

THE AMERICAN ARCHITECT

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FIG. 1—FACADE OF S. GIOVANNI IN LATERANO. GALLILEI, ARCHITECT. IN CONSTRUCTION IN 1736.

This is one of the most imposing Barocco Church Facades in Rome. The Architect was evidently much torn between his Allegiance to Scale and his Allegiance to Proportion. He has sacrificed the former in the crowning Balustrade, following the example of Michelangelo at St. Peter's. He has sacrificed the latter in the Balustrade of the second Story. In the colossal Statues crowning the Façade, both Scale and Proportion are subordinated to the prevailing Ideal of *Terribilità*. Yet these Statues contribute in no small degree to the overwhelming Effect of the Composition as a Whole.

S. Giovanni in Laterano

BY A. KINGSLEY PORTER

THE church of S. Giovanni in Laterano is the most venerable in Christendom. Not only has it successfully competed with St. Peter's for the honor of Papal cathedral, but it is accredited by a well authenticated tradition with being the first basilica erected in the city after the

peace of the Church. Modern criticism, it is true, has treated in somewhat unkindly fashion certain details of the *Life of St. Sylvester*. The sober historian, always the enemy of poetry and romance, is obliged to admit as apocryphal many charming details of the legend, such as the leprosy of Con-

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FIG. 3—MOSAIC OF THE APSE.

The ancient Mosaic of the Apse was barbarously destroyed in 1876, and replaced by the existing modern Copy. The Original was executed by Giacomo Torriti for Nicholas IV in 1291. Considerable Portions of an earlier Mosaic were incorporated in the new Composition. The head of Christ is believed to have been a fragment of the original Basilica of Constantine. Since the Original has been destroyed, it is now impossible to determine what were the Dates of the various Portions.

stantine, the bath in the blood of new-born babes, recommended to the emperor by his physicians, and the miraculous cure effected by the pope. It is no longer even certain that the conversion of Constantine took place in Rome, or that he was baptized in the palace of the Lateran. There is, nevertheless, no doubt that the basilica dedicated to the Saviour and now known as S. Giovanni in Laterano was built upon the site of an ancient palace by the Emperor Constantine, and it is entirely probable that this was the first erected at Rome openly and officially as a Christian church. Its priority in dignity and in age justify the inference that it established definitely the type of Christian church for all succeeding ages. The obscurity which veils the early centuries leaves us uncertain whether the basilican type of building had become more or less traditional during the time when Christianity existed without the sanction of the State. The probabilities are, perhaps, that it had. When Christianity was professed by the Roman emperor, and from an illicit and, in the eyes of the law, even criminal sect, became the State religion, the architecture of the Church and of the world entered upon a new phase. All depended upon the type of building to be erected by the emperor and by the pope as the center of the new religion in the city. New conditions might easily have justified the architect of Constantine in adopting a new form of build-

ing, and whatever he built must inevitably have had an overwhelming effect upon the architecture of the world for centuries to come. He did actually erect a basilica, and the basilica by that act became the type of the Christian church which has been reproduced in nearly all churches erected throughout the world for the sixteen centuries that have rolled by since its construction. Neither the Gothic cathedrals of France nor our own Protestant Colonial meeting-houses could ever have had existence had it not been for the Lateran basilica. Truly this church may justly claim its proud title: *omnium ecclesiarum urbis et orbis caput et mater*. And not only do Christian churches depend upon the Lateran, the Mohammedan mosque is derived from the atrium of the Christian church, and the atrium appears to have been first formulated at S. Giovanni.

Strangely enough the enormous historical significance of S. Giovanni has been little recognized. It has, I think, been pointed out by none of the writers—and they are legion—who have studied the monument.

Generally in Italy, and especially in medieval Italy, archeological results are reached with difficulty because of the vast amount of material and the little work that has been done upon it by modern scholars. In the case of the Lateran we are confronted almost with the opposite trouble. A great mass of minute investigation overwhelms the would-be student, who is apt to lose both his patience

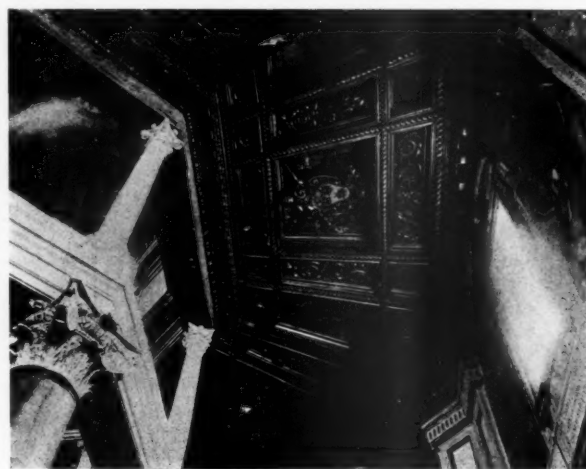


FIG. 5—VIEW IN THE SIDE AISLES OF THE BAPTISTERY, LOOKING UP.

Even the Capitals of the lower Arcade have in many instances been renewed in modern Times. The ancient annular Vault and Side Aisles have been replaced by the existing Renaissance Ceiling shown in the Photograph.



FIG. 4—INTERIOR OF S. GIOVANNI IN FONTE.

This is the Baptistery of the Lateran, and was probably founded in the Time of Constantine, although no Part of the existing Edifice is older than the Time of Sixtus III (432-440). All above the Level of the lower Architrave is Modern. There were originally Arches above the Architrave opening into the annular Vault of the Gallery and a cloistered Dome with Clear-story above.

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FIG. 6—"WELL OF THE SAMARITAN WOMAN" IN THE CLOISTER AT S. GIOVANNI.

A typical Example of the decadent Carving of the early X Century. Although it has been ascribed to earlier Epochs, this interesting Well is clearly Part of the Embellishments carried out under Sergius III (904-911).

and his sense of proportion in a labyrinth of archeological argument.

Owing to its intimate connection with the Papacy, the church of S. Giovanni in Laterano is rich in documents bearing upon the history of the architecture. In addition to the detailed record contained in the *Liber Pontificalis* (so admirably edited by Duchesne) there are extant upon the Lateran two ancient monographs of the greatest archeological importance. One is the work of the deacon Giovanni, a canon of the Lateran in the time of Alexander III (1159-1181), who incorporated in his description portions from an earlier manuscript. The second is a very full account written in the XVI century by the Veronese monk, Panvinio. No other medieval monument in the world, I believe, possesses ancient documents to compare with these. Among the great host of modern writers who have studied S. Giovanni two are pre-eminent. Rohault de Fleury published in 1877 his monograph, setting forth all that was then known of the monument. In 1911 appeared the monumental work of Lauer, in great folio, the last word in modern scholarship, containing critical editions of Giovanni Diacono and Panvinio.

If we grant that the Lateran basilica established the type of the Christian church, it becomes of the highest interest to determine exactly what was the form of the building erected by Constantine. The excavations of 1876 have made it clear that the plan of the church in all the reconstructions was never

very essentially altered. The basilica of Constantine was built anew after a part of the old palace had been destroyed. It was orientated like a Greek temple, the sanctuary turned to the west, the main portal toward the rising sun. Before the church lay an atrium, though not so extensive a one as in the sister basilicas of S. Pietro and S. Paolo, since it did not extend in front of the northern side aisles. In the time of Sergius II (844-847) there appears to have been a narthex between the atrium and the church, if I understand correctly an obscure text of the *Liber Pontificalis*. This narthex probably existed from the time of Constantine. The church itself consisted of the nave with double side aisles, separated by ranges of monolythic columns. There was a transept and a single apse.

Now it is this apse which constitutes the archeological *crux* of S. Giovanni. This is the problem which rises at once to the mind of every archeologist when the name of the church is mentioned. It is, of course, universally known that the present choir of S. Giovanni is a modern and very ugly construction of the year 1876. When it was built the ancient apse, which was considerably shorter, was destroyed. This ancient apse was unique among the basilicas of Rome in that it was supplied with an exterior portico or ambulatory. The question arises, did the apse of S. Giovanni always have this re-



FIG. 7—CARVING IN THE CHURCH OF SS. APOSTOLI, ROME, SHOWING CLOSE TECHNICAL ANALOGIES WITH THE WELL OF THE LATERAN.

The SS. Apostoli Slab was executed during the Pontificate of Stephan V (885-891). The Well of the Lateran shows a Style slightly more degenerate and, therefore, somewhat later.

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markable form, or if not, when did it first assume it?

The apse destroyed in 1876, as shown by the photographs and descriptions, did not appear to be very ancient. The windows were of the pointed Gothic form, the capitals and cornices were also of Gothic style. The inscription in the mosaic, in fact, recorded that Nicholas IV had reconstructed the apse in 1291. This reconstruction, however, was not complete. Nicholas IV himself recorded in his inscription that part of the old mosaic was pre-

apse. Does it mean that the ambulatory was built in the V century?

The inference has been accepted by the great majority of scholars. It has, however, never been proved. The inscription might easily have been transported from an earlier apse or even from another place. Even if the apse which existed in the XII century was still the apse of the V century, a portico might easily have been built about it without disturbing the interior. The documents give us



FIG. 8—THE CLOISTERS OF THE LATERAN.

In the Center can be seen the "Well of the Samaritan Woman." The Cloisters of the Lateran are the finest Example of Cosmati Work in Existence. They were executed by the Master Vassalletto, as is known from an Inscription. In date, they are evidently contemporary with the similar Cloisters of S. Paolo and, therefore, of the first half of the XIII Century.

served, and the same fact is reiterated in a chronicle written in 1369. Furthermore, it is certain that an ambulatory existed before the reconstruction of 1291. Giovanni Diacono, writing in the XII century, mentions an altar placed *retro sub absida*. This expression can only refer to the ambulatory. Moreover, Duchesne refers to a manuscript with a supplement to the description of Giovanni Diacono. In this is contained a copy of an inscription recording works executed by a certain Flavius Felix between 428 and 430. This inscription was in the

notices of a great number of reconstructions carried out in the apse of S. Giovanni at various times. We are told first of all that Constantine constructed a sanctuary adorned with gold, which can hardly mean with golden mosaics. Leo I (440-461) built a sanctuary (*fecit cameram*) in the basilica. The implication, therefore, is that he entirely rebuilt the apse. Leo III (795-816) made an apse (*cameram*) of wonderful size (*mire magnitudinis*). The phrase seems to imply reconstruction on a new plan. Sergius II (844-847) carried out certain alterations in

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the choir which are described in ambiguous language in the *Liber Pontificalis*. We are told that the place (*ambitus*) about the sacred altar which formerly had been too narrow he designed on a larger plan with his own hand; that he completed the work from the foundations with beautiful marble columns carrying sculptured archivolts (*desuper in gyro sculptis*), and that there the people now stand when taking part in the mass. Two interpretations are possible. The passage may have reference to a pergola such as was used in churches of the time; or, it may refer to a reconstruction of the apse with ambulatory. In the latter case, however, the ambulatory must have opened into the apse by an open arcade and not have been separated by a solid wall as it was after the restoration of 1291. In 896 the Lateran was ruined by an earthquake and rebuilt by Sergius III (904-911). In 1070 we hear of another reconstruction of the edifice.

There is, I think, no safe conclusion to be drawn from the documentary evidence. The ambulatory was at least as old as the XI century, but how much older cannot be proved by the documents now known. Architecturally, its form was extraordinary. It was separated from the apse by a solid wall, not by an arcade. It offers, therefore, no analogy to the ambulatories, so called, of Prata and S. Giorgio of Naples. Its only analogy is to be found in the church of S. Gallo in Switzerland, erected in the IX century, the forms of which are known from the ancient plan which has come down to us. It would, therefore, be natural to assign the ambulatory of the Lateran to the IX century, and more specifically to the reconstruction of Leo III (795-816). The work of Sergius II (844-847) must then be interpreted as having reference to the pergola.

It seems to me improbable that the ambulatory of the Lateran is earlier than the time of Leo III. Had it been erected as early as the age of Leo I (440-461), it is almost inconceivable that it would not have been copied in other buildings of which we should have knowledge. Absolute proof of the age of the monument might have been attained in 1876 when the foundations of the ancient apse were laid bare. The date might at once have been determined from the character of the masonry. In those days, however, the art of dating masonry was entirely unknown, and the photographs give insufficient indication for a study of the question. The fact that portions of the mosaic and of the marble inlay on the walls in the apse destroyed in 1876 were earlier than

the IX century does not prove that the ambulatory was earlier than this date. The ambulatory might easily have been built about a pre-existing apse, or the old fragments might have been transferred into the new apse.

If we suppose that the ambulatory of the Lateran was erected between 795 and 816 we must give it credit for having initiated a long and important development. The motive was copied at S. Gallo and expanded in the churches of Lombardy, such as S. Stefano of Verona and the cathedral of Ivrea. It also found its way into Auvergne and other parts of France, developing into the chevets which crown with glory the cathedral of Canterbury and the great Gothic churches of the Ile-de-France.

In the cloisters of S. Giovanni are preserved several fragments of stone carving, the only extant relics of the church of the Carolingian period. These fragments are not without interest and importance for the history of art, and as they have been consistently mis-dated by all who have studied them, it is perhaps worth while to give them a pass-



FIG. 10—DETAIL OF THE CLOISTER, S. GIOVANNI.

The Architecture is of exquisite Grace and Delicacy. The Capitals are executed with marvellous Skill. The Designs in inlaid Marbles are infinitely varied, infinitely beautiful, and of unspeakable richness of Color. The Cloister of S. Giovanni would be unequalled had it been designed for the Harem of a Moorish Sultan. Judged as an adjunct of the most august Church in Europe, however, it is felt to be lacking in Dignity and Power. In this Respect, it contrasts strangely with the Gothic Churches that were being built in France contemporaneously.



FIG. 2—INTERIOR OF THE LATERAN BASILICA.

The Interior reconstructed by Borromini was finished before 1650. Two of the ancient Columns were enclosed in each of the new Piers. A new Arch was then sprung from the new Piers and cut into the ancient clear-story Wall, the intermediate Columns being removed. Stuccos were then applied to the Walls, the resulting design is commonly called an example of Baroque Architecture in its most restless and extravagant form. The fine ceiling was executed by Giovanni Stanetti, and the mosaic pavement by Giovanni Stanetti. The Choir, which was the last part of the Basilica to be destroyed, was continually falling into Disrepair and being restored during the Middle Ages. The Pavement, a superb Example of Cosmati Work, is a Remnant of the ancient Basilica. It is ascribed by the *Liber Pontificalis* to Martin V. (1414-1431), but it is probable that he merely restored it, and that in the main it is of considerably earlier Date. The Ciborium was erected in 1369, but was ruined by a Restoration in 1851.



FIG. 12—DETAIL OF THE CORNICE OF THE LATERAN CLOISTER.

The Mosaics in colored Marble have been in great Part destroyed, largely, it is said, by the Canes and Umbrellas of Visitors, who were long accustomed to pick out small Portions to carry Home as Souvenirs. The Cyma of the Cornice is adorned with a Foliate Motive strongly Lombard in Character. This is one of the very few Examples of Romanesque Art in the City.

ing examination. The most interesting is the well in the cloister, of which we reproduce a photograph. This piece of degenerate and barbaric carving has been assigned by Lauer to the time of Hadrian I (772-795). Rohault de Fleury, on the other hand, gives it to Pascal I (817-828). A glance at the monument is sufficient to show that the style is not that of the IX and still less that of the VIII century, but is of the X century. A comparison with the carved slab in the church of the SS. Apostoli, a monument erected by Stephan V (885-891), will show that the two present remarkable analogies, but that the well of S. Giovanni is even more crude and therefore later than the slab of SS. Apostoli. Now, in point of fact, it is known that in 896 the Lateran was completely destroyed by the earthquake. (See in addition to the well-known Roman sources the *Chronicon Veronensi* ad ann. 896 ed. Zaccaria, *Iter Litt.*, II, IV, p. 225, a source which I believe has escaped all the scholars who have written upon S. Giovanni). It lay in ruin for years, but was eventually rebuilt (*a solo reedificavit*) by Sergius III (904-911), who gave to it various gifts and orna-

ments (*diversis donis et ornamentis*). It is not possible to doubt that among the latter was the well now preserved in the cloister.

Other fragments which have given archeologists much trouble may be grouped together about one piece which contains part of a little archivolt and an inscription naming a Pope Leo. Mazzanti has attributed it to the Pope Leo V and the year 903. This is, however, impossible, because we have just seen that the documentary sources show that at this period the church was lying in ruin and was not reconstructed until the time of Sergius III. Obviously Leo V would not have given church-furniture when the building itself had been destroyed. Moreover, the style of these fragments bears no relationship to that of the X century. The internal evidence shows, on the contrary, that they must be a work of Leo III (795-816), who, as we have seen, reconstructed the apse and probably added the ambulatory.

These broken fragments are a sad reminder of what time and the barbarity of man have deprived the Lateran. The gorgeous church-furniture executed in solid gold and silver, of incredible costliness, described in the *Liber Pontificalis*, offered a tempting prey to those who pillaged and sacked the city. The ciborium and other ornaments of the basilica were repeatedly plundered and repeatedly replaced by the popes. At length, objects which offered such temptation to robbers were discarded in favor of carvings in stone less

liable to be carried away. The Leonine fragments we have just described are an early example of such stone furniture. It is sad the fragments, even of this less costly work, are so few and small. It is sad, too, that the imposing ancient nave has forever disappeared beneath the stucco of Borromini and survives only in the fresco of S. Martino di Monti.

It is sad that we have lost the mosaics which once adorned the façade of the church and dome and vaults of the baptistery. Particularly to be regretted is the destruction of the ancient shrine of S. Croce which adjoined the baptistery. Saddest of all, because most needless, was the wanton destruction of the ancient apse in 1876. The Lateran today preserves but an exceedingly small part of the treasures of art which it once enshrined. Yet the cloister alone would make it an important edifice even in Rome, and happily its ancient glory still lives on in a measure through documents, which make it possible for us to reconstitute to some extent the vast importance of the edifice in the history of art.



FIG. 11—GALLERY OF THE CLOISTER, S. GIOVANNI IN LATERANO.

Almost all the Cloisters in Rome have Curves in Plan, convex to the center. The Existence of such Curves in the Lateran Cloisters was first observed by Professor Goodyear, and published by him in 1897. No small Part of the Charm of the Roman Cloisters lies in the Vibration produced by this and other similar Deviations from the Hardness of straight Lines. Contrast, in this Photograph, the Softness and Feeling in the medieval Work with the uninteresting Regularity and Hardness of the Modern Vaults.

The Narthex of Santa Sophia

The advantage of exhibiting small-size reproductions of great buildings and other architectural monuments has been recognized by the Metropolitan Museum for many years, ever since the bequest of Levi Hale Willard made possible the purchasing of a collection of "objects illustrative of the art and science of architecture." The models now shown in this collection and elsewhere include a number of Egyptian subjects.

To this list may now be added a model of the narthex of the church of Santa Sophia at Constantinople as it was in the days of Justinian, about 550 A.D., and as it is in large part to-day. The narthex itself is 200 feet long, 35 feet wide and 45 feet high. The scale of the model is the same as that of the Hall of Penshurst in Kent, the model installed last year, an inch to a foot. The walls are covered, as at present, with rich marbles of different colors; the vaulted ceiling and lunettes are filled with mosaics, restored from descriptions.

The Opportunity for Service that Education Gives

In an address before the graduating class of Delaware College, Elisha Lee, general manager of the Pennsylvania Railroad, said, in part:

"Here lies the opportunity for you who have had the advantage of a college training. Your education has not given you anything that you did not originally possess. It has simply developed your powers to the point where you should be able to get the greatest amount of good from them. Theoretically speaking, they should be raised to the n th power. Going out into marts of trade or into one of the many professions, your equipment will enable you to assimilate to the best advantage the facts and elements of your chosen life work.

"These are serious times. Our country needs the earnest, whole-hearted aid of every man and woman, every business and organization, if we are to safeguard our future as a free nation, and I think we may count upon that aid."

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Covent Garden

THERE is in certain localities an undefinable something that attracts kindred spirits and promotes a clearer and higher expression of great mentality.

Covent Garden, during the late seventeenth and early part of the eighteenth century, was surely such a neighborhood. Probably no section of London at that time was frequented by a more famous artistic association. To review those names is to set down those of men whose fame is world wide. Andrew Marvel, satirist, was, like others of his

was in Covent Garden that De Quincey spent those soul-racking hours he describes in the "Confessions," and it was also here that Charles and Mary Lamb, at a later period, lived and labored. Voltaire, whose satirical pen was ever placing his personal safety in jeopardy while in his native France, spent two eventful years in Covent Garden. And to round out a list of notable names Turner, England's great landscape painter, at one time made his home in this vicinity.

Covent, or perhaps more properly Convent Garden, was originally the kitchen garden of the monks attached to Westminster Abbey. Later it became



BIRD'S-EYE VIEW OF COVENT GARDEN MARKET IN 1812

From Bluck's aquatint after Pugin and Rowlandson.

(From the *Architectural Review*, London)

kind, ever in bad favor with those he made the object of his attacks. Dryden dreamed and wrote in Covent Garden. Steele, whose polished essays were the admiration of a host of appreciative readers, frequented this vicinity, a close companion of Addison. Otway, the tragic poet, here wrote the stirring prologues to many a play. David Garrick saw the heights of his fame while treading the boards of Covent Garden Theater, and here also the winsome Peg Woffington scored many a triumph. Hogarth found in the slums and purlieus of Covent Garden the inspiration for his "Rakes Progress," and the blind Milton, guided by the tender hands of his daughters, was also a frequenter here. It

the public market, and to quote a writer in the *Architectural Review* of London, it was "a motley collection of open shacks and ramshackle buildings."

The character of the neighborhood in 1812 may be judged by the accompanying illustration. The first theater of the Friars, that has been known by the name of Covent Garden, was built in 1732. It stood for fifty years. It was destroyed by fire and was replaced by a second structure in turn burned to the ground in 1808. On the last day of that year the cornerstone of a third theater was laid. The design (see illustration) was by Sir John Smirke. On March 6, 1856, Smirke's theater was burnt, and was replaced by the present theater on the site.

House of William T. Aldrich, Esq. Marblehead, Mass.

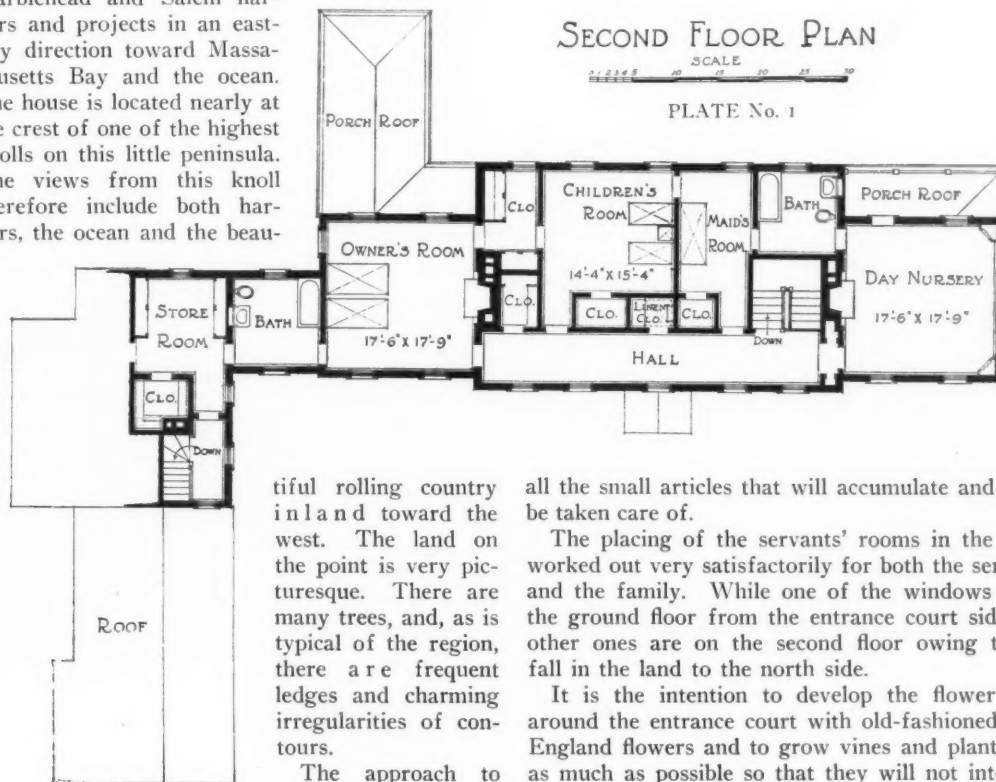
MESSRS. BELLOWES AND ALDRICH, ARCHITECTS

WE are indebted to Mr. William T. Aldrich for the following interesting notes with reference to his house, illustrated in this issue:

The lot, of about two acres, is situated at Peach's Point, Marblehead, Mass. Peach's Point divides Marblehead and Salem harbors and projects in an easterly direction toward Massachusetts Bay and the ocean. The house is located nearly at the crest of one of the highest knolls on this little peninsula. The views from this knoll therefore include both harbors, the ocean and the beau-

tiful rolling country inland toward the west. The land on the point is very picturesque. There are many trees, and, as is typical of the region, there are frequent ledges and charming irregularities of contours.

The use of the deep reveal in the living room has been found to be very satisfactory as the window seats prove most useful receptacles for fireplace wood storage. Also the small cupboards in the thickness of the walls have been a great comfort. They are used as broom closets and shelf spaces for



The approach to the house, while it presented a somewhat difficult problem of road planning, has gained much in picturesqueness by the rather steep grades, curves and cuts through the ledges.

The planning of the house was to follow as nearly as possible the local tradition in building. Many months were spent in studying the old buildings of Marblehead, and the scale of moldings, windows, pitch of roofs and details were based upon the actual existing old work in the town of Marblehead.

Wide oak flooring was used in the living room and dining room and Georgia pine for the rest of the house stained a rather deep snuff color.

The furniture is nearly all old furniture, picked

all the small articles that will accumulate and must be taken care of.

The placing of the servants' rooms in the wing worked out very satisfactorily for both the servants and the family. While one of the windows is on the ground floor from the entrance court side, the other ones are on the second floor owing to the fall in the land to the north side.

It is the intention to develop the flower beds around the entrance court with old-fashioned New England flowers and to grow vines and plant trees as much as possible so that they will not interfere with the views, but will give the house as old-fashioned an appearance as possible. As the style demanded small windows and rather low stories and as the views from the house are equally good in almost every direction, the architects tried as much as possible to make the house one room thick, thus providing good circulation of air in hot weather and giving interesting views from every room. While this cuts the circulation from the service wing to main body of the house, in practice it works out perfectly as the servants have access to the second story either by the back stairs or front stairs, depending upon whether the family is in one part or the other of the house.

The architects selected the view toward the North

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Shore and Salem Harbor for the location of the main piazza as this is over a meadow and is limited on the north by a very attractive wooded hill. The location of the piazza on the northeast side proves very satisfactory in the hot weather.

The nursery is placed to the south as the views are excellent although in a different direction, and the sun shines all day long in at least two of its windows.

The second little porch has proved most useful as the children use it for their own on the ground floor, and above it is used as a sleeping porch.

The terrace along the east front of the house makes a very nice place for the children in the afternoon as it is shaded by the house itself. The porch floors are only 6 inches above the level of the terrace.

The communication between the different children's rooms has proved very satisfactory. On the ground floor the accessibility of the piazza to both the dining room and the living room is a very useful feature. The side of the piazza toward the kitchen and service wing is glazed in with casement windows opening out and is fitted with Japanese rolling blinds on the inside, so that there is no annoyance from kitchen noises and the piazza is not seen from the kitchen side. Also in very warm weather it can be opened up to allow a free circulation of air.

The guest room on the ground floor has been very successful also. The floor of the nursery and the ceiling of the guest room below are carried on separate beams so that none of the noise of the nursery is heard in the guest room.

Wire lath is used throughout the house.

The basement is excavated under the service portion and dining room only, and includes a laundry and heating equipment, the laundry being on the level of the clothes yard.

All the retaining walls and basement walls, as well as the retaining walls of the road, were built from stone blasted out to make the cellar.

On the interior the details of the panelling and moldings follow old types. The doors are only $\frac{7}{8}$ in. thick and have been built of cherry and so far none of them have shown the least sign of warping. By using old fashioned latches and H and L hinges these doors have contributed much to the effect of an old-fashioned house.

To the south of the house the land rises very sharply so that the house itself is not on the actual crest of the hill which forms the property. This adds a great deal to the repose and appearance of stability of the house, as it is not on the highest part of the land. Also the fact that from this slight knoll perhaps the best view of the ocean is seen, an agreeable walk is made possible to provide a change of scene. The large number of trees in the neighborhood contributes very largely to the charm of the location and very effectively conceals the neighbor's houses.

The location of the garage has been very fortunate as it is conveniently near, without in the least detracting from the quietness of the place.

I have made the entrance directly into the living room, which in a country house in a location of this kind is very satisfactory and has a rather hospitable character. In this way I was able to use the old-fashioned arrangement of windows and central doorway without making the living room too cramped and too small.



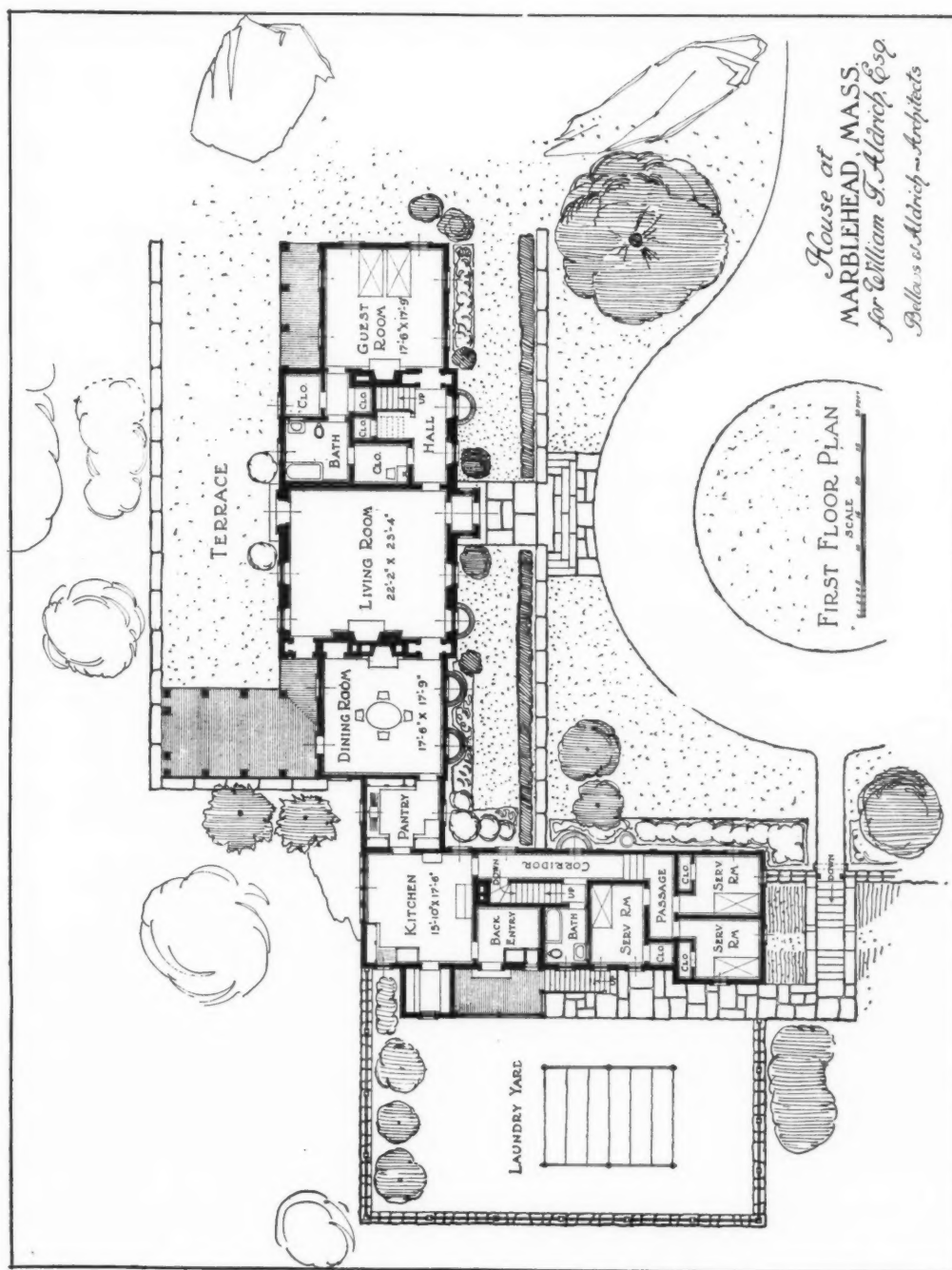


PLATE 2



PLATE 3

HOUSE OF WILLIAM T. ALDRICH, ESQ., MARBLEHEAD, MASS.

MESSRS. BELLOWS & ALDRICH, ARCHITECTS

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JAN 11 1964

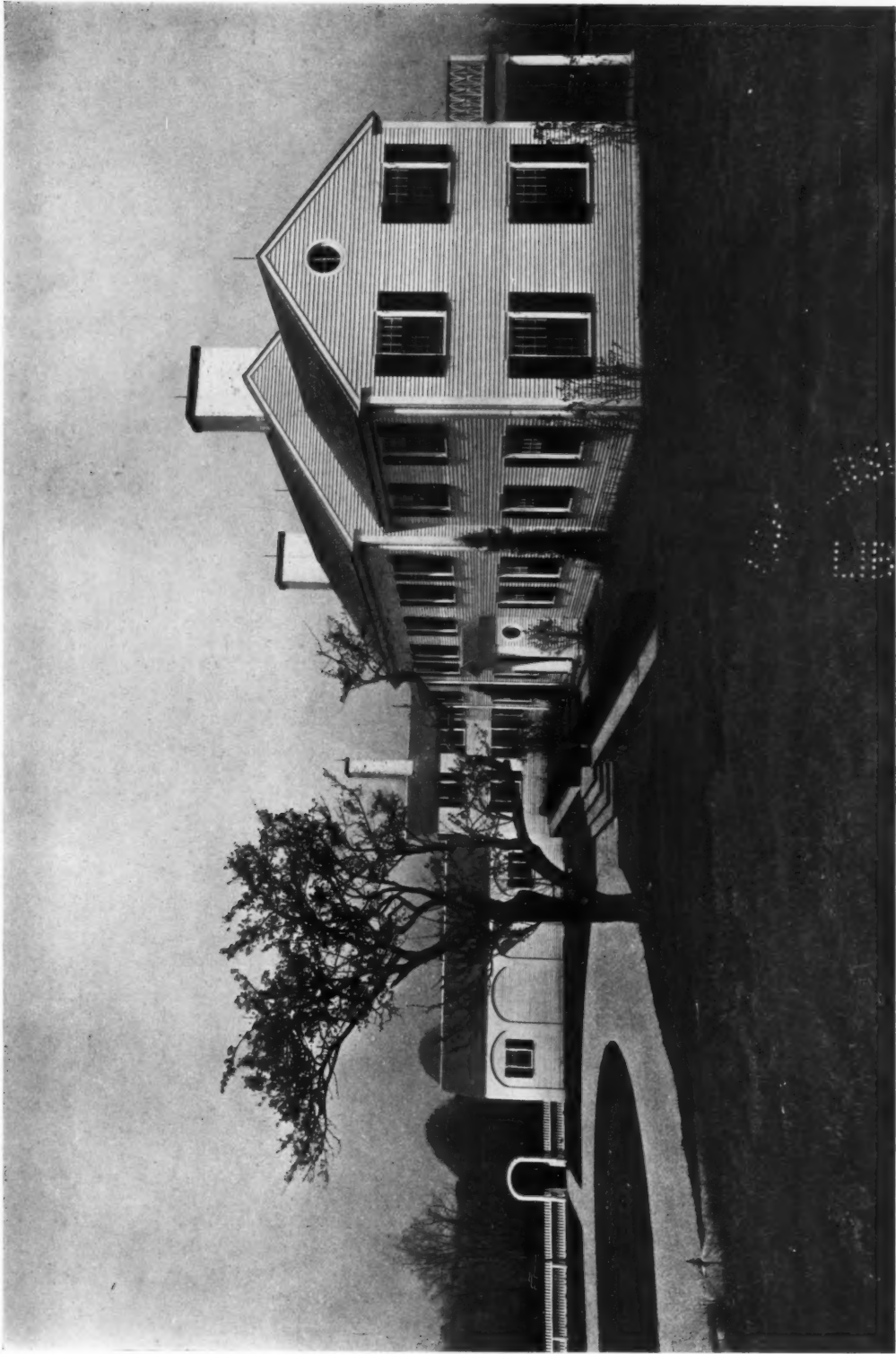


PLATE 4

VIEW FROM SOUTHWEST

HOUSE OF WILLIAM T. ALDRICH, ESQ., MARBLEHEAD, MASS.

MESSRS. BELLOWES & ALDRICH, ARCHITECTS

LIBRARY
OF THE
UNITED STATES
NAVY



PLATE 5

WEST ELEVATION

HOUSE OF WILLIAM T. ALDRICH, ESQ., MARBLEHEAD, MASS.

MESSRS. BELLOWS & ALDRICH, ARCHITECTS

127128
110



PLATE 6

DETAIL OF PRINCIPAL ENTRANCE

HOUSE OF WILLIAM T. ALDRICH, ESQ., MARBLEHEAD, MASS.

MESSRS. BELLOWS & ALDRICH, ARCHITECTS



PLATE 7

1915-1916
1917-1918



DINING ROOM



LIVING ROOM

PLATE 8

HOUSE OF WILLIAM T. ALDRICH, ESQ., MARBLEHEAD, MASS.
MESSRS. BELLOWS & ALDRICH, ARCHITECTS

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UNIVERSITY OF TORONTO



GUEST ROOM

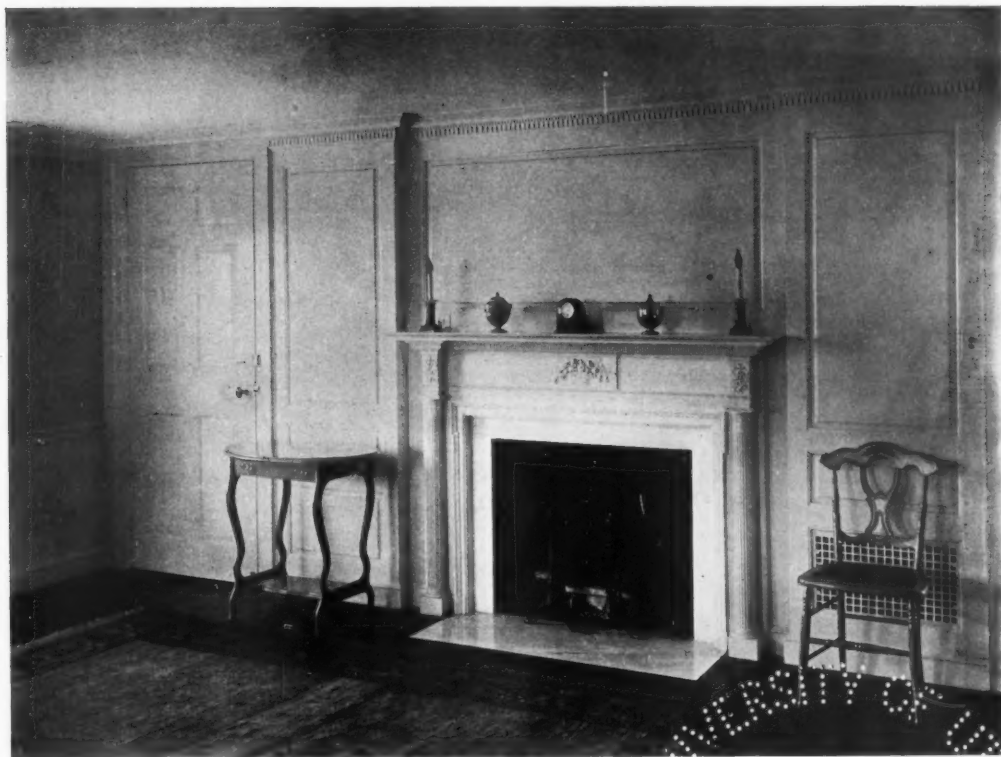


PLATE 9

CORNER OF NURSERY

HOUSE OF WILLIAM T. ALDRICH, ESQ., MARBLEHEAD, MASS.

MESSRS. BELLOWS & ALDRICH, ARCHITECTS



OWN ROOM MANTEL

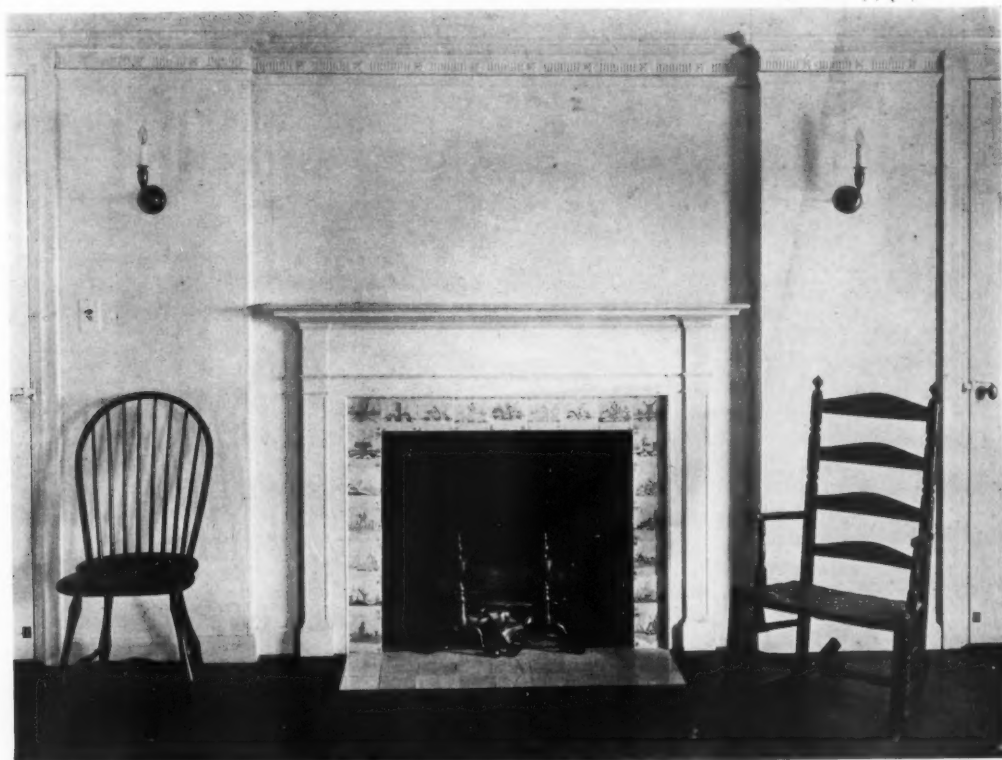


PLATE 10

NURSERY MANTEL

HOUSE OF WILLIAM T. ALDRICH, ESQ., MARBLEHEAD, MASS.

MESSRS. BELLINGS & ALDRICH, ARCHITECTS

Wholesale Terminal Markets

By ELIOT LORD, A.M.

THE necessity for the construction of municipal wholesale markets has been re-emphasized and pointed lately by the report of the first food price inquiry authorized by Congress this year. This report, submitted on April 25, says that "there is urgent need in this country for organization of comprehensive marketing machinery which will put producing and consuming communities in trading relations with each other and make possible sending of perishable products directly from the point of production to point of use." To this end municipal wholesale markets are specifically recommended.

This recommendation is in direct line with the conclusion of Mayor Gaynor's Market Commission and the investigation conducted by the National Municipal League.

In the latest report of the New York State Bureau of Municipal Information, covering municipal public markets (March, 1917), it is observed: "It cannot be said truthfully that any American city has yet developed an adequate municipal market system."

Why not? The same report answers pithily: "It has been the custom in America to let the markets run themselves. The general opinion of those who have studied the market question is that the great majority of failures have been due to mismanagement, poor location, inadequate accommodations and high rentals. * * * Wise planning, expert management and a definite constructive policy are essential to market success."

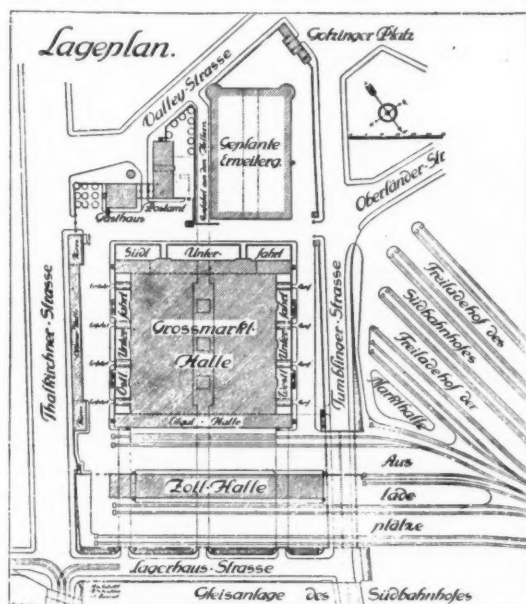
Yet, in spite of bungling plans and conduct, forty-one American cities report that their municipal markets are successful for the reasons that the municipal markets bring consumers and producers together, yield revenue to city, enable retailers and con-

sumers to buy more cheaply, assure quick and certain sale of produce; they attract shipments, secure receipt of fresh and varied produce and encourage small dealers, thus establishing a check on prices.

Even hobbling progress along these lines is to be welcomed, but there is a basic defect in our municipal market provision for large cities. This is remarked in the report of the Bureau of Municipal Information—"The terminal wholesale market has not been developed in any American cities, although the efficiency of this type of market has been successfully tested in many European cities.

Several large American municipal cities are now advocating the establishment of terminal markets where incoming produce can be handled on a large scale with the minimum loss of time and money and with the minimum amount of rehandling. Terminal markets are those to which railroads or ships or steamboats bring supplies in wholesale quantities and usually from long distances and to which retailers can come and buy."

It is a common sense proceeding to study as closely as practicable the development of the terminal market in



GROUND PLAN
MUNICH TERMINAL MARKET

Europe and to adapt its construction to our own cities. The ideal would provide well designed track connections with all railways entering and leaving a city, and adequate terminal accommodations for rapid unloading of freight and temporary storage.

The building and operation of the terminal market in Munich is particularly illustrative and informing, for the municipal market of latest construction in Europe before the war was opened in Munich in February, 1912. This market adopted or adapted improvements suggested and enforced by wide ranging experience.

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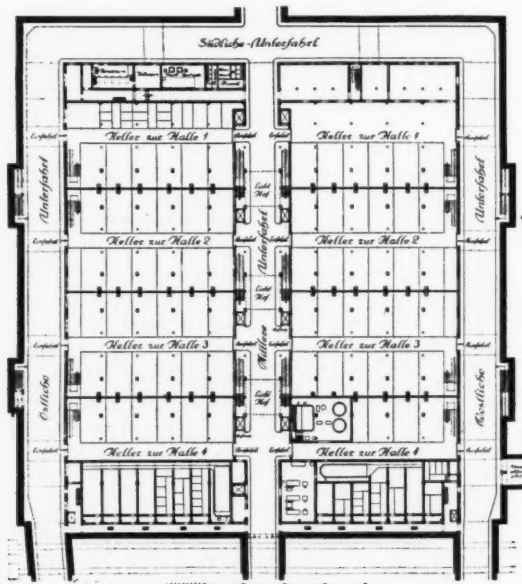
The Munich Terminal Market is located in close direct connection with the south joint railway terminal station of the city. To speed deliveries a special custom house for market supplies was provided at the northern end of the markets and four tracks run from the station directly into this toll house. Here there is accommodation for ninety cars. Tracks for delivery outside the toll house provide for receiving fully a hundred more cars at a time. Express delivery traffic has distinct accommodation, and there is special provision for shifting and reloading produce sold to buyers from other German cities.

Beyond the toll house the market extends its line of four lofty halls with covered connections, ending

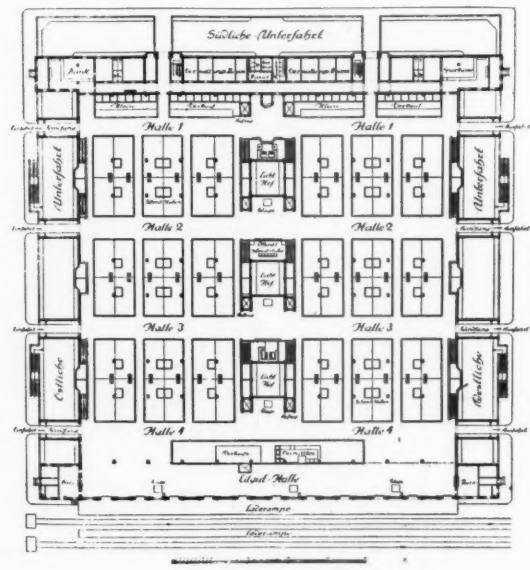
stalls, each bordering on a broad main passageway and transverse alley. Nine hydraulic elevators raise trucks loaded with produce from the basement, and every stall has, besides, its private hand lift and storage cellar. The retail market at the southern end, with 34 stalls, is chiefly designed for immediate neighborhood supply.

In the construction of this market, delivery with the least possible check, friction and lost motion; safety, cleanliness, ventilation, lighting, control of temperature and every known requisite for hygienic, economic and successful marketing were expertly provided.

The high pitch of the roofs prevents any burden from a heavy snow fall. The ranges of windows



CELLAR PLAN



GROUND FLOOR PLAN

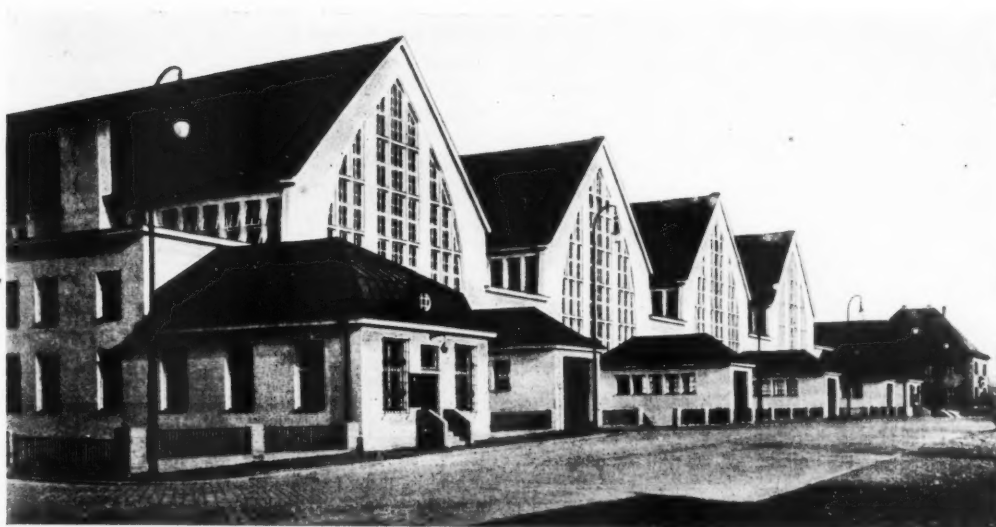
MUNICH TERMINAL MARKET

in the building for administration offices and a retail market. Each market hall receives a distinct division of produce. Beneath the chain of halls the undivided basement provides for the receipt of all shipments and cold storage.

The entire structure is built of concrete and iron. Each of the four main halls is 97 metres in length, $17 \frac{3}{10}$ metres in width and 20 metres in height, and the ground covered by the entire buildings is 11,650 square metres. The tract provided for general market uses is an allotment of 46,500 square metres. Of this allotment 9400 square metres are taken for the custom house and its special railway yards and 37,100 for the halls, tracks and grounds. The main halls are subdivided for 72 wholesale

on the sides and ends of the market admit sunlight profusely. Each of the four main halls has fourteen arc lights and the connecting ways use incandescent lamps. Constant circulation of air within the market is provided with regulation of temperature to prevent risk of exposure in winter. All entrances are secured with provision against unregulated air draughts. Every stall is fitted with running water. Provision is made for quick dumping of all refuse into trucks, which convey it away for sanitary disposal. In the cellars there is ample cold storage provision for the temporary holding of quickly perishable stock and the surplus that may be carried from day to day, but it is the aim to dispose of its receipts every day if practicable.

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EXTERIOR VIEW



INTERIOR OF ONE OF THE HALLS
MUNICH TERMINAL MARKET.

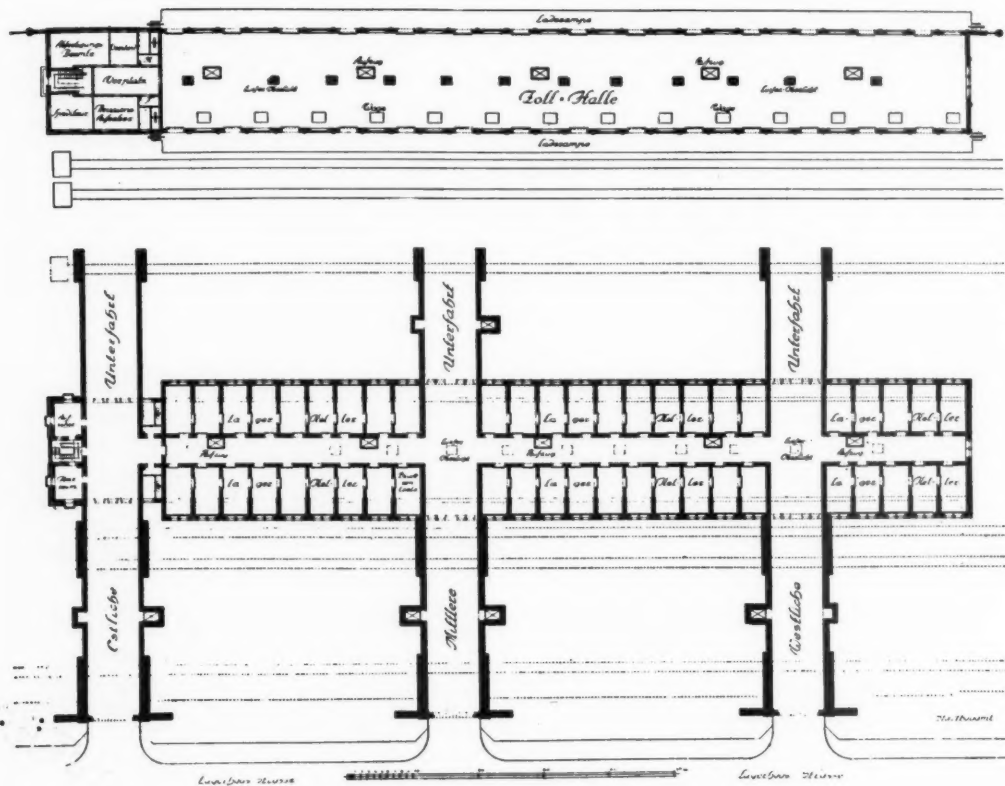
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The unloading and conveyance of produce are notably efficient. Incoming cars deliver their loads on platforms on a level with the floor of the car. Trucks carry the supplies through the basement to the storage cellars and lifts. There is no confusion or blocking of the flow and delivery.

Sales are made daily by auction and directly by the stand keepers. Commissioners appointed by the

have the same treatment with reference to charges.

In conjunction with this produce market a cattle market and range of slaughter houses are operated on an adjoining site. The present adequate construction for this purpose was completed in 1904 at a total cost of \$1,600,000. In 1912, 809,508 cattle and hogs were sold in this market and 713,328 killed in the slaughter houses. About 75 per cent of the



CELLAR AND GROUND FLOOR PLANS
CUSTOM HOUSE SECTION, MUNICH TERMINAL MARKET.

city are in charge of the market halls to conduct and supervise the sales. Each market hall has its designated Commissioner. This expense is charged against the allowance of 6 per cent on the gross amount of the auction sales. All consignments to the market with or without previous notification

stock comes in by rail, and the balance from neighboring farms. Strict inspection and safeguarding are enforced by the veterinary staff in control.

Changes affecting the operation of the market during the war are immaterial for the purpose of this classification.

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VOL. CXII JULY 4, 1917 No. 2167

A Patriotic Duty

NEVER since that day, now more than one hundred and forty years ago, when the "Stars and Stripes" were first flung to the breeze, has our flag been so widely displayed, and at no time has it meant more to a people engaged in a struggle they believe to be one of humanity and justice. Our heretofore sombre and monotonous streets are aflame with the brilliant colors of the American flag and the flags of our Allies.

Every man in whose veins runs the red blood of a patriotic citizen this aspect of the cities' streets stirs to a true sense of the high duty that is before him. Following these impulses he will, if he is ordinarily observant, note how the general atmosphere out of doors has been enlivened, how this widespread color makes his walk abroad something more than mere exercise, and how the brilliancy of color seen everywhere reacts on his mental attitude. No greater argument can be advanced for the more general introduction of color into our architecture than this display of national flags.

We are, as men to-day, divided into two classes, one by age limits bound to render service to the Government in its various armed forces, the other either by disabilities, exemptions, or age to find some patriotic employment that will in a sense pay the obligations of citizenship.

In both classes are many architects, and those we

know are doing their "bit" to the fullest extent of their ability. To that class necessarily debarred from active service in the field there is now presented, and there will be undoubtedly offered in the future, opportunities for the highest patriotic service. The greatest opportunity will be in the carrying forward of projects that have been of necessity abandoned by men "called to the colors." Preparedness has been a slogan heard 'round the world. But it means, or should, the getting ready for peace as well as the full and efficient preparation for war.

There will undoubtedly be a slackening in many branches of industry throughout the country, and among these will be perhaps the retardence of building operations that are not directly connected with the work incident to the progress of the war.

In every community throughout the country, from the largest city to the smallest town, there are schemes of local improvements that have been brilliantly conceived, accepted with enthusiasm, and for one or many of the reasons that have always attended such movements, lapsed into obscurity.

The question of war memorials, of fitting tributes to those who have met death through military service or whose deeds have been marked by signal acts of bravery, has been for a long time discussed in the foreign architectural press. A plan proposed, and one that has met with general approval, has been the building in each town of a permanent memorial to mark appreciation of the heroic men who have gone forth in this war. This plan of memorial proposed would be as admirable in this country as it is in Europe. No one will criticize the patriotic impulse that prompted a grateful people to set up in our cities and towns the many "Soldiers' Monuments" that so often disfigure public squares and "commons" and which as often cause a feeling of deep regret to every artistic observer.

Now will be found an opportunity to take steps to avert in the future a very serious artistic blunder, and no class of men can exert a greater influence in these matters than architects.

As the town center is the logical place for these memorials, it is equally logical to assume that when properly conceived they would exert a very decided influence on the future improvement of the neighborhood. We need in this country a better development of community life, a more intimate intermingling of the people, and there is no greater or better method than the facilities offered by the town or village hall. A well-designed village hall or library will admirably serve the purposes of a memorial, and provide for all the people a constant reminder of the purposes of its erection.

It will not, we believe, be necessary to dwell on the many phases that will naturally suggest them-

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selves to architects in every small community. The opportunity is, or will be, presented, and the far-seeing energetic man will be able to get for himself and the community at large the most valuable results. In large cities the problem will of course be more complex, but the basic principle will be found to be the same. If the small town needs a building that will serve as a place of assemblage on certain occasions, the large city will need them to an even greater extent.

Reference could be made to many schemes that have had birth in our important cities, met enthusiastic endorsement and then been forgotten. Every great occasion has witnessed these things. Beginning only as comparatively recently as the Dewey celebration, New York built many beautiful things—arches, columns, reception areas—all worthy of perpetuation in enduring materials. During the Hudson-Fulton celebration there was a reception stage built along Riverside Drive, and Mr. H. Van Buren Magonigle submitted a design, very generally approved, for a permanent memorial that would provide artistic and dignified surroundings for the reception of the nation's guests. All are now forgotten except by the comparative few who take deep interest in these matters.

Architectural societies, the National Sculpture Society and other organizations that have an artistic interest in our development have presented the most

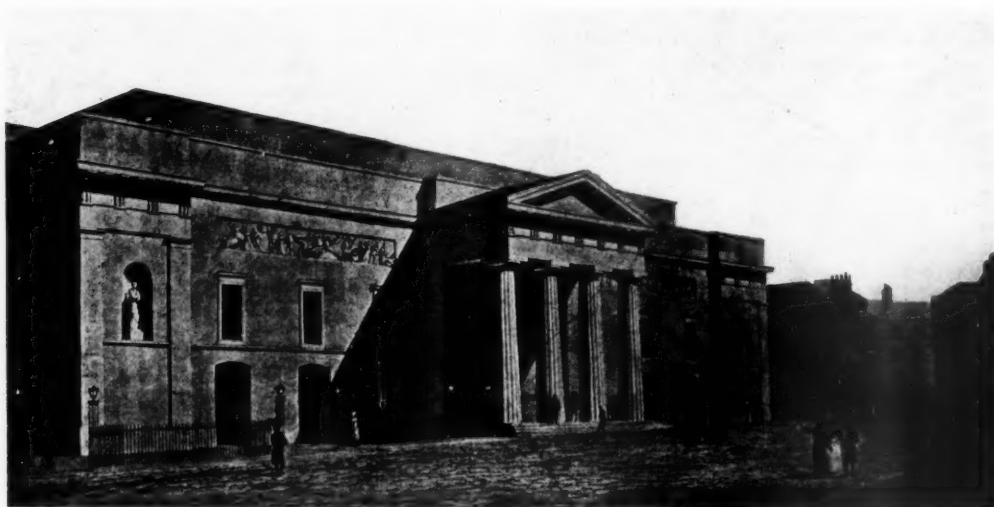
wonderful designs for the improvement of the section surrounding Grant's Tomb. We might cite instances indefinitely. Why not revive these many things and get to them in a way that will produce results?

Why not more municipal stadia? With each succeeding year we are becoming more and more an out-of-doors people. The few cities that have municipal stadia are enthusiastic over the many useful purposes they serve.

Let us have more public auditoriums, that we may be spared the humiliation of the makeshifts that have marked so many important occasions in our larger cities and especially in New York.

New York's opportunity was lost when it permitted the Madison Square Garden to be acquired by a private corporation.

Can anyone doubt that the forthcoming years will, in the direction indicated, offer greater opportunities than at any previous period for architects to exert their influence on these various matters? By training, temperament and experience, no class of men is better equipped, and it would seem to be a wise and patriotic duty for the profession, individually and through the various societies, to insure the proper progress of these things in the future, and to guard against the invasion of well-meaning but none the less inartistic memorials that have been foisted on us during and after our earlier wars.



THE BOW STREET FRONT OF COVENT GARDEN THEATER IN 1809.
SIR ROBERT SMIRKE, R.A., ARCHITECT. WILLIAM DANIELL, R.A., ENGRAVER.

Reproduced by permission from the print in Messrs. Batsford's Collection.

(From the *Architectural Review*, London.)

American Architects in the War

Joseph S. Cote, formerly secretary of the Washington State Chapter, Seattle, American Institute of Architects, has been ordered for active duty in the Eighth Regiment, U. S. Engineers, and will leave for service in France in the early future.

May Need Two Billion Feet of Lumber for War

Estimates prepared by the Lumber Committee of the Advisory Commission of the Council of National Defense show that 2,000,000,000 ft. may be used for purposes directly connected with the war, in the next twelve months. Construction of the 16 cantonments which will house the new army will absorb a large amount of the Government's lumber purchases. The cantonments will require about 500,000,000 ft. Second in quantity of lumber required comes the wooden ship-building program now estimated at 400,000,000 ft.

James Mason Crafts

James Mason Crafts of Boston, president of Massachusetts Institute of Technology from 1898 to 1900, died June 20 at his summer home in Ridgefield, Conn. After serving two years as professor of chemistry at Cornell, he became head of the department of chemistry at the institute, and in later years was identified with it as a leader in research work in this country and abroad.

Professor Crafts was a chevalier of the Legion of Honor, France, 1885; fellow of the American Academy of Arts and Sciences; member of the National Academy of Sciences, American Chemical Society, Washington Academy of Sciences and honorary member of the Royal Institute of Great Britain.

Yale Art School

The erection of a new wing to the Yale Art School, to be built as an addition to the north of the present structure on High Street, was urged by Dean Sergeant Kendall at the anniversary closing exercises of the school. He called attention to the fact that the university might secure many priceless collections if it had housing facilities for them. He deplored the lack of recitation and lecture rooms which the addition would provide.

"Arts and the War" was the subject of the anniversary address given by R. Clipston Sturgis.

"We do not often think of the soldier as an

artist," he said, "but loyalty, discipline and truth, those qualities that make the soldier, make the artist as well. If war is ever justified it is justified by a great desire for the truth, and in so far as a war is fought for this it is one of the finest things for the world.

"The suffering and the discipline of war make for understanding, without which there can be no sympathy. War in itself is as brutal as can be, but the men that go through it do not come out brutes. They have learned by the suffering which they have passed what suffering is and how to understand it in others."

Industrial Housing in the Pittsburgh District

Housing for industrial workers is steadily becoming a problem of magnitude in Pittsburgh.

Industrial prosperity in the Pittsburgh district has reached a point where employers must carefully consider the many phases of industrial housing to provide adequate accommodations for the rapidly increasing employees and their families.

New mills are being erected, new mines opened, and these all require many thousand workers in their operation. In view of the present unprecedented demand for the goods made in the Pittsburgh district, and the probability that at the close of the war this demand will increase, housing problems are, in the minds of far-seeing men, matters of first importance and necessitate immediate solution.

Training in the Industrial Arts

Dr. James P. Haney, in a recent address, emphasizes the need of industrial art teaching and quotes President Wilson, who has urged that in view of the very certain demand for trained men in these arts, after the war, it will be well to use efforts toward the development of educational methods.

Dr. Haney states:

"Before the war the United States secured much of its talent in the way of designers from men trained in industrial art schools abroad. Now many of these schools are closed, while the war has consumed some of the best blood trained in them. Not only will it be years before they are re-established, but when they are re-established they will have to meet the needs of their own communities and cannot undertake to supply us with expert workers.

"The Liberty Loan has caused us to think in millions, but we fail to realize how huge are the interests involved in the industrial arts. Millions alone are not sufficient to define them. Last year this

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country spent over half a billion of dollars merely for furnishings of the home.

"Abroad, every European State has for years spent huge sums of money in carefully conserving this artistic talent. We in this country are behind, and will remain behind until we likewise establish industrial art schools under public guidance in every industrial city throughout the land. Every one now preaches 'preparedness.' Here is a lesson written by foreign schools so plain that he who runs may read. The war is, at its end, to see extraordinary efforts made to recoup its losses along trade lines. The industrial arts will then receive a stimulus, the greatest they have known within a generation. The profits reaped by the skilled designer and manufacturer will be enormous. These profits should pass to our own talented workers in all fields, but they cannot pass unless these workers are trained. No phase of economic future has a greater significance than this. The slogan of every intelligent business man should be: 'Train the talented.' Practical art teaching is one of the ways of spelling 'prosperity.'"

The country is full of competent workmen. Under present conditions they are little more than animated machines, following out as faithfully as they can the different ideas of their different patrons, the architects; doing a certain work in one way to suit the ideas of one architect to-day, and to-morrow doing the same thing in a totally different way.

In contrast with this expert opinion, in which art is very properly regarded as a necessity, not as a luxury, stand the views of the borough president of the Bronx, New York, who vigorously protests the expenditure of \$55,000 for improving the grounds in front of the new county court house in the Borough of Richmond. Borough President Mathewson stated: "I can see but little excuse for building fountains and ornamental walks and constructing landscape effects in these times when everyone is preaching a husbanding of resources, particularly when fountains and landscape work are not essential to the administration of justice, for which this building was erected."

This sentiment is so opposed to the generally expressed opinion as to our conduct in wartime as to need no special reference as to its fallacious attitude.

Rembrandt's Art

Some of these wonderful portraits we have in this country. There is nothing more characteristic of Rembrandt than "The Man with the Black Hat," in the Metropolitan Museum; nothing in the world finer than "The Orphan" in the Chicago Art Institute. Perhaps his greatest masterpiece is a group of

such portraits on one canvas, the famous "Syndics" of the Rijks Museum at Amsterdam. Here he has allowed nothing strange or fantastic—the conception is as simple and as straightforward as it can well be—but the power of his imagination and the magic of his light and shade have endowed these plain citizens, busy over the accounts of the Cloth Hall, with an essential humanity that is eternally interesting to mankind.

It is always with light and shade that Rembrandt performs his miracles, that he expresses the inexpressible and realizes the supernatural. Of light and shade he is the supreme master, understanding its possibilities of mystery and of sentiment as no one else has done, doing with it what can be done by no other means and what no one else has done at all. Neither Tintoretto nor Correggio himself understood Correggio's invention as Rembrandt understood it—neither of them makes it the warp and woof of his art as Rembrandt does. For Rembrandt the world exists only as light breaking through shadow, as light illuminating shadow. He composes by light and shade, he draws by light and shade, he colors in light and shade, he executes for light and shade. With him composition is not a matter of lines and spaces, it is a matter of lighting. The importance of any part of his picture is strictly measurable by the amount of light it receives; the eye is led by gradations and directions of light; the things which are to be subordinated are lost in swimming shadow. Without some suggestion of his light and shade no composition of Rembrandt's would be intelligible, and he thinks so habitually in light and shade that his merest scratch of outline always gives this suggestion.—From "The Golden Age of Painting," by Kenyon Cox, in the *July Scribners*.

Mobilizing the Craftsman

A member of a firm engaged in ecclesiastical craftsmanship has been interviewed by a reporter of the *New York Times*, and his views on the present state of craftsmanship in the United States set forth.

He makes a well sustained plea for a closer relationship between the designer or architect and the craftsman who executes the design.

With other men who have closely observed the field of craftsmanship in the United States, he finds there is no scarcity of competent men, but, under present conditions, they simply follow the ideas that are given them for execution and are never allowed to exercise their artistic ability or their thorough knowledge of the material of their craft in the production of an original work.

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The interview further states: "This way of working, which is so very customary that one almost accepts it as the only way of doing things properly, cannot help but crush out all feeling or desire for personality on the part of the craftsman. You might as well leave trains out of the subway as leave personality out of art. If you get anywhere it is only by 'hoofing it.' And hoof it the architect does who tries under present-day conditions to do conscientious church work. He is compelled to cut every stone, lay every brick, hew every timber on paper in the drafting room. And then he isn't safe. His little symphony in three dimensions is very likely to be given an unsympathetic rendering by its orchestra of workmen and contractors if he does not stay right on the job and act as conducting composer."

To meet this condition the master craftsmen are devoting most of their time to church furnishings and seeking out the craftsmen and artisans of marked talent who are "compelled to earn a living at uncongenial tasks solely because they cannot find work enough to support a little shop or studio of their own." Where these are inspired by ideals of true craftsmanship, they will be given support and their work placed in accordance with their personal inclination and special ability. It is a practical move in the right direction, developing individuality while putting the artist in the way of financial success.

Recent Books

TOWN PLANNING FOR SMALL COMMUNITIES. By Walpole Town Planning Committee. Illustrated. Full cloth, 470 pp. Size $4\frac{3}{4} \times 7\frac{1}{2}$ inches. New York and London: D. Appleton & Co.

In this volume there is presented a clear and comprehensive statement of the small community, its problems and their solution. Heretofore city planning has been generally considered from the standpoint of the necessities of the large community rather than of the small one. In fact, most of the books and reports covering it have dealt with it from that point of view. If we are to have thoroughness and consistency in our civic development, it needs no arguments to show that the small town should be as carefully and thoughtfully planned as the large.

The editor has realized the important fact that real city planning includes not only the plan of a physical and of a social problem but a governmental one as well, so he gives a report on town government which constitutes as substantial a volume in its field as do the suggestions along physical lines. He goes further, and shows a realization that even with the most carefully formulated plans of physical, social and mental development something more is needed: namely, the intelligent organization of the community itself as a community.



Industrial Information

Art Metal Planfiles

Efficiency experts are giving considerable attention to the adoption of metal files and document cases in business establishments for the reason of their cleanliness, durability and fire-resisting qualities. The line of metal office appliances manufactured by the Art Metal Construction Co., Inc., of Jamestown, N. Y., includes counters, cupboards, book cases, filing cabinets, shelving, desks and other furniture. But the unit of specific interest for the architect's use is the Art Metal Planfile, designed for the preserving of tracings and blueprints flat and smooth in compressing pockets, held firmly in place by steel springs. These files are claimed to be fire resisting and waterproof, and can be fitted with locks to insure privacy. The company has issued Catalog 759, entitled "The Book of Better Business," describing its products.

Mill Construction Buildings

Engineering Bulletin No. 2 of the National Lumber Manufacturers' Association, Chicago, is devoted to heavy timber mill construction buildings. The first chapter defines the term "mill construction," and there follows information on materials for all parts of such buildings, floor and elevation plans for standard mill construction and formulæ for the reckoning of weights and strength of timbers. The booklet may be procured from the Engineering Bureau of the Association, for fifty cents.

"Stonekote" Products

A Portland cement product capable of many treatments and effects is the "Stonekote" exterior cement manufactured by the Garden City Sand Co. of 709 Chamber of Commerce, Chicago. The company has circulated a booklet on the subject, which covers thoroughly the questions of plasticity, durability, beauty and cost of the various forms of this material. There is a special chapter to the architect, dealing with the subject from his viewpoint, as well as others to the owner, the contractor, the laborer, etc. Illustrations show examples of treatment with this material for both new and "overcoated" rebuilt construction.

The company also publishes a pamphlet entitled "A 20th Century Home," giving in story form an idea of the many uses to which the product may be put in homebuilding. Either of these publications may be had upon request.

Concrete Highway Magazine

The May and June issues of the Concrete Highway Magazine, published by the Portland Cement Association, with general offices at 111 West Washington Street, Chicago, and branches in a dozen cities, are devoted to the demand for and the maintenance of concrete thoroughfares. This magazine is a live little publication, the text and illustrations dealing with every phase of the good roads question and with instructions for the construction of concrete highways.

Solid-Porcelain Lined Refrigerators

Sanitation and economy are talking points of the Monroe Refrigerator Co., Lockland, Cincinnati, Ohio, in their Catalog No. 25. Details of an ideal construction are given, showing the inch-thick solid porcelain lining, heavy insulation, air-tight doors and walls and efficient system of dry air circulation. Cuts illustrate types of ready-made refrigerators of many sizes and uses. The chapter on "built-in" refrigerators, made to order for any specified requirement, will be of particular interest to architects.

Frame Colonial Dwellings

A collection of plates showing colonial homes of New England, built in the seventeenth and eighteenth centuries, is bound into an interesting booklet issued by the Educational Bureau of the Paint Manufacturers' Association of the United States, of the "Bourse," Philadelphia. The oldest of these houses is the Quincy Mansion at Quincy, Mass., built in 1635. Thirty other dwellings are shown as they appear to-day, all of frame construction, in a fine state of preservation, to prove the contention that "the various types of lumber used for structural purposes will last indefinitely if kept well painted."

Illuminating Glass

The most recent achievement of the Macbeth-Evans Glass Co., Pittsburgh, is its Decora brand glass, manufactured in a wide variety of lamp globe shapes and decorative designs for all lighting purposes. Catalog No. 81 issued by the company deals exclusively with this brand of goods and describes the material as a glass whose inherent construction is such that it transforms a hard, brilliant light into a soft and luxurious glow.



A STREET IN MILAN, ITALY.

THE AMERICAN ARCHITECT