinese or " Outer City," and the other, the Tartar or "Inner City." Within the Tartar City is the "Imperial City" which, in its turn, encloses the "Forbidden City" and its palaces, where the emperor resides and holds his court. In the Outer or Chinese City stands the imperial "Temple of Heaven," where the emperor offers sacrifice, and in periods of drought or ${ }^{-}$famine, presents prayers for relief. Near the Temple of Heaven, and next to it in religious importance, is the Temple of Agriculture, which stands just inside the south gate to the Chinese City.


FIGURE I
OUTSIDE THE "FORBIDDEN CITY",

The city itself is wholly gray in color, with its gray-brick walls and gray-tiled roofs, with here and there an ancient cypress of intense green; and against this neutral background the imperial buildings and the temples stand out in brilliant relief, with the vivid blues, yellows and greens of their tiled roofs, and lacquered and gilded ornaments gleaming in the bright sunlight.

No adequate study of Chinese architecture as a whole has yet been made; and, indeed, the field seems somewhat a barren one, for the early edifices have been swept away by three thousand years of civil war and Tartar and Mongol invasions, so that the ancient architecture of the land is really better represented in Japan, where the Chinese styles were introduced in the sixth century. Speaking of the Chinese style in Japan, Mr. R. A. Cram, in the "Dictionary of Architecture and Building," writes as follows:-
"Already very perfectly developed in China, the style was at once seized upon by the Japanese and made their own. In their hands it preserved a greater fidelity to original principles than was to be the case in the land of its birth.
"Buildings were begun in the year 593 by Korean architects, in the fully developed style that for many years had expressed in China the extraordinary refinement and delicate civilization that raised her at this time to a
height that probably had no rival elsewhere. Korea had but recently felt the spiritual and intellectual influence of China, and it is quite probable that the art which she in turn handed over to Japan was in many ways inferior to that of the great centre of Oriental culture. This can never be known, for every vestige of contemporary architecture has vanished from China itself, and what we can learn of its nature must be acquired from these inestimably precious buildings in Japan. . . .
" Apart from classical traditions and the possible but unknowable influence of Korea, the first architecture in Japan is undoubtedly Chinese in every particular. As we see it at Horiuji it is a finished style, both structurally and artistically; it is a system of concentrated loads, the entire


FIGURE 2

THIRD GATE, "FORBIDDEN CITY",
structure being supported on a number of columns tied together with massive girders, and mortised in such a way that neither pins nor nails are necessary.


The outer range of columns is filled in with a screen wall of wood or plaster. Ornamental detail is almost wholly lacking; instead of being dependent on this for effect, the buildings are beautiful and architectural solely because of the subtlety of their proportions, their dignity of composition, the amazing refinement of line, and the vitality of the omnipresent curves that characterize them.
"This last quality, the marvelous combination of curved lines, is the most powerful element that goes to the making up of the general impression of almost unique beauty that is inevitable when one studies any of the early architecture of Japan; for the delicate feeling for curved lines first brought by the Korean builders persisted with almost no diminution to the end of the eighteenth century. These curves are to be found in nearly every portion of the work: in the contours of the brackets, in the outlines of the columns, in the chief rafters of the interior that extend from the outer to the inner series of
columns, supporting the roof, and, above all, in the roof itself. This last feature is, of course, of far greater prominence and importance than is the


FIGURE 4
VIEW FROM FIFTH GATE, "FORBIDDEN CITY"
case in any other architectural style, and its lines, mass and composition have received profound study until it has reached the limit of development. It is quite possible that it is reminiscent of the ancient tents of the nomadic tribes of Asia; but the theory that its


FIGURE 5
A HALL OF AUDIENCE, "FORBIDDEN CITY",
great weight and vast size were made necessary by seismic conditions is hardly plausible, since neither China nor Korea are peculiarly earthquake countries, while the region around Nara and Kyoto, to which the new architecture was confined for a thousand years, is comparatively free from this destructive influence.
"Whatever its origin, the Chinese, Korean and Japanese roof remains the greatest glory of the style, and is a most remarkable composition of curved
growth, and shows signs of an evident degeneration from the ancient art; and it is safe to conclude that the architecture of China during the last three hundred years is inferior to that which preceded it. Indeed we can hardly doubt that at one time Chinese architecture was a thing of beauty and grandeur. Hangchow, at one time the capital of the Sung dynasty, is said to have been one of the most wonderful cities in the world, and in historical records we may read of the imposing

lines. Practically every portion of it is curved,-ridges, hips, gables, eaves and all the varying curves flow into each other, grow out of each other, until they form a whole that is powerful, impressive, dignified, yet light, delicate, graceful. The curves are not mathematical; they are as free and instinct with life as those of Gothic architecture."

The existing architecture of China, at least such of it as is known to travelers, is nearly all of comparatively recent
palaces built before the Christian era, though of the character of their architecture no hint is given us. What is excellent in the modern edifices is chiefly the dignity of their mass, the contrast between their light wooden-built super-structures and the massive walls of their basements, and to the somewhat garish splendor of their coloring.

The greater portions of the buildings of Peking, including all the more important ones, are built of gray bricks about twice the size of those which we


FIGURE 7
GATE IN THE "TEMPLE OF AGRICULTURE"
employ. With the exception of certain pavilions and pagodas, they rarely exceed one story in height. The frameworks are of wood which are afterwards enclosed in the brick walls. The general architectural scheme of all of them consists merely in the various groupings of huge halls, and one group of buildings differs from another only in the arrangement of these separate halls and the adjoining living-houses surrounding them. A palace, for example, is never one great building under one roof as it is with us, but is a series of large, separate halls with a number of small buildings grouped together within a surrounding wall. The halls are the main architectural features. All the more important of them have as their chief decorations elaborate ceilings, in which the beams are left exposed and lacquered in brilliant colors, after the


FIGURE 8
HALL IN THE "TEMPLE OF AGRICULTURE"
general fashion of the ceiling in the "Temple of Heaven," here illustrated. These ceilings are supported by ranges of wooden pillars, usually of great size, which are also carved and lacquered.
The Imperial or Forbidden City with its palaces is entirely surrounded by a wall with a coping of yellow tiles. Inside of this outer enclosure is another wall and a moat, within which are the royal palaces. Some of these buildings, the privacy of which have been for centuries so jealously guarded, are of comparatively great antiquity ; and the general distribution of them is at least what it was in Marco Polo's time, to judge by his descriptions.

The Forbidden City is approached by five massive masonry gateways. The third of these gates is shown in our illustration in Figures 2 and 3. Of the five white marble bridges which cross the moat before it, the central one is reserved for the use of the emperor. Across this
bridge and down the wide straight street which runs directly through Peking to the south gate of the city, the emperor is carried in solemn procession each year to the Temples of Heaven and of Agriculture, which stand on either side of the city gate. The parapet of the gate is of white marble ; the lower portion is of brick covered with dull red stucco; and the woodwork of the pavilion above is colored a dull red, relieved at the eaves with brilliant blue, green and gold lacquers. On either side of the gate stand two white marble columns, one of which is shown in a nearer view in Figure 2. Figure 4 shows a view in the Forbidden City taken from the fifth gate. Figure 5 shows a hall of audience in the Forbidden City. The court is paved with gray bricks, the remainder of the stone work is of white marble, the roofs are covered with yellow glazed tiles and the walls are sheathed with yellow tiles and relieved with medallions of green glazed terra-cotta, ornamented in high relief.


FIGURE 9
"temple of heaven"
The woodwork is of duil red, and the eaves are brilliantly colored and gilded. Figure 6 shows another hall of audience in the Forbidden City.

Figure 7 shows a gate in the Temple of Agriculture. Here the roofs are of



FIGURE II
"'TEMPLE OF HEAVEN",
green tiles, the gate is covered with dull red stucco and the frieze above it is painted with conventional ornaments in dull greens, blues and yellows. Figure 8 shows the exterior of a hall in the Temple of Agriculture. The doors and pillars are covered with red lacquer and
ornamented with gilt bronzes, while the eaves are carved into most complicated designs and very brilliantly colored.

The ceiling of the Temple of Heaven, Figure 10 , is, as has been said, characteristic of the ceilings of the more elaborate Chinese halls, and is an excellent example of Chinese decoration. It is supported by four great wooden pillars, one of which may be seen in the illustration. The beams are decorated with dragons and other carvings against backgrounds of ultra-marine blue and emerald green, while the pillars are covered with patterns in gilt relief against a background of Venetian red. Figure 9 shows an exterior view in the Temple of Heaven. The platform is paved with gray stone and the parapet is of white marble. Figure in shows another exterior view in the Temple of Heaven. The path down the middle of the steps, up which the emperor is carried to the temple, is of great blocks of white marble covered with dragons in high relief. The building as a whole is very brilliant. The roofs are so laid as to look, under the glitter of brilliant sunlight, like running water. Figure 12 shows a kitchen

in the Temple of Heaven. The roofs of the buildings which comprise this temple are of intense blue glazed tiles. Figure 13 shows a minor temple of the Temple of Heaven group. Its materials and color decorations are the same as those of the larger temples. All these buildings are surrounded by groves of aged cypresses, whose dark green foliage throws the intense coloring of the buildings into greater relief. Figure 14 shows a view looking north from the south portion of the group of buildings which form the Temple of Heaven. It is taken from a point called the "Centre of the World," because all distances are reckoned from it. The


FIGURE 13
SMALL TEMPLE, '‘tEMPLE OF HEAVEN'"
"Centre of the World" is a truncated cone formed by three or four circular terraces into parapets of white marble.

Before August, Igoo, the imperial Palaces and the Temple of Heaven had never been visited by Europeans, although an occasional visitor of high rank had been taken through some of the state apartments of the Palace, as Lord Elgin was in 1860 , or Prince Henry of Prussia in 1897 . No photographs were then taken, of course; and, as has been said, now that the emperor has again taken up his residence in Peking, the subjects shown in this article are not likely to be again made public.



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issues for 1895 and 1896 and those for January, May and November, 1897, January 1898, January and May, 1899, and
September 1goo, which cannot be supplied separately), ten cents each.
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## NOTES

In view of the lively interest manifested by the subscribers to The Brochure Series in a former set of competitions for various designs, either architectural or allied to architecture, the editor has decided to revive these "Brochure Competitions," and an announcement of two subjects will be found on the opposite advertising page of this issue.
Both subjects announced are practical in character, yet such as will involve little labor on the part of the competitor; namely, for "Competition Q," a garden sun-dial, to be executed in stone, terra-cotta, or imitation stone; and for " Competition R" a pair of wrought-iron andirons, suitable for a room decorated in the Elizabethan style. These competitions close respectively on June 15 and July 15 , and the awards are to be announced in the issues of the Series for August and September.

The particular attention of intending competitors is called to the necessary rules. These have purposely been made as few and simple as possible, but the editor will be glad to explain any points which may seem obscure in regard to them.
It is hoped to make these Competitions of more interest and value by printing as many short criticisms and reproducing as many of the designs submitted as space will allow. The judges will, in each case, be architects or designers whose critical opinions will be found valuable.
The announcements of awards of these competitions will be printed in the advertising pages of the magazine, as many subscribers might prefer not to have them contained in the volume when bound.

It is rare that a volume appears which is greeted by the art critics of the press with such unanimity of discriminating praise as has been accorded to
"American Gardens." The Chicago "Evening Post greets it as "a superb volume" and "a
welcome companion." The Boston Transcript ends a long detailed review by saying: "finally the book is distinctly and emphatically American and for Americans, and it especially deserves recognition on this account. Quite apart from the beauty of the volume and our pride in finding so much to admire in the work of American designers of gardens, there are valuable lessons to be drawn from it by all who have or hope to have gardens of their own." The Brickbuilder says: "An examination of this volume leaves one amazed at both/the quantity of excellent work of this particular description which now exists in our country and also at the able manner in which the publishers have been able to present the subject . . . . It is a delight to turn over the pages and study the pictures as works of pure art. It was a thorough artist who stood behind the camera for these plates . . . We unreservedly commend this book to our readers."

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Edward J. Jones, Jr., has an attractive offer in the March Brochure. He was fortunate enough to secure thirteen interior photographs of the famous A. C. Burrage house in Boston, without question one of the most richly appointed private residences in New England.
The photographs are very sharp and clear, and the series most interesting. Attention is directed to Mr. Jones' advertisement in which full particulars regarding size of photographs, prices, etc., are given.

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OF ARCHITECTURAL ILLUSTRATION

VOL. 8
MAY, 1902
NO. 5

THE GARDEN OF THE

## SANTA BARBARA MISSION

CALIFORNIA

THE Mission of Santa Barbara is one of the most attractive and is the best preserved of all the missions built by the Spaniards in California. In coming into the harbor of Santa Barbara (one of the few harbors below San Francisco on the California coast) the mission can be seen at a distance, its walls and double towers appearing snowy white against the dark background of hills, with the mountains rising still higher in the distance. It is situated on high ground at the head of the valley, and from its towers a view openstowards the west to where the valley narrows in the Gavista Pass, forty-five miles away, and southward,
down the coast as far as Ventura. Up the valley is an equally delightful prospect of farms, orchards and vineyards.

Like the other missions of California, the foundation of Santa Barbara antedates the town by many years. The church was begun in 1786 , two years after the death at Monterey of Father Junipero Serra, under whose energetic and devoted guidance all the California missions were established; but the site had been already chosen by him, and the ground consecrated before his death. Thechurch as it now stands was completed in 1822, after having been twice nearly destroyed by earthquakes, once in 1812 and again in 1814.


THE GARDEN FROM THE TOWER
The eleven or twelve years following the completion of the church were those of its greatest prosperity; but they came to an abrupt close when the Mexican Congress, by the act of secularization in 1833, deprived the Franciscans and their Indian converts and pupils of all their holdings by taking possession in the name of the State. The missionary

SANTA BARBARA MISSION, CALIFORNIA
priests were replaced by curates, the Indians were emancipated from their pupilage and administrators over the mission properties were appointed.
During this time Santa Barbara was the centre of great wealth and power. The church was the largest and best in California; the fathers were the temporal as well as spiritual rulers of the

land, and exercised their power with the most extraordinary wisdom and justice. They were able teachers, and with the help of the Indians, a race not naturally industrious or apt, they made their gardens not only fruitful but beautiful. Starting with the common allotment given each mission in the beginning, of two hundred black cattle and a few sheep and horses, their stock came to number thousands, with gardens and vineyards made productive by a system of irrigation that was well-nigh perfect. They introduced the olive and the mission grape, from which last they manu-
once facing the church is left (see page 100); the adobe walls which encircled the buildings and their gardens have disappeared; age and decay have wrought their inevitable change. The huge roof beams have rotted away, the old tile roofs have been replaced by shingles, and constant repairs are needed to prevent still greater dilapidation. Time has mellowed the gray walls, grass has grown in the cracks of the stone steps to the church, swallows build in its cornices, adding to the charm of picturesqueness, but affording sad reminder of changed conditions within and without.


ONE SIDE OF THE GARDEN
SANTA BARBARA MISSION, CALIFORNIA
factured a wine famous for its quality.
But all this has changed, though the church and the convent still remain, occupied by a few fathers and neophytes. In 1854, however, a new society of the Order of St. Francis was founded, with its headquarters at the parish church in Santa Barbara; but it soon after moved to the mission where it has since remained as an apostolic college. The huts occupied by the Indian converts have gone; only one of the six fountains

The plan of the buildings is the familiar one of European convents,-a church and monastic houses surrounding a cloistered court,-but it is rambling and uncertain, and rooms have been added when and where wanted without regard to unity. The church is a long rectangle with two square towers in its façade and a great central door surmounted by a pediment and approached by a broad flight of stone steps. Each tower has its quota of three Spanish
bells, and is covered by a domical roof and topped by a quaint old weathervane. The walls are in places massive, six feet in thickness, of stone plastered with a heavy coating of coarse cement.

Within the dimly lighted interior, directly above the entrance, is the choir. Two small chapels open, one on either side, and a small enclosed burial place or cemetery adjoins one of them.

The long nave is lighted by rows of smail windows set high up in the walls, and is hung with pictures, many of them copies from the Spanish masters
by the old Spanish masters. From high niches sacred images look down upon the worshippers as if they would murmur benedictions of peace."

At right angles to the church, and continuing its façade for fully a hundred feet, is a long wing containing the apartments of the monks. At its centre a low flight of steps leads up to the broad arcaded corridor, which extends along its full length. A heavy door opens into a darkened hall, the home of the friars now guarding the church, and above it are the narrow cells or

made by Indian converts. At the further end is the altar, with a carved wood reredos. An old record describes the church as having "a plaster ceiling frescoed, marble columns, altar-table and pulpit in Roman style, image of Santa Barbara in front in a niche, supported by six columns; and at the extremities of the triangle the three Virtues, all four of the figures being of cut stone painted in oil. The interior is adorned with pictures of Purgatory, the Saints and the Crucifixion, executed
rooms of the monks. Through this wing another door opens upon a similar arcaded corridor or cloister, with stone piers supporting a tiled roof. It extends along one side of the square, enclosed garden, - a shrub-grown half acre, completely isolated from the outside world, with radiating paths and a circular well or fountain in its centre. Here it would be easy to go back in imagination a hundred years and believe that the few coarsely clad monks were the direct followers of Father Junipero. T.A.L.


# ECCLESIASTICAL SPINDLE SCREENS 

FROM THE NETHERLANDS

DURING the Middle Ages the art impulse was not by any means so spontaneous in the Netherlands as in other parts of Europe, but it had, nevertheless, a sustained force which left its impress in the shape of a great number of monuments spread thickly over the whole country. This impulse was kindled by outside influences, first from Germany, then from France. The earlier churches of the Romanesque style show a relationship to those of the lower Rhine valley; but after the thirteenth century, when Gothic architecture had become firmly established in France, the French Gothic style was adopted, and became the ruling one in the Netherlands, both in Belgium and in Holland; and, though not a native
growth, it found so ready an acceptance in the Low Countries that it was in the later periods developed to a degree of richness here not excelled in any other country.

The conditions under which this development took place were peculiarly favorable, especially in Belgium. From the time of the departure of the Romans until the final overpowering of the Low Countries by the Spaniards in the sixteenth century, the inhabitants had preserved their independence, and moreover, had at an early period attained a high degree of commercial prosperity which they maintained throughout the Middle Ages. While the rest of Europe was engaged in feudal wars and profitless crusades, the peaceful burghers of


the Belgian cities were quietly amassing the wealth which raised their towns, and eventually their country, into the most industrious and commercial community of Europe. With wealth, energy and comparative freedom from the disturbing influences of war, there was no reason why such a people should not build magnificent churches and fine public buildings; and this they did. Indeed,
there is scarcely a village in Belgium which does not contain some example of the work of the Middle Ages which is worthy of attentive study.
There was not, it is true, the uniformity of aim, and that controlling national effort, the effect of which is observed in the unity of style in the Gothic buildings of France, England and Germany; for each separate com-


DETAIL OF CHOIR SCREEN. CATHEDRAL OF ST. JOHN, BOIS-LE-DUC
munity in the Netherlands relied upon its individual initiative and exertion, and its architecture was the result of local rather than of national development. There was for the same reason, no such completely organized body of clergy as that of France at the corresponding period; and consequently we find no such chain of churches and cathedrals to exhibit the steady growth of Gothic design from the earlier to the later development of the style. On the other hand, however, no section of

Europe possesses a greater number or a more complete group of important Gothic churches. In size and in magnificence, if not in elegance of proportion and beauty of well-considered detail, they rank with those of France. Furthermore, although much has been lost by the gradual decay and inevitable waste of time, the people of Belgium and Holland have had neither the ambition to destroy nor the desire to alter the great monuments of their former prosperity; and the Netherlands thus remain a richer storehouse of the ecclesiastical


I6TH CENTURY DOOR, STEEN MUSEUM, ANTWERP

architecture of the Middle Ages than can elsewhere be found.

Inspired by the necessity of stimulating the devotion of the people by the spectacle of great religious pomp and ceremony, the Catholic clergy of the Middle Ages set themselves to give their church interiors the greatest richness, especially in the furniture and fittings. The sanctuary was the point about which this richness centered. Upon
altars, screens and tabernacles a wealth of elaborate ornamentation was expended, which was intended to increase the sense of sanctity and to avoid profanation. Altars, choirs and chapels were shut off from the adjoining portions of the church by screens of stone, wood or metal, frequently decorated with sculptures and elaborate ornamentation in gold and color, and often built throughout of rare and costly materials.


OAK CHAPEL SCREEN
GROOTE KERK, DORDRECHT

In the smaller churches intended for parochial worship, the sanctuary and choir were set at the eastern end and separated from the nave by open screens, usually of brass trellis work or of delicate spindles.

In cathedrals, conventual and collegiate churches, which were intended more especially for ecclesiastics, solid screens were often used. In northern countries, especially during the earlier periods, metal in combination with stone and wood was more commonly used for such screens than in the south.

A great many of these beautiful screens were destroyed during the seventeenth and eighteenth centuries, to be replaced by the rich carved stone jubes, such as those illustrated in the February number of this magazine, and all the mediæval churches were pillaged by the iconoclasts of a later time, or despoiled of their rich furnishings in the name of reform. There can be lit-
tle doubt, however, that they were all originally provided with similar screen work, traces of which may be frequently discerned in piers and pillars.

The examples chosen for illustration here have been purposely selected from different periods, and to represent screens constructed of different materials and intended for various purposes. In most of them, however, the spindle work is of brass, either plain or ornamental, set in frames of stone or wood. In some cases the portions shown are but the remaining fragments of a once complete design, and in many instances alterations have been made in the original work.

The two portions of railings surrounding the tabernacles at Léau and Louvain are especially delicate in design and workmanship; and, as they are entirely detached from their surroundings, are more complete in themselves than the sections of choir and chapel screens
which merely comprised parts of the whole interior scheme of decoration.

The Cathedral Church of Saint Sauveur at Bruges, from which two examples of spindle screens are shown, is an early Gothic structure of brick, built during the thirteenth and fourteenth centuries. Its exterior is not remarkable, but the interior is well proportioned and richly decorated. The chapels opening from the ambulatory surrounding the sanctuary and choir are all closed by ornamental screens and contain numerous tombs and works of art of especial interest. The Chapel of the Bootmakers, dedicated to St. Crispin, is placed at the angle of the north transept, and has an oak screen touched with gilding. That of the Chapel of St. Barbara on the opposite side, at the angle of the south transept, is also of oak, gilded, and was executed between
ryor and i5r6. The choir screen between these two chapels is an elaborate structure of colored marbles, alabaster, oak and brass, with a very skilful combination of materials, built in the seventeenth century; rich and effective, but of debased style.

The Cathedral of St. John at 'S Hertogenbosch, or Bois-le-Duc, late Gothic in design, is one of the most complete and important mediæval churches in Holland. It has a beautiful jube or roodloft, and much other fine detail. The choir screen, a panel of which is shown in the illustration, built during the 16th century, is of carved oak with brass balusters, set in compartments of stone.

The carved oak door, now in the Steen Museum at Antwerp, shows spindles of a simple but elegant design, characteristic and well adapted to the material, which is oak throughout.



In the Church of St. Jacques at Louvain, Belgium, the carved Gothic stone tabernacle is placed in the north transept, and is surrounded by the brass railing a portion of which is shown in the illustration. This railing was cast by Jean Veldeneer and bears the date of its installation, 1568 .

The Chapel of the Coiners of Money in the Great Church (Groote Kerk) at Dordrecht, Holland, is closed by an oak screen remarkable for the delicate execution of its details. The screen has,
however, been much injured by being repeatedly painted.

The pentagonal brass screen from the Church of St. Leonhard at Léau surrounds the celebrated tabernacle in the north transept of that church, a magnificent sculptured stone monument fifty-two feet high, executed in 1554 , one of the finest works of the Belgian Renaissance. The railing is the work of Cornelis de Vriendt, an architect and sculptor of Antwerp, and designer of the Hôtel de Ville in that city.

The Cathedral Church of St. Martin at Ypres dates from the thirteenth century, and is one of the most important buildings of the transition period in Belgium. It was built at a time most prolific in great buildings, both in France and in England, but before the already growing prosperity of Belgium yet demanded or warranted any large expenditure for them. The Chapel of the Cure opens from the south side of the nave, and is separated from it by a screen of marble, alabaster and brass. The columns have lost some of their
ornamentation and portions of the upper part of the screen have entirely disappeared, while new work of inferior design has been substituted in parts, notably in the bases to the small statues.

In the Church of Notre Dame at Dendermonde or Termonde, Belgium, is a carved oak screen with brass balusters, closing a chapel. As frequently happened at this period, each of the balusters bears the name of the person by whom it was given to the church. On several of them are the dates 1635 , and 1636. Torrence Hughes.



## CONSTANTINOPLE

## DRINKING-FOUNTAINS

IN Stamboule, the older portion of Constantinople - filled as it is with sights strange to western eyes one of the most beautiful and most characteristic features which strikes the attention of every traveler is the fountain outside every mosque and at almost every street corner. There are hun-
dreds of these fountains, of all shapes and sizes, from the simple niche set in a wall to the great square edifice of costly material and elaborate workmanship.

Water is the Mohammedan symbol for the principle of life; there is no other object of common consumption so precious to the Turk, or for which


he takes such care to provide; he is a connoisseur in waters as the dweller in western Europe is in wines. Indeed, the words of the Koran, "By water all things live," are sure to be found inscribed upon the larger fountains, while nearly all of them have some motto or sentence from the Koran, showing the deep veneration in which their service is held.

In the larger fountains, the well or cistern is usually entirely hidden within the structure, possibly to guard its purity; and in none is there anything more than a single jet, running from a small opening. Many of the important fountains have circular towers at the angles, closed with grilles to enable a person inside, usually a dervish, to supply a cup of water to the passer-by.

One of the most original and richest minor monuments of Turkish art is the Fountain of Ahmed III., which stands before the great gate of the old Seraglio, or Imperial Ottoman Palace. It was built in the beginning of the eighteenth century by the sultan whose name it


FOUNTAIN OF AYNALI TCECHME CONSTANTINOPLE
bears. It is of white marble covered with intricate and delicate carving, relieved by gilding upon a blue ground.



FOUNTAIN OF CABA-TACH CONSTANTINOPLE

There is hardly a space the size of a hand which is not carved. "It is," as

D'Amicis has said, "a prodigy of grace, richness and patience, to be kept under a glass shade; a jewel case, that one would like to open and discern some pearl of price enshrined within."

The Fountain of the Sweet Waters of Asia is on the Asiatic shore of the Bosphorus, opposite Stamboule, in a grove which has been for years a favorite pleasure ground for the higher class of Ottoman ladies.

These two will indicate the character of the larger fountains of Constantinople, while examples of the smaller ones are given in the remaining illustrations.

History, romance and legend combine to throw over these fanciful creations a glamor which seems to belong to another world than ours, - the dreamland of childhood, the land of the Arabian Nights. Each has its romances and its bloody tragedies, made more romantic or more tragic by the uncertainty which enshrouds all the happenings in this strange country.
M. I. A.


## THE NORMAN CHURCH

AT IFFLEY, ENGLAND

IFFLEY is a small village some two miles below Oxford on the river Thames. The church, which is dedicated to St. Mary, was built some time
during the twelfth century, and is one of the most interesting examples in England of the Anglo-Norman style, not because of its importance, either


IFFLEY CHURCH
EASTEND


IFFLEY CHURCH
WEST END
architectural or historical, but because it has been preserved with so few changes. Judging from the character of its architecture, which is of the later Norman type, it would be reasonable to assign it to the early part of the reign of Henry II. (II54-1189), when some of the richest examples of this style were erected.

Iffley church is a small structure, only 103 feet long and is feet wide inside, and is severely simple, with thick massive walls and little ornamentation.

What ornament there is has been well massed and counts for its full worth. One bay at the eastern or chancel end has been added to the original church in a later pointed style.

There are three entrances to the church (a rather exceptional arrangement) all at the western end of the nave, one each in the west, north and south walls. They are all different and all elaborately decorated in the characteristic Norman manner, with splayed open-


IfFLEY CHURCH
WEST PORTAL
ings and richly carved moldings. The western doorway in particular is almost over decorated. It has three successive groups of moldings, the inner group ornamented with a beaded zig-zag or


IFFLEY CHURCH
SOUTH PORTAL
chevron, and the two outer ones with the beak-head motive, the almost invariable forms used in these Norman doorways. The outer encircling molding of the arch contains a band of ornament

with curious allegoric astronomical signs surrounded by a rough interlacing border. The doorway in the south wall is, according to Rickman, an almost unique example in the Norman style in England
restored by the insertion of the circular window above the door, replacing one of Gothic form.

The interior of the church, like the exterior, is severely simple, and consists

of the use of flower ornaments or bosses upon the inner molding of an arch.

The western wall has been somewhat injured, and may be later than the rest of the church, but it has been recently
of a long nave, with a space beneath the tower, and a chancel, all without aisles. The arches under the tower have rich Norman moldings, but aside from this there is little structural ornament.


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# THE ARCHITECTURE OF <br> EGYPT 

THE story of human civilization begins with Egypt. Before the earliest dawn of history she had already evolved an ancient civilization, founded a complex social structure, developed the arts out of archaism, invented writing, erected monuments in every sense architectural, and conceived a religion of high moral quality. It is unlikely that the civilization which her oldest existing monuments reveal could have been accomplished in less than forty centuries before Menes, the first half-mortal, half-god king, with whom her recorded history begins, founded the monarchy which endured from twenty-five centuries before the Christian era down to 332 B.C.- the longest interval in political history.

For the purpose of architectural study Egyptian history may be divided into four periods: (r) The Ancient Empire, which comprises the first ten dynasties after the advent of Menes; (2) The Middle Empire, extending to the coming of the "Shepherd Kings," semi-civilized


STEPPED PYRAMID OF SAKKARA THE OLDEST OF THE PYRAMIDS

Semites, who invaded Egypt much as the Goths invaded the Roman Empire; (3) The New Empire, dating from 1600 to 1100 B.C. ; (4) The Ptolemaic Period, extending from 323 B.C. to the third century A.D., and comprising the Macedonian and Roman rules;-the last three periods being separated by long epochs of unproductiveness.

The extant monuments of the Ancient Empire are almost wholly sepulchral; the chief remains being the mastabas, the Pyramids, the Sphinx and a single temple, the so-called Sphinx Temple. The remains of the Middle Empire are also chiefly tombs, among which those at Beni-Hassan may be singled out for mention. The New Empire was the great temple building period. To it belongs among others the great temple groups at Karnak and Luxor, the Ramesseum, the Temples of Medinet-Habu and Abydos, and the rock-cut temples at Abu-Simbel. The Ptolemaic and Roman periods witnessed a revival of temple building, resulting in the edifices
at Philæ, Kom-Ombo and Edfu, and others of less importance.

The only remaining Egyptian edifices of architectural interest (with one possible exception, which archæologists are still undecided about) are either tombs or temples. Cities, palaces, even fortifications were considered by the Egyptian builders of ephemeral importance beside the tombs in which their bodies were to be laid and the temples of their gods; and they accordingly built them not of stone but of sun-dried bricks, which have long ago crumbled into mounds of dust. We shall accordingly proceed to examine the Egyptian monuments under the two headings of Tomb and Temple; but the reader will have no difficulty in keeping in mind the chronological sequence and relative antiquity of the various monuments if he will but remember that Egyptian civilization sprung up in the Nile Delta and gradually spread south to the cataracts, so that " as we mount toward the source of the Nile we descend the springs of time."

Both tombs and temples were the concrete manifestations of the religious beliefs and social structure of the nation; so that before we can understand why they took the forms they did we must briefly inquire into these two elements of Egyptian civilization.

Only the social constitution of Egypt made her great edifices possible. Throughout her history she was the most absolute monarchy that has ever existed. Successor and descendant of the fabled deities who had created all things, her king was considered as the living incarnation of God, and he, whose lightest word was sufficient to depopulate a province, with inherited consciousness of his own divinity, caused pyramids and temples to spring as if by magic from the earth. His supreme desire was to construct a monument which in magnificence and durability should surpass all efforts of his predecessors; and his method for obtaining the necessary labor was compulsion. The royal mind conceived a project, the order was proclaimed, and, if need be,

the colossi of memnon, thebes. Statues of amenophis ili., which stood in FRONT OF A TEMPLE OF THAT MONARCH, OF WHICH ONLY SCANTY RELICS REMAIN

TEMPLE OF LUXOR, THEBES COLONNADE OF AMENOPHIS III., FROM WEST


TEMPLE OF LUXOR, THEBFS. COURT OF RAMSES II., FROM REAR, LOOKING TOWARD ENTRANCE PYLON. PART OF THE COURT OCCUPIED BY A TURKISH MOSQUE
the whole male population of a province was driven to the work. Indeed, the massive grandeur of some of the Egyptian monuments can only be explained by the levy en masse of every available pair of hands, - the collective efforts of an entire population swarming to the work like ants. The theory that the Egyptian architects were possessed of some lost secret in engineering is erroneous. Their one secret was the unlimited command of individual labor.

A still more important factor in Egyptian architecture than the omnipotence of the king, was the national conception about death and immortality.

The Egyptians called that which did not perish with the last breath of the dying man his "double." The double was a duplicate of the mortal body, reproducing it feature for feature, and its existence was hardly more than a ghostly continuation of that of the body itself. The double had to be installed in a suitable lodging and sustained by food; and the pious duty of survivors was to take care that this
dependent spirit should not be cramped or extinguished by their neglect. The first necessity was, of course, to preserve and retard the dissolution of the earthly body; which was not only the temporary residence of the double, but to which it was one day to permanently return. Accordingly the Egyptians invented a process of embalming which rendered a mummy almost indestructible so long as it remained in the dry soil of Egypt. But the mummied body had also to be preserved from sacrilege. An enemy penetrating to the sepulchre of the dead might render the double homeless for eternity, and this is why the Egyptians built their tombs to outlast the centuries and made use of so many ingenious artifices to conceal the sepulchral chambers.
Such being the common belief, every Egyptian, from the king to the humblest fisherman, considered it his first duty to ensure his existence and comfort in the hereafter by preparing his tomb while he was yet alive. As permanence was the first essential of this tomb it is not
remarkable that most of the monuments of Egyptian civilization that have survived are sepulchres.

## TOMBS.

The earliest graves were probably pits heaped with heavy stones by way of protection, but the oldest remaining tombs are the so-called mastabas which were strong rectangular limestone structures, looking like the lower third of a small pyramid. Originally the mastaba contained but a single inaccessible chamber for the mummy, and the relatives paid the sacrificial rites in a shallow niche let into the outer wall; but, as the tomb became more elaborate, this niche was replaced by an inner chamber which served as a common meeting ground for the quick and the dead. Communicating with this only by a small pipe-like opening through which the smell of the viands might reach the double, was a small chamber called the serdab, in which the portraitstatues, which were supposed to give the
double chances of survival by duplicating the actual body, were safely walled up. The third and most important feature of the mastaba was the mummy-well,-a long shaft, sunk through the masonry of the mastaba deep into the solid rock beneath. The well itself was no larger than to allow for the passage of the sarcophagus, but was enlarged at the bottom into a small chamber in which the mummy was placed. The shaft was then packed full of stones and sand, sealed, and the dead left to his eternal sleep.

Although the mastabas themselves are of little architectural importance, we have described their internal features at this length, because their essential elements, the meeting chamber, serdab and mummy pit, are the essential elements of all Egyptian sepulchres.

The pyramid was only the immense mastaba of the monarch. The Stepped Pyramid of Sakkara is the earliest of the pyamids, and is, indeed, considered by Mariette the most ancient structure


TEMPIE OF LUXOR, THEBES.
COLONNADE OF COURT OF RAMSES II., WITH
STATUES OF THE KING BETWEEN THE COLUMNS


[^4]

THE RAMESSEUM, OR TEMPLE OF RAMSFS II., THEBES, FROM THE NORTHEAST AT THE LEFT IS THE OVERTHROWN COLOSSUS OF THE KING
in the world. About the Fourth Dynasty, however, the straight-sided pyramid became the usual form of royal tomb, and remained so up to the Eighteenth Dynasty. Funerary chapels and
serdabs would have been difficult to construct within the great pyramids because of the immense weight above them, and accordingly small separate chapel-temples were erected nearby as


GREAT TEMPLE OF AMMON
KARNAK, THEBES LOOKING FROM RUINS OF SANCTUARY THROUGH MAIN ENTRANCE
substitutes. The remains of such chapels have been discovered near the second and third pyramids. The pyramid itself, without exterior opening, usually contained the mummy-well only; and was merely the gigantic and impregnable dwelling of the mummy. Although some of the pyramids, as the largest of all, that of Kheops at Gizeh, for example, contain several passages and chambers in addition to the well, the existence of these chambers is not typical, and is probably due to a modification of the original plan.

As soon as he found himself on the throne each sovereign began the construction of his pyramid. The greater his tomb the more efficient guardian of his body would it be. Year after year, therefore, thousands of workmen clothed it in layer upon layer of dressed stone, until figures can give little idea of the bulk of these tremendous tombs. The amount of building material heaped upon the foundations of the pyramid of Kheops would construct a wall around the frontiers of France; were it hollow, St. Peter's Church at Rome could
be placed within it entire, like a clock under a glass shade; a ball fired from its summit with a good pistol would fall half way down the side.

Around the royal pyramids of Gizeh sprang up the tombs of the nobles who sought glory by being buried near their sovereign, and thus they became the centre of a vast cemetery constructed upon a scale of unparalleled grandeur. Great causeways connected the imperial city of Memphis with this necropolis, and from these causeways branched countless streets and lanes and alleys giving access to the innumerable private tombs. At the threshold of this great cemetery rose the great Sphinx, the image of Harmachis, personifying the resurrection His head alone now rises above the sand, but in the days of Herodotus his whole vast bulk, cut from the solid rock, rose above the level pavement. It is probable that the Sphinx was originally a likeness of the King Amenemhet III. of the Twelfth Dynasty who is supposed to have erected it, and the head wears the royal head-cloth. The features have been disfigured by all


GREAT TEMPLE OF AMMON
KARNAK, THEBES HYPOSTYLE HALL, FROM REAR, SHOWING METHOD OF LIGHTING


kinds of outrage, but we are still able to admire something of the noble serenity of expression which so impressed the ancient writers.

About fifty yards from the Sphinx a little temple called, erroneously, the Temple of the Sphinx has been excavated. This is perhaps the earliest of the Egyptian sacerdotal buildings and the only one dating from the Ancient Empire. It consists merely of monolithic piers across which are laid monolithic lintels; and shows some evidences of imitation
rious, and it may be for this reason that during the Middle Empire many tombs were cut tunnel-fashion in the vertical rock-cliffs of the west bank of the Nile.
The best examples of this type of tomb are those at Beni-Hassan. In essentials their arrangement corresponds to the mastabas of the previous age, and architecturally they would be of slight importance were it not for the columns which were left standing when they were hollowed out. But it is here that we find the first use of the column


TEMPLE OF KHONS, KARNAK, THEBES
of wooden construction, and has no architectural decoration.

During the Middle Empire, following the drift of population, the ancient necropolis of Memphis was succeeded by one at Abydos; but owing partly to the soft nature of the subsoil there, and partly to the fact that the tombs were built of brick and not of stone, very few of them remain. Moreover, although Abydos was an especially sacred location, the Egyptians must have foreseen that the chances of perpetual preservation of the mummy there were preca-
proper in Egypt, although the perfection of these early examples points to a well developed pre-existing system of stone construction, which has been lost to us with the temples of the Ancient and Middle Empires.

Among the columns at Beni-Hassan is one class of examples, sixteen-sided and capped by a square block, which so closely resemble the Greek Doric columns that much controversy has been aroused as to whether they might not be the progenitors of that order. The sixteen-sided column, however, was not


common in Egyptian architecture, and is never found in buildings later than the Eighteenth Dynasty, - a period long before the Greeks could have had any opportunity of imitating the works of the Egyptians. It seems, therefore, unlikely that they could have served as the models for the Doric order.

Under the New Empire the number of rock-hewn tombs increased, but they were marked by no new feature. In this age, however, which witnessed the construction of the great temples at Karnak and Luxor, an important development of the simple funerary chapel of the previous ages took place; and on the left bank of the Nile, in the neighborhood of the third great necropolis, that of Thebes, there sprung up a number of temple-like elaborations of the old funerary chapels. Of these, that known as the Ramesseum, with its colossal statue of its founder, fifty-six feet high, which today lies broken upon the ground, and the temple of MedinetHabu, are perhaps the best examples. The famous colossi of Amenophis III., known to the ancients as the statues
of Memnon, no doubt belonged to a similar temple of unusual size, almost all traces of which have disappeared. It will not be necessary here to describe in detail the arrangements of these private mortuary temples, for in general arrangements they correspond exactly to the public temples which we shall later consider.
Only the sepulchres of the kings and grandees, of course, have come down to us. The tombs of the humbler classes, built of poorer materials, have left comparatively few traces beyond the pits in which the bodies were concealed.

## TEMPLES

Undoubtedly many splendid temples were reared during the Ancient and Middle Empires, but almost no trace of them now remains; probably because the succeeding princes took the materials of which they were composed for their own later edifices. We have already referred to the only existing temple of the Ancient Empire, the "Sphinx Temple," and remains of temples from the Middle Empire are almost


TEMPLE OF RAMSES III., MEDINET-HABU, THEBES. HYPOSTYLE HALL, FROM REAR


TEMPLE OF RAMSES III., MEDINET-HABU, THEBES
SECOND COURT
entirely lacking. The New Empire was, however, the greatera of temple building.

It will not be necessary to describe in detail the individual arrangements of


TEMPLE OF HORUS, EDFU
view from entrance pylon beSt preserved of all the egyptian temples
the temples here illustrated, for there was a distinctly marked type to which all the Egyptian shrines conform in essential particulars. The confusing features and complications which we find in many of them are usually the result
temples have several such avenues leading to their gates. At the end of the sphinx avenue rose a great gate or propylon (see page 132), set into a high wall which completely enclosed the buildings of the temple (see wall around temple


TEMPLE OF HORUS, EDFU. LOOKING FROM BACK OF COURT TOWARD ENTRANCE PYLON
of later additions and not due to the original plan.

The more important temples were approached by an avenue bordered on each side with statues of sphinxes or rams (see page 134). Some of the great
of Horus at Edfu, page 137). This wall was intended as an impenetrable screen between the common people, who had no part in the rites and the mysteries performed within the enclosure. Opposite the pro-pylon rose the massive fa-
çade of the temple in the form of the characteristic Egyptian pylon (see pages 133 and 144), in front of which were often set obelisks and colossal statues. Pass-
perhaps through another massive pylon, he would enter the principal chamber of the temple, the hypostyle hall. This hall consisted of a central nave and


TEMPLE OF HORUS, EDFU
ing beneath this entrance the worshipper would enter a rectangular court open to the sky in the middle, but surrounded on three sides by covered colonnades (see page 138). From this court, and
aisles formed by immense columns, upon which the flat roof rested (see pages I3I and 140). The nave columns were usually considerably higher than those of the aisles, and the hall was lighted dimly


TEMPLE OF KOM-OMBO
VIEW FROM SOUTHWEST, SHOWING COURT AND HYPOSTYLE HALL
by narrow apertures in the clearstory so formed (see page 130). Behind the hypostyle hall lay three small closetlike sanctuaries, the middle one being the holy of holies, in which stood the image of the god. Behind the sanctuaries again were numerous smaller chambers, evidently intended for the use of priests, watchmen, servants and others. With the exception of the court all the divisions of the temple were roofed, and the inner rooms were very dimly illuminated by small square windows cut in the roofs (see page 137). Ustally all the chambers behind the hypostyle hall gradually diminished in height.

Occasionally the nature of the site would not permit of the erection of such free-standing temples as are described above. In Lower Nubia the sandstone rocks approach so closely to the banks of the Nile that the temples established there had necessarily to be mainly excavated in the rock, after the fashion of the tunnel-like tombs. The large temple at Abu-Simbel (page 135), in which the side of the mountain forms the façade,
or first pylon, and beside the entrance to which sit the four wonderful colossal statues of the greater Ramses, will serve as a typical example of these rockcut temples, which neither in plan nor in decoration differ markedly in interior arrangements from the free-standing temples, excepting, of course, that the court could no longer be left open to the sky.

A great revival of Egyptian art occurred during the Ptolemaic period when Egypt was relieved from the Persian dominion by the conquering Alexander; for the Ptolemies adopted the Egyptian religion and the Egyptian art. The plans of the temples became more symmetrical but did not change in fundamental arrangement. A characteristic innovation was the insertion of screen walls between the front row of columns of the hypostyle hall, as in the temple at Edfu (page 137) for example. There also sprang up around the main temples of this period numerous small shrines for special ceremonial purposes, such as the " Birth House " at Philæ (page 142),
which served for the rights attending child-birth, and the small so-called Kiosk like that connected with the Temple of Isis (page I43).

The general external forms of Egyptian edifices are pyramidic, that is, the external walls almost always slope inwards. Roofs are invariably flat, and indeed lack of rain rendered the sloping form of roof unnecessary in Egypt. Wall, pier and column, all the constructive members were generally short and thick-set, giving the peculiar aspect of massiveness and durability. The openings for the admission of light are few and small, and in consequence the walls of Egyptian architecture are more imposing than those of any other style.

The Egyptians were acquainted with the use of the arch, but they did not employ it in any of their greater buildings, perhaps because they knew that it carried within itself the seeds of its own destruction; for one bad stone in a vault may ruin a whole building, and it is questionable how many Egyptian tombs and temples would be standing today had they been constructed with the arch instead of with the indestructible stone beam.

The Egyptian column stands upon a base, is crowned by a capital and supports a square slab or abacus upon which in turn rests the beam of the architrave. As early as the Ancient Empire the Egyptians borrowed the forms for the decoration of their columns from two favorite and sacred plants, the lotus and the papyrus. Egyptian capitals either imitate the open bell-shaped cup of the lotus (page 125) or the closed bud of the lotus (page 127), while the shaft of the column either represents the single stem of the plant (page 125) or a cluster of stems (page 128). A late variety of capital was imitated from the spreading branches of the palm (page 140). Beside these plant-form capitals a type called the Hathor capital (page 142) was used, chiefly during the Ptolemaic period, in which the floral capital was also supplemented by the head of the cow-eared goddess Hathor.

The unvarying Egyptian cornice (page 132) was invented as early as the Ancient Empire. It is composed of three elements always arranged in the same order: a circular molding with a carved ribbon twisting about it (and in many Egyptian buildings this molding


also occurs at the angle where the two plane surfaces meet); above this again a hollow curve with perpendicular grooves, the whole surmounted by a plain fillet, cutting its sharp line against the sky.

The Egyptians invariably covered the
vast surfaces of their walls and columns with a decoration of pictorial and hieroglyphic carvings no less remarkable than the architecture it adorns. In every case these carvings were colored in solid tones of brilliant blue, red, yellow, green and gold, and from cornice to founda-

'"bIRTH HOUSE,', TEMPLE OF ISIS
ISLAND OF PHILA


TEMPLE OF ISIS, PHILA
WEST COLONNADE OF OUTER COURT
tion, every wall and column and pier was covered with a mass of such colored carvings, which like a gorgeous tapestry
enveloped and embellished every feature, but without hiding any of the details of construction.





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## Competition S

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Parts V. and VI. will be devoted to Pergolas, Arbors and Trellises, and Fountains and Water Features, respectively.

## OTHER FEATURES OF INTEREST IN THESE ISSUES:


#### Abstract

The Esthetics of Constructive Design by C. H. Blackall, 8 illustrations. Critical Reviews of the illustrations of American and European Architectural Magazines, 60 illustrations. Photographic illustrations of three houses by Myron Hunt, a house by Warren, Smith \& Biscoe, three houses at Aiken, S.C., by Hoppin \& Koen, a house at Sewickley, Pa., by Rutan \& Russell, Woodbridge Hall, Yale University, by Howells \& Stokes, Memorial Hall, Jacob Tome Institute, by Boring \& Tilton. Three studies for a Court House by H. C. Koch \& Co., studies for Churches by Abner J. Haydel and by Snelling \& Potter. Scale drawings of houses by Carrère \& Hastings, Warren, Smith \& Biscoe, and Rutan \& Russell. Rendered drawings of the Art Building, Louisiana Purchase Exposition, by Cass Gilbert, First Prize Design, Newark City Hall, by Duboy \& O'Rourke, Flagler Gymnasium, Florida, by Snelling \& Potter, International Trust Company, Baltimore, by Parker \& Thomas, First and Second Prize Designs of the competition for the Rotch Traveling Scholarship and the competition of the Society of Beaux-Arts Architects. In these four issues there are more than 150 illustrations in the text and the equivalent of 32 single insert plates.


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THE "CASA DE PILATOS," SEVILLE


# The Brochure Series 

OF ARCHITECTURAL ILLUSTRATION

VOL. 8

JULY, 1902
NO. 7

## THE BYWAYS OF VENICE

"T${ }^{4}$ HERE are always certain little mental pictures that always rise before the sentimental tourist at the simple mention, written or spoken, of the places he has loved," writes Mr. Henry James in his delightful "Portraits of Places." "When I hear, when I see the magical name of Venice, it is not of the great square that I think, with its strange basilica and its high arcades, nor of the wide mouth of the Grand Canal, with the stately steps and the
well-poised dome of the Salute; it is not of the low lagoon, nor the sweet Piazetta, nor the dark chambers of St. Mark's. I see simply a narrow canal in the heart of the city - a patch of green water and a surface of pink wall. The gondola moves slowly; it gives a great, smooth swerve, passes under a bridge, and the gondolier's cry, carried over the quiet water, makes a kind of splash in the stillness. The pink of the old wall seems to fill the whole place; it sinks


RIO DELLA BOTTESEI.IA
vENICE


even into the opaque water. On the other side of this small water-way is a great shabby façade of Gothic windows and balconies - balconies on which dirty clothes are hung and under which a cavernous-looking doorway opens from
a low flight of slimy water-steps. It is very hot and still, the canal has a queer smell, and the whole place is enchanting."

It seems indeed, as Mr. James suggests, that the memory of the byways


and side canals of Venice linger more ineffaceably in the mind of the sentimental traveler than even her most im-
posing monuments of architecture or the greatest treasures of her painting. The sojourner need not, as he some




RIO TERRA DEI CATECUMENTI
VENICE
times supposes in advance, take a gondola every time he ventures out of doors, for the sidewalks and their connecting bridges will lead him to almost any part of the city, and he can spend
delightful hours in such wanderings among the crookedest and most picturesque streets in the world. If he sets out for any particular destination he will, it is true, usually find his explora-
tions suddenly cut short by the brink of some canal or some dark, pocket-like court, as far as possible from the point he aimed at; but everywhere, as a reward, he will find something worthy to be seen. Every square has its cistern
with lions' heads and little naked cupids carved about it; and the most remote and tortuous of the canals seem lined with empty old palaces, dimly revealing their sculptured balconies and their lofty windows in the cavern-like gloom.



RIO DELL' ANGELO
venice

At night the quaint recesses of these courts and intricate lane-like canals are no less fascinating, though the glimmering little oil lamps and frequent tapers burning before the street-corner shrines of the Virgin serve but to make the way more obscure and to deepen
the shadows under the lowering arches. Nay, even though the byway he is exploring can boast no loveliness of architecture or sculpture, the traveler will find it invariably picturesque, vivified with the glow of many colors and the swarm of human life.
M. G.


## LOUIS XV. AND XVI.

## LANTERNS AND CHANDELIERS

IT is clear that in all times, except the most modern, the same hands have wrought upon the statuettes and bas-reliefs, which we rank as products of the fine arts, and upon ornamental bronzes; and it is entirely owing to a modern aberration that some historians have sought to separate such various products of intelligence into distinct groups, and to set up a so-called "high art" by the side of what they term "industrial art." In protesting against this arbitrary separation Jacquemart,
in his " History of Furniture," exclaims: "Was Cellini an artist only while modelling the Perseus or the Nymph of Fontainebleau? The marvellous cup of the Louvre, the enamelled goldsmith's work, the peerless jewels which immortalized his name - were these mere industrial works? The absurdity of such a distinction is needless to demonstrate: it must strike the least intelligent."

It will not be necessary to trace the development of modern lamps, chandeliers and candelabra through all their


LOUIS XV. LANTERN

I. OUIS XVI. LANTERN


LOU1S XVI. CHANDELIER
forms from Greek and Roman models to the present. We may disregard the rude forms of the Middle Ages; for it was when Andrea Riccio composed the famous candelabrum in the church of S. Stephen at Padua that admiring Italy entered into the new path, in which were to be developed all the beauties of which bronze is susceptible, - the solid and majestic architecture, the rich and bold ornamentation, wherein the most graceful scroll-work and the foliage of the vegetable world form natural frames for figures, real or ideal, and offer themes the endless variety of which two centuries have not been able to exhaust. Torch-holders, flambeaux, fire-dogs, hand-bells and caskets, were multiplied without repetition; and every accessory vied with every other as a masterpiece of decorative art.

But it is in the seventeenth century that bronze, in its application to furniture, assumed preëminent importance in France. We find it contributing to the sumptuous adornment of palaces, and vieing with the massive goldsmith's work then in vogue. Possibly both arts may be referred to the same hands, for we observe that both start from a common central idea, by virtue of the same impulsion. The assemblage, first at the Louvre and afterwards at the Gobelins, of all the artists to whom the furnishing of the royal residences was entrusted, and the superintendence of the work confided to a single artist - a man of the highest eminence-must have


LOUIS XVI. CHANDELIER


LOUIS XVI. CHANDELIER
had the effect of harmonizing the several individualities of the craftsmen. Accordingly, if it be possible still to catch some touch of the past in the bronzes of the time of Henry IV. and of Louis XIII., the reign of Louis XIV. asserts itself in fullest originality, with its style, somewhat stiff and formal. it is true. but full of grandeur, dominated by the forms of contemporary architecture and by the genius of Lebrun.

But under Louis XV. and the Regency there was a complete transformation of taste. In household furniture we note endive and " rocaille," contemporaneous with the most perfect chasing. Among the promoters of this style we must mention Meissonier, who perhaps carried his capricious fancy to exaggerated lengths; but other artists flourished at the same time, such as Philippe Caffieii,
a man of remarkable elegance of style, descended from a distinguished race of sculptors. Besides these two were many others, some of whose work belongs partly to this period and partly to the next, such as the Italian, Cucci, who worked at the Gobelins at the same time with Boulle - the latter described in certain deeds as " ciseleur et doreur du roi"-Cressent and Martincourt, last being the master of Goutière, who later became the most famous of the bronze workers under Louis XVI.
Charges of caprice and exaggeration


LOUIS XVI. CHANDELIER


LOUIS XV. LANTERN
may, no doubt, be urged against the bronzes of the Regency and Louis XV., for the abuse of contorted endive, of medallions in curled and fantastic curves, of shells rolled in curious undulations, is apparent; but in flambeaux and in candelabra, in branches for wall lights, in fire-dogs and in ornaments for the fireplace, we have wholes so rich and details so happily treated, despite their occasional whimsicality, that the voice of criticism is silenced.

We reach a time, however, when all this exuberance of fancy was disciplined and toned down. Dreams of the antique harassed Madame de Pompadour; and at her stiggestion, appeared the first signs of that reform which we mark under Louis XVI., - a change so marked that it was thought worthy of a special distinctive name. The artistic "favorite" had the prudence however to select that of "Genre à la Reine."

Louis XVI. bronzes require no description. They may be distinguished from all others by the least experienced. Their delicate groups entwined to support the numerous stems which unroll their foliated scrolls and bloom into flowers that serve as sconces for innumerable lights, the cherubs sporting amid garlands of flowers, and the acanthus, the numerous folds of which have the pliant grace of vegetable fibres,- all this fine ornamentation, rivalling the work of the jeweller, and made still more beautiful by the use of dead gold, which subdued the metallic glare, seems exactly in harmony with those polished and refined manners which Marie Antoinette sought to introduce. Against


LOUIS XVI. LANTERN
the delicately tinted walls, with their reeded mouldings and mirrors and tap-estry-filled panels, these bronzes accord-
toons, bows, quivers of arrows, ribbons and knots, roses and garlands-and the robust science of the sixteenth century; -


LOUIS XVI. LANTERN
ed admirably. There is a wide difference, indeed, between this exquisite triviality of workmanship - with its commingling of the severest motives of antiquity and coquettish scrolls, fes-
but in the former we may read something of the polished gallantry and trace the courtly grace of that wonderful society which was about to disappear in an orgie of bloodshed. S. F. N.


## THE ،CASA DE PILATOS"

## SEVILLE, SPAIN

THE Moors were finally expelled from Spain in 1492. In Seville their rule had been broken as early as the thirteenth century; but here as elsewhere their style long continued to
potently influence architecture, and the resulting fusion of Moorish with Christian art gave rise to a type called the Estilo Mudejar. The Mudejar was not, however, actually a new style, nor


"CASADE PILATOS",
WROUGHT-IRON WINDOW GRILLE

PHOTOGRAPH BY THE SOULE ART CO.
elaborate, and originally a masterpiece of Mudéjar architecture, has been altered and modified by the additions and restorations of five centuries.

The "Casa de Pilatos" seems to have been commenced about the beginning of the sixteenth century by Morisco architects for Don Pedro Enriquez de Ribera, the Marquis of Tarifa. The work was not far advanced, however, when the marquis died, and bequeathed it to his heir, Don Fadrique Enriquez de Ribera, the first Duke of Alcalá. But this nobleman did not at once continue the work. The zeal of the period was upon him; and in 1518 he set out on a pilgrimage to Jerusalem. At the end of two years he returned; and, his
even a modification of a style. It was simply the application of sometimes incongruous elements of Moorish ornamentation to any kind of structure, Romanesque, Gothic or Renaissance.

One of the most interesting and harmonious examples produced by the Estilo Mudejar is the "Casa de Pilatos" or "House of Pilate" at Seville, in which Moorish ornamentation is applied to Gothic and Renaissance structural forms. Its little patio or courtyard, which is more purely Arabic than any other part of the edifice, is, indeed, a finer example of this style and is better preserved than the more widely known Alcazar in the same city, which, though more

"CASADE PILATOS" WROUGHT-1RON DOOR GRILLE
Photograph by the soule art co.

mind kindled by religious devotion, was astonished, so the story goes, to trace in his uncompleted domicile certain remarkable resemblances to that edifice in
ify the original plan on which his ancestor had begun to build in accordance with his memories of Pilate's house ; and, it is said, even incorporated in its walls

"casa de pilatos" seville
DETAIL OF THE COURTYARD
PHOTOGRAPH BY THE SOULE ART CO

Jerusalem which was then shown to the devout as the very palace in which the Roman prætor, Pontius Pilate, had dwelt. At any rate (to follow the legend,) Don Fadrique hastened to mod-
bricks burned from clay which he had brought back from the holy city.
How far Don Fadrique altered his palace to correspond with his memories of the palace of Pilate cannot, of course,

"CASA DE PILATOS"
COURTYARD FROM BENEATH THE ARCADE

PHOTOGRAPH BY THE SOULE ART CO.
been known ever since the time of its building as the "Casa de Pilatos."

Don Fadrique's successor, Don Per Afan de Ribera, added to the adornments of the house many valuable antique statues which he had collected in Italy while Viceroy of Naples in the sixteenth century. It is said that some of the finest specimens were given him by Pope Pius V. who wished " to rid the holy city of as many of the relics of heathendom as he could"!

During the political upheaval of 1843 the palace was much damaged, and many of the apartments, including all those on the upper floor, have recently been modernized. The main portal, the famous courtyard and the picturesque roofs, however,
be now determined; but the alteration could hardly have been fundamental, for in general the house corresponds closely to the type still common in Seville. It has the same plain white façade, the same vestibule leading from the entrance door into the main feature of the house, the patio - an uncovered courtyard surrounded by an arcade, above which rises a second arcade, the galleries of which overlook the court and in the middle of which a fountain plashes - the same rooms opening from it on all sides, and the same small orange garden in the rear.

But however imaginary the real resemblance of the Alcalá palace to the actual palace of the Roman Pilate may be, it has, nevertheless,

"casa de pilatos"
SECOND STORY OF COURTYARD

PHOTOQRAPH BY THE SOULE ART CO.
which are shown in our illustrations, remain, with the exception of some judicious restorations, very nearly in their pristine state.
The patio is, as we have said, the pride of the edifice. It is surrounded by an arcade of twenty-five slender marble columns, the capitals and entablatures of which are fretted into lacelike carvings and adorned with peculiarly delicate and varied arabesques. These columns uphold a similar number of columns, also of marble, which form the gallery above. In the center spouts a fine marble fountain adorned with dolphins and surmounted by a head of Janus. The wall of the arcade is wainscoated ten feet high by tiles or azulejos as beautiful as any that are to be found in Spain. First imported from Africa to Valencia and thence to Majorca, whence our name "majolica,"- these Moorish tiles, baked centuries ago, glow with intense and beautiful colors, and produce, in contrast with the whiteness of the marble, an effect quite impossible to convey in words. In the four corners
of the courtyard stand colossal statues which, as has been said, were brought from Italy by Don Per Afan de Ribera.

Many of the window and door openings from this patio are now filled with plain gratings, but there still remain in the palace many beautiful examples of more ancient wrought-iron work, as those shown in our illustrations instance.

From the patio open dim, half dismantled chambers, with heavy ceilings of cedar, which show similar decorations to those in the patio, but which are of comparatively little interest, as are the modernized rooms, reached by a staircase, in the upper part of the building. The picturesque roofs, however, covered with dark red Spanish tiles and surrounded by pierced balustrades, remain much as they were.

Our illustrations of the "Casa de Pilatos" are, by courteous permission of the Soule Art Co. of Boston, reproduced from photographs, published by them, from original negatives recently made in Spain by Mr. E. E. Soderholtz.
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Brochure Series Competition $Q$ Design for a Sun-Dial

ANNOUNCEMENT OF THE AWARD

The judges regret to have to announce that in general the results of Competition $Q$ were disappointing.

In a sun-dial of the type called for in the requirements of this competition, grace of outline and proper effect of mass in silhouette are plainly the most important factors of a good design, as such garden dials, at least in these days of clocks, are mainly intended to serve as decorative features, intended to close vistas, mark axes or otherwise to contrast agreeably in color, form and detail with the surrounding vegetation. Lack of such necessary grace of outline, and carelessness of the general effect of mass were perhaps the most salient faults in the majority of the designs submitted.

In a competition of this sort it is not, of course, essential that decorative detail should be more than sketchily indicated; but in a number of the designs submitted even such


First Prize Design, by Mr. J. Melville Miller, Montreal
sketchy indications evidenced a lack of proper original intention which seriously interfered with the harmony of the results.
With three exceptions contributors limited themselves to presenting so-called horizontal dials, - dials in which the gnomon or shadowvane is set upon a flat horizontal plate,neglecting the infinite variety of vertical, globe, cylindrical, and other dial shapes adapt-
able to standing dials, which might have led to most interesting results.

A few of the drawings submitted deserve brief critical mention in detail:-
"T." Shows possibilities, but too uncertain in rendering to make an accurate judgment of its merits possible
"Chelten." Would perhaps serve better as a font than as a sun-dial.
"Shadow." The combination of field-stone rubble base with carved capital seems incongruous.


Second Prize Design, by Mr. George F. Parker, Taunton, Mass.
"Fragment." Attractively rendered, but perhaps more interesting as an exhibit of architectural anatomy than as a design for a sun-dial.
"I Mark only the Sunny Hours." Better in conception than in rendering. An octagonal dial-plate might have been preferable
" Device of Concentric Circles." Silhouette of the whole would probably prove ungraceful when executed.
"Abracadabra." Several designs submitted, all of which show feeling for proportion and cleverness in rendering.
"Sol" (Design I.). Somehow unfortunately suggestive of the village pump.
"Pax." Clumsily rendered, but with a certain grace of shape which would make it effective in place.
"Device of Swag and Compass." Dial plate overbalances its support, and the whole suggests metal rather than stone.
"Enoch." A suggestive and attractive combination of sun-dial with fountain. Requires more careful study in detail. There is a fine sun-dial at Henbury, Gloucestershire, Eng., somewhat on the same lines, which would serve as an interesting comparison.
"Hazen." Might be effective if more carefully worked out in detail.
"Duck." If well executed and set in a large and rigidly formal garden might be effective.

The first and second prize designs are printed (Continued on following page.)

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above. The first prize was awarded to MR. J. Melville Miller, 27 Lorne Ave., Montreal, P.Q., Canada. The second prize was awarded to Mr. George F. Parker, 5 Church Street, Taunton, Mass.

The results of "Competition R," of which the subject was a pair of andirons to be executed in wrought-iron, suitable for a room decorated in the Elizabethan style, will be announced in the advertising pages of The Brochure Series next month.
The announcement of "Competition S " which closes on Aug. 15, 1902, will be found on another page of this issue. In judging this competition, which calls for the ground floor plan of any private house so rendered and lettered as to make an artistic drawing, the judges will not take into consideration the merit of the plan itself, but only the appearance of the drawing as a whole. In other words, the competition is intended solely as an exercise in the attractive presentation of a ground plan.
"Competition T" (also announced on another page), which closes on Sept. 15, 1902, proposes as a subject a dove-cote or pigeonhouse, built of brick or wood, to stand on the ground (not upon a pole or other elevation), separate from the other buildings, on a gentleman's country place. The dove-cote is intended to serve as a shelter, nesting and breeding place for pigeons; and should be provided with a door for access to the interior and with openings for the entrance of the birds. The exterior only is to be shown in perspective by a pen and ink drawing.

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## Brochure Competition Announcements*

## Competition U <br> CLOSES OCTOBER 15, 1902

SUBJECT: A Wooden, Roofed Gate for Foot-passengers, to be set into a five-foot stone wall enclosing an estate or garden.

Award to be announced in The Brochure Series for November, 1902.

First Prize, $\$ 10.00$ in gold Second Prize, $\$ 5.00$ in gold

Competition V<br>CLOSES NOVEMBER 15,1902

SUBJECT: Design for a combination electric and gaslight wall bracket, to be executed in brass, for a room in the Colonial style. The bracket is to hold three lights - two electric bulbs and one gas burner.

Fixture to be shown by two drawings on same sheet (i) front elevation and (2) side elevation, with scale indicated.

Award to be announced in The Brochure Series for December, 1902.

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## RULES GOVERNING COMPETITIONS


#### Abstract

r. All drawings must be in pen and black ink (neither pencil nor wash drawings will be considered) on white paper or cardboard measuring 8 by ro 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.


. 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 beld 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 are on the subscription
of the competition. If the best designs are the work of 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.

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THE ALHAMBRA GRANADA, SPAIN

LOUIS XIV. AND XV. panel decoration


# The Brochure Series 

OF ARCHITECTURAL ILLUSTRATION

VOL. 8
SEPTEMBER, 1902
NO. 9

## THE ALHAMBRA, GRANADA

|T was in 7II, after a hundred years of brilliant and uninterrupted conquest in Asia and Africa, that the Moors first crossed the Strait of Gibraltar and invaded Europe. In three days they had overcome the enfeebled Visigothic kingdom in Spain, and established a dominion there which did not relinquish its last hold in the Spanish peninsula until 1492, when the Alhambra, the palace of the rulers of Granada, fell before the Christian arms of Ferdi-
nand and Isabella. Indeed, had not their first tumultuous invasion been checked on the plain of Tours by the cavalry of Charles Martel, the followers of Mohammed might have overrun all Europe, and "the Crescent, at this day, might have glittered on the fanes of Paris and London."

As it was, however, the invaders found themselves beaten sternly back at the boundary of the Pyrenees on the north, and severed by seas and deserts from


THE ALHAMBRA
FROM THE GENERALIFE
their kindred of the east. But charmed by the land which had so easily fallen under their yoke, and freed from the influence of their co-religionists, the conquerors abandoned the Moslem principle of fanatic conquest and sought to establish a peaceful and permanent dominion.

They laid the foundations of their power in far-sighted and equitable laws, fostered the arts and sciences, promoted agriculture, manufactures and commerce, diligently cultivated the graces and refinements which had marked the Arabian empire in the east at its time of greatest civilization; and gradually built up a domain in Spain which was unrivaled in Christendom, and which endured for nearly as


PLAN OF THE ALHAMBRA
A, Hall of the Ambassadors; a, The Mexuar; b, Court of the Mexuar; c, Vestibule; dd, Baths; e, Hall of the Two Sisters; fff, Hall of the Tribunal; $g$, Hall of the Abencerrages.
long a period as has elapsed since William the Norman conquered England. The Moorish Universities of Córdova, Toledo, Seville and Granada became seats of learning to which students from all other lands repaired to acquaint themselves with the sciences of the Arabs, the lore of antiquity and the courteous usages of chivalry. But, with all its seeming permanence, the His-pano-Moslem empire was, after all, a brilliant exotic. The Moors were an alien people, different in birth, in religion and in instincts from those who surrounded them; and the whole existence of their kingdom was only a prolonged though gallant struggle for a foothold in a usurped land. Their fiery

courage was at length subdued by the obstinate valor of the enemy; and, about the middle of the thirteenth century, their unity broken by internal discords, their great strongholds at Córdova, Murcia, Seville, Jaen and Cádiz succumbed, one after another, to the repeated attacks of Ferdinand ins. Granada alone remained Moorish, and here all the brilliant civilization of Islam was concentrated. The fall of the various smaller states made it the refuge of multitudes of new inhabitants. It became the wealthiest city in the Spanish peninsula. Its reputation for learning, science and art eclipsed that of its former rival, the Caliphate of Córdova, - and indeed for two hundred and fifty years this isolated little kingdom bore the standard of Islam's civilization higher than it had ever been borne before. The result of this great concentration of vigor, science, learning and art within the restricted limits of one province was the Alhambra - the flower and


An ANGLE OF THE OUTER WALLS
consummation of Moslem architecture.
Like the elder Moorish states, the overthrow of Granada was occasioned by internal factions; and in the year


FOUNTAIN OF CHARLES $V$.

1492 the Catholic sovereigns, Ferdinand and Isabella, were able to accomplish the great aim of their lives; - the Moors were finally expelled from Spanish soil.

One of the most beautiful views in Spain is that of the plain of Granada, green with its constant verdure, and walled in by the snowy breasts of the Sierra Nevadas. At the upper end of
this plain, " like a pearl set in emeralds," shines the white city of Granada, while above it, on a rocky plateau, not unlike the Acropolis at Athens, rises the reddish walls and towers of the Alhambra (the Arabic name of which means merely "The Red"), its rude exterior giving little promise of the graceful and delicate beauty that prevails within.



COURT OF MYRTLES, SOUTHWEST END
THE ALHAMBRA.

The early history of the Alhambra is obscure. Moorish historians assert that fortifications on the site were begun as early as 899 ; but the oldest portions of the building which can be identified with any certainty do not date before the time of Mohammed i., the founder of the Moorish dynasty that ruled Granada so long and so brilliantly. Its construction extended over a century at least; and, as a result, it reflects the political and social development of the kingdom. The original buildings to the north, of which the group along the Mexuar Court alone survive, were small and comparatively unelaborate; but as the monarchs increased in wealth and power the palace was enlarged by the simple process of adding other and more magnificent courtyards with their surrounding ante-chambers - a fashion of building which accounts for the irregularity of the plan.
To imagine what the Alhambra must have been in its pristine glory, when
it was an abode of Oriental magnificence, only fitly to be compared to the magical palaces of the "Arabian Nights," the traveler must still evoke his imagination. He must try to revive in fancy the gorgeous original coloring of the wall-tracery, its vivid tones harmonized by the free use of gold, so that what still charms by the graceful intricacy of design must once have presented a shimmering harmony of color; and he must picture the now deserted rooms as peopled by groups of Moorish nobles, clad in the rich silks of peace or gorgeous panoplies of war. Every foot of wall surface, every column and arch, every doorway and niche still bear witness to the delicate taste and artistic luxury of its creators. A vision of spacious courts, pillars of marble and alabaster, walls wainscoted with glowing tiles, partitions gilded like the sides of a casket, vaults and cupolas wrought like honeycomb or frostwork, with stalactites and pendents which confound the beholder
with the intricacy of their patterns, filagrees and stuccos of veil-like transparency, and all distinguished by an airy lightness and grace - such is the impression which the interior of the Alhambra,
trees or lined by walls over which clamber vines and roses. Before he reaches the summit of the plateau the traveler is confronted by a huge square tower of imposing aspect, which originally served


HALL OF THE AMBASSADORS
THE ALHAMBRA
PHOTOGRAPH BY THE SOULEARTCO.
so grim in outward aspect, still makes upon the eyes of the astonished visitor.

The Alhambra is reached from the city of Granada by a steeply ascending path, hedged in by groves of orange
as the main outpost of the fortress. Here the caliphs sat to make immediate trial of petty cases; and it has always been known as the Tower of Justice. It is flanked by a charming Renaissance


WINDOW HALL OF THE AMBASSADORS PHOTOGRAPH BY THE SOULEARTCO.
fountain, erected in I545, which, since it bears the motto of Charles v., is known by his name.

Beyond the Tower of Justice the ascending footway debouches suddenly upon an open esplanade, lovely with ruined gardens. From a mass of shrubbery on the further side of this plaza
rises the unfinished palace of Charles $v$., who demolished a part of the Alhambra to make room for it. It is in the florid


COURT OF LIONS
SOUTH SIDE
style of the Spanish Renaissance, and elsewhere the traveler would stop to


admire it; but remembering how its foundations were once occupied he will here impatiently pass by the intruding pile, and, through a winding corridor that burrows through one corner of it and a humble portal, will at length reach the central court of the Alhambra itself.

Issuing from the dark passageway into the flooding sunlight of the Court of the Alberca (reservoir) or Myrtles, as it is called, he will seem suddenly to
have been transported from Europe to the Orient of four or five centuries ago. The Court is one hundred and twenty feet in length and seventy-five in breadth, and along its center extends an immense basin bordered with myrtle hedges. At each end rise beautiful arcades borne by slender marble columns; that on the southwest, with its triforiumlike second story and open gallery at the top, being especially beautiful.

At the end of the Court of Myrtles opposite to that at which he made his entrance, the visitor will pass through an elaborate horseshoe arch into a narrow ante-chamber, the vaulting of which has unfortunately been destroyed by fire, and thence into the Hall of the Ambassadors,-a square, lofty chamber which served as the state reception-room of the Moorish sovereigns. The room has no unusual constructional features, but its ornamentation is amongst the richest in the Alhambra. One hundred
and fifty-two different patterns, impressed with an iron mold upon the wet plaster, may be counted on the walls.

From the Hall of the Ambassadors the visitor will return to the Court of Myrtles, and through a side passage near its further end, will enter the great Court of Lions. No part of the Alhambra gives a more complete idea of its original beauty than this. One hundred and twenty-four marble columns support the surrounding arcade, which at each end juts out into a graceful pavilion,

surmounted by a charming half-dome roof. The walls above the columns are of wood covered with an exquisite fretwork decoration of plaster, which looks as if carved in ivory. At the ends of the court eight small fountains jet from shallow marble basins, whence the overflowing water is led in runlets to the fountain in the middle of the Court. The famous stone lions, twelve of which
support this central fountain, give their name to the Court. Though the Moorish poets and historians of Granada seemed to have considered no eulogy too extravagant to apply to these beasts, they are, it must be confessed, but clumsily carved, though not without a certain conventional and heraldic effectiveness

A narrow ascending passage leads



HALL OF THE TWO SISTERS, LOOKING TOWARD COURT OF LIONS
THE ALHAMBRA
from the northwest side of the Court of Lions to the Hall of the Two Sisters, so called from two large equal-sized slabs of white marble which are set into its pavement. In this room the decoration of the Alhambra probably reaches its zenith. The walls, broken by niches flanked with graceful columns, are wainscoted with the finest tiles; but the glory of the apartment is its honey-
combed vaulting, which contains, it is said, no less than five thousand cells, each differing from the other. At every corner stalactites depend, and fantastic cell formations hang from the roof. Above this soars the dome, formed of innumerable tiny cells, " looking as if the architect had been helped in his work by a swarm of bees."

Behind the Hall of the Two Sisters is


VIEW FROM COURT OF LIONS TOWARD MIRADOR DE DARAXA
THE ALHAMBRA
a charming little chamber, the three tall windows of which formerly looked out upon the inner garden of the palace. It is called the Mirador de Daraxa, and forms a beautiful perspective with the Hall of the Two Sisters and the Court of Lions.

On the same axis as the Hall of the Two Sisters, and corresponding to it in
position, size and decoration, though much less elaborate, is the Hall of the Abencerrages, which it is not necessary to describe.

At that end of the Court of Lions opposite the entrance to the Court of Myrtles, is the Hall of the Tribunal, architecturally one of the most interesting apartments of the palace. Its name


HALL OF THE TRIBUNAL
THE ALHAMBRA
rests on the groundless assumption that the sultans dispensed justice here. It is divided into seven sections separated by alcoves, and three archways connect it with the Court of Lions. With its honeycomb vaulting and stalactite arches enshrouded in a dusky gloom, it resembles some fantastic grotto.

Adjacent to the Court of Lions, and between it and the Court of Myrtles, is a group of underground apartments called The Baths. Our illustration shows one of these apartments, called the Hall of Divans, which was used for undressing and reposing after the bath, the alcoves serving as couches.


Crossing the Court of Myrtles from The Baths we reach a little group of buildings that lie some thirteen feet


ENTRANCE TO THE MEXUAR
FROM THE SOUTHWEST
below the level of the Court. These form the oldest part of the Alhambra. They

consist of a cluster of small, and for the most part, unadorned chambers, which still possess a stylistic charm of their own. These chambers are grouped about the ruined Court of the Mexuar, behind which lies an ancient chamber called The Mexuar, that, during the Moorish period, probably served as the judicial audience-room of the Cadi.

The wall decorations of the Alhambra were illustrated in detail in the issue of The Brochure Series for August, 1898. Several of the photographs which illustrate the present article are from the original negatives made by Mr. E. E. Soderholtz for the Soule Art Company, and are used by their kind permission.
A. P. WHITMARSH.


## LOUIS XIV. AND XV.

## PANELDECORATION

I$T$ is an artistic truism that no style in art can spring into being complete, fully developed, and distinctly differentiated from its predecessors. Always there must be a transition between the old and the new. One new mode may be hastened into completeness, and acquire definite structure more rapidly than another because of extraneous influences, as the discovery of the buried treasures of Herculaneum and Pompeii gave a sudden impetus to the classicism which went far to formulate
the style of Louis xVI ; but it is impossible for any artist or any body of artists, even were they capable of conceiving a perfected style, to foist it upon the public. However weary of the past, however clamorous for novelty the epoch, traditions are too imperious to be waved aside. Something must ever survive from the accomplishment of yesterday.

Minor transitions between analogous styles obey this same law of gradual change; and the ornamentation which

we know as the style of Louis xiv. dissolved into the style of Louis xv. by degrees as subtle as those by which Gothic ornamentation merged into and was overcome by the revived classic. The panels in our illustrations will exhibit the type evolved in the transition.
In spite of his love for theatrical and cumbrous magnificence, Louis xiv., especially toward the end of his life, became more and more attached to the retreat that he had devised for himself at Marly, where, as Saint-Simon puts it, "lassé du beau et de la foule," he might temporarily elude the boredom of etiquette and the burden of his own splendor. At Marly he attempted to surround


ORGAN CASE
VERSAILLES


DOOR PANEL
VERSAILLES
his old age with a setting more amiable, more smiling, less regal than that which adorned his palaces of state. He wrote to his architect that the figures of children must enliven its decorations. "Youth must be everywhere," was his phrase.

The incident might be taken as symbolic of the spirit which transformed

Louis xiv. decoration into that of Louis xv. The former had all the staid conventionality of age, only saved from sinking into mere gaudy magnificence by a certain vigor and severity of line which was its inheritance from the Italian Renaissance. The elements of charm, variety and spontaneity were entirely smothered by the one all-consuming desire for general opulence of effect. On the other hand, the style of Louis xv. in its complete development, cast utterly away all rigidity, all con-
vention, nay, even almost all dignity. It could endure no right angles, shunned everything which savored of classicism, elevated absence of symmetry well-nigh into a cardinal principle, and only resembled the style which had preceded it in its desire for splendor of effect at any cost, setting general magnificence even above its own capricious waywardness.

Midway between the two extremes come the panels shown in our illustrations. Most of them date from the period of the Regency. The influence of


the seventeenth century is still evident in the regular and sometimes cumbrous arrangement, the theatrical symmetry,


[^6]the use of almost all the former motives, and above all, in that inexpressible quality which one writer has endeavored to characterize by saying that "the art of Louis xIv., even in its moments of greatest simplicity, never forgot to be emphatic."


WALLPANEL, HOTTEL DE SOUBISE, PARIS
On the other hand, the details, in a score of ways, announce the softening and enfranchising influences of the coming style. There is an evident attempt to make the forms lighter, to narrow their breadth, to put more-may we call it frivolity? - into them. The lines seem less rigid, they bend more easily


DOOR PANEL
and terminate in volutes of greater thinness and delicacy. If the design as a



CHEST DOOR PANELS
CHAPPEY COLLECT1ON
closer view that, though the garlands apparently exactly balance in mass, they
differ in detail; if sprays still occupy analogous spaces in the composition



DOOR PANEL
vERSAILLES


WALL PANEL GARDE-MEUBLE, PARIS
their leaves are different, and that if the Rococo has not yet been able to fully develop its asymmetric tendency, it has already succeeded in casting disfavor upon the rigidity of the right angle.

WILLIAM P. BACON.


WALL PANEL
GARDE-MEUBLE, PARIS



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Brochure Series Competition S

## Ground Floor Plan

ANNOUNCEMENT OF THE AWARD

The conditions of this competition called for the ground floor plan of any private house (the merit of the plan per se not entering into


First Prize Plan, by Mr. Frederick C. Hirons, Medford, Mass.
consideration), so rendered and lettered as to make an artistic drawing. The successful solution of the problem should, of course, imply consideration of the outline shape of the plan, its treatment so as to obtain either an effect of even color or effective contrast, its placing in the panel and the treatment of the resulting margins, the arrangement of lettering within the plan itself and about it, the character of the lettering, and, finally, the fashion of rendering.

The results of the competition will best be made evident from the accompanying illustrations, which are fairly representative of the different types of drawings submitted.


Second Prize Plan, by Mr. Milton Dana Morrill,
West Point, N.Y.


Mention. "Dixie."

The First Prize has been awarded to Mr. Frederick C. Hirons, Medford, Mass.; the Second Prize to Mr. Milton Dana Morrill, West Point, N.Y.
Besides the drawings here reproduced, the judges have awarded mentions to those submitted under the pseudonyms, "AD Libitum," "Clipp," "Stub Pen," "Saleratus," "Perkiomen," "Cheshire," and " Yves."
The award of Competition $T$ for a dove-cote or pigeon house to stand on a gentleman's country place, will be announced in the next issue of The Brochure Series.

Attention is called to the two competitions set on another page of this issue,- (I) Competition U, for a wooden, roofed gate for foot-passengers to be set into a five-foot stone wall enclosing an estate or garden; and (2) Competition V. announced in this number for the first time, which calls for a design for


## Mention.

"Plan-et."
that usually very inartistic but necessary feature, a combination electric-light and gaslight wall-bracket, to be executed in brass, for a room in the Colonial style. These competitions close respectively on October 15 and November 15.

The editor must again call the attention of competitors to the necessity of strictly con-

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C C ( Mention.
"Kindergarten."
forming to the rules set to govern these contests. They have purposely been made as few and simple as possible; and yet in every set of drawings submitted a number - and


Mention.
" Oxford."
often some of the most promising - have had to be debarred from consideration because their authors did not abide by the rules which limited their fellow competitors.

## Details of Building Construction

$B y$<br>CLARENCE A. MARTIN<br>Assistant Professor of Architecture at Cornell University

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[^7]
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IN this special number of The Architectural Review the publishers confidently believe they present the most exhaustive and authoritative work on the planning, design, construction and fitting of stables and farm buildings ever published. The material is chosen and arranged with a view to making the number an indispensable work of reference for architects and draughtsmen. The articles are written by men who have made a special study of their subjects and no better authorities could be found, while in the illustrations, prominent architects from every section are represented by the best work they have done in this particular class of buildings. Only a brief outline of the principal features is attempted in this announcement - merely enough to show the character of the number and indicate the unusual value of its contents.

## STABLE PLANNING

By Howard N. Potter, Architect

IN this, the leading article, are discussed the choice of site and aspect, the general problem of the plan (relative position and size of stall room, putting-to space, harness room, men's room or office, and carriage room), the character of the cross sections and construction of floor, walls and roof of the different portions of the building, the ventilation and drainage, stall construction, and the doors, windows, hardware and fixtures. A typical plan, elevation and section are shown, by reference to which the different points are illustrated. The article is further and most effectively illustrated by fifteen plans from which brief comparisons are drawn to assist in explaining points of vital importance as well as those which are merely matters of taste.
Following this article are PLANS OF TWO HUNDRED STABLES (for the most part accompanied by photographs) classified as far as possible, first, according to accommodations, and second, according to type of plan; almost every requirement of size and arrangement being met by some plan. This one feature, for its reference value, is worth a whole year's subscription to the Review.

## STABLE INTERIORS

Aillustrative feature of special interest and of the greatest value will be the grouping of photographs of stable interiors, showing carriage rooms, stall rooms, harness rooms, etc., the photographs being taken to show a variety of treatments.

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Farm Barns of R. H. I. Goddard, Esq., Potowomut, R.I.; Clarke \& Howe, Architects, Providence, R.I.

## FARM BARNS

By Alfred Hopkins, Architect

WITH the increasing interest taken in country life by wealthy men, architects are more and more frequently called upon to plan groups of buildings for stock and dairy farms, and Mr. Hopkins, who is associated in professional practice with Mr. Edward Burnett, the best known specialist on large farming and stock establishments, gives the principles to be observed in planning, grouping and constructing hay, horse and cow barns with their accessories. The article is illustrated by a number of plans and photographs showing the application of these principles. Following are several pages of plans and photographs of farm buildings, large and small.

# "DREAMWOLD" <br> THE ESTATE OF THOMAS W. LAWSON, ESQ. <br> Coolidge \& Carlson, Architects 

THE subject of farm buildings is still further exemplified by a description of this model stock farm. The description will be illustrated by plans and photographs of the different types of buildings - the racing stable, 800 feet long, the show stable, riding ring, foaling stable and hospital, poultry houses, kennels, dove cote, windmill, water tower, fire engine house, forge and post office, for this is not alone a farm, it is a village of itself. The illustrations are from photographs by T. E. Marr.
In addition to the principal features already described there will be others, less important only in point of space occupied, which would, by themselves, make a special number.

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## Library Architecture


#### Abstract

II The issue of the Architectural Review for January, 1902, is devoted to the subject of libraries. It contains a general article on the essentials of library planning, by Mr. Charles C. Soule, a Counsellor and Trustee of the American Library Association, and a recognized authority on the planning and administration of libraries. Designs for sixty-five libraries are published, the total number of plans, sections, elevations and exterior and interior photographs exceeding two hundred and seventy. : : : THE PRICE OF THE NUMBER IS TWO DOLLARS


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NOTHING is more remarkable in the history of art than the rapidity of rise, the wonderful efflorescence, and the sudden decline of the Dutch school of genre-painters. Before the War of Independence the artists of Holland had been imitators at the best, whose endeavor was to paint like the

Italians; but, with the heroic struggle for liberty and the ensuing freedom, a national self-revelation came to the devoted little land. From a despised handful of unconsidered traders, a mere tributary province, isolated on the mud flats of the north, the Dutch Republic suddenly sprang into being, and Holland

"PEASANTS AT AN INN",
ADRIAAN VAN OSTADE
became a nation among the nations. Her unwarlike citizens and home-trained leaders had defeated the most redoubted troops and the greatest generals of Eu-
silks, satins and brocades; her ships were the carriers of the continent; her trading companies monopolized the commerce with India, China and Japan ; and

"the card players',
JAN STEEN

## Buckingham Palace, London

rope; and her victories of peace were no less sudden or surprising. Her voyagers had won her colonies in Nova Zembla, in India, and in Brazil. Her increase in material prosperity had been marvelous. The Dutch manufactories supplied Europe with half the luxuries - cloth, mirrors, porcelain, pottery,
her thousand ships scoured the Baltic in quest of raw material.

When Holland drew the first long breath of peace, after the war, and found leisure to look at her new self, such was the eminence to which she discovered she had risen - an eminence won solely by her own efforts - and
there arose in her a national pride than which none was ever stronger or more justified. And thus it came about that when a native Dutch art, created by

The climate of Holland with its gusty rains and sudden chilly mists had always inclined the Dutch to domesticity, but the poignant charm of home could never

"THE MUSIC LESSON",
JAN VER MEER OF DELFT
Royal Gallery, Windsor
peace and material prosperity, arose, it became wholly a home-keeping art, devoted exclusively to the depiction of the new national life, which had suddenly taken on for her people so dear and passionate an interest; and especially did it concern itself with the representation of the domestic interior.
have appealed to them so potently as now, after the long years of war, during which there had been no sure possession nor quiet rest.

With these two sudden revelations, first, of the national importance, and second, of the charm of familiar things, there arose a school of artists to paint

'' MORNING TOILET',
PIETER DE HOOCH
Van der Hoop Museum, Amsterdam
them; a school which we call that of the "Dutch Little Masters," and which for suddenness of development, for number, and for equality of talent is unmatched in art history. Ter Borch, Douw, Van der Meer of Delft, Brouwer, Van Mieris, Jan Steen, the Ostades, Woverman, Pieter de Hooch, Wynants, Cuyp, Ruysdael, Hobbema, Paul Potter, the two Van der Velders, and how many others; one and all, and each in his own way, laboring toward the same end, which was to represent every diversity and surrounding of Seventeenth Century Dutch life.

It is, however, with but one part of this multiform representation that we have here to deal, that is the depiction of the Dutch interiors of the middle or upper classes; for, though to illustrate the range of interior painting a few examples of the ruder dwellings or taverns have been reproduced, they cannot af-
ford the architectural suggestions that we find in the pictures of Maes, Van Mieris, Van der Meer of Delft, or, above all, of Pieter de Hooch, who painted his settings with such loving minuteness.

Perhaps the best teacher for the interior decorator of today is the Italian or Dutch genre-painter. I am aware that this unusual statement may provoke the smile of incredulity, but if the reader will but look again at the pictures of Carpaccio, of Holbein, or of Pieter de Hooch, to name but three out of a score of artists, and will examine them, not merely as depictions of interiors, but for the suggestions which they afford for modern practice, he will, I think, be astonished at what they have to teach him. I know of no safer test of the æsthetic worth of any feature of room decoration than to ask oneself how it would look in a picture: I know of no greater praise of an interior, than to be
able to say of it that it is as well considered as a painting.

All interiors in which æsthetic treatment is a factor may be roughly grouped into three classes: first, public rooms, such as the apartments and halls of public buildings; second, rooms for occasions, like ball-rooms or others designed for temporary and especial uses; and third, living-rooms, the settings for the life and occupation of every day. It is, of course, only for these last, the livingrooms (which are, after all, the most important), that we shall find the Dutch pictures suggestive, for they show certain qualities of loveliness which are preëminently desirable in the home. Exquisite in their indefinable quality of homeishness; opulent with the richest of all luxuries, that of well-considered simplicity ; airy with a cloistral spaciousness which is not bareness, they breathe a sunny cleanness and an air of well-being,
order, refinement and peace. The causes of these effects are less patent than they may seem at first glance. Certain fundamentals are, of course, obvious, - the unsurpassable cheer of their flooding sunshine, the wholesome calm that springs from order, the peculiar emptiness which suggests cleanness rather than bareness, - the Dutch pictures hold all these evident lessons for our disordered rooms that stifle with fullness and weary with jumbled color. But there are suggestions less obvious in the treatment of every detail; and, with the reader's leave, let me briefly touch upon the principles which seem to me to have guided the Dutch painters in their handling of ceiling and wall spaces, floor and color.
The ceilings are, as usual, simply and heavily beamed, with the flooring above left visible. The lines are invariably long and emphatic, and when cross

"THE CARD PARTY',
Louvre, Paris
PIETER DE HOOCH
beams are introduced they never break the surface into the peculiar pigeon-holelike cofferings of the Italian ceilings. The more pronounced the checker-work
word, the practice of the painters of Holland almost precisely reverses our own too common custom of suddenly truncating our walls with a hard white

"'PEASANTS CONVERSING",
Buckingham Palace, London
ADRIAAN VAN OSTADE
of the floor below, the stronger are these beam lines made as a relieving contrast. The tone of the Dutch ceiling is invariably darker than that of the wall surface below, thus adding to the apparent height of the room and lending the dignity of gloom to the beaming. In a
expanse of plaster, which stares down in cold barrenness upon whatever richness may be contrived below, and which has precisely the same æsthetic value as a stretched cotton sheet.

The Dutch painters lived before that ingenious modern eye-torture, wall
paper, was invented, and the walls of their interiors are invariably plain in surface. The reader will, I think, find it an enlightening exercise to try to imagine any artist making a picture of
which can nowhere find a rest from its torment, into endless games of checkers with its colored blobs, or weary attempts to follow the meaningless mazes of its vapid patterns. The

"'WOMAN READING",
an interior in which the walls are plastered with wall paper, with its wearisome repeat of pattern, or pimply eruption of spots, too spasmodic to afford any satisfying glow of color in itself and so vivid as to rob all other color masses in the room of true effect, tempting the distracted eye,

Dutch knew better, and where the eye was to rest most frequently they afforded it a quiet haven of plain and restful tints - dull drabs or greens and quiet fawns or grays - against which the accessories which added positive color to the room might glow warmly.

This pleasant and neutral-colored wall


DUTCH LIVING-ROOM
Berlin Gallery
PIETER DE HOOCH
surface is everywhere broken into panels and oblongs of various sizes (but always generous enough to be restful), by the right-angled lines of window and door moldings. These division lines are always emphatically marked and are invariably distinctly lighter or distinctly darker in color than the wall surface; for the Dutchmen never made the mistake, as we occasionally do, of painting door-jambs and window-frames of the same color as the walls, or in a tint of so little contrast that all their value as partitioners of surface, and thereby all their decorative worth, is lost. Indeed, we shall find on examination that not alone in the breaking of the wall surfaces, but in the tiling of the floors, the mullioning of windows, the juxtaposition of textures, and the placing of color, that they observe this distinctness of division, which is the ruling principle
to which the charm of order - next to color the most valuable of decorative effects - is due.
The floor is a more important factor in the effect of every room than the ceiling; equal in importance, I believe, to the wall, - and yet how do we neglect it! I will venture to say that for every glance of the eye upon the ceiling it rests for an hour upon the floor. The Dutch painters realized this. Their ceilings are broadly, and sometimes even summarily treated; but upon the floor they expend a care hardly less than that they give their most important figures. See how even the careless Jan Steen (who troubled very little about the pictorial aspect of his settings, provided that they were true to life) has painfully broken the bare expanse of foreground in his picture of "The Card Players" (page 22o) with scattered ob-


jects; and how the uningenious Adriaan Van Ostade has littered his with branches. But De Hooch and Van der Meer and Maes and Van Mieris - for I must here draw conclusions from pictures which I have, unfortunately, had no space to reproduce-give us more valuable solutions.

In the first place you will never find them, in any composition where the floor counts, making it a bare unrelieved
expanse of one color; equally you will never find them painting it as a muddle of many tones, as are our carpets today. To do the first would have been to bid goodby to any richness of effect; to do the second would have been to say farewell to any look of airy spaciousness. The floors of the better class of Dutch houses were usually paved with marbles, sometimes gray and white, sometimes dull red and white, sometimes black and
white, set in geometrical patterns, but patterns always with distinct contrasts of color, always rectangular, and always considered with reference to the shape of the room, the general trend of its wall and panel lines, and the amount of floor space visible. When in the less luxurious rooms the flooring is of earthen tiles, the joinings are always visible, and form, as it were, a floor texture; when it is ? of wood the joints of the
boards are always evident. In any case three principles are invariably observed: first, distinctness of contrast between the colors used, when colors are used; second, to take advantage of every possible reflection of light that may fall upon the floor surface from window or door; and third, never to allow the floor to compete in color with those accessories which are to set the colorkey of the apartment. We may obtain

our nearest approach of the effect of the Dutch floor, in our domestic interiors at least, by the use of hard wood set in parquetry patterns, and next to this by the use of plain hard woods, laid in not
floor a plain unfigured carpet is perhaps the best floor covering, its monotony broken by small rugs placed with their lines parallel to the lines of the walls: the very worst, if we value our color

''THE BUTTERY',
PIETER DE HOOCH
Ryks Museum, Amsterdam
too narrow strips and with the joinings left plainly visible. If the surface of the floor is plain we may break it by the use of rugs, which should be small, subdued in color, kept away from areas of reflection whenever possible, and distinctly contrasting with the hue of the floor. Next to the hard wood
scheme or contrast of texture, is the spotted or prominent " all over "pat. terned carpet of many vivid hues.

The windows of the Dutch interior count in the "anatomy" of the decoration, if I may so express myself, as does no other single feature. Large in area, they add to the general impression
of airiness and cheer; they are set high in the walls, as is logical considering their mission; and in every case they fulfil two decorative functions apart from their utility; first, to form strong

When painted glass is used the color is always brilliant and jewel-like and always massed, never allowed to wander in minor tones over half the surface. Observe, too, that nothing is allowed to

''PEASANTS SMOKING',
rectangular panels which break the walls and supplement the other divisions (and note here that their cross-bars and mullions are always strongly marked, never half-hearted little strips); and second, that the leading of the panes is not employed merely because it is leading, but to give an added texture.
interfere with the rectangularity of the window panel. The window heads are always visible, and the "upholsterer" was never allowed to break the order of the lines by festoons of drapery looped into purposely curves, or by curtains joined at the top and fastened back at the waist by a cord, resulting in an area

"THE MESSENGER",
Ryks Museum, Amsterdam
of light bounded by the ugliest of devisable lines. Whenever curtains were introduced by the Dutch artists they are always strung upon a pole parallel with the window head, and fall in long dignified folds, the longer and straighter the better, which emphasize rather than detract from the rectangularity of the window space.

It is, however, above all, as lessons in the management of color, that these Dutch pictures are most valuable. What a harmonious and yet well-ordered glowing, what a warmth of general effect, and yet what individual value of each
hue we find in them. I am well aware that to consider, in any generalization, so subtle a question as the arrangement of color in an interior is hopeless; but perhaps it may be suggestive to briefly hint at a few of the principles by which the Dutch painters seem to have been guided in obtaining their inimitable effects.

It will be remembered that ceilings and walls and floors have been kept dim and indeterminate in tone, merely serving as restful and contrasting backgrounds. Without further color the rooms would seem cold and barren, but
against this neutral background are added rich color masses that set the key. Oftenest, of course, these color masses are afforded by the dresses of the figures, but in a sufficient number to allow us to study the general principles of application, permanent accessories supply the color values. Colors are always added in distinct masses, never in indeterminate messes; that is to say, all vivid tones are concentrated into few well defined areas. Sometimes the note is set by the glowing crimson or dull blue of a table-cover, sometimes
by the crimson and gold of a screen or panel of stamped leather, sometimes by the vermilion of a painted chest, or by the rich yellow of a cushion. But whatever predominant and eye-attracting hue is used as a key, it is given to us in a mass, never in a jumble with other hues that would kill its individuality and so its charm. Next, this dominant color is echoed, as it were, in minor masses throughout the apartment, though these minor masses never have the same degree of vividness; and if the crimson or blue of the table-cover is


DUTCH INTERIOR

repeated it will be in a subdued key by the covering of the chairs, for instance, which will echo it in minor masses, each of them, however, glowing distinct and separate against the dim background. The other colors which are to supplement and complement the dominant chord thus set are afforded by still smaller groups of jewel-like color masses - a blue Delft-ware dish with rosy apples in it, a mirror catching reflections, a bit of stuff woven of many colors, a rich toned picture firmly ruled in by
its ebony frame, the glowing tones of a painted escutcheon in the window, and the like. But each of these minor masses of color counts vividly by itself against the background, each enhances by harmony of contrast the key set by the predominant note, and the whole is fused by that inimitable color instinct of the Dutchman, of which, though we may neither analyze nor acquire it by study, we may perhaps catch some helpful reflection by taking their works as our examples.-Helena Carson Williams.

# THE CATHEDRAL, BAPTISTERY, AND LEANING TOWER OF PISA 

THE Cathedral, Baptistery, and "Leaning Tower" of Pisa, taken together, form the most remarkable group of ecclesiastical buildings in Italy, if not in Europe. Clustered around the green retired Piazza del Duomo, they seem almost like types set apart from the present to represent the finest monuments of Tuscan Renaissance architecture.

Up to the time of the Renaissance, mediæval Italy never perfected any one type, nor developed any paramount manner in architecture; but among the many contending styles three bade fair to win the battle - the Lombard and Tuscan Romanesques and the Gothic. The two former flourished nearly during the same centuries; the Gothic coming later and from without, arrested their development; but not until at Milan, Pavia, Piacenza, Bologna, and elsewhere, the Lombard style had set evidences of its individual beauty; while the Tuscan Romanesque had done the same at Lucca, Pistoia, Florence and above all, at Pisa.

It is evident that even in the darkest of the dark ages the Tuscans were already groping toward the Renaissance. They never forgot the domes of their remote ancestors; the influence of classic models is apparent both in the construction and the detail of their basilicas; and the deeply grounded preference of the Italian genius is shown in their round arches, their colonnades of pillars and pilasters, their low roofs and shallow tribunes. The most typical and characteristic feature of the Tuscan style is, however, the external decorative application of wallarcades, sometimes carried on flat pilasters, and occupying the whole height of the wall, sometimes standing free in superimposed stages of small arches borne on slender columns.

The early progress of art was more rapid at Pisa than elsewhere in Tuscany. Indeed the dawn of Italian mediæval art may be said to have begun in 1063 with the foundation of her Cathedral. The splendid impetus in building thus begun, continued throughout the whole


of the twelfth century; and the three monuments which we are here considering, were the chief fruits of this sustained impulse.

The singularly perfect and beautiful Cathedral is the finest monument in the
vaulted aisles, the transepts single aisles.
The imposing Baptistery is one hundred feet in diameter, and its cone-surmounted dome is one hundred and ninety feet high. The lowest range of semicircular arches consists of twenty


INTERIOR OF THE CATHEDRAL
PISA

Tuscan style. It is constructed of white marble with black and colored ornamentation. In plan it is a Latin cross. E $\dot{x}-$ ternally the west façade, shown in the illustration, is the finest, where the characteristic Tuscan feature of a surface arcade running around the base, is repeated by the four open arcades above. The nave of the interior has double
columns, the second of sixty ; and above these is a row of eighteen windows in the same style, separated by pilasters. The Gothic additions of the fourteenth century have, however, done much to disguise the purely Tuscan character of the original structure.

The Campanile, or "Leaning" Bell Tower, which stands directly behind the


Cathedral, is, according to Mr. Freeman, "the noblest of southern Romanesque towers." Its basement is surrounded by a range of semicircular arches supported by fifteen columns, and above this rise six arcades with thirty columns each. The smaller eighth story, which contains the bells, has only twelve columns.

The question as to whether the thir-teen-foot tilt of the tower was accidental or intentional has occasioned much dis-
cussion, but there are strong reasons, in spite of the apparent improbability of the supposition, for believing that it was either intentional, or that, owing to some defect in structure the tower took its slanting position during construction, and that the architects finished the work without attempting to restore it to the perpendicular. At any rate, the foundations are said to be still solid and horizontal.


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

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## Brochure Competition Announcements

## Competition V <br> CLOSES NOVEMBER 15, 1902

SUBJECT: Design for a combination electric and gaslight wall bracket, to be executed in brass, for a room in the Colonial style. The bracket is to hold three lights - two electric bulbs and one gas burner.

Fixture to be shown by two drawings on same sheet ( 1 ) front elevation and (2) side elevation, with scale indicated.

Award to be announced in The Brochure Series for December, 1902.

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

## Competition W

CLOSES DECEMBER 15, 1902
SUBJECT: A combined Sign-post and Horse Trough to stand in the middle of a village square. To be executed in stone, wood and wrought-iron. The Sign-post to point the directions to four outlying towns.
To be shown by a pen and ink perspective drawing.
Award to be announced in The Brochure Series for January, 1903 .

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

## R U LES G OVERNING <br> COMPETITIONS

I All drawings must be in pen and black ink (neither pencil nor wash drawings will be considered) on white paper or cardboard measuring 8 by ro 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,

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 Bro chure 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.

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## Brochure Series Competition T

## A Dove-Cote

announcement of the award

THIS competition called for a pen and ink perspective sketch of a dove-cote or pigeon-house intended as a shelter, nesting and breeding place for the birds, to be provided with openings for their entrance, and with a door giving access to the interior. This dove-cote was intended to stand separate from the other buildings on a private country place, to be set upon the ground, not upon a pole or on another building, and to be built of brick, wood, or both. No particular style of architecture was specified.

The problem awakened a lively interest, and a large number of sketches were received, representing a great variety of conceptions.

Perhaps the commonest and most prevalent fault in the designs submitted seemed, to the judges, to be a tendency toward over-elaboration and ornateness. It is true that nothing in the specifications insisted upon simplicity
of treatment ; and the competitors had a right to assume, as many of them did, that the dovecote might have to harmonize with the surroundings of an imposing and expensive character. But the very subject itself and the nature of its use should have obviated such


First Prize Design By Mr. Melville Miller, Montreal.

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Second Prize Design By Mr Robert W. Snyder, Scranton, Pa.
elaborateness and surfeit of ornament as many of the sketches showed.

On the other hand, the sense of proportion, in a problem not over easy to be dealt with in this respect was, in general, commendable, and in several of the designs admirable. In rendering, the sketches were, as a whole, superior to those submitted in previous contests.

So many drawings were received in this competition that it was found impracticable to undertake individual criticisms, but the designs here printed will indicate something of the range and variety of treatment.

The first prize was awarded to Mr. J. Melville Miller, Montreal, Can.; the second prize to Mr. Robert W. Snyder, Scranton, Pa.


# Details of Building Construction 

By<br>CLARENCE A. MARTIN<br>Assistant Professor of Architecture at Cornell University

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The award in " Competition $U$ " for a design for a wooden, roofed gate for foot passengers, to be set into a five-foot stone wall enclosing an estate or garden, which closed on October ${ }_{15}$, will be announced in the next issue.
"Competition V," which closes on November ${ }_{15}$, calls for a sketch of a combination electric and gaslight wall bracket, and the results will
be published in The Brochure Series for December.

Competition "W," announced for the first time in this issue, closes on December 15 . The subject is a combined sign-post (which shall point the directions to four outlying

towns) and horse trough to stand in the middle of a village square. It is to be executed in stone, wood and wrought-iron, and the drawing is to be a pen and ink perspective.

The editor of The Brochure will always be glad to consider suggestions for competition subjects which the readers of the magazine might find interesting. The only requisites for such subjects are that they shall be specific, capable of being stated clearly in a few words, and not such as to involve too much labor in the rendering.


## ANNOUNCEMENT

# THE <br> BROCHURE SERIES 

## FOR 1903

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.

## 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 volumes have become.

## AMONG THE SUBJECTS

WHICH it is planned to illustrate in the early 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 of the best type; and a number of the specimens of the 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 Thomas Bulfinch and a series of papers dealing with some of the most notable infdividual Colonial mansions of America, their surroundings and rooms.

## INTERIORS

OF unusual suggestive value will be illustrated by papers on the Italian rooms as depicted by the early Italian painters ; those very rare 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 other styles.

## OTHER ARTICLES

WHICH the editor hopes to present in early numbers will treat of the Italian brick and terra-cotta Romanesque work, a style which has proved so well adapted to American conditions; and of the smaller and comparatively unknown French chateaux. Italian gardens will be very copiously illustrated, and there will be presented some charmingly picturesque views in the villages of South France and North Italy ; etc.

## MORE HISTORICAL

SUBJECTS 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.

## THE COMPETITIONS

$I^{\text {¹ }}$N which the Brochure's subscribers manifest so lively an interest will be continued into the new volume.

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CHARLES D. MAGINNIS

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[^8]
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$T$O 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.
© 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.

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- MORE HISTORICAL SUBGECTS will be the great Cathedrals of $\mathrm{S}_{\mathrm{pain}}$; 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; etc.
©. THE COMPETITIONS in which The Brochure's subscribers manifest so lively an interest will be continued into the 1903 Volume.
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for 1903

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## COSMATI MOSAICS

WROUGHT-IRON GRILLES
CHOIR OF ST. OUEN, ROUEN

MISSION OF SAN JUAN CAPISTRANO
CALIFORNIA


# The Brochure Series 

OF ARCHITECTURAL ILLUSTRATION

VOL. 8
DECEMBER, 1902
NO. 12

## COSMATI MOSAICS

THAT particular type of mosaic decoration to which the name "Cosmati Work" has been applied, was developed in Italy during the latter part of the twelfth century, and continued as one of the important decorative arts for over one hundred years, or until the transfer of the Papal court to Avignon in 1305 effectually checked all building operations in Rome, and, to a great extent, in other parts of Italy. It is commonly agreed that the name "Cosmati" was derived from the Christian name, Cosimo, of one of the famous family (whose surname has not been recorded) to whom we owe the perfection of this branch of the mosaic worker's art. Cosimo was not, however, the first of the family to attain eminence as a mosaicist, for his father Jacopo and grandfather Lorenzo had already established their reputations by a number of important monuments. Neither can we find that

bishop's throne
CATHEDRAL OF ANAGNI

Cosimo was the most skilful or the most prolific producer of the family. It is therefore difficult to see why he, out a family of whom seven members at least, during four succeeding generations, are
known to have devoted themselves to this work, should have been singled out as representative, and his name given to the work of the whole family and school.

Lorenzo, the first of the line, and founder of the school, came to Rome in the last years of the twelfth century, from Anagni, a small town some forty miles southeast of Rome. Pope Innocent III., also a native of Anagni, an enthusiastic patron of the arts as well as a wise and powerful ruler, had just ascended the Papal throne. There had been a long period of stagnation, lasting for more than two centuries, which had been peculiarly barren in the production of all branches of the fine arts. The time was therefore



BISHOP'S THRONE S. CESAREO, ROME
most opportune for Lorenzo's appearance at the Capital.

He had then, no doubt, thoroughly mastered the craft of mosaic working, for he was at once admitted to citizenship, and also to membership in the gild of marble workers. His previous achievements cannot now be traced, but that his method and style were already fully settled is evidenced by the first work with which his name can be definitely connected, that in the church of Ara-Coeli in Rome. Lorenzo must have received his early training from Byzantine masters, but he soon outgrew their influence and established an independent style of his own, which was perpetuated by his followers.

Following the custom of the middle ages, the sons worked with their father, and the successful practice of the art was passed on from generation to generation. Besides Lorenzo, his son Jacopo, and grandson Cosimo, there are four sons of Cosimo whose names (Luca, Jacopo, Adeato and Giovanni) have been found inscribed upon various different works with which they were identified, and others whose identity cannot
now be established were doubtless employed in the same way, for the productions of the school are scattered in great numbers all over Italy, and examples are to be found even as far afield as England.

Jacopo, the "son of Lorenzo, was also an architect, while others were sculptors of no mean ability; and although their fame rests mainly upon the beautiful mosaic inlays applied to marble, they also produced numerous other works of art of the highest merit, such as wall mosaics, marble pavements and sculptured tombs. Indeed, Giovanni, the last of the family of whom anything is positively known, designed and executed, in 1299, the tomb of Cardinal Consalvi, in Santa Maria Maggiore at Rome, which is one of the most beautiful mediæval tombs in existence.


BISHOP'S THRONE
S. GIOVANNI IN LATERANO, ROME


PASCHAL CANDLESTICK CATHEDRAL OF TERRACINA

Mosaic as applied to architectural uses has had a varied and fluctuating history, now coming into great favor, and again dying out and entirely disappearing from among artistic industries. The early Romans used it with great skill upon their floors and pavements; and later, during the early Christian centuries, wall mosaics, in conventionalized pictorial designs, were developed under the Eastern Empire. From this time forth, Constantinople under the Byzantine Greeks, became the center in which, and the source from which, the highest developments the art has known were produced. Besides the marvelous productions of Constantinople herself, those of Ravenna, Sicily and Venice belong strictly to the Byzantine school, and are the products of Byzantine workmen.

The work of the Cosmati school, although an outgrowth from Byzantine methods, has, as stated above, a character which marks it as in many ways distinct and native.

There are two main classes of mo-saics,- those used for pavements, and those applied upon walls and vaults. The former may be again divided into tesselated pavements, in which the design is made of small cubes, generally of marble, more rarely of glass or clay, and sectile mosaics, formed of larger pieces of marble, shaped and cut so as to fit accurately one with another. The so-called opus Alexandrinum of the


PASCHAL CANDLESTICK
CHURCH AT ALATRI

middle ages is a combination of the two methods. Wall or fictile mosaic is made of small pieces of opaque glass arranged to form a complicated picture.

The work of the Cosmati had a general resemblance to opus Alexandrinum, and was used to ornament ambos, pulpits, tombs, bishops' thrones, baldachins, columns, candelabra, architraves and other marble objects It is, however, more than mere mosaic enrichment, for
the design includes the ornamental treatment of the whole structure.

Those designs which are used upon flat surfaces are, however, in particular, very like the pavements just referred to. They are made in large flowing bands or ribbons of ornament which interlace and enclose geometrical shapes, such as circles, squares and rectangles, these larger areas being filled with slabs or disks of rare colored marbles, serpen-



ALTAR PANEL
CHURCH OF S. PRASSEDE, ROME
tine and porphyry. The ground is marble, usually white, and the pattern, made up of small glass tesseræ, is set into a sinkage cut out to the proper shape and depth. This pattern is always geometrical, and is composed of small squares or triangles arranged in variations of the star motive. The materials employed were largely dug from the ruins of ancient Rome, which furnished an inexhaustible supply of broken glass and rare marbles, although colored glass made at the time was frequently used.

The best of the Cosmati work is always rich and varied in color, and with a strong, coherent design. The mosaic is always subordinated to the general design of which it forms a part, and is, in fact, conceived as a whole. The Byzantine work of Sicily, on the other hand, which is often confounded with that of the Cosmati, lacks these qualities of breadth, and is hardly more than a series of ornamental bands separating plain surfaces.

The architectural forms employed by




AMBO
CHURCH OF S. CESAREO, ROME
the Cosmati school are in general Gothic. This is especially evident in the elaborate altar canopies with pierced geometrical tracery; but in detail the forms differ widely from the Gothic work of the North. In place of the richly-worked moldings by which the French and English architects obtained their effects, it was accomplished in Italy
by means of the beauty of polished marbles and jewel-like mosaics.

Although their work extended throughout Italy, and is still to be found in widely separated localities, the center of the activities of the Cosmati school was in Rome, and it is in the Roman examples that the art may be studied to the best advantage.
T. G.


# WROUGHT-IRON GRILLES 

CHOIR OF ST. OUEN, ROUEN

THE Abbey Church of St. Ouen at Rouen, often classed as the most exquisitely lovely of all French Gothic churches, is one of the oldest abbeys in the country. It was founded as a monastery in the fourth century, and was transformed into an abbey for men by St. Ouen in the seventh century. The present church was begun in 1318 , but was not finished until the middle of the nineteenth century. This longextended process of construction accounts for the presence, in one of the most frankly Gothic churches in existence, of the elaborate, late Renaissance or Rococo iron-work, which is the subject of the present illustrations.

The choir, with its chevet of eleven encircling chapels, was the earliest por-
tion of the church to be completed, and is almost unique in its perfection among the buildings of its age. The richly wrought screens or grilles closing the arches of the ambulatory, which surrounds the sanctuary and separates it from the outlying chapels, were added in the seventeenth century, and belong to the Rococo style of the time of Louis xiv.

This period, that of the latest efflorescence of the Renaissance, has long been considered one of decadence, and the style, especially in its extreme forms, well deserves the reproach attached to it; but there is still much about it that is excellent and worthy of study, more particularly in its details for interior decoration. Among these the iron-work




will in many cases be found exceptionally worthy of attention.

The technique of the smith's art at this time reached its highest point, but there was an accompanying tendency,
as there was in architecture, towards overloading with ornament, and the exhibition of skill merely as a tour de force. The great aim was to obtain grand and sumptuous effects, and iron-


work was therefore used upon a large and elaborate scale. Grilles for windows, doors, park enclosures and church interiors were produced in great numbers.

The differences which distinguish this work from that which preceded it, may
for producing such forms as pediments and cornices; and rosettes, knobs and other decorative centers of ornament were employed more profusely. Crowns, wreathes, cartouches and other elaborate devices all added to the complexity

be briefly summed up as follows: Round iron, which had previously been used, gave place to square bars, and the threading and interpenetrating of rods was succeeded by halving and oversetting. The contour of leaves became bolder; leaves and scrolls were projected beyond the plane of the grille; iron in the shape of moldings was more used
of the design, and gave opportunity for the craftsman to exercise his skill. While the whole tendency was towards complexity, the richness of elaboration was at the same time concentrated in prominent places, leaving subordinate ones empty and plain, and even in many parts of the design reduced to simple straight bars.
S. F. N.



# THE MISSION OF SAN JUAN CAPISTRANO 

## CALIFORNIA

OF the long line of missions, twenty-one in all, extending at intervals of a day's journey up the coast of California from San Diego for more than seven hundred miles towards the north, and ending at San Francisco, nothing remains but ruins to now remind us of the heroic struggle of the band of monks who founded them, and who, for a brief time, prospered in their enterprise of converting the Indians to Christianity, and establishing the supremacy of Spain in Upper California. The story of their early struggles and their final overthrow because of the greed of encroaching settlers from the East has already been told in these pages. (See Brochure Series, Volume IV., Number 7.)
San Juan Capistrano was founded on November 1 , 1776 . It was, however, the third on the old road called "E1 Camino Real" or The King's Highway, upon which Padre Junipero Sierra had planned to place a line of missions, so spaced that a traveler might hear matins at one and vespers at the next mission.

In 1776 an expedition had started from San Diego to found a mission upon this site, but word being brought of a sudden uprising of the natives, the expedition was abandoned, bells and supplies were buried in the ground, and a hasty return made to San Diego, to aid if possible in protecting those left behind. Later in the same year Father Junipero returned, dug up the bells, hung them upon trees, said mass, and formally established the new mission of San Juan Capistrano.

The work of constructing the final buildings, the ruins of which are shown in our illustrations, was not begun, however, until 1797, and was completed in 1806, when upon September 7 , in the presence of all the fathers, soldiers and Indian converts who could be collected together, they were dedicated to the "Solemnity of the Purification of the Blessed Mother."

On the morning of December 8, 1812, while the neophytes were gathered together in the chapel, an earthquake shook the building and tumbled the tower through the roof, killing a greater


part of the worshippers. The whole mission was wrecked, and has never since been rebuilt.

In 1833 Capistrano, like the other missions, was secularized, but was returned in 1843 to the padres. Later it was again seized and sold to private owners, and
after much litigation finally restored to the Church.

Unlike many of the other missions, San Juan is built entirely of stone, and was almost wholly erected by the hands of the Indian neophytes. Alfred Robinson, an English traveler, described it




THE VERANDAS FROM ABOVE
SAN JUAN CAPISTRANO
as he saw it in 1829. He says: "There yet remain the ruins of an immense church which was destroyed by an earthquake in 1812. It bears the appearance of having been one of the best finished structures of the region, and the workmanship displayed in the sculpture upon the walls and its vaulted roof would command admiration in our own country. The arrangement of San Juan is
similar to that of San Luis; in fact all these establishments are formed upon the same plan, and much resemble each other, varying only in their extent and population."

The main features and arrangements of these mission buildings in general have already been fully described in previous number of The Brochure Series already referred to.


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

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## Brochure

Competition Announcements

## Competition X

CLOSES JANUARY 15, 1903
SUBJECT: A Spire for a Village Church built of wood in the Colonial style.
To be shown by a pen and ink perspective sketch of the spire only.

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

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

## 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.

## Rules Governing Competitions

1. All drawings must be in pen and black ink (neither pencil nor wash drawings will be considered) on white paper or cardboard measuring 8 by 10 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.

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 theretore 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 V
A Combination Lighting Bracket

ANNOUNCEMENT OF THE AWARD

Competition $V$ proposed as its problem a design for a combination electric and gaslight wall bracket, intended to be executed in brass, and for a room in the Colonial style. This bracket was to hold three lights, two electric bulbs and one gas burner, and the fixture was


First Prize Design, by Mr. Richard I. Swezey, New York City
to be shown by two pen and ink drawings, one giving the front and the other the side elevation.

It is evident that this subject did not appeal to The Brochure Series subscribers. Not only were there fewer designs submitted than usually result from a competition, but those which were submitted fell very far below the usual creditable standard. The judges cannot but regret this result, for few accessories of interior decoration of equal importance are ordinarily so commonplace in design as light-


Second Prize Design
by Mr. Lucius Clark Main, East Orange, N. J.

## $\left\{\begin{array}{l}\text { New } \\ \text { Ne }\end{array}\right.$ <br> PECIFIED by leading architects to hold the snow on all pitch roofs, entirely obviating all chance of injury to life or to the property it protects. The only perfect device for this purpose. It is made in various forms for old and new roofs, of slate, shingle, tile, or metal. FULL INFORMATION ON APPLICATION eveleteve <br> Che <br> Folsom Snow Guard Co. <br> Boston, Mass.



ing fixtures, and it was hoped that the competition might furnish a stimulus which would tend toward the production of more attractive motives. Unfortunately, however, there was a decided poverty of ideas in the designs submitted. Almost without exception the same hackneyed motives,- the antique lamp, the torch, the candle with a gas-jet at the top, were served up again with varying additions of twisted pipe. No originality was evident; no competitor undertook de novo, to make a design which should fit the required purpose. The most damaging criticism of the designs as a whole is, that they were, almost without exception, commonplace. It is, of course, to be conceded that the problem was not an easy one; but for the most part, the designers felt themselves forced either to sacrifice practicality in the striving for grace, or be so far trammeled by what they conceived to be the

"Van Wyck"
technical necessities of the problem that the result was one of almost unrelieved awkwardness.

The competition also revealed a decided and somewhat astonishing range of judgment as to what type of ornament would be appropriate for a room decorated in the Colonial style; Gothic and even Baroque motives were not infrequent. Those designs which suggested the Louis XVI. and Empire styles were in most instances clumsy, and plainly evidenced that in these cases especially, there
was a lack of grasp upon the fundamental essentials of these styles. Particularly noticeable throughout was the misshapen ugliness of the central bodies from which the branches were thrown out.

The award in Competition W, for the design of a combination sign-post and horse trough for the middle of a village square, will be announced in The Brochure Series for January.

The announcement of Competition X, which calls for a pen and ink perspective drawing of the spire of a village Colonial church, is repeated in this issue, and will close on January 15 .

Competition Y, first set this month, and which closes on February 15, sets the interesting problem of the design for a churchyard headstone, with an inscription indicated, to be executed in stone. No further limitations are specified, since it is the intention to give designers the freest possible opportunity for originality of treatment; but they should, however, remember that a headstone is not a monument. The designs in Competition Y may be in wash, pencil, or pen and ink.



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By M. JULES PILLET

TRANSLATED AND REVISED BY
JULIAN MILLARD


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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. 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 $121 / 2$ inches and contains 43 text pages and 84 figures. Bound in blue cloth.

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[^7]:    The announcement of the awards in Competition $T$ will be found in the advertising pages at the back of this issue.

[^8]:    The announcement of the awards in Competition $V$ will be found in the advertising pages at the back of this issue.

