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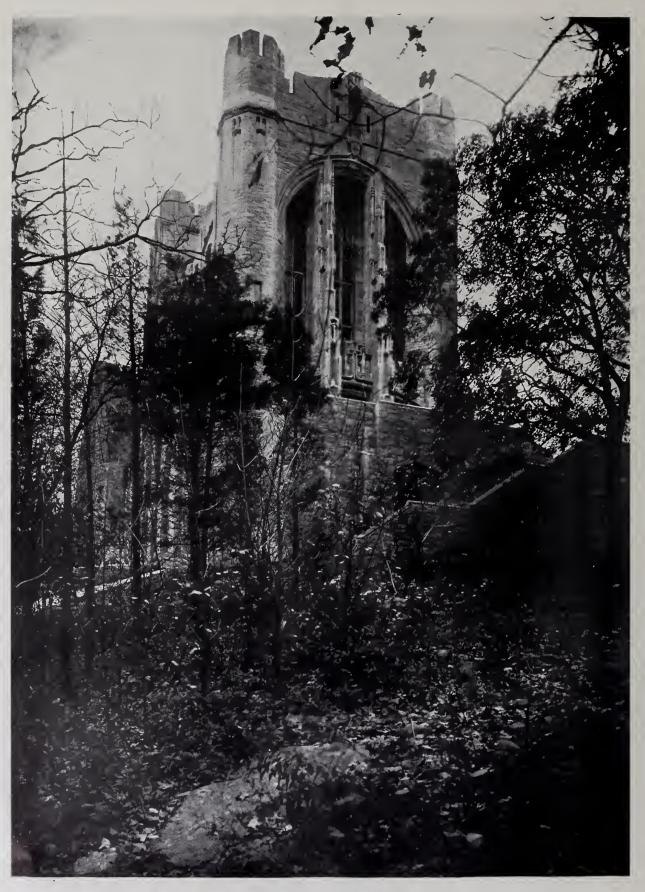
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AMERICAN CHURCHES VOL. II

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CHAPEL OF THE UNITED STATES MILITARY ACADEMY, WEST POINT, N. Y. CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS

VOLUME II

Illustrated by the work of the New York Office of Cram, Goodhue & Ferguson

(More than three hundred illustrations)

BY JAMES McFarlan Baker, M.S.

NEW YORK

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This book is dedicated to

Bertram Grosbenor Goodhue

in recognition of his broad culture and mastery of his profession, and to whose kindness and assistance the author is indebted. Digitized by the Internet Archive in 2016

FOREWORD

OST people concede that the Gothic style more truly expresses the Christian ideal of the Church than any other. In Europe the growth of the Gothic style was an orderly sequence, just as is the case in the development of all great architecture—each generation adding something to the work of its predecessors. It is difficult to appreciate the full value of this constantly building better, this constant striving for perfection, which produced the triumphs of Gothic Art in France during the thirteenth century—Rheims, Chartres, Amiens—the greatest monuments of Architecture that the world has seen.

Unfortunately, in America the Church builders were not only far removed from good examples (many had never seen the work in England or on the Continent), but for a long period they were hampered by lack of funds, lack of trained craftsmen; and, most important of all, they lived in an age that had fallen so far below the great religious enthusiasm of the thirteenth century that the Church had become apathetic in its indifference to its housing and its appointments. A lamentable lack of Church unity had brought about that change of expression in the plan which produced the meeting house type of Church and the varying types of the Colonial. Not only good usage but even the laws of the Church seemed to have been forgotten, and it was not until nearly the middle of the last century that scholars began to clear away the mass of misconception that had grown up about these things. Even at the present time ritual is little understood, though much knowledge has been gained.

The work illustrated and described here shows a great advance over that of the "Gothic Revivalists" of the past, but the knowledge has been gained only by much research and from sources not always available to the average student. For those who are interested in the subject, and for those called upon to execute ecclesiastical work without the requisite time to study in detail its problems of arrangement, it has seemed worth while to embody in simple form, and arranged for easy reference, something of a knowledge gained by long association with Church building. It has seemed especially worth while when these notes could be illustrated by a series of excellent examples.

JAMES McF. BAKER.



CHAPTER ONE

"Religious Architecture has always been the highest expression" of the art of a people. The religious edifice has led all others in the progress of building, it has furnished models and traditions, it has made architects wise and workmen skilful."

LTHOUGH these papers treat particularly of the chancel, its arrangement and furniture. touching on its history and on precedent, they seemed incomplete unless illustrated by some of the churches which Cram, Goodhue & Ferguson have built so successfully. Many have railed at the cheap imitation, the picturesque inanities, the "cosy" effects or vulgar garishness, in a word at the insincerity and lack of religious feeling in our churches; but this firm has built churches that are sincerely and deeply religious; and, more, they constantly builded better-each new work reaching a higher level than the last. Examples are shown of a few of their churches, small and large. work illustrated in this volume, that of the New York office of the firm, is, almost in its entirety, the work of Mr. Goodhue.

One of the most difficult problems facing the Architect is that of building a small church. Funds are usually inadequate and requirements large. The temptation for building committees to resort to wood or other makeshifts is almost irresistible—a shining example coming to mind being a church of corrugated iron. Wood is perfectly suitable for church furniture, even for the roof; but never for the walls of the building. It lacks a sense of dignity and permanence,

both prime requisites.

When funds are limited, brick is a perfectly honest and satisfactory material, beautifully handled in Northern Italy. The Sage Memorial, at Far Rockaway, shows how successfully it may be used. Of course, the ideal building material for a church, both from its suggestion of permanence and dignity, and because of its traditional use for churches, is stone.

Facing the Common and beside its old burying ground, Christ Church, Westhaven, is beautifully placed. Though the church is small the tower gives it commanding dignity and a feeling of strength. The warm seam-faced granite is effectively laid; though in later work insistence has been placed upon long and flat stones, instead of those approaching the square, as here. The building cost thirty-seven thousand dollars, seats just over four hundred, and has a wing for sacristies, Sunday school room, etc. It could not be duplicated for this figure today and even nine years ago the most rigid economy had to be used in its building. Tracery and mouldings are reduced to their lowest terms, everything is extremely simple; and, compared with the other interiors illustrated, this may seem a little hard. The supporting columns here are small, causing but little interference with the lines of vision. Obviously the lighting arrangement is an innovation of the Rector's. It is an excellent example of a church for the small parish whose funds are limited.

Much more lovely is St. John's, West Hartford (suggesting as it does the best English work), with its low, strong mass and tower at the crossing. It is built of the local stone. For a small church the interior has a fine sense of space and of graciousness combined with strength and a feeling of permanence. The chancel, fully illustrated in the following chapters, is very free and rich. Notice the "Nuns' Gallery" on the right, balancing the organ case. The "Nuns' Gallery"

opens into the chancel from the ladies' room, a well-studied room for the women to work in. (Good examples of its treatment are illustrated from the Sage Memorial, and the First Baptist Church of Pittsburgh.) The aisles here are lower and narrower, more nearly passages, and are a step toward "lateral burrows," as they are playfully termed by one member of the firm in question. St. Paul's, Duluth,

used, as at St. Thomas's, under the pews only; but the aisles, vestibules, etc., are surely more churchly if paved in stone or tile.

Most beautiful of all the small church interiors is that of St. Mark's, Mt. Kisco, (illustrated in a later chapter). It is of light cream colored stone, finished by stone cutters, not by machinery, and the result is a fine life and softness to the sur-



BRONZE COMMUNICANTS' RAIL.
ST. THOMAS'S CHURCH, NEW YORK

is a step still further in this direction, for here the aisles are really only passages where chairs can be set when needed.

In neither of these churches, nor in any where it is possible to avoid it, have wood floors been used. When a congregation has once become accustomed to stone or tile floors there are rarely, if ever, complaints that they are cold. Where wood is absolutely insisted upon, it may be

face texture and to the mouldings. It has an interesting variation of plan; there is only one aisle, the columns on the south side being built into the wall. The charm of this interior is greatly heightened by the superb memorial screen and pulpit. At the risk of repeating the discussion when we come to screens, it should be pointed out how greatly this feature adds not only to the beauty of the church and to the mystery



CHAPEL OF THE INTERCESSION, NEW YORK



FONT (CLOSED).
ST. THOMAS'S, NEW YORK

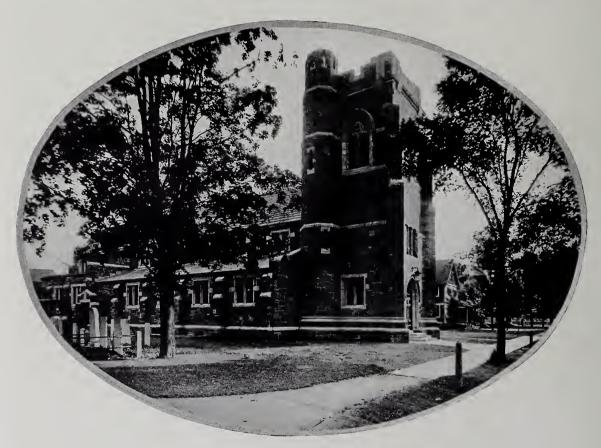
surrounding the altar; but to the length of the church as well.

All of these churches, small as they are, have a Morning Chapel and adequate sacristies as well as Sunday school rooms, etc. In all the windows are small, shutting out the glaring light, for dimness in a church does tend to produce a religious atmosphere.

The Sage Memorial, at Far Rockaway, has a very complete arrangement of Church, Parish House, and Rectory. The

formality to indicate its public character. The ornamental ceiling is an early example of that modern plaster work which the English do so well.

For the sake of economy the church was built of brick, stone trimmed—and it at once suggests the question why do we not use brick for our churches more frequently? Certainly it is both satisfactory and dignified. The mass of the brick edifice, with its strong tower is very effective in its setting of green trees. In the



CHRIST CHURCH, WEST HAVEN, CONN.

Sunday school is planned with a broad aisle on the east which may be divided into class rooms by rolling shutters or thrown all together into a good-sized auditorium.

The "Ladies'" Room is, as a rule, any place that happens to be left over or even one ordinarily used for some other purpose, and is usually a plain, bare room. What an inspiration it must be to have such a one to work in as that at the Sage Memorial. It appears to be a beautiful, great living room with just a touch of

next chapter will be considered the interesting chancel solution that this church presents for the Presbyterian denomination. The nave is lofty and well lighted with interesting glass (see illustration in last chapter). Under the crossing is a richly painted flat ceiling. As at St. John's, West Hartford, there is a great west window and no central west door. Of course, it is an open question, but it is an amusing idea, that west side-porches are more suitable for small churches and that only large ones should have great

west doors. This would not apply to those terminating in a west tower.

"The South Church is the most churchly edifice in New York." In many ways it is;—for plan, mass, detail, are all redolent of the past. The church belongs to the Dutch Reformed denomination and it was something of a feat to clothe their demanded auditorium plan with such a form. Yet this is essentially all it is, an auditorium, perfectly fitted to a small congregation;—a nave with low side aisles. These aisles are the real "lateral burrows"—and how admirably they are conceived. They serve only as passageways, leaving the nave clear for seats; and so all seats have a clear view of pulpit and altar. The result of the aisles being kept low is to give splendid height to the clerestory windows, to give the building scale and to make possible a small yet monumental church. Of course, the low aisles are only one of a number of features that produce this result—the simplicity of the treatment (almost the entire effect is gained by mere



CHRIST CHURCH, WEST HAVEN, CONN.

mass without ornament); the deep west entrance with its great window above, the transept and the *flêche*, all contribute to produce the effect. The *flêche* is of lead, the soft patina of which harmonizes with the gray of the stone work. The church is built of the ordinary New York ledge stone trimmed with Bedford, and the result is quiet and beautiful. The jambs and tympanum of the west door are also of lead, moulded with the vine and bearing the old Dutch arms and the motto of the church. This cast-lead work, like the lead font for St. John's, West Hartford, was executed in England, being practically the first ecclesiastical castlead work of its kind in America. The pseudo transepts serve to break what might otherwise have been a monotonous elevation and to house the organs. It is unfortunate that the mischievous pro-clivities of the neighborhood children make it necessary to screen the windows and so hide the crisp lines of the tracery. The demand here was for all the light possible, and both in plan and in great light

areas the interior recalls the Sainte Chapelle. Both churches are also vaulted; though here the vault ribs are not carried on thin clustered shafts but spring directly from the unmoulded piers. The plan shows the cleverly placed Sunday school and parish house in the rear, and on the street a large rectory.

The vault was the great problem of the mediæval builders—at once the glory of their work and their despair. Their constant effort was to thin the stones of the vault webs to reduce their thrust, and hence the amount and cost of the counterbalancing masonry. They thinned these webs until, at Westminster, the stone is hardly five inches thick. More they could not do. Were any of the great cathedral builders here today, how eagerly would they have seized upon the principle of the tile vault—the tile vault,



SUPPER ROOM AND DRILL HALL FIRST BAPTIST CHURCH, PITTSBURGH, PA.



LADIES' ROOM
SAGE MEMORIAL CHURCH, FAR ROCKAWAY, N. Y.

which is not only much thinner and consequently exercises much less thrust; but, as well, thanks to the self-sacrificing efforts of Professor Wallace C. Sabine, and of Mr. Rafael Guastavino (the actual maker of the tile) has now become an ideal material acoustically considered. Assuming zero for felt—perfection from the acoustician's point of view, but hardly from the architect's—the Sabine-Guastavino acoustic tile has an index of fifteen, while the nearest natural stone is represented by seventy-three.

sented by seventy-three.

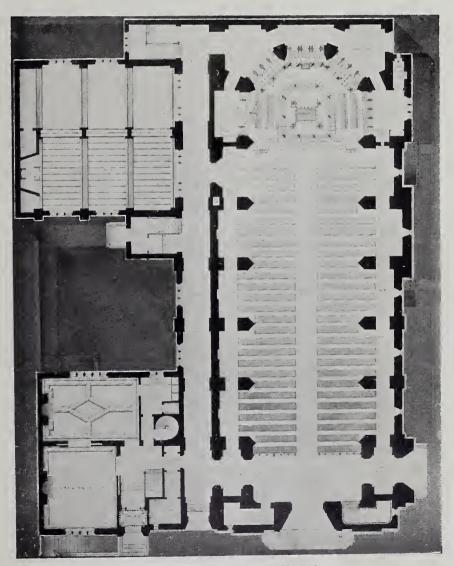
The U. S. Military Academy at West Point, built of the native stone, rises sheer and almost menacing from the hill-side of which it seems a part. It is not a city church placed here, but one of great vigor and simplicity, well suited to the

mountains that frame it and one expressing the military character of the school. The nave long and solemn, roofed by a vault that elsewhere might seem heavy. From the center of the chancel a steep flight of stone steps leads down to a stone crypt where some day will be laid the remains of great military dead. The great east window and even more the lofty transepts — with their clustered shafts between which streams the sunlight—add just the necessary touch of romance and glory. It is a very perfect soldiers' church.

Halifax Cathedral, roughly unfinished as it is, looks, and is, a real cathedral. How much better to have built only the shell and to have built that adequately!

The First Baptist Church of Pittsburgh is similar in type to South Church, though here the scheme called for a large parish house and great drill hall, supper room, etc.; and there was a further requirement that the Sunday school auditorium should open into the church when occasion required. This last problem was solved by placing the Sunday school next the south transept with screens under the transept gallery. The Sunday school here is square; and both gallery and the space below it can be divided into class rooms by rolling screens. There are studies, special shutoff class rooms, library, room for the ladies, etc. This last is another beautiful room, the chief feature of which is the ceiling of moulded plaster.

But the most interesting parish house feature here is the great drill hall and supper room, which extends under the entire



SOUTH CHURCH, NEW YORK.



SOUTH CHURCH (DUTCH REFORMED), NEW YORK The $Fl\hat{e}che$ is of cast lead.

church and Sunday school. It is a well-lighted, unobstructed space of which only the smaller part is seen in the illustration. Beyond are arranged a kitchen, ladies' dining room, etc. This openness is gained by a flat tile arch construction supporting the main floor. It is lighted by grassed areas so constructed that from a little distance away they are not seen. The various buildings form a most pleasing group, full of unexpected surprises and charming detail. Above all rises a great flêche of copper. The church presents a very successful solution of a Baptist plan, and is an unusually wide but

well-balanced interior. Here, too, the demand was for a great deal of light. and the walls seem almost literally walls of glass. Fortunately, it was possible to fill this with silvery grisaille of most unusual quality. dominant feature of the interior is the treatment of the east end where the great organ and choir gallery, rich with gold and color, rises above the Baptistry (see illustration in later chapter).

Very reminiscent of old Spain is the Pro-Cathedral of Havana with its façade in the luxuriant Churrigueresco style. Aside from this ornamental front the exterior is severely plain; but it is one of the few successful Episcopal Churches in the transica.

in the tropics.

The problem at St. Thomas's was to build a monumental church on a city lot one hundred by two hundred and thirty-five feet,

one that would seat two thousand people, with a Parish House containing Sacristies for the Clergy and Choir, Guild Hall, Sunday School Rooms, Library, Offices, etc.—an adequate building that still must not compete in any way with the church. The problem was solved with infinite patience and in a masterly manner. The strength and dignity of the building, its fine aspiration, make it more than hold its own amid the surrounding hotels and buildings of commerce, some twenty stories high. There is no leaning upon precedent here, no copying of motives—it is vitally alive everywhere, and a splen-

did embodiment of the Church Militant.

It is built of a silvery white oolitic lime stone of great permanence, that grows whiter with age. Already the yellow high lights and violet shadows of buttress, pinnacle and tracery "sing," as does Monet's "Rouen Cathedral." Yet the whole effect is produced with the simplest masses and a sparing use of exquisite detail. The loveliest of the detail would have been the South Porch, temporarily omitted, and which the composition needs

to really tie the tower to the long buttressed

Lacking its rich glass, most of its chancel furniture, its great reredos that will rise from floor to vault, the interior may at first seem cold; but the rich play of light in the vaults and among the caverns of the Chantry and Gallery is not approached by that in any church in Ameri-The entire interior is of soft buff Kentucky sand stone. The vaults, very successful in their soaring line, are of flat tile, the acoustic properties of which are almost perfect. Everywhere is fine craftsmanship; — in the treatment of the stone, in the wood carving, the wrought iron and silver, etc. much of which work is illustrated in the succeeding chapters.

The Chapel of the Intercession, ideally located in Trinity Cemetery, surrounded by trees and the quiet dead, seems to belong to a world other than that of

Fifth Avenue—to be "far from the madding crowd's ignoble strife," in the midst of which St. Thomas's rises serene. It, too, is a large church, lofty and beautiful; but one that appeals where St. Thomas's dominates,—one that you can love, not merely admire; one that has a spirituality far beyond that which the other possesses.

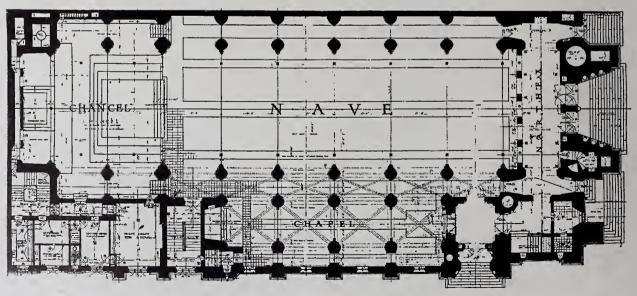
Built around three sides of a square cloister, which in summer is a riot of gay flowers, it forms a most picturesque



INTERIOR, LOOKING EAST.
ALL SAINTS CATHEDRAL, HALIFAX, NOVA SCOTIA



ARMORY IN CLERGY SACRISTY.



PLAN.

ST. THOMAS'S CHURCH, NEW YORK

group. The "unities" have been carefully preserved, and though the arrangements for elaborate parish work are very complete, the vicarage, parish house and sacristy wing have all been kept subordinate to the church itself, whose towering mass overshadows the rest of the group.

Below the church is a large crypt. The light filters through a single window over the Altar leaving the aisles dim and shadowy, except when the doors leading to the Cemetery are opened and the sunlight streams down the broad stairs giving a most dramatic contrast.

The interior of the church is extremely simple; but it has already an atmosphere of reverence and worship that one cannot escape feeling as soon as he steps inside. It has the advantage of a chancel

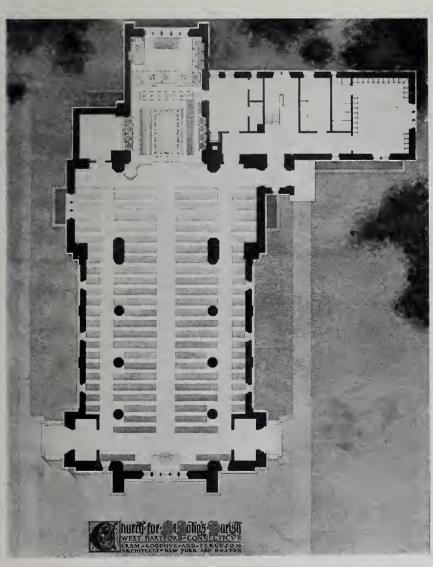
completely fitted with very rich and beautiful furnishings. The floor is paved with slabs of slate. The plaster is applied directly to the rough stone giving the walls a very "genuine" and at the same time very interesting texture. The splaying of the piers between the windows and the dark shadows back of the clerestory arches adds much to the interest of the nave walls. Between the purlins of the roof is placed felt and it is perhaps due to this that the acoustic properties of the church are so perfect. The roof itself is rich with dull gold and color.

A word as to Baltimore Cathedral, shown here in reproductions from drawings.

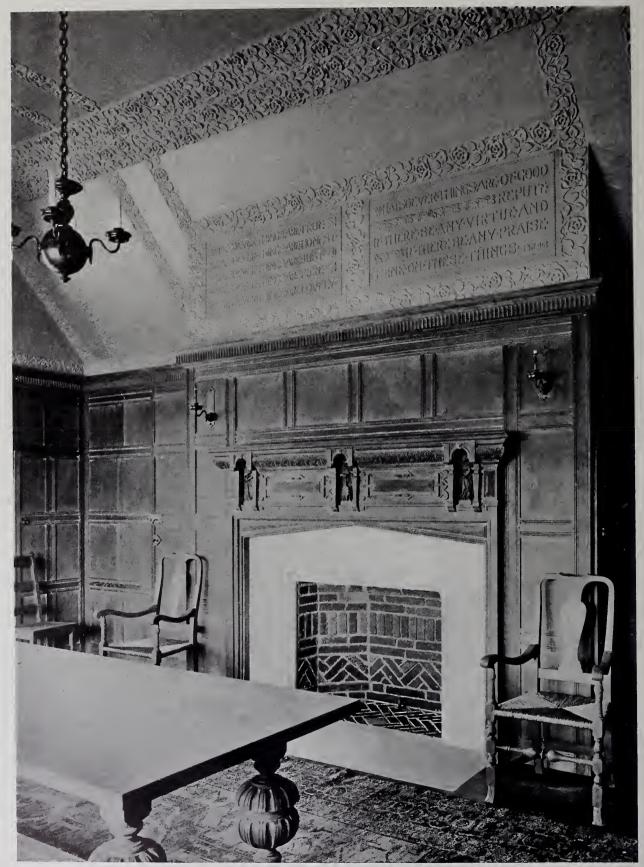
While less in size than either New York or Washington, the plans show this to be

much more than merely a Cathedral since everything is included that is essential to the full needs of a great diocese. Rich in the possession of a quite priceless collection of books dealing with ecclesiastical history and dogma, the most important of the subsidiary buildings is the Library; next comes the Bishop's Palace, then the Choir School, the Synod Hall, three Canon's Houses and the Deanery, all to be built about a cloistergarth, the north side occupied by the great cathedral itself, looming high over all after the manner of the wise old mediæval builders who, without exception, placed such buildings on the southerly side of the church, cathedral, abbey or whatever it was, in order that the dwellings might take full advantage of the health-giving sunlight.

In the present case, it is proposed to make a great preaching space,



ST. JOHN'S CHURCH, WEST HARTFORD, CONN.



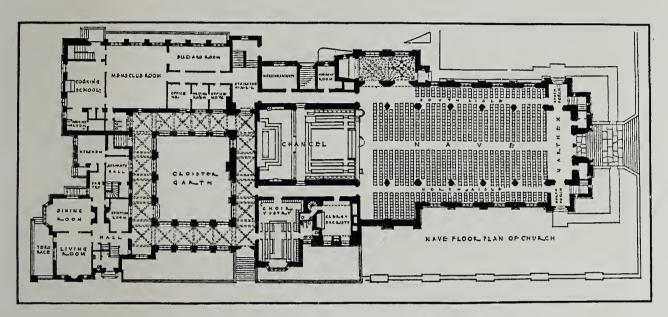
LADIES' ROOM
FIRST BAPTIST CHURCH, PITTSBURGH, PA.

capable of accommodating thousands, out of the cloister garth, and the fact that the grade falls rapidly at this point has permitted the architect to set a pulpit in the south transept porch well above the heads of the assembled worshippers.

It is not a large church but a cathedral with its plan conceived everywhere on a large broad line; a great perfect chancel, large crypt and generous accommoda-

tions for the clergy. It, too, is full of pleasant surprises, as the frank spanning of the drive at the east end by the Lady Chapel; this in order to lengthen the building.

The site is one of the most beautiful that can be conceived and when the group shall stand at last well complete another great shrine will have been given to the world.



CHAPEL OF THE INTERCESSION, NEW YORK



PRO-CATHEDRAL, HAVANA, CUBA CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS

CHAPTER TWO

Chancels

HILE perhaps only churches using liturgies can, properly speaking, be said to have chancels, the word has come to mean that portion of any church reserved for the clergy. The word "cancelli" means a screen, and referred particularly to that "screen in the ancient basilica which sep-

to the space "inter cancellos." It is only in this sense that the early Church had chancels, for they had no choir, their cancelli being equivalent to our altar rails, not to our chancel screens.

The chancel originally consisted of a semicircular domed apse about the width of the nave. In the basilicas the chancel



SOUTH CHURCH, NEW YORK CITY

arated the bema*, or raised tribunal, from the rest of the building." The use of the word chancel in ecclesiastical buildings is natural, for the altar stood in the place occupied by the bema in the apse of the basilica, and from applying merely to the screen the term was early transferred

the deepening of this apse and the development of the choir.

Originally where there was a choir it had been placed in the nave separate from

was merely a sanctuary, with the clergy

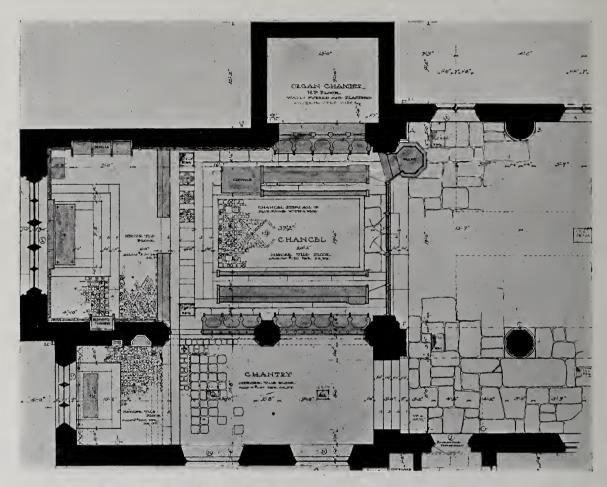
occupying the raised seats of the bema. The elaboration of the ritual soon forced

had been placed in the nave separate from the chancel, though this too was screened. The choir accommodated not merely the

^{*}So called from the platform from which the Athenian orators addressed the people.

singers but also the clergy (when they were not officiating at the altar) and the members of the minor orders. Here was sung the additional daily services or "choir offices." Practically all the great churches of the early Middle Ages were monastic; and in these the choir was really the private chapel of the monks, totally shut in, decorated and made as convenient and comfortable as the time suggested. The

and fully equipped chancels, one at either end. The Cathedral of Albi in France has this arrangement. In Spain the development was to the west whereas in England it had been to the east, and the result was the choir shut in by grilles and connected with the altar by a passage enclosed with railings breast high. Though this gave a curious appearance, and in many ways disfigured the church,



CHANCEL OF A SMALL PARISH CHURCH, ST. MARK'S, MT. KISCO, N. Y.

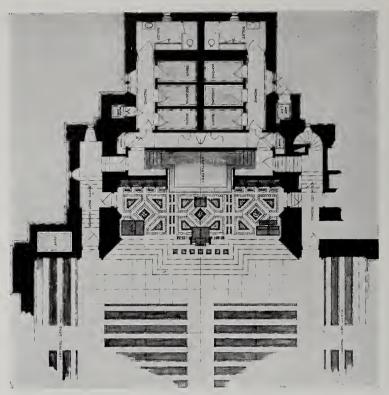
development of the choir offices and consequent requirements brought about the planning of the long choirs peculiar to England; where there had grown up a tradition of square-ended chancels so firmly fixed, that, with few exceptions, it has determined the form of the eastern end of English and American churches.

Though they are foreign to our use today, it is interesting to note some of the variants from the English arrangement. Many German churches had two distinct it added to the mystery, and possibly to the solemnity of the service. But it is to the long English choirs only that we look for guidance and inspiration.

The Reformation almost abolished the use of the chancel, as a chancel, and turned the choir into a small church. It is from this revolution, as well as from the Puritan period, that we must trace the meagre and cramped chancels that disfigure practically all our early churches. But the beauty and utility of



ALTAR, ST. LUKE'S CHURCH, NEW YORK BERTRAM GROSVENOR GOODHUE, ARCHITECT

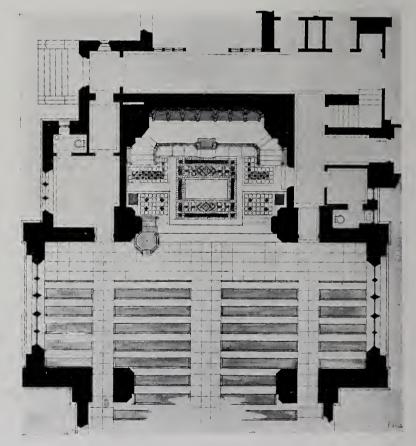


FIRST BAPTIST CHURCH, PITTSBURGH, PA.

the old order are again being appreciated, and the newer churches have chancels which, in size, rank well with the early examples, though they still can only approach their splendid furnishings.

It is, of course, impossible to lay down any rule as to the proper relative size of nave and chancel, as this can only be decided by the needs of the individual cases. Very roughly speaking, the chancel should be from one-third to two-fifths the length of the nave, never being less than two bays. The services held in a cathedral necessitate a great chancel and we find the chancel of Baltimore six bays deep while the nave is only seven bays plus the crossing. Because of the restricted site St. Thomas's choir is unfortunately short, being only two and one-half bays deep. That of the Chapel of the Intercession is more adequate, having four bays while the nave has seven. For a very small church, the Mt. Kisco chancel is admirably proportioned, being three bays to the nave's four; or thirty-seven feet to the nave's fifty-eight feet, the chancel bays being invariably narrower than those of the nave.

From the earliest times it has been customary to mark the transition from the nave to the chancel by a change of level. Whether this was following the precedent of the raised basilican apse,—to enable the clergy to be heard,—or to give a better view of the congregation, there can be no question of its desirability. The difference should not be great, however, a change of from five to fifteen inches being ample for almost all cases; for "the church is not

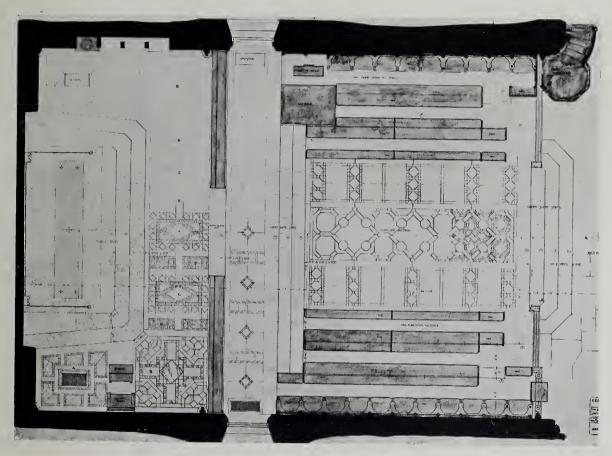


TYPICAL PRESBYTERIAN CHANCEL, SAGE MEMORIAL CHURCH, FAR ROCKAWAY, N. Y.

a theatre, and it is not necessary or even advisable that the action in the chancel should be displayed with great prominence."

The change was also marked by a parapet or screen. The rood screen has, by some authorities, been thought to have come down directly from the low cancelli which divided the apse of the tribunal from the basilica. The screen varied from an open colonnade to a stone wall

peared altogether. This is the tendency in the churches today, especially where there are large choirs. The "triumphal" arch is only faintly marked at St. Thomas's Church, and is altogether lacking at the Chapel of the Intercession. Where the church is, of necessity short, this throwing of chancel and nave together undoubtedly adds to the apparent length of the building; but it emphasizes the need of something to mark the divi-



CHANCEL ARRANGEMENT, CHAPEL OF THE INTERCESSION, NEW YORK

with a solid door in the middle, this door being closed during part of the ceremony.

There has always been felt a necessity for shutting off the sanctuary,—of housing about the "Holy Mysteries"; and to this feeling can be traced not only the screen, but also the narrow chancel arch of the early Saxon Church (sometimes only six feet wide while the chancel itself was more than twice that width). As time passed, these arches were continually widened until they finally became the width of the chancel; and then disap-

sion. And this need is satisfied by splendid richly wrought screens of wood or stone, or by a large suspended rood such as was designed for the Chapel of the Intercession; or by a rood beam, as at Grace Church, Chicago.

The step from the nave to the chancel should be at the screen gates; and, if there is more than one step, it is best that these should project into the nave rather than be recessed into the choir. They should be wide and low, about five inches, never more than six inches high. It is

well to leave a space of at least the width of the centre aisle between the chancel steps and the nave seats to accommodate the "stations" at the Sunday procession.

the "stations" at the Sunday procession.

A sense of space, of openness, is most desirable in the choir, and should be insisted upon even if the large number of choristers, so eagerly sought for today, has to be reduced. (It is almost certainly best not to have a surpliced choir

CATHEDRAL OF THE INCARNATION, BALTIMORE, MD.

in a small church.) The passageway between the stall ends should not be less than twenty-four inches, and where this is in front of the "returned" stalls it must be wider. The distance between the bookrests—i.e., the open space in the choir—should be as wide as possible, a rough guide being to use the length of the altar as a minimum where the altar is properly designed. In large churches it is desir-

able to have a cantor's, or choir lectern, placed here, as shown in the plan of Balti-more Cathedral. The stalls themselves should be placed on a wooden platform raised slightly above the choir floor. The floor under the stalls should be of boards, not blocks, in order to give reso-The first and secnance. ond rank need not be elevated, but the third, or last row, should be raised two or three steps above that in front so as to give free play to the men's voices, and likewise add to the architectural composition of the choir.

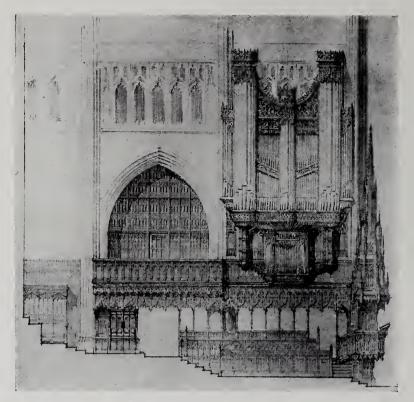
Though unusual in this country the "returned" stalls, shown, for example, on the plan of Baltimore Cathedral, have many advantages. The priest saying the office and the congregation face in the same direction, as is proper when he leads them, and when he addresses them from his stall he has merely to rise and turn toward them. This arrangement gives more efficient control of the choir boys and also helps to mark the difference between clergy and the singers.

In order to afford room not only for the communicants, but also for the convenient passage of the clergy to and from the sacristies, a minimum width of four feet should be left between the sanctuary step and the end of the choir stalls. If pos-



REREDOS FOR A CHURCH AT FALL RIVER, MASS.

CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS



ELEVATION OF CHANCEL, LOOKING SOUTH, ST. THOMAS'S CHURCH, NEW YORK

sible this should be much increased. At the Chapel of the Intercession this measures five feet four inches.

Although the position of the pulpit is

not a point fixed by law, it is customary in parish churches to place it on the Gospel, or north, side of the church. Practically all the illustrations, however, show it on the south side, for if the pulpit is placed close to the wall or pillar, this location gives much more freedom of gesture to the preacher. In any case it is best to have it stand out a little from the wall, rather than be placed against, or under, the arch.

Side or parclose screens separating the chancel from adjoining chapels or ambulatories are almost a necessity and may form a canopy for the stalls. These are shown in the sketch for the St. Thomas's chancel fittings, and in the chancel of the South Church.

The sanctuary is the Christian "Holy of Holies" for which all that has gone before was a preparation, and toward whose altar all in the church converge. Here, in order to mark its sacred character, is concentrated the most splendid decoration that the church can afford. It is also marked by a further elevation of at least one step. Large churches may have two or more, though these should not come together, because to kneel at the top of a flight of steps is most trying for the communicant. (Note the arrangement on the plan, Chapel of the Intercession, where there is a space of 5 feet, 5 inches between the kneeling step and those from the choir.) Too many steps, however, instead of enhancing the dignity of the sanctuary only dwarf its proportions:

and in small churches they reduce the

available floor space.

The sanctuary is further separated from the choir by an altar rail; or, better



SECTION THROUGH NAVE, LOOKING TOWARDS CHANCEL, ST. THOMAS'S CHURCH, NEW YORK

still, a communicant's kneeler. This rail should be set back from the edge of the step at least fourteen inches in order that the communicants may have a sufficient space to kneel. They should kneel on the same level or above that on which the ministering priest stands. In large churches, as at the Chapel of the Intercession, doors should be provided at each end of the communicant's space to allow for the return, through the chancel aisles or am-

quently joined to its eastern end, as at the Chapel of the Intercession.

The credence may have a separate niche, or may take the form of a table to be placed on the epistle side of the sanctuary as at Mt. Kisco. In parish churches the throne for the bishop should be portable, as it is to be erected only when he is to be present and removed after his departure. It is a modern American custom in Episcopal churches, that supplies



GROUND PLAN, CATHEDRAL OF THE INCARNATION, BALTIMORE, MD.

bulatories, of those who have received communion instead of their crowding past those about to receive it.

The revival of the ritual which accompanies the eucharistic office necessitates ample space about the altar and a careful placing of the sedilia, piscina and credence. In the churches of the Middle Ages, the sedilia, or seats for the officiating ministers, was commonly built into and formed a part of the wall, or screen, on the epistle (south) side of the sanctuary. The credence and piscina were fre-

a fixed chair for the bishop on the gospel side of the sanctuary opposite the sedilia. Stools or benches are likewise required for the extra copemen who assist at matins or vespers on great feasts.

It is hardly wise to take up the discussion of the vexed question as to whether the altar should be elevated two steps or three. Quoting Sir Roger de Coverly, "There is much to be said on both sides."

For many reasons it is better to place the altar eighteen inches from the east wall, thus allowing a passage all around

it. The footpace on which the altar rests should extend from sixteen inches to two feet on each side, wherever this is possible, while in front it should be from three to four feet wide (though two feet may be used as an absolute minimum and thirty inches is a very convenient width). The other two steps should be from twenty to twenty-five inches wide in order to give convenient standing room for the assistants. These steps may extend directly across the sanctuary, though it is perhaps better practice to return them at the ends of the altar, in which case they need not be as wide on the sides as in front. If they are carried across the chancel neither the credence nor any other object may be placed on the upper step—that is, against the east wall -nothing being allowed upon the same level with the altar. Carrying the last step across to receive the bishop's chair is not uncommon. This arrangement is used at Mt. Kisco. There should be at least six feet between the last, or subdeacon's step, and the communicants' rail

The minimum depth of the sanctuary for even a very small church is ten feet from the communicants' rail to the east wall. Of this six feet would be taken up by the altar and footpace—supposing there be no other altar steps—and four feet between footpace and communicants' kneeler, which may, or may not, be elevated one step above the nave floor. If a communicants' rail be used it should be elevated one step, and should have at least a clear foot between it and the edge of the step. A generous opening should be left between the two rails or kneelers. A cord or rail may close this opening.

The minimum width for the chancel is roughly seventeen feet. The principal

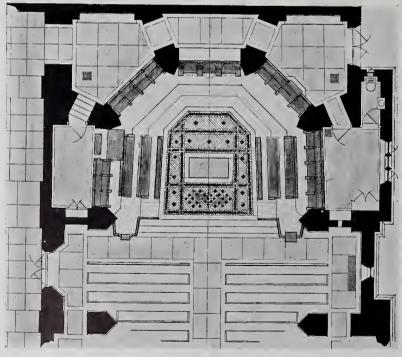
The minimum width for the chancel is roughly seventeen feet. The principal altar in a church should not be less than seven feet long with an extension of the footpace on each side, and at least four feet between it and the side walls of the chancel.

Referring to the illustrations:—The drawings for Baltimore Cathedral are still in a tentative state; but the plan shows an ideal cathedral choir, planned for all the elaborate ritual that such a church calls for. The organ in this case will be placed on one side only, even higher up than at St. Thomas's.

In its splendid furnishings St. Thomas's chancel will more nearly approach a great European church than any other in America. The pulpit with

in America. The pulpit with its lace-like pinnacle suggests that of Strasburg which rises "higher than the church." The stalls are richly canopied—while above them the great organ case towers up into the vault. Dominating all, the reredos rises straight from floor to roof, a mass of splendid color and delicate carving. Through the tracery of the upper part the light glows from richly colored windows.

So far only the organ cases are built, and now the great organ seems out of proportion. When, however, the reredos is in place, the organ will recede into its proper relation. Such a case, repeated on both sides of the chancel, would have overwhelmed or at least op-



CHANCEL OF SOUTH CHURCH (DUTCH REFORMED), 85TH STREET AND PARK AVENUE, NEW YORK

pressed, everything else in the chancel; used singly, it is very effective—in fact, dramatic. But the organ had to be divided to find accommodation for its great bulk, and it occupies the galleries on each side of the chancel. To keep the composition simple, as well as to emphasize the effect of the great case, all the other chancel openings are filled with screens, rich in texture though very quiet in effect. In front of these screens the galleries, formed over the stall canopies, are sufficiently ample for either a choir or an orchestra of stringed instruments, such as is frequently used on the Continent. These gallery fronts tend to narrow the chancel and to emphasize its length by giving a much needed strong horizontal line.

Because of the great height of the church—it is ninety feet from floor to vault—more steps have been used in this chancel than any other of their churches; and the results amply justify their use.

The Chapel of the Intercession has one of the most ample and best arranged chancels of any American church, and it has many unique features. The lectern is supported by a slight projection of the cap stone of the parapet between nave and choir. It is of the double type, of wrought iron, with sconces for tapers. The wall stalls on either side are canopied and have hinged seats with moulded misericordes beneath, after the fashion of the Middle Ages. Above the stalls on the Gospel side rises the splendid organ cases filling two bays; while opposite is the "Nuns' Gallery," a feature designed for the use of women singers when it is desired to have them supplement the regular choir.

The altar is most interesting. A spreading vine of bronze, holding in its branches relics which the vicar has collected from the most sacred shrines of the church,

forms the front.

Here a splendid dossal takes the place of a reredos. The altar is inclosed by riddels; and the rest of the east wall is hung with a contrasting fabric. Above all, and recessed back from the dossal, rises the great east window reflecting its soft lights on the richly decorated roof. Aside from its quiet dignity, the chancel of St. John's, West Hartford, is interesting for its "Nuns' Gallery" over the stalls opening into the chancel from the Ladies' Room upstairs. It forms an echoing note to the organ opposite and shows how much Mr. Goodhue departs from a dry formalism and still preserves an atmosphere of reverence.

Grace Church Chapel, Chicago; St. Andrew's Chapel, Chicago, and Trinity Chapel, Buffalo, are quite notable examples of what can be done in a very

small space.

Grace Church Chapel is only about twelve feet wide, inside the nave piers, by forty feet long (the chancel is fourteen feet deep), yet the effect is quite splendid, with no note of triviality.

St. Andrew's Chapel is eighteen feet wide by thirty-two feet long, the chancel being eight feet deep. It is wonderfully quiet; and, in spite of the splendor of its reredos, with its gleaming gold and color, seems to have already acquired something of the atmosphere of the Old World shrines, their air laden with the prayers of many generations.

It is difficult to imagine a more inartistic architectural composition than that presented by the end of most of our sectarian churches. A church has the strongest possible sense of direction, the congregation all facing front, the aisles, the lines of walls and roof—all leading frequently to what—a little desk, a narrow platform and a blank wall. Even where there is no ritual something more than a mere pulpit is needed: not only to give dignity and to emphasize the spiritual leadership of the minister—but especially is this something needed for a strong architectural termination. successful solving of this problem may mean the difference between the atmosphere of a church and that of a lecture

Where there is no objection to frankly treating the communion table as an altar, the problem can be solved rather satisfactorily as at South Church, though here the traditional French form of the end helps to give a "churchly" impression. This is really a choir rather than a chancel, with stalls, pulpit and lectern.

In the First Baptist Church of Pittsburg, Mr. Goodhue has reached a particularly happy solution of a difficult problem. From the front book-rests to the back of the baptistry is 30 feet 3 inches, a fully adequate depth for a chancel of a church of this size. While it will probably not be claimed that the sacrament of baptism is more important than that of communion, the Baptist denomination feels that baptism is a feature of their service that should be given all due prominence. In this case the communion table occupies its usual place in the center of the chancel, though placed well forward,* while at the back is the baptistry; which, when not in use, is screened by hangings. Just in front of this are placed the chairs for the pastor and visiting clergy, while on each side are stalls for the elders. The pulpit, and a secondary

organ console, an unfortunate necessity, are placed on each side of the chancel.

To obviate anything that might detract from the solemnity of the service, the baptistry is so arranged that those about to be baptized cannot be seen by the congregation when entering or when leaving the water.† The screen which accomplishes this takes the elders' stalls and also supports the choir gallery. Above this rises the splendid organ, its case, as well as the whole front of the choir gallery, being a mass of subdued gold and color. The seven silver lamps suspended in front of the organ case add their symbolism to the rich effect. Except where a great reredos has been possible, the result is probably a church interior as dignified and impressive as it is possible to conceive.

^{*}The plan is correct, the photograph showing a temporary arrangement.

[†]Note the standing room just back of the screen for the elder who helps those who have just been baptized out of the pool.

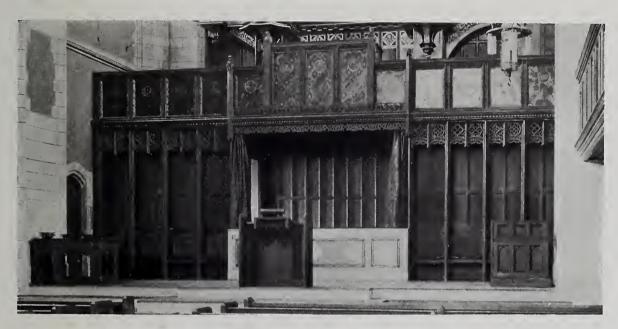
CHAPTER THREE

Screens, Parapets and Stalls

T is the greatest pity that so little use is made of chancel screens here in America. Nothing so perfectly marks the transition from nave to chancel, or so adds to the dignity of the celebration of the Eucharist. They destroy the feeling of bareness so frequently felt in our chancels, give a play

have been in times past," and they were screened.

As in every religion the sanctuary has been shut off from the profanation of the multitude, it is only reasonable to suppose that some sort of rail or barrier existed from the earliest times in Christian churches; and we have many references



STALLS AND SCREEN, FIRST BAPTIST CHURCH, PITTSBURG, PA.

of light and shade, an interest to the space beyond, and create a sense of mystery that is unbelievable unless seen. Many a simple parish church in England owes its charm to its chancel screen. Where there is a great east window, the screen and towering loft make its glare bearable; and, curiously enough, they always seem to add to the length of the church;—to see a few good examples in place is to be convinced of their value. And the English version of the prayer book distinctly says, "The chancels shall remain as they

to early rails to confirm this. But no very early example remains, and we can not be sure what form the division took.

After explaining the use of the veils in the Jewish tabernacle, which separated it into three parts for the Holy of Holies, the priests and the people, Mr. Bligh Bond states that our earliest detailed accounts of Christian churches show that these were also divided primarily into three areas, separated by screens or veils. He continues—"These, like the Jewish veil, had a symbolic aspect. When, at the hour



DETAIL OF LOWER STALLS, TRINITY CHAPEL, BUFFALO

of the Crucifixion, the veil of the Temple was rent asunder, this event received its symbolic interpretation, in the sense that a direct avenue was now revealed between the soul of man and his God, and the way was open to all. Thus in the use of the veil, as we find it perpetuated in the early Christian Church, there is this modified symbolism, and the veil, although still suggestive of a barrier (that of physical death) was not stretched permanently before the Sanctuary, but was parted down the middle, to allow of its being withdrawn at certain times, thus suggesting the idea of a spiritual unity." "Their symbolic meaning and ritual use is indicated by Chrysostom in the following passage:—'When the sacrifice is brought forth—when you see the veils withdrawn, then think you see the heavens opened, and the angels descending from above.' It seems clear, then, that the symbolic or ritual use of veils was well nigh universal in the primitive church, and was esteemed of great importance. At first, it is probable, the veil pure and simple formed the barrier plus such framework or pillars as may have been necessary for its support." Though "veils remained in use until long after the days of Constantine, often in the form of tapestry or a curtain, by degrees regular screenwork took their

place." But, in the thirteenth century, Durandus, who wrote most fully on the symbolism of all things pertaining to the church, makes no mention of screens; which would seem to indicate that they were used rarely, if at all.

And indeed it is probable that rails had at first more of a practical than a symbolic use. The earliest barriers were apparently low parapet screens of stone, or were rails. If space permitted it would be interesting to trace, as far as possible, the development from these to the colonnade, which formed the next step; and still later to the Iconostasis, with its blaze of painting, gold and jewels; and to the English

screens, those marvels of carved and painted woodwork, which first arrest and then hold the attention of all who enter the churches possessing them.



DETAIL OF PARAPET, TRINITY CHURCH, TRINITY PARISH, BUFFALO, N. Y.

In the description of Constantine's Basilica at Jerusalem we read "the 'apse' was 'surrounded' by twelve columns, equal in number to the Apostles, and adorned on the summit with great bowls



CHANCEL SCREEN, ST. MARK'S CHURCH, MT. KISCO, N. Y.



BOOK REST, ST. PAUL'S CHURCH, DULUTH, MINN.

of silver." The use of an architrave as a support for hanging lamps, for bowls and candlesticks containing lights, for reliquaries, veils, and most important of all, for a cross or later a crucifix, may have been the reason for the almost universal use of colonnades. Or the columns may have been merely the development of those supports which the length of the rood beam made necessary, examples of which we know existed in very early times. The triumphal arches were frequently so wide that the beam, without support, would have sagged, or would even have been impossible. This beam may have been for the support of lights rather than to carry a crucifix. Whether the rood beam suggested the architrave or vice versa, it is impossible

In the early church when the choir was placed in the nave this also was separated from the public space by low parapets. When the choir was placed in the apse, and the whole formed the chancel, screen and parapet were combined and formed either a colonnade resting on a parapet, or a colonnade with marble slabs between the columns, as in the famous example at Torcello. Though the colonnade was not the final form in England, there are sufficient remains to show that there were examples of colonnades here, and these occur in the earliest churches of which there are any remains today.

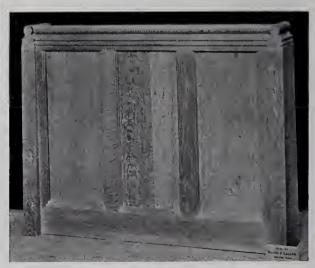
This would seem to mean that our screens of light woodwork were derived from the same source as the solid stone Iconostasis of the east.

There is still one other reason for the screens being used everywhere, and that is that they served as reredoses for the nave altars. Nearly all English parish churches seem to have had three altars, of which two were placed in front of the screen, on either side of the entrance. When aisles were added to the churches, these altars were naturally moved to the ends of the aisles, and placed in

separate chapels.

The origin and reason of the rood loft is more difficult to determine than that of the screen. It has been suggested that they represent merely a connecting, by a gallery, of the two great ambos; but we do not find rood lofts in Italy where the ambos were used everywhere and "there is no record of the use of ambos in England." Lofts were found in practically every church in England. The elaborate ritual of the cathedrals and collegiate churches perhaps required them—but why were they built even in small parish churches?

The lofts were usually about six feet wide, though they varied from five to



BOOK REST, ST. THOMAS'S, NEW YORK



CHANCEL RAIL, ST. PAUL'S CHURCH, DULUTH, MINN.

eight feet and in some cases were even wider. Usually they were balanced and kept in place above the screen by groined vaulting, but the wider examples were

vaulting, but the wider examples were partly supported by additional beams. They were protected by richly ornamented galleries or parapets about three feet six inches high, on top of which was usually placed the great rood, with its attendant figures of Mary and John. This faced the nave. Sometimes the great rood, or as it was called "high rood," "good rood," "high cross," "great cross," "greatest cross," etc., was placed on a beam above the gallery. (The Chapel of the Intercession was designed to have a great hanging rood to mark the transition from the nave to the chancel, but this has not as yet been put in place.)

But what was its use? We do know that the loft was used to read and preach from, but the stairs leading to it, usually built in the thickness of the aisle wall, in the form of a "vise," were frequently so narrow that a vested priest could not comfortably mount. The name "jubé," as these lofts were called in France, and some-

times in England, denoted one use, for the reading of the Gospel was always preceded by the benediction, "Jube Ďomini benedicere." They were also much used as singing galleries and for those musicians who were hired to come in for all great festivals. In many of the large churches they also carried the organ. Some lofts even contained pews and many had altars. The rood loft in Santa Sophia was large enough for the Byzantine emperor to be crowned on it: and at Rheims Cathedral the French kings

were crowned on the jubé.

Beautiful and effective as these lofts are, their interest to us is almost solely archæological, though in the case of Hali-



PARCLOSE SCREEN, CHAPEL OF THE U.S. MILITARY ACADEMY, WEST POINT, N.Y.



LECTERN AND VICAR'S STALL, CHAPEL OF THE INTERCESSION CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS

fax Cathedral, there will be a fully equipped rood loft over the screen. This loft also has an unusual form of rood, the two thieves' crosses being added to the crucifix supported by the Virgin and St. John. Examples of the three crosses still exist in many places in Brittany, as at Fiacre-le-Faouet. But though the interest in screens is archæological primarily they richly repay study.*

The screens were very substantially constructed, dowelled and oak pegged. The vertical mullions were framed into heavy sills at the bottom and supported a heavy beam at the top. These sills frequently ran through from side to side, making it extremely awkward at the entrance. The transom rail was usually from three feet six inches to four feet above the floor. Both sill and transom were delicately moulded and frequently painted. The lower part of the screen was filled with solid panels and tracery. These, as well as the panels of the loft above, were often painted either in diaper patterns, similar to those in the choir gallery front at Pittsburg, or with figures of saints and virtues. Above the transom rail, the screen was kept open, so as not to obscure the

*Mr. Francis Bond's books "Screens and Galleries," "Stalls and Tabernacle Work," and "Misericords," as well as Mr. F. Bligh Bond's book, "Roodscreens and Roodlofts," are most interesting and superbly illustrated. The latter work is rich in measured drawings and scale details.



CHOIR STALLS, SAGE MEMO-RIAL CHURCH, FAR ROCKAWAY, N. Y.

view of the altar. mullions were moulded, buttressed and sometimes carried small figures. The upper portion of each division was filled with tracery, usually carved out of the solid and from two and one-half inches to four inches thick, though later this was thinned down. As large an area as possible of the tracery was from a single board, an old example measuring thirteen inches wide by six feet long. Above this tracery, which was usually rather simple, came the cornices of great variety and most splendid richness.

In these cornices are the finest examples of foliage of the whole Gothic period, showing admirable feeling for balance of light and shade. The bands of ornament appear to be cut from a single piece but are almost invariably built up and the carving set into deep coves to give a maximum depth to the shadows.

We may not hope today to rival the finest of the Devonshire screens, the very richness of the carving would make their cost prohibitive in this less religious age. And today, when we have to search the entire country and then find only a few craftsmen capable of executing such work, it is sad to reflect that the old screens were not made by imported workmen, but by the village carpenter; and that this was the rule all over England.

Two, four, six, or even more, candlesticks on the

rood loft are in conformity with ancient custom and look most impressive if the churches are kept in proper shade; but probably most impressive of all is the single great crucifix on the screen. Screens make very perfect memorials, giving ideal opportunities for the sculptor and painter.

The photograph of the interior of St. Mark's, Mt. Kisco, is unsatisfactory, both in lighting and because of the lack of any permanent furniture behind the screen. The screen itself is one of the most successful in the country; simple, in keeping with the church, yet rich and very lovely. The shields on the back bear the symbols of the Pas-

sion. The screen at St. Paul's, New Haven, separating the chapel from the baptistry, is simple but very effective. As it is now, it suggests those tympanic screens of England where the space between the screen and roof was deliberately filled in with matched boards or plaster work, on which was painted "The Doom," and later the ten commandments, the royal arms or some allegorical scene. Eventually on this tympanum will be placed a small organ, when the whole will form a very beautiful chapel end. The stalls form the base of the screen as they would in a screened choir having returned stalls, and are combined with the screen somewhat after the Welsh manner.

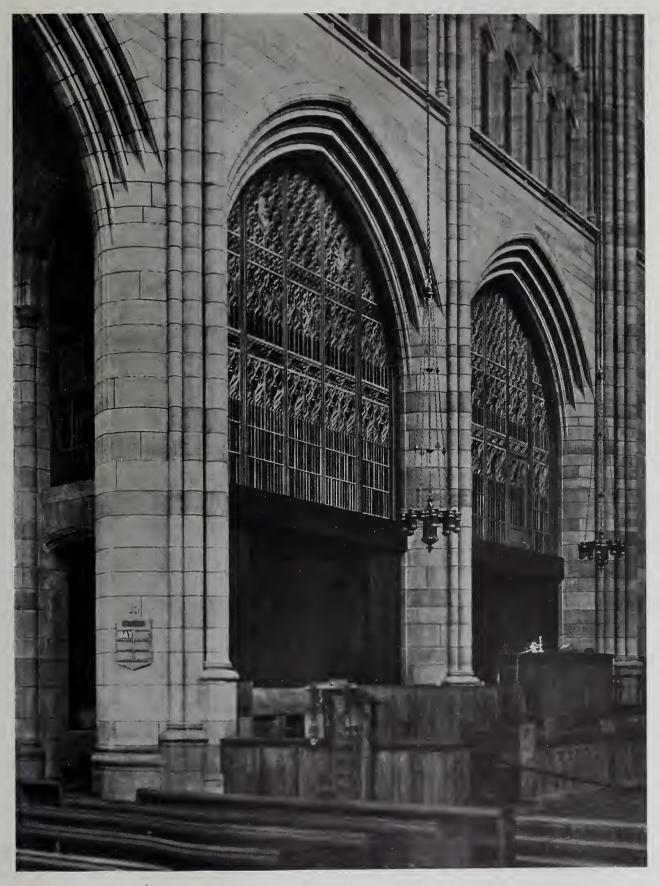


STALLS AND NUNS' GAL-LERY, ST. JOHN'S CHURCH, WEST HARTFORD, CONN.

The narthex screens at the Chapel of the Intercession and South Church, show a particularly successful treatment of entrance vestibules with galleries placed above them. Here, as in the rest of Intercession woodwork, the carving will become richer with age as the dust accumulates and it loses its uniform color. Perhaps, however, the bands of ornament here are not undercut as deeply as they might be. The photograph of the first screen gives just a suggestion of the interesting character of the beautiful

modern glass.

Where there are chancel aisles, parclose screens are necessary to shelter the clergy from the draught and to serve as a protection. The very inadequate photograph of the West Point screen, the entire upper part of which is filled with tracery, and that of South Church show examples. The organ screens at St. Thomas's Church also belong to this type. Any richer form of organ case. where there are so many openings, would have overpowered the chancel. Mr. Goodhue wanted these to be very inconspicuous, giving simply a rich texture. This effect is gained by the soft natural gray of the wood as well as by the lack of projection; and they will form a most effective background for the canopies of the stalls. The tracery of the "Nuns' Gallery," in the Chapel of the Intercession, forms a kind of stone parclose



ORGAN SCREENS, ST. THOMAS'S CHURCH, NEW YORK CRAM, GOODHUE & FERGUSON (BOSTON & NEW YORK), ARCHITECTS

screen—very different in treatment from the "Nun's Gallery" above the stalls at St. John's Church, West Hartford. Also at the Intercession, the Morning Chapel screens are so good and the carvings have been kept in such admirably flat relief that it seems worth while to illustrate them by details. A very interesting par-

SMALL ORGAN SCREEN, ST. THOMAS'S CHURCH NEW YORK

close screen terminating in a font separates the Morning Chapel sanctuary from the aisle at St. Thomas's Church.

Parapets

A parapet is the usual modern method of separating the chancel and nave. This may be of stone, as at St. Thomas's and the Chapel of the Intercession; or of wood, as at West Hartford and Duluth. It should be solid, not open and high enough to screen the stalls and benches but not to hide the altar and should leave a clear view of the chancel from the nave. There is always some change of level between the nave and chancel but there should not be more than from one to three five-inch steps. As a rule, these steps should not be recessed into the choir but should come on the nave side of the entrance, as at Mt. Kisco.

Stalls

If space permitted, it would be extremely interesting to consider at length the different locations of the seats of the clergy and the reasons for these changes, but even a brief outline may be worth while. In general, the earliest churches were planned with the apse toward the This apse was usually a semicircle, on whose chord was placed the altar. Around the wall of the apse, back of the altar, were the seats of the clergy, with the throne of the bishop in the center, raised high above the other seats; these still exist at Torcello. With this arrangement, the officiating priest faces both the east and the congregation. But it was most desirable that the congregation also should face the east. Probably in the fourth century, the church plan was reversed, the apse now facing the With this arrangement both officient and congregation face in the same direction. The clergy sat in the nave as they now do at San Clemente and other Roman churches. In the ninth century the sanctuary was lengthened to include both altar and clergy, but the clergy being seated in the sanctuary about the altar detracts much from the dignity of the service. From this arrangement it was a natural step to the familiar modern

plan of nave, choir and sanctuary, each

division distinctly marked.

It is probable that all ancient arrangements included returned stalls and there is every reason for going back to this practice in parish churches; especially where there are screens, it seems a pity not to set the clergy stalls against them. Among other advantages, they assist in the convenience of the clergy and differentiate them from the choristers; they make it unnecessary for the clergy to stare at the congregation and enable them to obtain much more perfect supervision of the choir boys; the priest faces east, as he should, and leads the congregation in song and prayer, and when he addresses his people, he has merely to turn in his stall. The present position of the officiating minister behind the chancel arch tends to blanket his voice, making it impossible for him to really lead the congregation.

As to the order of precedence in the stalls:—the rector occupies the first stall, on the right, or decani, as you enter the choir; the first seat on the left, or cantoris, is occupied by the curate, the second seat on the right by the assistant curate and so on alternately. The precentor occupies the last stall on the decani

side.

The number of stalls will, of course, depend on the size of the church; but in general, our choirs are unnecessarily large. If we were sufficiently musical to have good congregational singing, we should need very small choirs indeed; but even where we cannot depend upon the congregation, a small, well trained choir, with plenty of space in the chancel, is infinitely to be preferred to a crowd.

The wall stalls should be elevated several steps above the choir floor for æsthetic as well as acoustic reasons. Where there are two rows, the lower stalls may be elevated one step; but where three rows are necessary, it is better to have the first row on the choir floor level.

At Durham the first row of stalls is set up one step, the second up four steps. At Lincoln, the third row is two feet six inches above the floor. At Henry VII's Chapel the wall stalls are raised six steps above those on the floor; and the book rests of the wall stalls form the canopies of the front row of stalls; but canopied lower stalls are rare. Usually they are long pews with no division from end to end,—the decoration is concentrated on the ends which were made as rich as funds permitted. Here, as in the misereres, the mediæval carvers allowed their fancy to play, and the tops were frequently surmounted by figures. the ends of the Buffalo stalls are carved the four patrons of church music: St. Gregory, St. Ambrose, St. Augustine of Canterbury and St. Wilfrid. The book desks also were enriched. But ordinarily there is only money enough to add ornament to the wall stalls, leaving the book desks plain. Duluth is a good example of a simple form.

The book desk should be generously wide, eleven inches if possible, not a book rack; and there should be a second shelf to hold all books not actually in use. It is more convenient if this can be divided into sections, one for each chorister, for each chorister should have his own book. these being plainly stamped Decani 1, Decani 2, Cantoris 1, etc., the boys being only allowed to use books stamped "Boys." The desk for boys should not be higher than two feet four inches, or, at most, two feet six inches; for men, two feet nine inches. Where the choir is crowded the boys' desks may be omitted. a strip of dark matting being placed for them to kneel on. The boys should not sit crowded together, twenty inches per boy being the minimum. Twenty-two inches for the men, and twenty-four for the clergy is as little as can be allowed. The seat should be from fourteen to sixteen inches deep. If possible the benches should not be nearer than three feet, back to back, the stalls three feet three inches. No metal or sharp corners should be permitted that may catch the vestments. It is a pleasure to run your hand over the baskets of fruit which ornament the parapet posts at Buffalo, so smooth are these.

The wall stalls are individual, separated by arms; and were usually canopied. In poorly warmed churches, with a strong down draught from the cold triforium, these canopies were necessary to protect the heads of the clergy during

the long hours of service. The seats are usually about one foot four inches above the floor and should be generously spaced. Those of the Intercession are two feet four inches on centre and seventeen and one-half inches deep. The arms are usually about three feet six from the floor and frequently slope down toward the back to add to their comfort. There is sometimes a small leaf or animal placed lower down that forms a hand rest. The backs also were given a marked slope for comfort's sake.

The Intercession stalls are capped by an elaborately carved continuous canopy, the strongly marked horizontal shadow of which carries the eye back into the chancel. At the entrance to the chancel this is topped by more elaborate canopies, marking the rector's and vicar's stalls. The canopy of the rector's stall, that adjoining the pulpit, is supported by delicately moulded colonettes and traceried side shields. On the backs of these stalls are carved the arms of Trinity Parish and of its Chapel of the Intercession. Each of these stalls is also provided with separate kneelers. It was not possible here to have the misereres elaborately carved as they were in the Middle Ages, but under the hand rest of each stall are carved supporting figures, masses of foliage, etc., each differing from the others. It is unfortunate that the lower stalls from the old church had to be used, so different are they in character from

the rest of the woodwork; but this is a temporary arrangement. As they are intended for a chapel the canopies of the Buffalo stalls are less formal in character and for that reason are perhaps more interesting. The conventionalized vine detail is especially good.

The final development of the English stalls show each surmounted by its own canopy. In Manchester, Henry VII's Chapel and Windsor, these were amazingly complex and beautiful; and the effectiveness of this lace-like carving cannot be overestimated. But unhappily we can hardly hope to take advantage of their inspirations today, because of the expense. It is difficult for the modern man to realize what a vital part the church played in the life of all classes in the thirteenth and fourteenth centuries, or to appreciate how they lavished their wealth upon it. Mr. Bond gives some interesting figures as to the cost of various stalls taken from actual records, the money values of the thirteenth century being translated into dollars. The canopies alone for St. George's, Windsor, cost \$400 each. The stalls for Kings College Chapel cost \$60,000; as did those for Henry VII's Chapel, being \$475 each. The stalls of Wells cost \$90,000, while those of Amiens cost \$100,000. The chancel fittings of Exeter Cathedral, not one of the large cathedrals by any means, cost \$150,000. How can we hope to rival these with the cost of production increased?

CHAPTER FOUR

Pulpits, Lecterns, and Organs

"HE country parson preacheth constantly: the pulpit is his joy and his throne," wrote George Herbert. But apparently the early fathers indulged in preaching more rarely, for the Rev. P. H. Ditchfield notes that in the thirteenth century priests were ordered to preach or instruct their flocks four times a year, explaining in the vernacular the Creed, the Ten Commandments, evangelical precepts and other sacred truths. He cites, however, a later order for preaching on every Sunday and holy day, and adds that there were books issued for the guidance of preachers.

In the earlier days it was probably the custom to preach from the steps of the altar; and Valerian says that such was the custom in France down to the ninth century, while St. Augustine "states that he preached from the exedra or apse." The introduction of screens and rood lofts, however, would shut the preacher from the view of the multitude and so blanket his voice as to make this position

impossible.

It is quite likely that some preaching was done from the rood loft; in fact "pulpitum in mediæval documents usually refers to a rood screen." But we find that the approach to most of the rood lofts was so narrow as to make it all but impossible for a vested priest to mount. Cardinal Gasquet, sometime Abbot of Downside, seems to think that it is very doubtful if the lofts were ever commonly used for preaching. He suggests that there was "an unpretentious wooden erection perhaps in the screen or at the chancel arch" from which the priest instructed his people.

One naturally thinks of ambos as early pulpits; but, though St. Chrysostom preached "sitting on the ambo," it is not

at all certain that they were commonly so used.

From the fifteenth century on, more attention was given to preaching and pulpits were erected everywhere. Shortly after the Reformation, they were ordered by Canon 83 to be "provided in every church," to be "comely and decent," and

"seemly kept."

There is apparently no law as to where they should be placed. Perhaps the majority of the old pulpits were on the north side, and many authorities insist that they must stand there, i. e., on the gospel side. This arrangement allows the officiating ministers to follow the sermon from the sedilia without changing their position. Today in France the ministers leave the altar and take their position in the "banc" or pew opposite the pulpit—this is the arrangement in practically all the cathedrals and churches of northern France.

The pulpits at West Point, St. Paul's, (Duluth), Sage Memorial Church, and All Saints' Cathedral (Halifax), are so placed; but, with the exception of the First Baptist Church of Pittsburg, all of the other pulpits illustrated are on the

south side.

The portion on the south side has the advantage of leaving the preacher's right side toward the people free and is much more comfortable for him. The old pulpits were usually set well out into the nave and sufficiently high to command the entire congregation—the priest could then be seen by the greatest number of his people, and the result acoustically was almost invariably good. Placing the pulpit back under the arch is sure to cause "interference" and blank spaces in the church to which his voice cannot be made to carry. In this respect the Halifax Cathedral pulpit is well placed, for it stands

clear of the pier and is amply high. This is a large cathedral and it was necessary to place it beyond the crossing so that the greatest number could hear. Before placing the pulpit, it is worth while to experiment with a temporary wooden platform or box of the right height, moving this from place to place until one can determine just where the voice rings clearest, where the gestures can be most free and where the largest number of the people can see. Movable pulpits, which have certain advantages, though not fre-



CHRIST CHURCH, BAY RIDGE, L. I.

quently used today, were by no means uncommon in the early days, and many examples still remain in England, as Cranmer's pulpit, used today as the nave pulpit in Westminster Abbey.

Probably a third of the old English pulpits that remain are of stone; but stone being so much more durable than wood, many more of the wood pulpits have disappeared so that the original proportion of stone to wood was undoubtedly much smaller than one to three. Of metal pulpits, so common in Spain, not one remains in England, though there are references to their having been used and having been painted and gilded. These, as in Spain today, may have been used for reading the Gospel and Epistle. The Gospel pulpit may also have been used for preaching. Wood has a "warm, smooth, clean" feeling to the hand and it "fur-nishes" a church, if one may say so without being misunderstood, giving warmth and color. Actual color, and even gold, was often used—some of the Norfolk pulpits having figures of the Evangelists. doctors of the church, and other motives painted on their panels. At Scarboro, Yorks, England, is a modern pulpit with paintings of such subjects by Burne-Jones, Rossetti and others.

The form of the English pulpit was almost invariably either octagonal or hexagonal. It is perhaps not wise to push the symbolism of numbers too far, but when the pulpit was hexagonal, its sides probably represented the six attributes of the Deity: power, majesty, wisdom, love, mercy and justice; while eight being the number of regeneration and perfection, it was particularly fitting, symbolically as well as architecturally, to make them eight sided. Practically all modern pul-

pits are based on the octagon.

The pulpit must be sufficiently high, both as a matter of dignity and acoustics for the preacher to dominate the entire Even in a very small congregation. church, the floor of the pulpit should not be less than three feet six inches above the floor of the Nave. The Duluth pulpit is three feet nine inches, that at West Point three feet eight inches, while that at Halifax is five feet above the floor.

St. Mark's, Mt. Kisco, is a very small church, and here the pulpit floor is four feet one inch high; and it seems very perfectly proportioned.

Care should be taken with the arrangement of the steps to avoid the possibility of an awkward entrance, the last step coming outside of the octagon so that there is no possibility of stepping backward and falling. In general, if these can be kept out of sight, as at Buffalo, it is a great advantage (at least to the peace of mind of visiting clergymen). The effect of the stairways at Halifax and the Chapel of the Intercession, however, is much too beautiful to be sacrificed. The arrangement at Buffalo has the added advantage of permitting a fine hanging to be placed back of the preacher. The same consideration for a possibly awkward cleric makes it necessary to have the pulpit parapet sufficiently high so that his hands shall not "dangle." It is sometimes necessary to consider the individual clergyman; but its height should be about thirty-eight inches to forty inches. The Chapel of the Intercession pulpit is only thirty-six inches, but Duluth, West Point and the Sage Memorial pulpits are thirtynine inches, while that of Mt. Kisco is forty inches and Halifax is forty-two inches high.

Many of the old pulpits were only thirty inches across the top, the oldest existing example in England, that of Mellor, Derbs, a hexagon, cut out of solid oak, is only two feet eight inches in diameter at the top. Probably thirty-six inches, inside measurement, is a good average. This is the size of Mt. Kisco. Buffalo is only thirty-three inches, while West Point is thirty-seven inches, Duluth thirty-nine inches, Halifax forty-four inches, and Intercession fifty-three inches. In cathedrals of the Latin Rite it is desirable that the pulpit should be sufficiently large for the Bishop to be able to preach "in pontificalibus," supported by his chaplains.

The parapet rail should be at least four inches wide to avoid an appearance of thinness and to afford a rest for the hands. It is very desirable to have a shelf with a ledge wide enough to carry a Bible, a prayer book, etc. These books should be stamped "pulpit."

There is also needed a manuscript rest large enough to hold a foolscap sheet, and arranged so that it can be easily raised or lowered. Probably Mt. Kisco can furnish the best type of this. Here a wrought iron bar, held by an easily adjusted clamp, supports a simple oak rest. This desk should face the major portion of the congregation and not necessarily due west. A round hole sunk in the rail for a horizontal clock is a great convenience and obviates the very odious practice of screwing an automobile clock to the top



ST. ANDREW'S, PASADENA, CAL.

of the pulpit. Of course, the obvious solution is the hour glass, hallowed by early

usage.

Sounding boards are frequently necessary, but unless it is desired to "shoot" the voice to some particular spot there is no possible excuse for using the hideous

shell forms so common.

The symbolism of the vine on pulpits is very common. On Duluth are carved suggestions of the fruits of the spirit, and around the top runs a very splendid text from First Corinthians 1:48: "For if the trumpet give an uncertain sound, who shall prepare himself to the battle?" This suggests the stirring texts of some of the old pulpits; for example that of Llandaff Cathedral—"Woe is unto me if I speak not the gospel"; that from Newport, Isle of Wight, "Cry aloud and spare not, lift up thy voice like a trumpet," and again the

one from Huntington, "Where there is no vision the people perish."

The text around the top of St. Mark's, Mt. Kisco, is from First Corinthians 13:1—"Though I speak with the tongues of men, and of angels and have not charity, I have become as sounding brass or a tinkling cymbal;—and now abideth faith, hope and charity, these three, but the greatest of these is charity." The vertical ornament here suggests such canticles, as "Take us the foxes, the little foxes, that spoil the vines"; while the bases of the buttresses are supported by culs-delampe representing six great preachers: St. Ambrose, St. Augustine of Hippo, St. Bernard, St. Augustine of Canterbury, St. Gregory and St. Athanasius, each carrying shields bearing their symbols.

The pulpit for the Chapel of the Intercession owes its form largely to the fact

that much of the woodwork from an older pulpit had to be used. The figures represent St. Joseph of Arimathea and St. Columba, while the panels show the Good Shepherd, St. Paul preaching on Mars Hill (though in this connection the sword might well have been omitted), St. Stephen and St. John the Baptist.

Many of the old pulpits are carved with fish, birds, peacocks, lambs, etc., the symbolism depending on the words, "preaching the Gospel to every living creature."

It would be interesting to trace the development of Puritan doctrine, that grace came through the interpretation of the word of God rather than through the Sacraments of the Church, as it is expressed in the great "threedecker" pulpits; and also to trace the development of those late pulpits in Germany and the Netherlands, which became more and more elaborate. Of these, the one at Cracow where a ship under full sail, the mast, rigging and all the details being



TRINITY CHAPEL, BUFFALO

minutely carried out, is supported upon the backs of sea monsters, is a typical example. But, happily, these do not influence us today.

Lecterns

Lecterns or book desks were used in all mediæval churches. Roughly speaking, they were of two kinds—the great fixed lectern in the choir for holding the servor candles in sconces attached to the desk are usually needed to light it.

In the early church, the Gospel, and the Epistle were read from the ambos; but in the ninth century movable stands were arranged for this. The movable lecterns were usually light iron frames hung with veils of rich stuff. After the reading the stand was removed. From the thirteenth century on there were fixed and perma-



ORGAN CONSOLE, GRACE CHAPEL, CHICAGO, ILL.

ice books and the movable lectern from which the Gospel and the Epistle were read.

The great lectern had two, three, four or even more sides for holding the choir books, and was pivoted so that it could be turned to the various portions of the service. If this is used, it should be placed well toward the western end of the choir. Two stools may be placed behind it facing east for the cantors, and standard candles

nent desks for reading the Gospel and

the Epistle.

The position of the Gospel lectern varied. In the rites of Durham is described a "lectern of brass where they sung the Epistle and the Gospel" which stood "at the north end of the high altar." It had a gilt pelican at the top "whereon did lie the books that they did sing the Epistle and the Gospel." "But in England, in parish churches at least, it was the cus-



CHAPEL OF THE INTERCESSION

tom in the Middle Ages to read the Gospel and Epistle from the rood loft."

Few churches today have a special Gospel lectern, and all of those illustrated are desks for the great Bible from which the lessons are read. There is no fixed position for this desk or lectern; but usually it is placed in front of the chancel rail or screen on the opposite side from the pulpit. The rubrics merely order that the reader should so stand "as he may best be heard."

The lectern may be of any material; but as it is essential to be able to raise or lower the desk it, of necessity, will be either of wood or metal. The most important consideration is that the desk be at the proper angle to read from and at a convenient height so as not to screen the reader from the congregation.

The lower edge of the desk should probably be about four feet above the platform. Of those shown the lower edge of the lectern of the Chapel of the Intercession is three feet eleven inches above

the floor of the reading platform, St. Thomas's four feet above the floor, and that at West Point four feet one inch. If possible the lector's platform should be elevated above the church floor at least a foot; and, again if possible, it should not be lower than the chancel floor. At St. Thomas's the reader is one foot nine inches above the church floor, while at the Chapel of the Intercession the difference is three feet four inches.

Perhaps the most satisfactory of the lecterns shown is the one Mr. Goodhue did long ago for St. Andrew's Church, Pasadena. On either side of the desk stand are small figures of St. John and St. Andrew. In the book rests are beautifully carved medallions containing peacocks symbol of the Resurrection. The ledge



ST. PAUL'S, DULUTH, MINN.

of the desk is supported by monkish grotesques.

Very interesting is the beautifully wrought metal lectern at the Chapel of the Intercession. The book is supported on a lectern cloth of red pigskin, deeply fringed. (Lectern "falls," [veils] should not be changed to agree with the color of the season; though it is perhaps well to have plain linen or no cloth at all during Lent.) This lectern is lighted by sconced tapers, sufficiently high that they in no way endanger the reader. In the stone base, which supports the desk, is carved a very interesting, though decidedly unconventional, symbolic representation of the Old and the New Law; while the whole is supported by the eagle.

The eagle from very early times was the usual form of support for the Gospel lectern, so much so in fact that Gospel lecterns were frequently spoken of as "eagles." There are many variations,

chief of which is the pelican.

Quite the most splendid of these lecterns is the new one for St. Thomas's Church, with its inlays of teak, box and ebony; and its carved figures, four from the Old and four from the New Testament. In the book rest is an inlay representing Moses elevating the serpent; and, balancing it, the Crucifixion:—for "as Moses lifted up the serpent in the wilderness, even so shall the Son of Man be lifted up, and whosoever believeth in Him shall not perish but have everlasting life."

On the front of the desk is a medallion in the centre of which is the eagle of St. John, while encircling it is the inscription, "My word shall not pass away."

Quite interesting also, though very much slighter, is the little lectern for the Deaconess School at the Cathedral of St. John the Divine. This is very simple in form with rich inlays. Here the symbol of "the pelican in piety" is used in place of the eagle.

Organs

It sounds like romance to read that the Byzantine Emperor sent Pepin "a great organ with lead pipes" which he set up at his capitol at Compeigne, and that the caliph of the Arabian Nights, the great

Haroun-Al-Raschid, sent a "rare instrument" as a gift to Charlemagne. But long before this organ had been used in churches throughout Europe;—in Spain as early as the middle of the fifth century and in England certainly as early as the seventh. Organs were known in the



ST. PAUL'S, BROOKLYN, N. Y.

Roman Empire and were used in places of amusement quite commonly. By the fourteenth century they began to be frequently used in churches, though usually as portables or régals that were carried about, even from church to church. From this point the development was very rapid, and only one hundred years later we find the organ at St. Lawrence, Nürn-



U. S. MILITARY ACADEMY, WEST POINT

berg, containing 1,100 pipes in the great organ and 454 in the positive.

The great height of the continental cathedrals suggested an elevated position

for the organ, which was frequently placed in a high gal-lery called a "tribune." The lery called a "tribune." organ of Chartres is in the nave, bracketed out at the level of the triforium; and that of Strasburg is placed above the main arch in the second bay in the nave on the north side. The organ of Amiens Cathedral occupied the west end gallery as early as 1429, and this is the position of the great organs at Paris, Freiburg, Saint Denis and many other churches. In all the more important French churches, there are almost invariably two organs, the choir accompanimental organ being placed in, or immediately adjoining, the choir. In Notre Dame, it is placed in the arch of the second bay of the north side of the choir just above the stalls. A rather unusual arrangement exists in the Madeleine, Paris, Westminster Cathedral, London, and the church of the Paulist Fathers in New York where the organ, choir (and orchestra when this is used) are placed behind the high altar.

The Roman practice of placing both choir and great organ at the west end is certainly open to serious liturgical objections, the unity of the service demanding that the choir be placed in the chancel. All musical authorities agree that the organ should be placed as near the choir as possible. Yet to place the great organ at the side of the choir usually means that the voices are entirely drowned, especially in the overgrown instruments demanded by modern organists. To get the most splendid musical effects, it is almost impossible to have a great organ in the choir, with open space sufficiently large so that some of its stops are not blanketed. On acoustical grounds, no position is as good for the great organ as that at the west end of the church; for not only can the organ be correctly arranged without necessarily being deep, but every stop can have its full value, so obviating strained voicing and inordinate wind



ST. ANDREW'S, CHICAGO



ORGAN, CHAPEL OF THE INTERCESSION, NEW YORK CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS



DETAIL OF LECTERN, CHAPEL OF THE INTERCESSION, NEW YORK

pressures. If, then, the organist will be satisfied with an accompanimental organ, in the choir, which does not need many speaking stops, where "dignity, purity, roundness and fulness of tonal structure" is the first consideration, and with the great organ placed at the west end, the ideal arrangement is reached.

In the English churches a few of the early organs were placed in the transept, as at Canterbury. There is but one example of a large west end organ, that in the Beauchamp Chapel at Warwick. Before the Reformation the lateral choir position was almost universal in the English Cathedrals. In general, where there is but one organ, this seems to be the most satisfactory position. It was only after the Reformation that the organs were placed in the centre of the screens, many examples of which arrangement still exist in the Cathedrals.

There have always been objections to the organs obstructing the church. King Charles insisted that the organ at York Minster should not be placed on the screen and had the organ at Winchester removed from the screen and placed on the north side of the choir, in order to afford a better view of the interior. Wren, because of the insistence of the Dean, designed an organ case for the centre of the screen of the new St. Paul's Cathedral which proved too small to receive the great organ. He refused, however, to have it enlarged, declaring that his interior was "already spoilt by the damned box of whistles."

Where the regular congregation is accommodated in the choir, as at York Minster, the placing of the great organ on the screen has certain advantages; but with the huge organs now demanded, and their consequent obstruction of the church, it is very unlikely that this position will ever be reverted to again, at

least in our day.

Unfortunately, few of the mediæval organ cases remain. There were, however, many exceedingly rich examples, beautifully carved and painted, for only the recent period seems to have been niggardly in the matter of church ornamentation. The cases frequently had triptych doors painted with scenes from the New Testament or the Apocrypha. Viollet le Duc's description of the organ at Gonesse suggests the case at Pittsburg for "the entire woodwork of the main organ case is illuminated in gold and colour, presenting a very gorgeous appearance." The description goes on about the reds, the blues and the gold, the blue being apparently generally used for friezes and the shadowed portions of the carving, the fillets being of gold as was some of the lower carving.

Where, by the nature of the position a great area is not available, it is best to call in a practical organ man, a representative of one of the great organ manufacturers, and confer with him as to the position of the organ chamber, its height above the floor, the height of the chamber, the area required, etc., before the plans for the church have been carried very far. (Failing such help, Audsley's great work on "The Art of Organ Building" is very complete and a valuable aid.) Given your chamber, the problem is not merely to close it in by a lattice suggest-



CHANCEL, ST. THOMAS'S CHURCH, NEW YORK CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS

ing a radiator grille, but to build a case at once expressive and beautiful, as rich as may be but still kept in harmony with the chancel furniture and distinctly subordinate to the altar and reredos. In order to have the case just what it appears to be, Mr. Goodhue insists that all of the case pipes speak instead of being dummies. From the organ builder's point of view this is perhaps pushing truth rather far; but it certainly has a ring of sincerity. In the design of the cases illustrated, all of these things have been considered and the results are eminently successful, expressive of the organs they screen.

The delightful little case in St.



ST. THOMAS'S, NEW YORK



ST. ANDREW'S, CHICAGO

Andrew's Chapel is of a very unusual type suggesting the old portables, or the organs that accompany St. Cecilia in the paintings of the Renaissance. It was designed for an organ without pedals and the addition of these has confused the composition; and, in particular, made the built-over bench very clumsy. The decorations here are principally the vine through which runs the text: "Jubilate Deo, omnis terra psalmum dicitec nomini ejus, date gloriam laudi ejus." "Make a joyful noise unto God all ye lands, sing forth the honour of His name, make His praise glorious.") The door hinges are hand-wrought polished iron. Sometime, it is hoped, the inside of these doors will be suitably painted and gilded, bringing them into key with the splendid triptych just beyond.

Duluth, Buffalo and the Sage Memorial show dignified, quiet types of small organ cases, the ornament being kept very simple. St. John's, West Hartford, and the South Church, New York, are richer and of a more "romantic" type, the design suggesting something of the richness of the Spanish cases. In the South Church, a simple chapel form without architectural breaks, the organ is placed on either side of the church, the cases being similar in mass but very different in detail. Being placed in the

second bay of the nave, they give interest to what might otherwise be a monotonous sameness of windows and a suggestion of depth to the chancel; which, the church having no liturgical service, is of necessity very shallow. The central tower has some beautiful tracery in the form of a crown, which the photograph does not show. It also fails to show the rich black shadow behind the cases: for these organs really fill pseudo-transepts.

these organs really fill pseudo-transepts.

The small echo organ over the west door of West Point Chapel is very sim-

Point case was followed; that is, enclosing the entire chamber in a case instead of confining this to one bay and filling the remaining openings with screen work, as at St. Thomas's. The case is so large that in order not to give it undue prominence, there are no great projections. Much of the detail is very interesting and the case has the advantage of having the finished stalls in place below.

The most interesting of all, the most beautiful organ case in America, is St.



ple, but the main cases are quite splendid, or would have been if they had had their banks of trumpets in the lower part as they were designed to have. The officer in charge refused to allow these to be set, with the result that the lower part of the case is conspicuously bare and unfinished in appearance. The inscription on this organ case reads: "With Angels and Archangels and all the company of Heaven we laud and magnify Thy glorious name."

Though the Intercession organ is large, it is placed on one side of the chancel only and the scheme of the West

Thomas's. It is difficult to get a photograph that gives an adequate idea of the case, and at the same time an idea of its relation to the church. The great mass, with its daring overhang, is just the note needed by the severely simple interior. When the richly canopied stalls are added below the effect will be superb. The composition is simple but very effective, while the detail has been handled in a particularly decorative manner. This case, like West Point, still lacks its trumpets, and so misses just the finishing note. These are at the church and will be added soon. Very naive are the

little grotesques supporting the side towers; while most interesting of all, though quite indistinguishable in the photograph, are those beneath the aisle case. Six patrons of music, David, Miriam, Wilfrid, Gregory, Tubal Cain, and Cecilia stand in niches on the lower case; while above runs the verse: "Laudate eam in sono tubaea laudate eum in

patterio et cithara laudate eum in chordis et organo."

It was considered especially desirable to divide the organ here in order to get antiphonal choir effects. Great care was taken with the screens in order to have the proper proportion of openings for the sound waves. It should be noticed that each chamber has an opening on the aisle.



FIGURES ON ORGAN CASE, ST. THOMAS'S, NEW YORK CRAM, GOODHUE & FERGUSON (BOSTON & NEW YORK), ARCHITECTS

CHAPTER FIVE

Altars

HE early Christians were taunted with having a religion which allowed no altars; and Origen admitted this to be so, when, in his reply to Celsus, he said, "The heart of

every Christian is an altar."

Strictly speaking the word "altar" means "A base or pedestal used for supplication and sacrifice"; but actually, of course, the first Christian altars were the movable wooden tables about which the faithful gathered to "break bread," secretly in private houses. This usage of seating all the communicants about the table was common in the first century and possibly thereafter; and we have early paintings showing such a scene in the Catacombs. As the Church gathered numbers, such an arrangement was bound to

prove impossible and various practices were introduced similar to our present usage.

When persecution ceased and the Church, emerging from the Catacombs, had public places of worship, it was no longer necessary or desirable to have movable altars, and naturally more costly and permanent materials gradually took the place of wood. Tradition says that early in the second century Pope Evaristas forbade the use of wooden altars, and again in the fourth century Pope Sylvester issued an edict against them. But movable wooden tables were used as altars certainly as late as 250 A.D. and probably much later. Indeed, from a passage from William of Malmsbury, altars of wood were apparently used in England



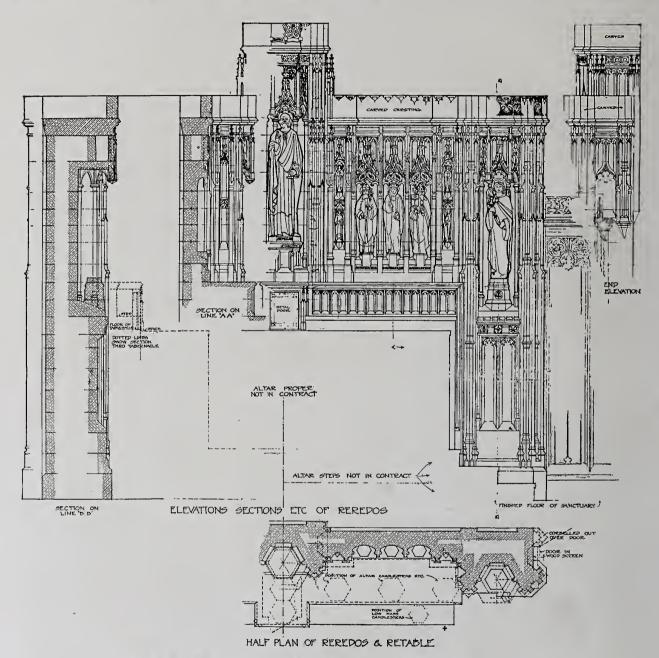




PAINTINGS IN THE REREDOS OF ST. ANDREW'S CHAPEL, CHICAGO

as late as the middle of the eleventh century. From a capitulary of Charlemagne forbidding the celebrating of Mass except on stone altars consecrated by a Bishop, wooden altars were apparently in though there may have been altars that were literally of gold, as Herodotus says the great altars of Babylon were.

Mass was allowed to be said on gold, silver or wooden altars. Theodore,



REREDOS, ST. PAUL'S ROMAN CATHOLIC CHURCH, BROOKLYN, N. Y.

use in his day. There are but few traces of them later than the ninth century.

These wooden tables were covered with stuffs or silver and having gold and jewelled inlays. The frequent reference to altars of gold from the fifth to the eighth centuries probably referred to the latter, Bishop of Tyre, even celebrated mass on the hands of his Deacon. Theodore, Bishop of Canterbury, says that Mass may be said out of doors without an altar, or even a portable altar, if the chalice is held in the hands. It is now the usage to celebrate on a stone altar; but if it be of

wood or other material, there must be a stone in the middle of the altar, of the portable variety. Even now the Greek church "allows altars of wood, stone or metal to be used."

It is doubtful whether portable altars were allowed before the eighth century. They were used, however, before the Christian era, one from Gaza dating about 200 B. C., is of limestone, 6 inches square, and has cut in the top five cups instead of five crosses. They became very common in the eleventh and twelfth centuries and were used on journeys, in private chapels or in heretical countries. "They were small slabs of polished hard stone large enough for chalice and paten."

Throughout the huge dioceses of Mediæval England there were great numbers of unconsecrated altars, the side altars of

small parish churches, those in manor houses, etc., it being impossible for the Bishops to reach all their parishes often enough to consecrate them. For use on these the Bishops consecrated great numbers of portable altars. Besides this they were probably used on the high altar on special feasts for greater reverence. "These were usually made of valuable stone or set in precious metal and jewelled, and at Glastonbury was an ancient super altar so richly garnished that it went by the name of 'the great sapphire of Glasconberye."

Pope Felix (264-267) decreed that "Mass should be celebrated upon the tombs of the martyres," possibly because of the reading of Revelation 6-9, "I saw under the altars the souls of them that were slain for the word of God." These practices developed into the mediæval rule that no altar could be consecrated unless it contained a relic or relics. The later multiplication of altars may have been due to this

edict; or, perhaps more, to the celebrating of Mass by each priest. In primitive times there was but one altar in each church.

An interesting list of such relics placed in an altar is that of the one dedicated to St. John Baptist in Christchurch, Hants, in 1214. The relics "included parts of the vesture and robe of our Lord; parts of the vestments of the blessed Virgin; bones of St. John the Baptist and Sts. Peter and Paul; some of the blood of St. Stephen, bones of Sts. Laurence, Blasius, Victor, Vincent, Alban, Hippolytus, Polycarp, Urban, Chrysogonus, and the Holy Innocents; bones of the martyrs and confessors, Martin, Julian, Simplicius, and Joseph of Arimathea; some of the oil of St. Nicholas, monk of Rome; and bones of the virgin saints, Agnes, Alice, Lucy, Juliana, Perpetua, Margaret and Agatha.



ALTAR IN CHAPEL OF U.S. MILITARY ACADEMY

There are frequent references to stone altars in the fourth century. In the council of Epaone (517), it was decreed that none but stone pillared altars should be consecrated with chrism. Though stone took the place of wood, the altar was still conceived of as a holy table, and was supported on one, two, four, five or six columns or shafts, most of the Greek altars having but one. These open altars lasted up to the fifteenth century, when



ALTAR, CHRIST CHURCH, WEST HAVEN, CONN.

the sarcophagus or solid type was introduced.

The altars were usually cubical in mass, not long and narrow as at present. They were extremely simple, and all ornamental accessories were placed around and separate from the actual altar, for the table was thought too holy to carry anything but the "mystic oblation" itself. It was not until the Middle Ages that ornaments of various kinds were placed on the mensa.

Frequently the mensa was hollowed

out, dished like a platter, with small holes at the corners to facilitate drainage. In one such altar still preserved, the depression measured six centimeters.

With the Triumph of the Church, a change had come in its way of looking at the altar and the sacrifice. The holy table was now given the utmost prominence and shown the most profound respect. The holy sacrifice was now felt to be a mystery so awful that it must be screened by veils even from the eyes of the faithful. In the Greek Church grew up that "fear and dread" of the "awful" "terrible" sacrifice upon which Chrysostom insists—the priest's feeling of unworthiness—which was expressed by the shutting of the people entirely from the sacrifice by the iconostasis, or solid screen. In the Latin Church, however, it has always been the sacrifice of the priest and people; and the veils, which shut off the celebration, gradually disappeared; so that to-day the altar stands open to all. At one time, however, they enclosed it on all sides.

It was perhaps partly to carry these veils, but more to give dignity to the altar that the baldachino or ciborium came into use. This had long been a symbol of honor universally placed above the seats of rulers. The ciborium served to support the cross, to carry suspended lights and votive crowns, gold and jewels, and other offerings. Besides this it was of great architectural advantage, marking the altar as the great central point of the church, for the altars of the basilicas were so small as to need something of the kind to give them dignity in order to have them dominate their setting.

The Caeromoniale Episcoporum 1-1213) calls "for a canopy or baldachino to be supported over the altar of sufficient size to cover both altar and predella." These were sometimes hung from the roof by chains so that they could be raised and lowered like the canopies of the later Gothic period. Sometimes they were supported from the wall or reredos; but usually they were carried on four stone columns. With the lengthening of the altars in the Gothic period, they passed out of use; but the veils still re-

mained, at least on each side of the altar, supported by four or six posts, while at the back was almost invariably a hanging (dossal) or later a retable. (A good example of these riddel posts are those for St. Andrew's Chapel, Chicago.) Often the angels carried instruments of the Passion instead of candles.

In the early Church, we saw that the clergy were seated around the apse so that the prelate had a view both of his clergy and of the people beyond the altar. The people in turn could see the clergy. Just such an arrangement is followed at South Church, with its simple block altar. When serving mass the celebrant faced

the people from behind the altar. There could be, consequently, no retables on the altars of the primitive church. These only appear when the seats of the clergy were moved from the apse to the choir west of the sanctuary. The celebrant was now between the people and the altar and there was no objection to erecting a screen at the back of it.

Gradually the cross and candlesticks appear on the altar—and finally reliquaries in addition. That this last was protested against is shown by such legends as that told by Benau I, Abbot of Cluny, of the miracle working image of St. Gauburge. When this was placed



ALTAR, FIRST BAPTIST CHURCH, PITTSBURGH, PA.

on the altar the miracles immediately ceased, the reason, as explained by St. Gauburge in a vision to one of the suppliants being that the altar should be reserved solely for the Divine Mysteries. Upon the consequent removal of the relics from the altar the miracles instantly recommenced.

This tendency, however, grew until on all festivals the treasure of the church was heaped and crowded upon the altar



PELICAN IN PIETY FROM CRESTING, CHAPEL OF THE INTERCESSION

for the admiration of the faithful. Edmund Bishop quotes delightfully from an old authority. "To say the truth," he writes, "this altar is not happily conceived; it is so low and overburdened that it is no easy matter to descry the officiating priest. But it is certain that there is not an altar in the kingdom more richly decorated and whereon there is a greater quantity of reliquaries and vases and candlesticks and branches and lamps and other such things, some of silver, some of

silver gilt, some even of gold. Indeed, nothing is wanting to complete its magnificence; and besides it has ingenious and clever sacristans who are continually inventing new modes of adorning it." And Bishop adds, "We have reached the zenith; after this decline alone is possible." While an extreme case, this was by no means the exception. Why, then, should we be amazed at present-day vulgarities when toward the latter part of the period to which we turn for inspiration for all that is best in ecclesiastical art, such monstrous taste was prevalent?

The growing veneration for the relics of the saints in the ninth century strongly influenced the design of the Christian altar. It was no longer thought sufficient that these be placed beneath the altar, but they must be elevated and made conspicuous so that they could be approached more easily by the faithful. It was still thought a sacrilege to divide the bodies of saints, and as a result the shrine was usually as large as, or larger than, the table itself. They were placed just back of and at right angles to the altar, one end frequently resting on the mensa. The relics were housed in shrines so precious that it was soon thought wise to raise them above the people, leaving a passage beneath. The shrine was further glorified by having over it the baldachino that had previously stood over the altar. Some sort of screen was felt necessary to cover the opening left between the altar and casket, and this screen also usually supported the end of the shrine.* Usually the screen stood clear of the table; but many rested directly upon the

Only the table was consecrated and while on that no image whatever was allowed in the presence of the Eucharist, as long as the early tradition was followed, the screen or retable was not consecrated and was freely adorned with carved and painted scenes and with gold and jewels.

The ever-increasing hosts of pilgrims soon made it desirable to move the shrines

^{*}Viollet le Duc's admirable article on "altars" in his "Dictionaire d'Architecture," gives drawings of various Mediaeval altars.

back, free, from the altar, thus allowing an unobstructed passage all about them; but the retables remained where

they had been.

As the taste for luxury displayed itself in the interior decoration of churches, the retables became more and more elaborate. Already very rich in the thirteenth century, though their lines were simple and severe, they soon began to increase in height and dominate the altar by presenting a "scaffolding" of ornament and figures often of large size, or a succession of subjects covering a vast field. Italy, Spain and England from the fourteenth century onward set the fashion for elaborate reredoses enriched with bas-reliefs, niches, turrets, etc. The period culminated in such gorgeous examples as the reredoses of Winchester and St. Albans. Seville and the other great Spanish churches.

Of this type the new St. Thomas's reredos will be the greatest modern example. Rising clear from floor to vault, a mass of carving emphasized with rich though subdued gold and color, it will make the altar the focus of the entire church. The great reredos at Fall River and that in the pro-Cathedral at Havana with their paintings and niches, sumptuous richness everywhere, are good examples of the extreme type called late Spanish "Churrigueresco." The reredos at Havana, the whole of which was shown earlier, is not yet finished, has not received its painting or its gold and color which will be subdued but strong in true Spanish style. Even in its unfinished state it is very convincing.

It has always been customary to drape the altar—for the sacrifice offered there was an "unbloody one." The practice was not universal, however, at least in France, for occasionally references

are made there to undraped altars. An example is that of Angers where the altars were bare, not covered with anything at all when not in use. Just before Mass, altar cloths similar to those used on a dining table were placed on them. There was no frontal. Such a custom partially explains why some altars were so richly carved and decorated while others of the same period were severely plain. But "the rubrics of the Roman missal plainly order the altar to be covered with a frontal of the color of the vestments of the Mass" and "in the Church of England the frontal has always been required by law."

Even in the surroundings of the altar in the Gothic period there was a restraint in the use of the precious metals that lack of means alone cannot account for. They may have felt that gold and silver excited



REREDOS, PRO-CATHEDRAL, HAVANA, CUBA

cupidity more than they moved the soul; but certainly they strove to honor the altar more by beauty of workmanship and perfection of handicraft than by richness of material. Though nothing approached the richness of the sanctuary, art in all things was placed above cost.

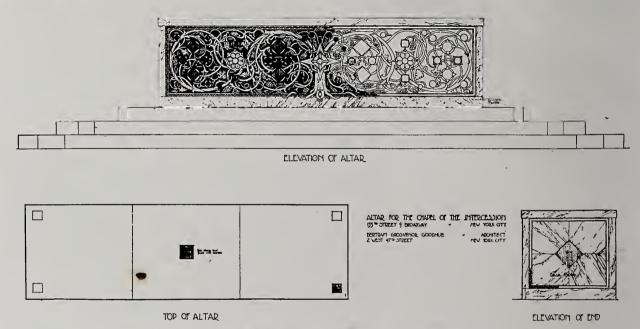
It is hardly worth while to consider the Rococo period; but the curious effect of the Reformation in England should be noticed.

The name "altar" was written in the "Communion Office" of 1549 and in the first prayer book of Edward VI. But early in this reign orders were given

legs, one cannot but feel how unsuitable they were for their purpose.

It is difficult to lay down any fixed rules for the size of altars. Generally they are too short and too high. G. G. Scott's rule that the length should be one-third the width of the chancel is fairly good; though, unless the sanctuary be very wide, it will usually look better if a little longer than this.

The long altars of the late Gothic period certainly had a dignity that the earlier examples did not possess. The Arundel altar was 12' 6"—that in the chapel of the Palace of the Popes at



DETAIL OF ALTAR, CHAPEL OF THE INTERCESSION BERTRAM GROSVENOR GOODHUE, ARCHITECT

that all "altars" should be destroyed and that movable wooden tables should take their place. After the Reformation and during the Puritan period these tables occupied the old altar position; but during the celebration they were turned north and south. Many examples of the extension table or "telescope" altar remain, as that at Powich, Worcester, which measured nine feet three inches and which could be drawn out to a length of sixteen feet. "When used it was brought out into the church and fixed on trestles and the communicants would sit around it." Beautifully carved as many of these were, with their great melon

Avignon 14' 6", while that at Seville Cathedral was 17'. The altar of the new St. Thomas's will be 12' 6". They should be at least 2' 6" deep and always more than this if possible. Of those illustrated, the altar at St. Andrew's Chapel, Chicago, is 5' 9" long, 2' 11" high, 3' 2" deep; Military Chapel at West Point, 9' 6" long, 3' 4" high, 2' 9" deep; St. Paul's Church, Duluth, 10' 0" long, 3' 3" high, 3' 0" deep; Chapel of the Intercession, 12' 0" long, 3' 4" high, 3' 6" deep.

The altar slab or "mensa" alone is consecrated and on the upper surface of this is cut five Greek crosses, one in the center and one on each corner. According to the



ALTAR, CHAPEL OF THE INTERCESSION, NEW YORK CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS



FIGURES IN REREDOS OF TRINITY CHAPEL, BUFFALO, N. Y.

Roman rite these crosses must have been anointed by the Bishop with chrism in the ritual of consecration before the altar could be used. "In the consecration of altars," said the late Father Morris, when writing to the Antiquary in 1890, "a little fire is made on each of the crosses. Five pieces of incense are put on each cross, and on the lumps of incense a cross is made of thin wax taper which is lighted at the four ends. When the fire is burned out, the ashes are scraped away with a wooden spatula, but, as the cross is incised, the melted incense runs into it and remains there, as the scraping is only flush with the surface." "The five crosses seem, however, to have been cut in the slab whether the ceremony of formal consecration was carried out or not. Most of the known early examples bear only one or more crosses in the front of the mensa."

The altars at West Point and at West Haven are the only ones having a gradine. In America we are rather careless in such matters. In the Roman use, they are allowed both by custom and by law; but in the Church of England "gradines and shelves cannot be included among the ornaments covered by the rubric. They seem never to have been in use

anywhere until the sixteenth century; and undoubtedly the custom was for the two candlesticks to be placed on the altar itself. Surely nothing could be worse than a flight of steps back of the altar littered with flowers and candles.

The tabernacle used for reservation should stand wholly detached and should be affixed to the mensa, not inserted in the gradine or let into the reredos. It should be completely veiled—like a "little tent," the color of the veils corresponding to that of the vestments, black excepted. This is the Roman law.

If the top of the altar projects 2 inches it gives room below for the feet of the celebrant. Where possible, it is a great convenience to have a passage directly back of the altar. At the Chapel of the Intercession this is three feet wide.

In the beginning altars were not elevated on steps, but were built flat on the pavement. In the fourth century they were raised one step above the sanctuary floor. It has become the custom, for symbolic reasons, to have an odd number of steps, usually three. Many steps leading up to the altar platform are almost always a mistake. It is a question whether in a small chancel one step is not best in any case. Trinity Chapel, Buffalo;



FIGURES IN REREDOS OF TRINITY CHAPEL, BUFFALO, N. Y.

Grace Church Chantry, New York; and St. Paul's, Duluth, have each but one step. St. Andrew's Chapel, Chicago, has two; and the other examples given have each three steps. These steps should never be more than 6" high. St. Andrew's Chapel and St. Paul's, Duluth, are only 5"; all of the others being 6".

The first step, the footpace, should be at least 30" wide. At the Chapel of the Intercession, it is 3' 4"; while at St. Andrew's Chapel it is 4' 0", which is the ideal.

In our examples the deacon's and sub-

deacon's steps vary from 12" to 18" in width. Where space permits it is an advantage to have these wider, at least two feet, so as not to crowd the ministers serving mass; and in order to produce a better effect.

Communion Table

In the Communion Table for the First Baptist Church of Pittsburgh, Mr. Goodhue has gone back for his inspiration to the early open table altars in use up to the fifteenth century. The result is an unusual, but successful, solution of the problem. Unfortunately the photograph shows the table turned around.

Ciborium

In St. Luke's—a Romanesque church the ciborium has been restored with very good effect (nearly all of the old metal dome being retained), giving just the dominant note to the altar that its position requires. Of course, rich brocade curtains will take the place of the plain cream hangings of the photograph.

Reredos

Quite the most conventional of Mr. Goodhue's reredoses is the one designed for St. Paul's Church, Brooklyn, some seven years ago. It has the usual row of canopied Saints in an interesting setting of delicate stone work.

Much more rich and architectural is that for Christ Church, West Haven. The strong decorative border of a conventionalized grape vine holds the composition firmly together. The paintings are good copies of Van Dyck's Altarpiece, The Adoration of the Lamb, at Ghent. The carving is everywhere picked out in gold with a little color added;

and the whole is extremely effective. To this type belongs the one for St. Paul's, New Haven, as yet in existence on paper only. Here the same use has been made of the conventionalized grape vine; but the composition is much richer

and doors have been added.

Much freer is the treatment of that for Trinity Chapel, Buffalo. Here the problem was complicated by an ugly altar with very bad east windows which had to be kept. The altar will be draped. Over the window runs the delicate canopied tracery, obscuring the worst of the glass. The extraordinary character and vitality of the figure carving here shows that we still have craftsmen capable of carrying on the "great tradition." Taber Sears, the painter of the panels, also caught the Gothic spirit; not that these are period paintings by any means; but the rich brocades and color bring them into harmony with their setting. In this instance very little color is used upon the woodwork.

While it is in no sense archæological, a suggestion of Buffalo might be found in late German work, but St. Andrew's Chapel, Chicago, is a still greater departure from tradition. More splendid in gold and color than any of his previous work its ornament has almost a Celtic richness. A feature unique in this country is the tester that spreads out over the altar and predella. The pictures painted by Mrs. Traquair, of Edinburgh, inspired apparently by the extremely rare English "primitives," are highly conventionalized both in color and drawing and admirably fit their setting. They are very small, but the conception is so broad and so deeply reverent is their feeling that the whole is a most successful piece of religious art.

The reredos—perhaps one should call these smaller ones triptychs—for the Lady Chapel of the Chapel of the Intercession is more architectural in its lines. The ornament is exquisitely delicate and free; but it is confined in simple masses and is treated more like a frame for the painting. To get the soft lustrous color desired, this was done entirely in burnished gold, to which the color was applied. It is toned down quite low, so that it melts back into the shadow of its sanc-

tuary. The groined vault, the richly carved screens, the hanging lamps of silver and the triptych make this chapel a

very perfect jewel.

Quite the most interesting is the new altar for the Chapel of the Intercession, which in many particulars is unique. For this the Vicar has collected many historically interesting stone relics. These are set into the front of the altar and held in place by a golden vine—a kind of "tree of Jesse"—all on a black ground. The altar itself is of marble. The predella and steps are of alternate bands of

yellow Sienna and Alps green marble. There is no gradine, the ornaments standing directly on the mensa, following the early custom.

Behind is a splendid dossal of specially woven brocade, set in a richly carved and gilded frame. Crowning all is the tester, covering both priest and altar. The sides of the altar are enclosed by riddels, harmonizing with the dossal, supported by the riddel posts surmounted by gilded angels bearing tapers. In its beautiful setting, this is probably the most splendid altar in America today.



FIGURES ON ORGAN CASE, ST. THOMAS' CHURCH, NEW YORK

CHAPTER SIX

Chancel Rails, Credence, Sedilia, Fonts

ITH the taking away of the chancel screen some protection was needed for the altar, and in Archbishop Laud's time altar rails were introduced. These apparently soon served also for communion rails. Manuscript miniatures show that benches were used in the Middle Ages; though possibly these were provided only for the infirm, the others kneeling directly on the pavement. This arrangement can be followed perfectly well to-day where the sanctuary is small and cramped (perhaps using a houseling-cloth), with short kneeling benches placed at the sides for use by the old and infirm communicants.

Most important, in this connection, is the position of the rail. It must be set well back from the edge of the top step, twelve inches being an absolute minimum, and two feet being none too much. Where kneeling benches are used, as in the case of St. Andrew's Chapel, Chicago, and Trinity Chapel, Buffalo, they do not have to be fixed to the floor; and so, if the sanctuary is crowded, can be pushed forward when not in use by the communicants. These benches, besides looking better and being more comfortable to use, are of great assistance to the officiating clergy, for they raise the communicants above the floor and the priest does not have to bend down to serve them.

Of course the grotesque modern rails in lacquered brass and onyx are impossible. Marble, while easily cleaned, is rather cold, and where not heavy in detail tends to become trivial. Wood seems to be much the most satisfactory material. The rail at St. John's, West Hartford, is a good simple example.

Frequently the old rails carry inscriptions, as that at Galcombe, Isle of Wight:

"I will wash mine hands in innocency so will I compass Thine altar, O Lord.

"Create in me a clean heart, O Lord,

and renew a right spirit within me." At St. Paul's, Duluth:

"Hoc est corpus meum quod pro vobis datur hoc facite in meam commemorationem. (This is my body which is given for you, this do in remembrance of me.) Hic est calix novum testamentum in sanguine meo qui pro robis fundetur." (This cup is the new Testament in my blood which is shed for you.—Luke 22, vs. 19-20.)

The rests at the top should be broad and sloping as a support for the arms. These tops should be at least five inches wide, and are better if wider. The old rails were generally two feet six inches high; but it is better both for comfort and convenience that they should not be more than two feet two or two feet three inches above the kneeling level. The rail at St. Thomas's shows an unusual arrangement of bronze panels set in an oak frame. The panels bear symbols of the Eucharist. The most beautiful examples shown are the kneelers for Trinity Chapel, Buffalo, and St. Andrew's Chapel, Chicago. All of these are provided with pigskin cushions.

Litany Desks

The litany desk has become something like a fixture in Anglican churches, though the more approved custom is to remove it when it is not in use. In parish churches its position is between the pews and the chancel steps, or at the head of the central aisle. It is a sort of *priedieu*, the desk of which supports the book containing the litany. Because of the penitential offices, the design should be simple—almost austere. In the desk for St. Thomas's are introduced four penitential symbols.

Credence

Thiers says that in his time churches frequently had two credences; though he adds that the north one had no special use. The credence as we know it does not date back even to the Reformation.



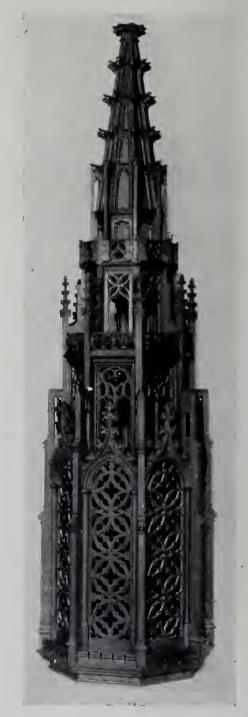
FONT, ST. JOHN'S, WEST HARTFORD

"In Mediæval times a shelf was often fixed above the sill of the piscina, on which were placed the cruets." In Scotland a niche in the side walls seems to have been the usual form of the credence. This arrangement, with oaken doors, is used at St. Andrew's, Chicago; while at Grace Church Chantry, the niche, quite ornate, is open. The elements are frequently prepared at a side altar or on the south end of the high altar; but if the credence is used for this purpose, a table, from 21 to 27 inches long and from 12 inches to 15 inches deep, is more convenient than the niche. The credence at West Hartford is a conventional example, while that at St. Mark's, Mt. Kisco, with its angels swinging censors, is a much more interesting and happier conception. The credence should preferably stand against the east wall, south of the altar. If there is no room there it may stand against the south wall. It should be covered with a linen cloth; but no cross nor candlestick should adorn it.

Sedilia

The sedilia, placed against the south wall of the sanctuary, may vary in form

from the scaamnum, or portable bench with a low back, to the more preferable form of the seats built into the wall. Separate seats are forbidden by the Roman rite. There are examples of these built-in seats having one, two, three, four and five places; but ordinarily there are three—for the officiating priest, the



ST. PATRICK'S CHURCH, HUNTINGTON, L. I., N. Y.

deacon and the sub-deacon. The modern arrangement usually takes some such form as the canopied one at St. Paul's, Brooklyn, or that at the Chapel of the Intercession. But very frequently in old examples the seats are at different levels, the eastern one being the highest. This



ST. ANDREW'S CHAPEL, ST. JAMES'S CHURCH, CHICAGO

highest seat was also made more ornate than the others. "But this arrangement was altered by the decrees of the Council of Trent which ordained that the celebrant should take the central seat with his assistants on either side of him," and "later examples show reversion to the unbroken level seats." The seats in the St. Paul's example are set forward three inches so that the priest's chasubles may fall between them and the back.

The piscina was often built as part of the sedilia, and the credence was sometimes joined to it. This first arrangement occurs at the Chapel of the Intercession.

Chairs

We saw that in the early Church the bishop's seat was a raised throne at the back of the apse—the seats for the clergy being ranged on either side. When these were moved westward, the clergy's seats became the sedilia on the south side of the

sanctuary, while the bishop's throne was placed on the north side. In England it was customary in the cathedrals to place the throne on the epistle side. The Roman rite, however, directs that the throne should be placed on the Gospel side, and should be raised a step above the level occupied by the assistant priests and deacons.

"Ritual Notes" says "It should have three steps and a canopy that can be easily covered with hangings appropriate to the occasion."

Los Angeles Cathedral is designed in a particularly free, modern style, showing both Gothic and Romanesque influence. The bishop's throne reflects this same tendency. Its canopy or baldacchino will be supported on columns of brescia, verd antique, cippolino and giallo æntico mar-



CREDENCE, ST. MARK'S, MT. KISCO

ble. It is of very open tracery, gilded and painted. Under the cresting runs the inscription, "Ecce sacerdos magnus qui in diebus suis placuit Deo." Just below are scenes from the life of Christ; while in the niches above each column stand the figures of the four evangelists. The throne itself is a simple, dignified oak

chair bearing the arms of the diocese at the top. Behind will hang a gorgeous brocade.

The chair for Trinity Chapel, Buffalo, has something of the sturdy strength of the early episcopal chairs, simple as befits a chapel, but rich enough for its dignified

purpose.

Of this same type of chair is the fine officiant's seat for St. Andrew's Chapel, Chicago. The panels of the back are traceried in low relief, those of the arms being pierced. The back and front of the chair is paneled with a simple but very effective form of linen fold, set in a substantial frame. The *prie-dieu* of this chair is a gem, its ornament admirably placed and executed.

Fonts

We have no example of very early fonts. In fact, the primitive form was not



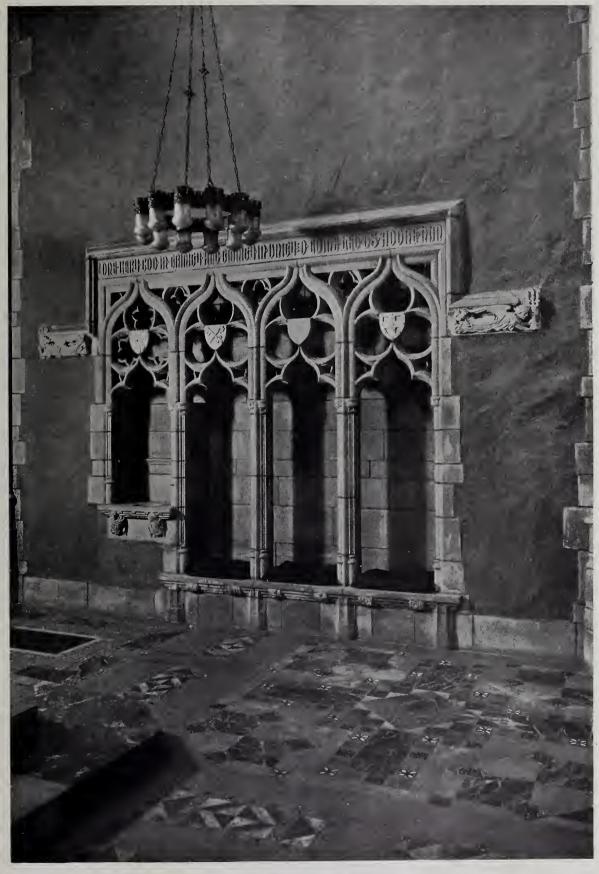
DETAIL OF DOORS
FONT, ST. THOMAS'S, NEW YORK



CREDENCE
GRACE CHURCH CHANTRY

the small, modern type but a great tank sunk in the floor of the baptistry, frequently in a separate building.

Here the bishops only baptized those who came to Christ—for though probably infant baptism can be traced back almost to the earliest days of the Church, in the first centuries the great majority of those baptized were adults. As Christianity spread over the world, the proportion of infant baptisms became greater, until finally the baptizing of an adult grew to be the exception. This condition largely determined the change from the baptistry to the font, as a matter of convenience for the officiating priest. The change was also in part due to the use of fonts in every church. There is a record of Cuthbert, Archbishop of Canterbury, in

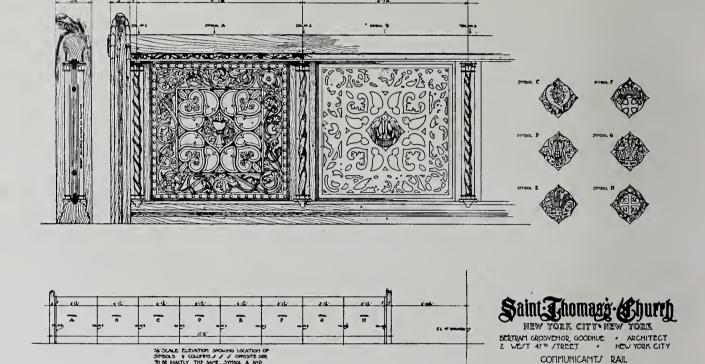


SEDILIA AND PISCINA, CHAPEL OF THE INTERCESSION, NEW YORK CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS

747, authorizing all priests to baptize, which necessitated a font in every church. "Leo IV expressly recommended that every church should have a font," and from the tenth century onward we find many examples survive.

The basin, constantly growing smaller, rested directly on the floor, until the eleventh century, but after this time it was mounted, up to the twelfth century, usually on five shafts. To this type belongs the sketch for the font of St. Paul's,

ably right in saying that "the font should, according to Canon 81, be of stone and 'set in the usual ancient place,' i.e., near the church door." It was the custom to place the font at the west end of the nave in the neighborhood of the north or south door. The western bays of the church were frequently cleared of seats and formed baptistries. This is the position of the font at St. John's, West Hartford; and where, as in this case, the entrances are from side porches, this seems the ideal



DETAIL OF COMMUNICANTS' RAIL

Duluth, the ornament of which is very reminiscent of the period.

Many materials have been used. Constantine gave a font of silver to Santa Sophia. Queen Elizabeth had two fonts made of gold, as gifts for Mary Queen of Scots and Charles IX of France, at a cost of £1000 each. We have still splendid examples of the bronze fonts of Germany. There were fonts of brass, lead, pewter, even brick and many of wood—though the latter were probably "always irregular, and, at a later time, uncanonical." It is claimed that the "material has never been confined to stone"; but Dearmer is prob-

location. The position of the font at the door of the church symbolized the entrance into the Christian family.

St. John's is undoubtedly the finest modern lead font in existence. It was made in England, where the tradition of fine lead casting has been so successfully revived.

Of course, the inspiration came from the ancient lead fonts, thirty of which are known to still exist in England. Aside from the charm of the beautiful patina of the lead the symbolism gives it an added interest. Around the bowl runs an arcade in which are seated the virtues:

Largitas, Humilitas, Pietas, Misericordia, Modestia, Temperencia, Paciencia, Pudicitia; while above are the symbols:

Cross	Faith
Anchor	
	Victory
	Charity
	Church
Gate	.Blessed Virgin Mary
Dual	



COMMUNICANTS' RAIL, ST. PAUL'S, DULUTH

On the cover is the inscription, "Quicumque enim spiritu dei aguntur sunt filii dei." This bowl, like the rare exception at Pyecombe, was cast in one piece. Most of the lead fonts were cast (in addition to the bottom) in four pieces and joined.

It seems a pity that the modern font should ordinarily be so severe and barren

of interest, or else "sicklied o'er with trivial ornament;" for the old fonts tell such interesting stories. There were scenes from the Old Testament; David with his Harp, Daniel in the Lion's Den, Noah and the Ark, etc.

Adam and Eve was a very popular subject. In St. James's, Piccadilly, the serpent winds around the bowl offering an apple to Eve—Adam stands below. Beneath another such scene runs the legend:

"Hic male primus homo Fruitur cum conjuge pomo." (Here wickedly the first man enjoys the apple with his wife.) There were various scenes illustrating the Creation and life of Adam and Eve; and they were used with other subjects. Adam and Eve were particularly appropriate for the decoration of fonts, the regenerating water of which washed away original sin.

Even the shape of the bowl was intended to be symbolic. Pugin, evidently quoting from an old source, says that there were three shapes:—round, because

baptism was for the whole world; eight-sided, because of the "eight persons who were saved by water from perishing," and square because of north, east, south and west. The circle has always been considered the emblem of Eternal Life, which is perhaps the special reason why this form is so frequently used for fonts. In the later fonts, at least, the octagon is the usual form; and it is suggested that it "embodies the fact that our Lord

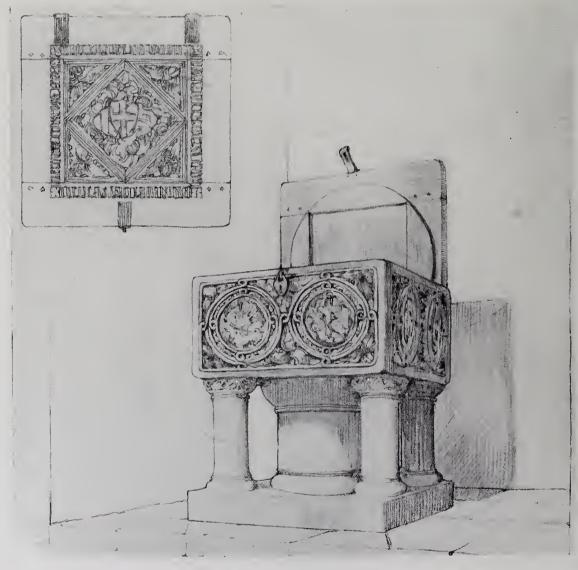
arose from the dead eight days after the Crucifixion," or, following Durandus, the "old world and old man created in seven days, new world of grace and regeneration and new man must have been created on the eighth day, of which facts the octagonal font is the outward and visible sign." But this question of symbolism



COMMUNICANTS' RAIL, ST. ANDREW'S CHAPEL, CHICAGO

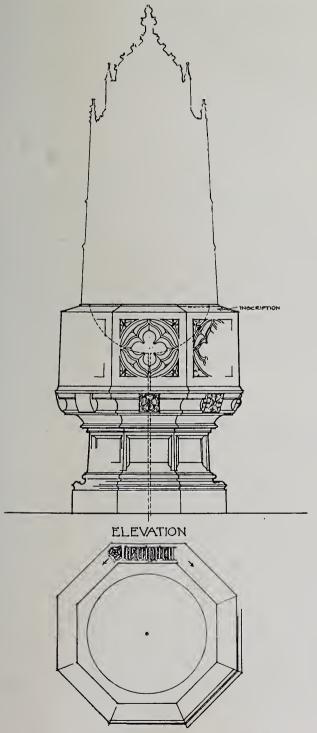


DETAIL OF SCREEN
FONT OF ST. THOMAS'S CHURCH, NEW YORK



SKETCH FOR FONT FOR ST. PAUL'S CHURCH, DULUTH, MINN.

of shape is very baffling, for while the octagon is a common form in fonts it is very unusual to find a chalice having eight sides; and while there are many chalices having six sides this is an extremely rare font form. If the form is vital and means anything the same symbolism should apply to both. At the same time the number eight suggests a



FONT, ST. PAUL'S R. C. CHURCH, BROOKLYN

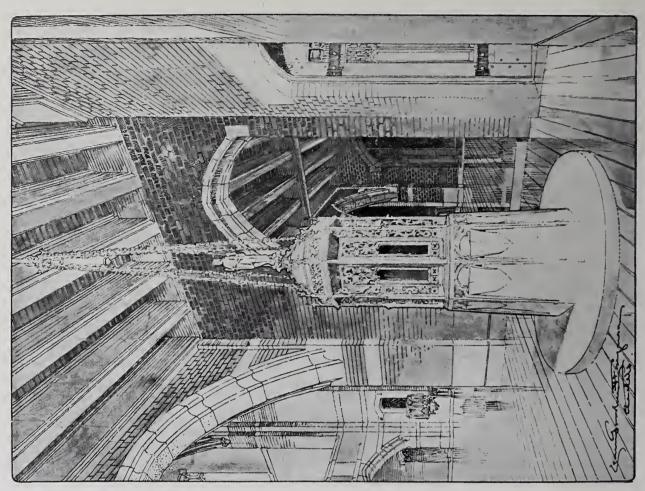
most interesting series of subjects in representations or symbols—among others the seven days of creation, and, eighth, being the symbol of Christ.

The octagon may only have been derived from the tradition of the eight-sided baptistry and tank; it may have been used because it was a more graceful form than

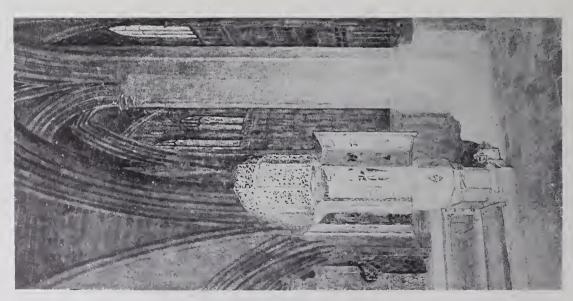
the pentagon or hexagon.

Very frequent among the illustrations are scenes from the life of Christ, viz., the "Annunciation," the "Entry into Jerusalem," the "Last Supper," and the "Crucifixion," etc. Sometimes, in this last scene, the souls of the dying thieves are shown as tiny babes issuing from their mouths, the one ascending to Heaven and the other descending to the jaws of Hell. The seven sacraments were fully recognized in England up to the Protestant Reformation. "About the middle of the fifteenth century the singularly happy idea of depicting the seven sacraments of the church occurred to the designers of the more elaborate English fonts." No particular order was observed in the arrangement of the subjects, they were apparently placed haphazard. Of the twenty-nine examples listed, the eighth panel is filled, in nine cases, with the Crucifixion, in seven with the Baptism of our Lord, in three with the Last Judgment, while the Communion of the people, the Assumption, the Virgin and Child, the Holy Trinity, Our Lord in Glory, the Martyrdom of St. Andrew and the figure of the donor occur once each. Then there were the symbols of the Passion alternating with the Evangelists, the symbols of the four evangelists with their names on scrolls, bands of angels, the twelve apostles, a single example having the Holy Trinity, Virgin and Child and the twelve apostles two and two.

Animals also played an important part in these decorations. There is St. Michael slaying the dragon; and, on the ancient Cornish fonts, are dragons and salamanders. Two peacocks—the symbol of immortality—were used; sometimes picking at a bunch of grapes, sometimes drinking from a vase, the reference being to the Eucharist. The lion was depicted sleeping with one eye open, as he was said to do in the Physiologus. He is a type of

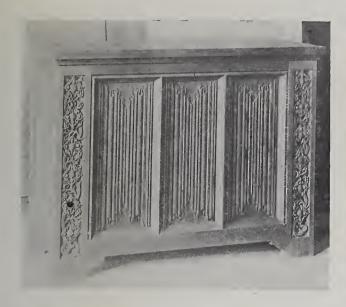


CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS



SKETCHES FOR FONTS

At left: ST. THOMAS'S, NEW YORK
At right: A CHURCH IN OHIO



CREDENCE



KNEELER

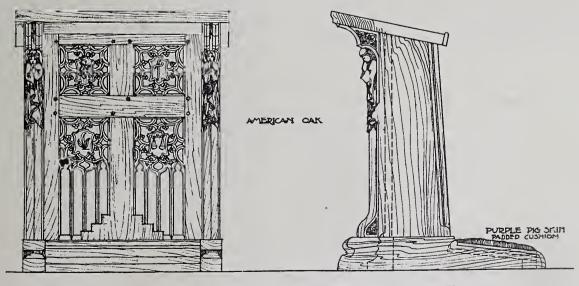
Him who "watching over Israel slumbers not nor sleeps." The Agnus Dei was also used frequently surrounded by savage beasts. In quite early times we find the river Jordan, personified, the river with fish swimming in it, the passage of the Red Sea, a fisherman, the descending dove, and crowns both thorny and celestial—typifying the trials and rewards of the Christian life entered through the gate of baptism. At one period the signs of the zodiac and their appropriate signs representing the months, were used.

Inside the bowl were carved fishes, frogs, shells, etc., the swimming fishes

suggesting the living waters of baptism.

Whole alphabets were arranged around the flat tops of the bowls. It has been suggested that this was used for instruction—a sort of Sunday school lesson—but a learned antiquary points out that alphabets also appeared on bells and that belfries could hardly have been used as Sunday school classrooms.

In the later fonts the decorations were more ornate and the symbolism more complex. At Stanton Fitzwarren are eight virtues trampling the corresponding vices under foot. Their accompanying scrolls read as follows:



LITANY DESK, ST. THOMAS'S CHURCH NEW YORK

Largitas
Humilitas
Pietas
Misericordia
Modestia
Temperancia
Paciencia
Pudicitia

Avaritia Superbia Descordia Invidia Elaietas Luxuria Ira Libido

On a similar font the virtues are represented by knights between whom are scrolls on which appear the names of the



CLERIC'S CHAIR
ST. ANDREW'S CHAPEL OF ST. JAMES'S
CHURCH, CHICAGO

vices written backward as though seen in a mirror.

The great bronze font at Hildesheim is supported by four kneeling figures. They bear vases from which flow out on to the pavement the four rivers of Paradise. Above runs an inscription explaining the connection of each river with a special virtue: Pison with Prudence; Gihon with Temperance; Hiddekel with Strength; Euphrates with Justice. On

the side of the bowl are representations of the passage of the Red Sea, of the Jordan, of the Baptism of Christ, and of the Virgin and Child.

Full of interest, too, were the old inscriptions. What could be finer than the inscription in curious Norman French on the font of Keysoe, which, translated, reads: "All ye who pass here pray for the soul of Warel, who may God by His grace grant true mercy." The famous palindromical lines from Santa Sophia, "Nixon Anomhma Mh Monan Oxin," i. e., "Cleanse your sin, not your face only," was much used. Some were merely pious, as: "Hoc fontis sacro pereunt delicta



CLERIC'S CHAIR
TRINITY CHAPEL, BUFFALO

lavera," i. e., "Sins perish in this holy bowl." "Carne rei nati sunt hoc Dei fonte, renati," i. e., "Those born guilty in the flesh are born again in God in this

font." Others contained good advice, as:

"Pater Noster, Ave Maria, Criede Leren ye child yt is nede,"

and

"Good people all, I pray, take care, That in ye church you doe not sware As this man did."

This last, at Tollesbury, refers to a parishioner who in 1718 came to church drunk and created a disturbance. To escape prosecution he gave the font to the church, and the church warden ordered the above inscription placed on it.

The use of anything save a proper font had been forbidden by Elizabeth. The Puritans, however, forbade the use of all fonts, and their place was taken by mere basins, a number of examples of which,



CREDENCE ST. PAUL'S CHURCH, BROOKLYN

in pewter, still survive. This usage obtained such a hold that, "Only a few years ago a shallow Wedgwood saucer, with cover, the whole precisely like a muffindish, was especially made for this purpose." Not so long ago some such practice was frequently met in America; but, happily, is now a thing of the past.

The English fonts average a foot deep and one and a half to two feet in diameter. Beverly Minster, three feet eight inches in diameter; Wroxeter, three feet nine inches in diameter, and Hexham, three feet two and a half inches in diameter are abnormally large sizes. The West Hartford font is three feet five inches high, the bowl being two feet one inch inside diameter and eleven inches deep. St. Paul's, Brooklyn, is three feet six inches high with a bowl two feet by ten inches deep. The new font for St. Thomas's is three feet high, the interior being one foot four and a half inches by eight inches deep. "Partitioned fonts" probably do not go

"Partitioned fonts" probably do not go back further than the fifteenth century. Where the consecrated water is kept, as in the Roman rite, they are necessary. Such an arrangement is shown on the font at St. Patrick's Church, at Huntington, L. I. In the Anglican church the water is not now reserved. "As the rubric in our baptismal service orders the font to be filled at each baptism, a drain is now necessary." This drain should run directly to

the earth.

In the Middle Ages, and still in the Roman Church, the water, once hallowed, was kept a long time, and it was necessary to provide a strongly locked cover to prevent the water from being stolen and used for practicing the Black Art. At first these covers were flat lids similar to the one at St. John's, West Hartford. The covers soon grew more ornate, something like the covers for St. Patrick's, Huntington, and St. Paul's, Brooklyn. These covers are raised and lowered by counterbalance weights. Of the same type, though less conventional, is the sketch, by Mr. Goodhue, of a shrine cover surmounted by a figure of St. John the Baptist. It was usual to place the figure of the Virgin, the patron saint, an angel, a dove or a "pelican in piety" at the top of these covers.



CLERIC'S CHAIRS AND KNEELERS

At left: ST. ANDREW'S CHURCH, BROOKLYN CHURCH, ST. ANDREW'S CHAPEL OF ST. JAMES'S CHURCH, CHICAGO

CRAM, GOODHUE & FERGUSON* (NEW YORK OFFICE), ARCHITECTS.



CHAPTER SEVEN

Altar Furnishings

PEFORE considering the ornaments of the altar, there are some small articles that deserve attention.

Hymn Boards

Hymn boards should be large enough to have a space for the day, the psalm, and at least three lines for hymns. A satisfactory example is that for the Chapel of the Intercession. There are four of these placed at convenient positions through the church. They are very simple, I had almost said inconspicuous; but there is no reason why, if the scheme of the church decoration is rich, color and gold should not be introduced. St. Andrew's Chapel, Chicago, is very small, and here the hymn board occupies one panel of the metal door at the right of the chancel.

Notice Boards

A notice board is needed in at least one of the church entrances. The example shown—that for St. Thomas's—is a frame in dull gold and color, and has a glass door that locks. Inside is one of the patented bulletin boards, having sets of adjustable letters, which can be had in any size. The letters are simple and legible and the whole effect perfectly quiet and dignified. A simpler scheme, and a satisfactory one, is to have a board covered with good serge or baize on which the notices are put up with thumb tacks.

Alms Boxes

The alms box should be something more than a mere commercial "catch-penny" device. Perhaps it is even worth while making it sufficiently interesting to invite attention. The box for St. Andrew's, Chicago, is delightful with its clasps of iron and its padlock bearing the Saint's cross. It stands on a pedestal that raises it just above the back of the pew.

The question of the form that the alms basin shall take is an open one. Whether

it shall be a plate of wood or silver, or a bag of brocade with a long wooden handle, must be decided by each congregation, but the Rubric prescribes "a basin to receive the alms for the poor." "The use of alms bags, however convenient, rests on no authority, being sanctioned simply by custom."

Candle sticks

We have Leo IV. (847-855) for authority that the only objects permitted on the altar were relics of the saints and the book of the Gospels, and we find no reference to candles on the altar before the tenth century. Apparently they were in occasional use in the eleventh and twelfth centuries, and came into general use in the thirteenth. Usually there were only two until the sixteenth century; and in England this number continued in use for some time after. The Roman Caeremoniale Episcoporum in 1600 ordered three candlesticks to be placed on either side of the Crucifix and this has been the practice ever since. Hollinshed's reference to "Henry Eighth's chapel on the Field of the Cloth of Gold, where the altar was apparelled with five pairs of candlesticks of gold, etc.," is interesting as showing that in England two was not the universal number as some liturgical purists would have us believe; though they might well retort that the circumstance only goes to prove the Royal heretic was as scornful of the church's laws as of her principles.

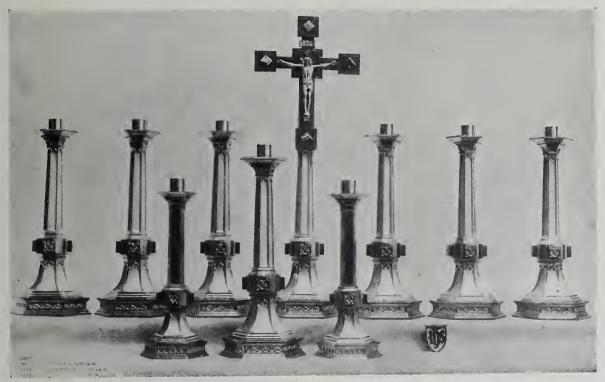
In the modern Episcopal church there was long a curious prejudice against the use of candles on the altar. Vernon Staley writes: "There exists greater authority for the use of the altar candlesticks in the second year of the reign of Edward VI. and more evidence of their use in the English church since the Reformation than for the use of the altar cross," and quotes many authorities in support of this. In general, the practice to-day is



In center: FLOOR CANDLESTICK, U. S. MILITARY ACADEMY, WEST POINT, NEW YORK At sides: RIDDELPOSTS, TRINITY CHAPEL, BUFFALO, N. Y.

to have two candles; and this is still the customary arrangement in the East. The Roman law prescribes six candles on the high altar and seven when the Bishop is officiating in his own diocese. Gold, silver, copper, gilt, latten, brass, crystal and wood have been used for candlesticks, though gold and silver do not seem to have been used in England until the reign of Charles II. Ancient candlesticks were mostly low with short candles. These look rather better on the altar than the tall ones. It also makes it easier to prop-

applies, however, only to the Episcopal and not to the Roman church. In the Episcopal the candles should be of pure beeswax and not of composite material. They should be of white wax except on Good Friday (during Holy Week, and at Requiems when the candles should be of yellow or unbleached wax). The Roman church merely requires that the candles be made of wax "in great part" or at any rate "in some considerable part." "Candles for liturgical purposes were made of beeswax probably because of the sup-



ALTAR CROSS AND CANDLESTICKS-ST. PAUL'S, BROOKLYN, N. Y.

erly proportion the candlesticks to the cross or crucifix. The candles should be subordinated to the altar cross, the flame should not be allowed to go above its top. The proper arrangement is shown in the sketch for the Mt. Kisco cross and candlesticks. The crosses for Ashmont and Brooklyn were designed to stand on tabernacles and not flat on the mensa, which accounts for their appearing to be small.

"The use of imitation candle bases, called 'dummies,' 'stocks' or 'judases' to give height to the altar candles—and consequently of shields to hide the juncture of the candles and stocks is illegal." This

posed virginity of bees, the wax therefore being regarded as typifying Christ born of a Virgin Mother."

Altar Books

An interesting example of his careful attention to the minutest detail connected with the church, is the altar book for which Mr. Goodhue designed the type and drew the borders. (See pages 88 and 89.) In the Middle Ages the same care was lavished on the books of the Gospel as was spent on the decorating of all other objects of ceremonial use. It is impossible today to have beautiful hand-

wrought missals for our altars, but we should at least demand that the letterpress of these be as perfect as possible. The design for the binding of this altar book for St. Andrew's Chapel, Chicago, is



CHALICE FOR DUNWOODIE, NEW YORK

of interest chiefly for its rich and dignified simplicity. It is to be bound in white pigskin, blind tooled. On the front cover are the symbols of the four evangelists in silver holding cabochon jewels, these protecting the binding from rubbing. On the reverse side the four rivers of Paradise, with their symbolic meaning, take the place of the four evangelists.

Alms Basins

For the memorial chapel as well as for the great church silver basins seem particularly fitting; and they offer a splendid opportunity to the silversmith. The basin for St. Paul's Chapel, New Haven, bears the arms of the donor and an inscription. That for St. Andrew's Chapel, Chicago, has the emblems of Faith, Hope and Charity and the inscription "And now abideth Faith, Hope, Charity, these three; but the greatest of these is Charity." Both of these are of handwrought silver, that of St. Andrew's being remarkable for the texture of its surface and the beautiful execution of its ribbon letters and ornament. St. Thomas's has a set of twelve medium-sized basins and one larger one into which the offerings are emptied. The large basin bears the inscription—"All things come of Thee, O Lord, and of Thine own have we given Thee." The memorial inscription is placed on the bottom of the basin. The three medallion scenes picture Faith, Hope, and Charity, while in the center of the basin is engraved the arms of the parish. Some of the texts for the smaller ones are:

"Blessed be the man that provideth for the sick and needy;"

"He that hath pity on the poor lendeth unto the Lord;"



ST. PAUL'S CHURCH, NEW HAVEN, CONN.

"Honour the Lord with thy substance and with thy increase;"

"With what measure ye mete it shall be measured to you;"

"Everyone shall give according to his inheritance."

These inscriptions are quoted partly because appropriate ones are hard to find



BULLETIN BOARD, CHAPEL OF THE INTERCESSION

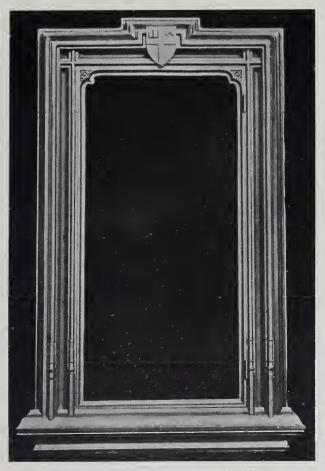
and partly to show the pains that a conscientious architect must take if he is not to follow the usual trite examples. The size of the basins shown are:

	Diam.	Depth
St. Thomas's, large basin	20"	$31/_{2}''$
St. Thomas's, small basins		
(12)	13"	27/8''
St. Andrew's	13½"	27/8''
St. Paul's, New Haven	,	

The Altar Cross

It is very difficult to get satisfactory photographs of silver because of the play of light on the surfaces. The illustration of the altar cross for St. Andrew's Chapel is very disappointing in its failure to show the vigorous modelling and spirit of the work. When you see the original, the metal lives. The black background also complicates matters for its reproduction for the ebony of the cross on which the silver is built has entirely disappeared, giving an unpleasant open-work effect. The medallion scenes are in carved ivory, yellowed. Mr. Arthur Stone is the artist who interpreted the design.

Where the altar cross forms part of an altar set, that is, where there are candles,

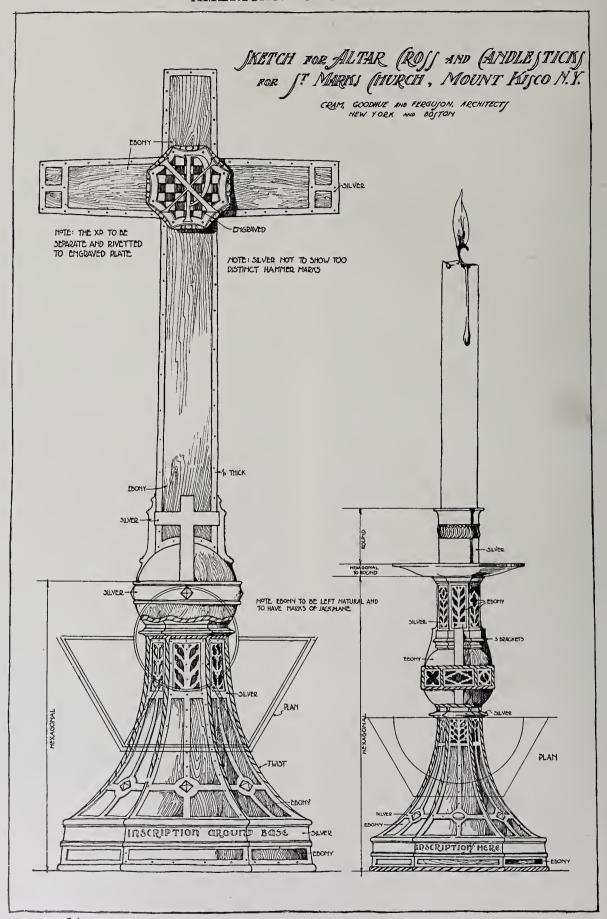


ST. THOMAS'S, NEW YORK

the lower part of both cross and candlesticks should be the same.

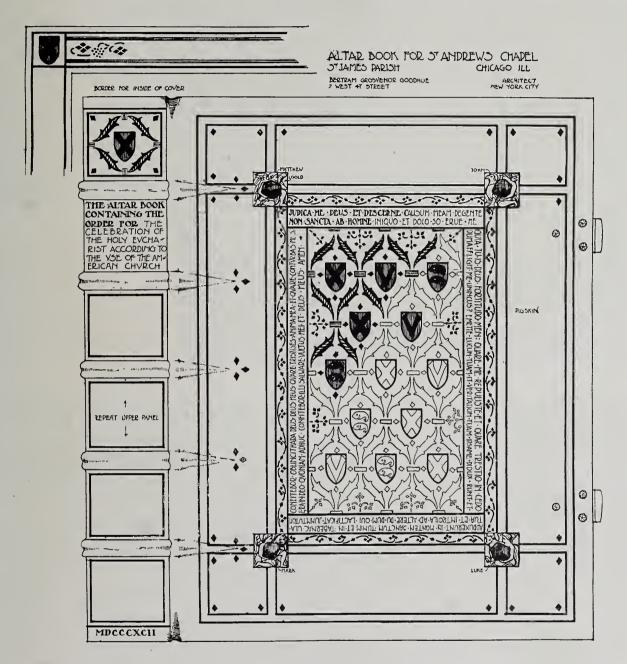
Floor Candlesticks

Floor candlesticks, similar to the wonderful Paschal candlesticks of Italy, may



be used with splendid effect. The seven light candlesticks at West Point (see page 80) add much to the effectiveness of the composition of the altar and dorsal. They are richly ornamented and finished in dull burnished gold. Electric candles had to be

either side of the altar, is the octagon, and these may well be painted in small conventional patterns. Usually it is necessary to dull the color and gold in order to bring it into harmony with reredos and dorsal; though haply with the return



used and the scheme of having the bulb project a slight distance above the top of the porcelain candle is most convincing when they are fully lighted.

Riddel Posts

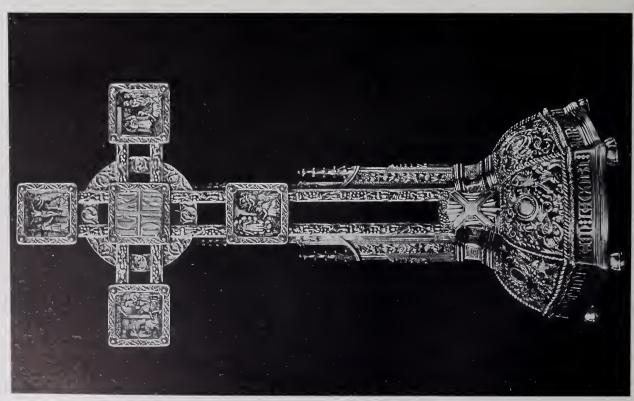
A frequently-found form for the riddel posts, which support the hangings on

to rich color in the sanctuary and the use of splendid brocades for hangings, the color of the posts need not be toned down too much. The riddle posts usually carry angels supporting pricket candlesticks or bearing the instruments of the Passion. Hand-made wax tapers to fit prickets can now be obtained from at least one com-



ALTAR CROSS AND PATEN

ST. ANDREW'S CHAPEL, CHICAGO.





SMALL ALTAR BASIN, ST. THOMAS'S CHURCH, NEW YORK

mercial house at exactly the same rate as the ordinary wax candles. It is needless to point out how very much more harmonious these are than the ordinary candles of commerce.

The Chalice

Of all the ornaments in the church, by far the most important was the chalice and on this has been lavished the goldsmith's art in all ages. So important was it that the word "chalice" is often used figuratively as a symbol of its sacred contents. In the early church it is probable that the chalice was usually a glass cup. Wood and horn chalices were also in more or less common use; and there are records showing that even clay was used. Wooden chalices were certainly in use until the ninth century; in Ireland we know that there were chalices of bronze; and copper, tin and ivory served as well as the precious metals. Until the fifteenth and sixteenth centuries it was a custom to place a chalice on the dead priest's breast and to bury it with him just as today the chalice stands on the priest's coffin during his obsequies. It is to this custom that we owe some of our finest ancient examples, for many of these have been recovered, some being very beautiful examples, though most are merely the burial chalices of wax or pewter. Besides being made for this purpose, pewter chalices were used at Mass well into the Middle Ages when the church happened to be very poor. As late as 1700 copper gilt was also used in poor churches. From very early times, however, the precious metals were used: for St. Augustine speaks of "two gold and two silver chalices dug up at Cirta" and St. Chrysostom speaks of "a golden chalice set with gems."

Several councils of the church forbade the use for chalices of horn, glass and copper. The Archbishop of Canterbury forbade the use of pewter in 1222; and in 1175 the council of Westminster had "ordered that all chalices be of gold and silver."

The earliest form of the chalice was that of a cup with a broad base, almost stemless, much the form of the famous Ardagh chalice. This is of Celtic workmanship and one of the oldest chalices that we have. Like nearly all of the very ancient chalices, it has two handles. It stands seven inches high and has a bowl of the unusual size of nine and one-half inches diameter, and can hold nearly three pints. Another early form, some examples of which remain from about 1650, had a cup like a celery glass; that is, very deep, and having neither stem nor handles. "Down to the tenth century the



ST. THOMAS'S CHURCH, NEW YORK



A PAGE FROM "THE ALTAR BOOK."
DESIGNED BY BERTRAM GROSVENOR GOODHUE



A PAGE FROM "THE ALTAR BOOK."
DESIGNED BY BERTRAM GROSVENOR GOODHUE.

chalices usually had two handles, their type being that of the ancient cantharus. In the tenth and eleventh centuries a cantharus form and a type without handles are both found and the handles did not disappear until about the end of the twelfth century. The bowl in the early chalices was hemispherical shape, and this continues down to the thirteenth century; but in the fourteenth century the shape became more conical and the stem and knop tended to become prismatic, while the foot, formerly cicrular, was made angular and divided into lobes. On the lobe or compartment which the priest held toward him was engraved a cross or the Crucifixion. These changes may have resulted from the laying of the chalice upon its side on the paten, for the form with the smaller bowl and angular foot would not roll in the same man-



GRACE CHAPEL, CHICAGO, ILL.

ner as the larger round-footed cup." A number of very large mediæval chalices with handles have been discovered, and it is possible that these were used to communicate the people, and were different from those used by the priests. This may also be the explanation of the enormous size of some of the Byzantine chalices that still remain. Many of these latter are of rock crystal or agate, and are elaborately mounted in metal.

Up to the fourteenth century the chalices, in the Western church at least, were comparatively small—sometimes bearing inscriptions and the names of the Twelve Apostles, or having simple etchings and jewel work. In the fifteenth century the knop became more and more ornate, frequently resolving itself into a group of studs or bosses something in the style of the Dunwoodie chalice. Later

this took the form of elaborate arcading with figures, etc., until, in the Renaissance, the ornament became excessive spreading all over stem, base and cup. From the sixteenth century the chalices generally were elaborate and ornate, Spain and Portugal producing perhaps the most complex but certainly not the most beautiful examples.

A superb chalice of the fifteenth century North Italian work is in the South Kensington Museum: "This example is extraordinarily elaborate and of beautiful shape and proportions. The deep bowl is encircled below by a choir of angels, admirably wrought on an enamelled background, the smaller figures so minute that only close examination reveals their beauty. The stem, pierced with tracery, has a knop of rich tabernacle-work with niches enclosing figures of Christ with the orb, the Virgin and Child, St. Peter with the keys, St. Paul with a sword, St. John with his gospel-book, and an angel with

the Book of Life. The six-lobed foot bears figures of Christ wearing the crown of thorns, a bishop or an abbot, saints of the Dominican Order, and an angel. Above, half-figures of angels rise from flowers."

In England, after the Reformation, the communion cup replaced the chalice. The



DUNWOODIE CHALICE

earliest examples date from the time of Edward the VI., though most are from the period of Elizabeth. All are very simple, the bowl being high and beaker shaped and the small paten, when reversed, formed a cover of which the lower part serves as a handle. This form continued down to the Commonwealth.

At least from the ninth century down to the end of Romanesque period, a calamus canna, fistula, etc. (i.e., a tube), was often used with the chalice. The calamus survived until comparatively modern times at certain places, as in the monasteries of Cluny and St. Denis; and is still used by the Pope. At the solemn Papal high mass the chalice is brought

from the altar to the Pope on his throne and the Pontiff absorbs the contents through a golden tube. Occasionally in the Middle Ages a small spoon accompanied the chalice for mixing the wine and water.

The height of the Gothic chalice varied from five to seven inches. A chalice six inches high is large enough to communicate sixty people and is a most convenient size for ordinary use. On great occasions it is better to use two chalices than one of great size with the added danger of its being upset. Eight inches is quite as large as is ever necessary. The bowls are best perfectly plain, both inside and out, and so most easy to cleanse. Also, as a matter of cleanliness, it is best to have the stem and base hollow and to have the cup provided with a screw so that it can be removed from the base when being washed. The bowl is usually about four inches across and seldom over In St. Andrew's chalice it is five inches, while in the Dunwoodie examples it measures four and one-half inches.

The present law in the Roman church says that the chalice, or at least the cup of it, must be either of gold or silver—in the latter case the cup must be gilded inside. "In circumstances of great poverty or in time of persecution, a 'calix stanneuss' (pewter) may be permitted; but the bowl of this also, like the upper surface of the paten, must be gilt." Before use it must be consecrated by a Bishop with holy chrism. Strictly speaking, only the Priest and Deacon are permitted to touch the

chalice or paten. The base should be much larger than the bowl for the sake of safety. This seems overdone in the case of St. Andrew's chalice, the result being a little ponderous; but the two Dunwoodie bases are very satisfactory. The knop is to insure a firm hold on the chalice, to eliminate any chance of its slipping. This is frequently enriched with enamel as in the case of the symbols on the Dunwoodie chalice, with jewels as in that for St. Paul's or with tracery and tabernaclework. Grapes and wheat, symbols of the Eucharist, are especially appropriate for the ornamentation of the knop. Most old examples do not show elaborate symbol-





ALMS BASINS

ism in the ornament. though in the famous example at Mayenne, the five "Doleful Mysteries" are shown on the foot Frequently and knop. there is only an inscription, as, "I will take the chalice of salvation," or as that around the base of the Dunwoodie example, the translation of which reads — "We offer unto Thee, O Lord, the Chalice of Salvation, beseeching Thy clemency that into the sight of Thy Divine Majesty it may ascend with the odour of sweetness for our salvation and that of the whole world."

In old inventories "chalice" means both chalice and paten. The paten is a circular plate for the reception and distribution of the consecrated wafers or bread and made large enough to cover the chalice. Before the Reformation they frequently had

stems like those still in use in the Greek "In the sixteenth and seventeenth centuries patens made to serve as covers or lids to the chalice became more common. Nearly every extant mediæval example has a sacred device engraved upon it; but now that many breads are consecrated, a plain surface is more convenient. Still the surface should always be depressed and should not be polished so as to reflect the face like a mirror; indeed it is only mechanically finished metal work that has such a surface." In old examples the well or depression of the paten is with the rarest exception, engraved with some sacred device —the Manus Dei (the Hand of God up-



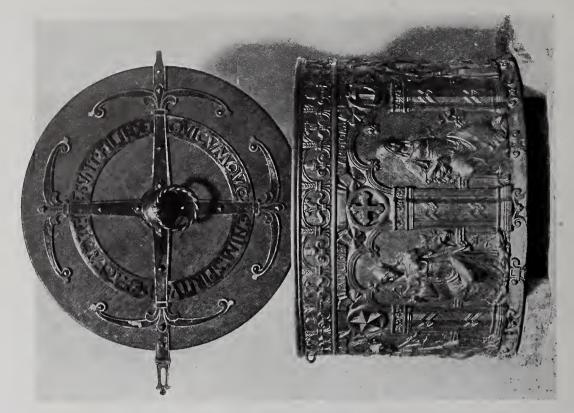
ALMS BOX ST. ANDREW'S, CHICAGO

lifted in blessing) or the Vernacle (representation of our Lord's face) being most common. But to-day, at least in the Roman Church, the whole of the upper portion of the paten must be perfectly plain. It should be of gold or silver, and if of the latter the upper surface must be gilt.

The Dunwoodie paten with the Crucifixion in enamel on the bottom is in accordance with the Rubric. The rim fits just inside the cup and prevents the possibility of slipping. The most beautiful of these patens is that for St. Andrew's, Chicago. The silver is wrought to a most exquisite surface, and the carved Crucifix rivals the best medal work of to-day. It is indeed a rare gift to the Lord.

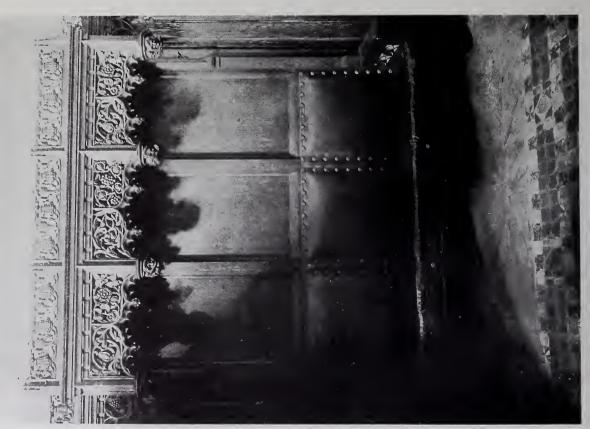
The Prie Dieu

In the tiny oratory of the Bishop of Rhode Island stands a Prie Dieu, given him as a token of love by many friends. It is not only unique, but is one of the finest pieces of modern ecclesiastical furniture. Everyone working on it strove for perfection. The hinges and intricate lock though finely wrought of iron are as fine as a goldsmith's work, the carving admirably done; and to obtain its lustrous color the figures and cresting were finished in burnished gold leaf, which was then painted, and the whole very much dulled. A purist might call it bad art to imitate antique, but the result is so mellow, so exquisite, that after seeing it no one could criticise.



Above: FONT, ST. JOHN'S, WEST HARTFORD At left: SEDILIA, ST. PAUL'S, BROOKLYN.

CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS

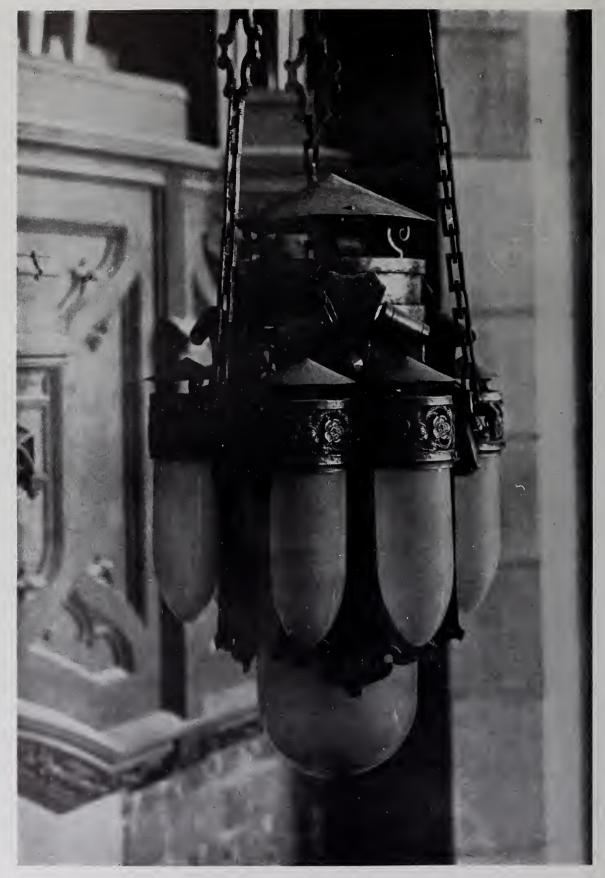




CHANCEL FIXTURE

ST. MARK'S, MT. KISCO ST. THOMAS'S CHURCH, NEW YORK MESSRS. CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS

GUILD HALL FIXTURE



SAGE MEMORIAL CHURCH, FAR ROCKAWAY, N. Y. CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS

CHAPTER EIGHT

Lighting Fixtures and Hardware

STUDY of the history of church lighting, while mildly interesting, affords little or no aid toward solving the problem today. We have clear records of the ancient bowls of oil having a floating wick—of the small "English cresoets" where the bowl was cut in stone, and of the coronas or rings of lights. These coronas were frequently

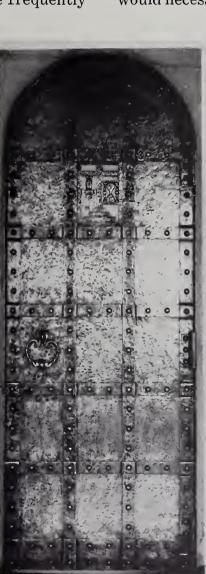
of great size, some being 24 feet across, while one or two are believed to have been even larger. They almost invariably hung from the center of

the vault.

In a church all the lines should lead the eye toward the sanctuary. Lights hanging from the center of the vault interrupt these lines and distract attention from the Architecturally. they occupy a position of prominence guite out of proportion to their real

importance.

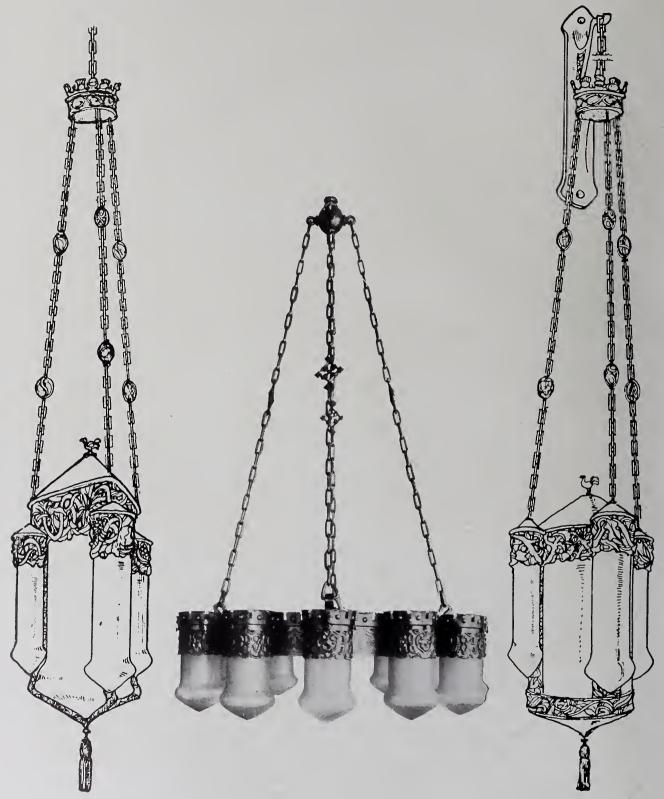
Mr. Goodhue in the nave and chancel always hangs the lights from the columns themselves or just in front of them. At West Point and South Church the lights are placed on the wall, at either side of the shafts, while in Mt. Kisco they rest on the abacus of the column. The lights hanging well toward the side wall give added lines leading toward the sanctuary—do not interrupt the view of the reredos, and tend to narrow and so to lengthen the church.



DOOR TO CRYPT, U. S. MILI-TARY ACADEMY, WEST POINT, N. Y.

The corona supported candles or large wax lights and threw the light upward more than in any other direction. In a great cathedral where the vault was enormously high this did not much matter; for, as the lights had to be reasonably near the floor if they were to be of any value to the worshippers, the vault would necessarily be in deep shadow. This

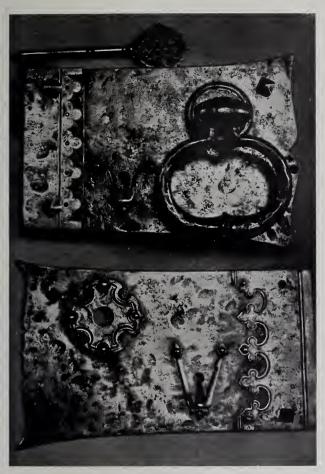
shadow adds to the apparent height and to the dignity of the church and is worth striving for. This result is obtained in the fixtures illustrated by frankly capping the top of the light. This is also one of the reasons why practically all of Mr. Goodhue's fixtures are pendant (though a hanging form seems the ideal for an electric bulb) and as the light is intended for the people below it is surely the most frank expression as well as the most practical arrange-Except for the ment. reversal of the lights, the fixtures for the Chapel of the Intercession and St. Thomas's are suggestive of the old coronas, though they are very much smaller. The design of the former ring is curiously free and ungothic. The fixture is of wrought iron; and, though it does not show in the photograph, is richly damascened with brass. As is shown in the other illustrations of this organ case, this fixture is particularly sat-



LIGHTING FIXTURES

ST. PETER'S CHURCH, MORRISTOWN, N. J. CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS

isfactory. The Lady Chapel of the Chapel of the Intercession has the same unit, only grouped in four, making a very effective altar light. St. Thomas's chancel fixtures have a lantern in the center of the



A CHURCH LOCK

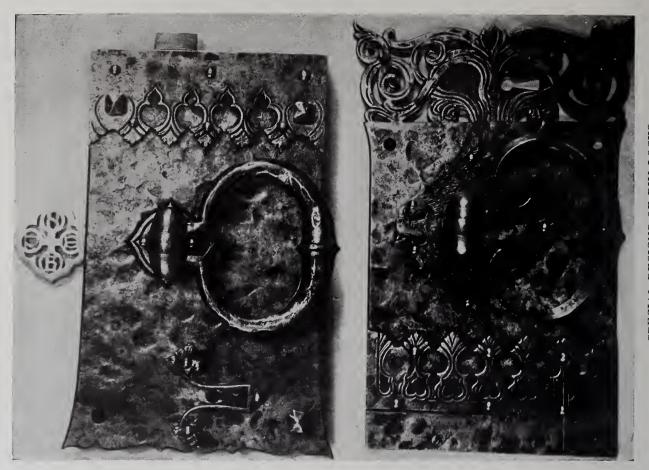
crown, making them richer than the nave lights; and for still greater richness the chancel fixtures are in silver. The lights for the First Baptist Church of Pittsburgh show a good effect produced at very little cost. The ornament is really only pierced plates slightly hammered. A little richer, quite modern, and very effective, are the fixtures for St. Paul's, Duluth. The nave fixtures might seem thin if one did not know how very small this church is. The wall lanterns here show a typical and good solution. In the nave fixtures for the Sage Memorial Church the grouping is carried further and gives a very rich effect. The lights for the chancel of St. Mark's, Mt. Kisco, are smaller; but when lighted are perhaps the most beautiful of all. The shades are of mica instead of glass, and give a lovely soft glow. The heavy red silk tassels afford an Oriental touch that is very pleasant.

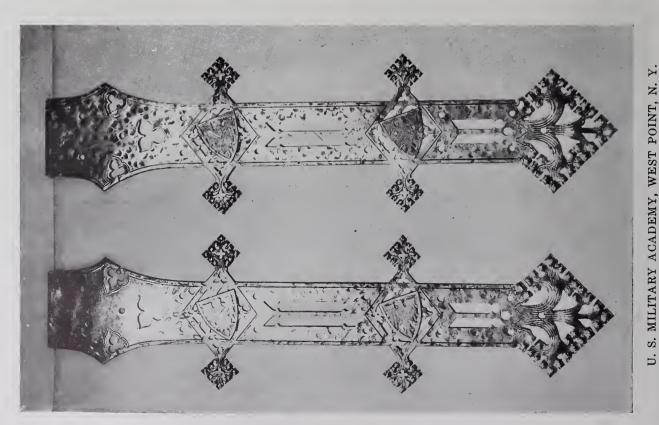
Any form of low-hanging nave lights giving a strong illumination is usually open to the objection of shining unpleasantly in the eyes of the congregation. The fixtures for St. Peter's Church in Morristown were designed to meet this objection, and the glass cylinders are varied in thickness, the thin part being toward the



SPECIAL DESIGNS FOR HINGES

altar, while the opposite side (that seen by the congregation) is thick, giving a soft, diffused light. Yet so perfectly is the glass graded that the difference in illumination between the front and back



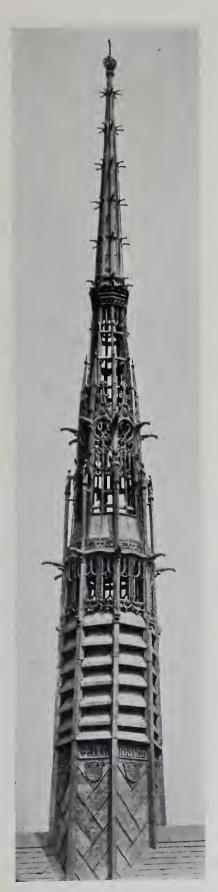


, WEST POINT, N. Y. SPECIAL DESIGNS OF RIM LOCKS CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS

100

was not unpleasantly noticeable. The texture of the glass plays an important part in the success of all fixtures. Unfortunately it does not show in any of the photographs except that of the lantern for St. Thomas's, where a form of handmade Norman slab is used. This photograph also shows better than any of the others the perfection of detail and workmanship.

The intelligent use of metal adds much to the success of Mr. Goodhue's churches. He is practically the only architect in America who has made a serious use of lead. In an earlier chapter we saw how successfully he had used this in the font for St. John's, West Hartford. His most strikingly successful work in lead is the great flêche for the South Church, New York, which is entirely of cast lead; and which, unfortunately, had to be cast in England. A similar flêche, that for the First Baptist Church of Pittsburgh, considerably larger than this, is of copper, and while it is admirable, there is something about the beautiful softness and color of lead which for purposes such as this can be rivalled by no other material. Another interesting example is the small dome capping the turret stairs of St. Thomas's parish house. It will only be a question of time before this whitens into a color beautifully in harmony with the stone of the building. The most



FLÊCHE, SOUTH CHURCH NEW YORK

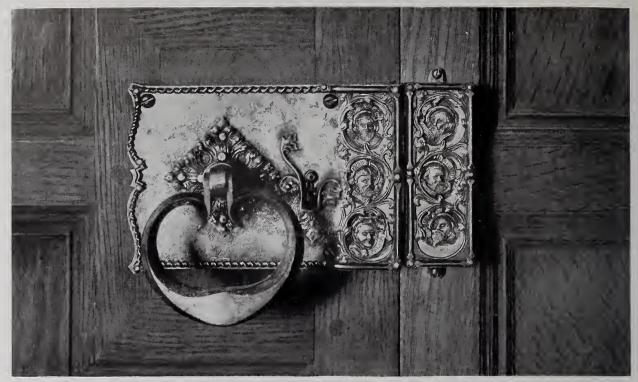
original example of his lead work is the main door of the South Church, the entire architrave and tympanum of which is in lead. The architrave is enriched with a border of the symbolic grape, while the tympanum bears the arms of the church and its motto.

The crypt of the military chapel at West Point was designed to serve as a burial place for illustrious military dead. The door to this is a sheet of strapped wrought iron. upper panel is pierced, forming a squint. A Cross Suffering, under the arms of which are a broken sword and an hour glass. Very beautiful effects have been obtained by kalamining with half-polished iron, as is shown in the doors for St. Andrew's Chapel, Chicago. Here the surface is patterned and studded with handwrought nails having ornamental heads something like those in the old Spanish doors. The upper panels are pierced so that one can see through them.

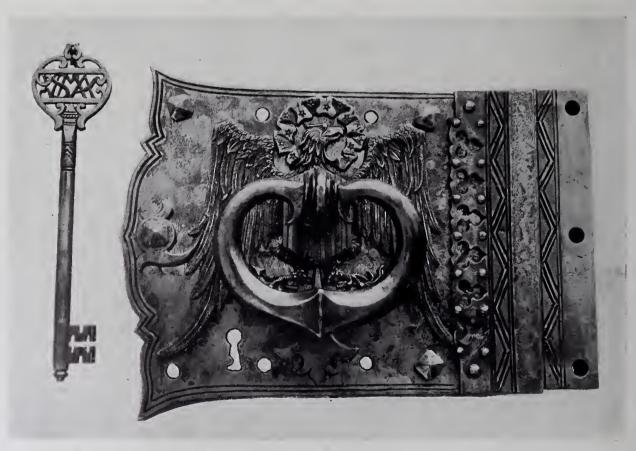
Distinctively unusual and interesting are the wrought iron and symbolic register grills for St. Thomas's Church. These are in the vestibule, high up in the wall in a place where the ordinary grill would be very unsightly.

Hardware

Even where the parish cannot afford splendid lighting fixtures, much individuality and charm may be given to the hardware without involving great expense. For ex-



CLERGY SACRISTY, ST. THOMAS'S, NEW YORK



U. S. MILITARY ACADEMY, WEST POINT, N. Y.

SPECIAL DESIGNS IN CHURCH HARDWARE

CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS.

ample the plain rim lock which Mr. Goodhue devised, and used in the rectory of the Chapel of the Intercession, cost but a trifle more than the ordinary stock lock, while many of the hinges, even though of handwrought metal, are comparatively inexpensive. Next to the design, the most

HAND-WROUGHT LOCK, CHAPEL, RIDGEWOOD, N. J.

important consideration in this hardware is the texture and finish. The photographs of some of the locks exaggerate the variety of the surface, making it look very much pitted, and unpleasant; but this is due almost entirely to the poor lighting of the subject. The inspiration of most of the designs comes from the old German and French examples; but

many of them are unique. The lock for the reception room of the firm's office bears the coats of arms of the three members. The key catch is a pair of dividers, while on the handle is the seal of Solomon, carved there to keep away all evil spirits. The key bears the

monogram of the firm. The workmanship on this lock is as fine as that of the best examples in Cluny or South Kensington. Both in this lock and in the pair for the sanctuary in St. Thomas's, which bear the heads of the Twelve Apostles in carved iron, the craftsman put his whole heart into the work, and the product is superb. The keys also have the same interesting individuality as those wrought by the ancient locksmiths. That for St. Mark's, Mt. Kisco, bears the lion, while those for St. Thomas's have varying designs. The main door has a splendid great key, bearing the arms of the parish; that for the choir sacristy has a musical

clef, while that for the clergy sacristy bears the chalice. Perhaps the most interesting group is the door to the sacristy at Christ Church, Ridgewood, N. J. One of the doors is pierced by a squint, over which is a wrought grill. The hinges, very ornate, bear a long in-

The lock is of the same rich character.



SPECIAL LOCK FOR ST. MARK'S CHURCH, MT. KISCO, N. Y. CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS



PANTHER AND DRAGON, UNITED STATES MILITARY ACADEMY, WEST POINT, NEW YORK

CHAPTER NINE

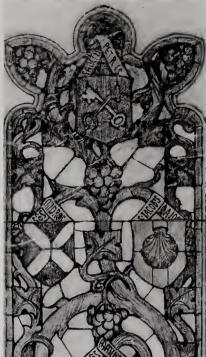
Symbolism

UCH of our interest in the old churches is due to their human element, to the stories wrought in them by the masons—in a word, to the symbolism of their ornament; and to symbolism Mr. Goodhue has devoted considerable study. Wherever possible he introduces it into his decoration, with the result that his churches are as interesting in detail as they are in mass. The bosses, both inside and out, of the U.S. Military Academy at West Point, are splendid examples of this human interest. The boy telling his rosary, the archer shooting and the tragic group of the fallen horse and raven-these, and all of their fellows live. When it is so easy to make one's ornament mean something, it seems unnecessarily stupid to use over and over again the same uninteresting dry tracery or leafage. We have seen how he uses symbols everywhere—in the organs, lecterns, pulpits, fonts, etc. Thus the inner surface of the leaves of the tabernacle for St. Thomas's font are gilded, and on each is painted a figure typifying a virtue, each virtue accompanied by its appropriate flower, fruit and emblem, and painted in its symbolic color. The word beneath is

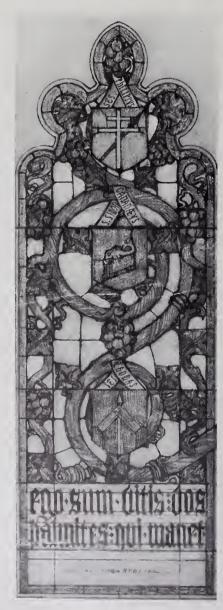
the corresponding vice written reversed, as though seen in a mirror, an old medieval device.

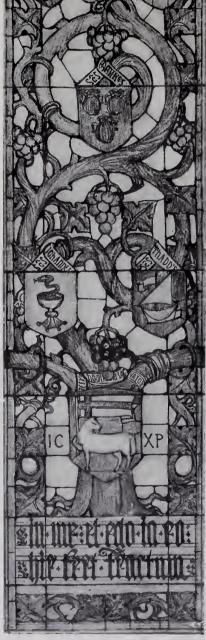
Every flower and fruit has its own meaning, making it particularly appropriate for this or that place. For example, the columbine, so frequent in the work of the Flemish masters, represents the seven gifts of the Holy Spirit; and these same Flemish masters always painted seven parts to the flower instead of five. It is an attribute of the Love of God and is sacred to the Holy Ghost. The convolvulus, flower of September, and the violet, flower of March, are symbols of humility, while the cyclamen is a symbol of voluptuousness and was used for love philtres; the daisy, flower of April, is the symbol of the perfect innocence of the Divine Child; the elder, of zeal; the jasmine, of hope; the poppy, flower of August, of sloth. The pansy, "old Trinity" and shamrock are symbols of the Trinity. The vine occupies a very important place as a symbol both of Christ and of the Church. When it carries 12 bunches of grapes these signify the twelve Apostles and when there are birds in its branches they represent Christian souls. Grapes alone

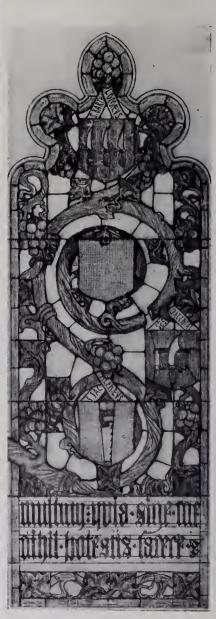
DETAIL OF STAINED GLASS, CHANCEL WINDOW



SAGE MEMORIAL CHURCH FAR ROCKAWAY, N. Y.







on a stem represent unity. The tree of Jesse frequently takes the form of a vine instead of a tree, when either the grape vine or the acanthus is used.



LION, ST. MARK

CHAPEL, U. S. MILITARY ACADEMY, WEST POINT, NEW YORK

Such a motive has been used for the windows of Sage Memorial Church at Far Rockaway; only, instead of the kings, the vine bears the shields of the twelve Apostles, each emblazoned with its proper arms, except that of Judas, which is left blank. The same motive, only executed in stone, is used for the main entrance to the First Baptist Church, Pittsburgh. Both examples are very decorative and effective.

One of the most important of the flowers of symbolism is the rose, the flower of martyrdom and Divine Love. The palm, the symbol of victory over sin and so car-

ried by the saints; the olive, symbol of peace and of healing; and, most important of all, lilies, emblem of purity and of the Virgin, are found everywhere. The fleurde-lis is especially the symbol of the Holy Virgin as Queen of Heaven, while the simple white "lilium candium" is the attribute of the Maid of Nazareth. Lilies are also the symbol of heavenly bliss and of celestial beatitude. The Annunciation lilies should have no stamens, a tiny flame in the center of each cup signifying eternal life. The lily-of-the-valley is the symbol of humility and of meek purity. In general, according to Durandus, flowers are the emblems of goodness. The flowers of heaven are painted variously as lilies, violets, carnations and straw-berries. By the sixteenth century flowers had lost all symbolic meaning.



BULL, ST. MATHEW

CHAPEL, U. S. MILITARY ACADEMY, WEST POINT, NEW YORK



ADAM, SOUTH CHURCH, NEW YORK

While it is interesting to give all your ornaments a meaning, it is extremely embarrassing to have an authority question this meaning and to be able to reply only, "I read that somewhere." And then even the best of us forget. I have found it convenient to have a sort of "index of symbolism," which is, in effect, an alphabetical reference to all sorts of books ranging from those frankly on symbolism, such as Smith's "Symbols and Emblems," Collins' "Symbolism of Animals and Birds" to the Encyclopaedia and even stories such as Anatole France's "Reine Pedoque." Each book is given a number which is placed after each reference and the following number refers to the page.



CHAPEL, U. S. MILITARY ACADEMY, WEST POINT, NEW YORK



EVE.
SOUTH CHURCH, NEW YORK

Thus

Pomegranate: Symbol of the Resurrection. 20/195.

On the hem of the priest's robe were pomegranates of blue, purple and scarlet. Exodus, 28/33.

St. Gregory the Great called it "Emblem of the unity of Church," 10/242, and so of the Church. 11/145. The ancient symbol of Hope, 21/88. Symbol of the future and of the hope

of immortality, 20/78.
Emblem of royalty, because the top resembles a crown, 17/145.*

My divisions were, roughly: animals, colors, flowers, fruits, jewels, symbols (anchor, anvil, ark, etc.), numbers, emblems of the Saints and so on;

^{*}And so on as more information is gained, space being left between each subject.



CHAPEL, U. S. MILITARY ACADEMY, WEST POINT, NEW YORK



ST. PAUL'S CHURCH, NEW HAVEN, CONN.

as

St. Elizabeth of Hungary,
Qu., W., 1231......E. S. W.
(Queen, widow, died 1231.)
Nov. 19......10/42
Giving clothing to a crippled child, a triple crown in her hand...S. S. D., 157
Double crown on a book..E. S. W.
Basket of head flagon of wine.....S. S. D., 157
Roses and a cripple clothed....E. S. W.



ST. PAUL'S CHURCH, NEW HAVEN, CONN.

Fruits in garlands symbolize the fruit of the Spirit, which is peace. Corn and grapes symbolize the Eucharist, the Body and Blood of Christ. The pomegranate is the symbol of the Resurrection, while the fruit of the strawberry symbolizes good works; i.e., fruit of the Spirit. The fruit of the tree of knowledge is variously shown as a pomegranate, a fig, a lemon, a quince or a pear; while the fruit of Paradise is usually depicted as the cherry.

Even gems have their significance; the scarab being symbolic of immortality;



ST. PAUL'S CHURCH, NEW HAVEN, CONN.

the sapphire of truth and sincerity; the pearl of modesty and purity; the opal of changeableness; the diamond of fearlessness and invincibility; and the amethyst of humility. The amethyst also controls vile thoughts and preserves the wearer from contagion.

All are familiar with the birthstones for the different months (these are based on the stones of the breastplate of the High Priest*), and the meanings attached to the day on which one is born. It is quite fascinating to pursue these meanings farther for every day has its talismanic colour, its animal, its gem, etc. With each

^{*}The first stone mentioned in the Bible being for March, not January.



"PELICAN IN PIETY"

month is connected a stone; a guardian angel his talismanic gem; a special apostle, and his talismanic gem; a zodiacal sign; a flower, etc. Each of the signs of the zodiac also have gems. All of this is interestingly treated of in Dr. Kunz's book on "Precious Stones."

Then, of course, there is the symbolism, familiar to all, of objects such as the



THE LION

anchor, the symbol of hope; the anvil, the symbol of death; arrows, of pestilence; ashes, of penitence; the heart, of charity; the circle, of eternal life; the mirror, of prophecy; the orb, of sovereignty; the ring, of power; the rod, of office; the ship, of the church; and greatest of all of these, the Cross. Probably the Star of Hope; the Ark, floating on the stormy waters of the deluge (the symbol of the Church among the tempests of this world), the Alpha and Omega, all of these illustrated, are as familiar as any.



THE SHIP OF THE CHURCH FIRST BAPTIST CHURCH, PITTSBURGH, PA.

Each of the colours have their mean-Thus, black indicates darkness, wickedness and death; and is the colour given to Satan. Black for men means gravity, good sense, constancy, virtue; for young women, fickleness; for married women, constant love and perseverance. Black and white signify humiliation, mourning and purity of life. It is a canonical colour. Blue in man's dress indicates wisdom; it represents faith, fidelity, loyalty, constancy, truth and spotless reputation. In a woman's dress, jealousy and love. It represents the air and is the emblem of the celestial region and celestial purity. It is not a canonical colour and it should really not be used in the

decoration of churches or for ecclesiastical vestments. It is the special colour of Our Lady. Gold, emblem of brightness and glory, is counted sometimes as white, sometimes as yellow. Green is the symbol of fidelity, of hope and of immortality; grey, of humility; red, of nobility, ardent love and burning zeal for the faith, of energy and courage and is the symbol of fire. Worn by men, red signifies commanding nobility. By women, pride, obstinacy, haughtiness.



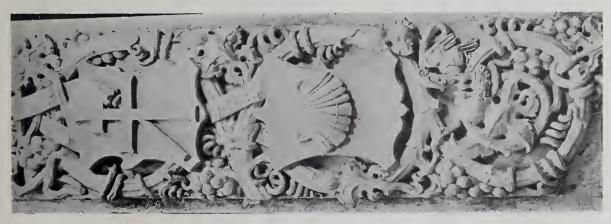
FIRST BAPTIST CHURCH, PITTSBURGH, PA.

It represents creative power, heat. Red and white roses are the symbol of love and innocence or love and wisdom; but red and white together are also the colours of the devil and of purgatory.



FIRST BAPTIST CHURCH, PITTSBURGH, PA.

Scarlet is the sign of honor and prosperity; silver, of purity. Violet is the symbol of gravity and it signifies passion and suffering. It is the colour of penitence and is a canonical colour. For men, it means sober judgment, industry, gravity. For women, high thoughts and religious love. It was worn by martyrs and virgins after the Crucifixion. White is the symbol of light, faith, purity, innocence. It symbolizes honour and integrity in judges, humility in rich men, chastity in women. The Virgin is painted in white at the Assumption. Among the Greeks it was a sign of mourning and sadness. Yellow is the symbol of the sun and is used as a



FIRST BAPTIST CHURCH, PITTSBURGH, PA.



MAIN ENTRANCE

FIRST BAPTIST CHURCH, PITTSBURGH, PA.
CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS



UNITED STATES MILITARY ACADEMY, WEST POINT, N. Y.

substitute for gold. It signifies love, constancy, dignity and wisdom.

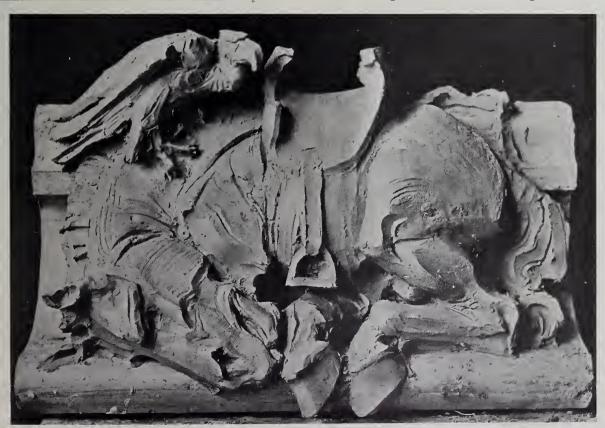
The symbolism of the colours may be arranged, though very incompletely, something as follows:

Black	Blue	Green	Red	Víolet	White
Planet Saturn Day Saturday Stone Diamond Typifies Decrepitude Color of Mourning Number Eight	Friday Sapphire Six	Wednesday Emerald	Mars Tuesday Ruby Fervor	Jupiter Thursday	Monday Pearl Moon Seven
Symbol of Envy Seven ages of man,	Childhood	Youth	Manhood	Old age	Infancy



UNITED STATES MILITARY ACADEMY, WEST POINT, N. Y.

In designing memorials one constantly uses emblems to represent the various saints; as, St. Agnes by a lamb on a book, or a Lamb led by a cord; St. Ambrose by a bee hive or in cardinal's robes with books, or by his arms—a bee hive and two scourges; St. Anthony by his staff like a letter "T." Of course each saint has many symbols. Then there are the patron saints of cities and countries, arts, crafts and professions, a most useful list. For example: St. Barbara, patron saint



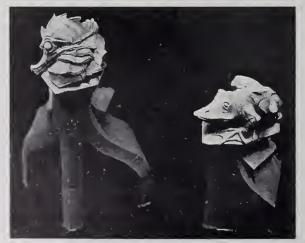
CHAPEL, UNITED STATES MILITARY ACADEMY, WEST POINT, N. Y.



GROTESQUE
CHAPEL OF THE INTERCESSION, NEW YORK

of architects; St. Thomas, of builders; St. Joseph, of carpenters; St. Giles, of cripples; St. Aloysius, of youth; St. Maurice, of Austria; St. Ann, of Canada; St. George, of England; St. Denny and St. Michael, of France; and so on. But most useful of all is the symbolism of numbers. As examples:

- 1. Unity of God.
 - 2. The two natures of Christ.
 - 3. The Trinity:



MODELED DETAILS FOR STALLS
U. S. MILITARY ACADEMY, WEST POINT, N. Y.

Three fruits of the Spirit, Joy, Peace and Love.
Three great teachers of the Eastern Church: St. Chrysostum, St. Basil and St. Gregory.
The Three Wise Men.
The three theological virtues:

4. The four evangelists.

The four cardinal virtues: prudence,
justice, fortitude, temperance.

The four rivers of Paradise: Pison,
Gehon, Hiddekel, Euphrates; of

faith, hope and charity.



 $\begin{array}{c} \text{GROTESQUE} \\ \text{CHAPEL OF THE INTERCESSION, NEW YORK} \end{array}$

which Pison represents prudence; Gehon temperance; Hiddekel, fortitude; and Euphrates, justice. The four Seasons, etc.

5. The five wounds of Christ.
The five joyful mysteries.
The five sorrowful mysteries.
The five glorious mysteries.
The five canonical colours: white, red, green, violet, black.
The five wise and foolish virgins.

6. The attributes of the Deity:

Power, majesty, love, wisdom, justice, mercy.

7. Of the symbolism of seven there is no end. It is the number of perfection. There are seven archangels, seven sacra-



THE ARK AMIDST STORMY WATERS OF THE DELUGE. SYMBOLIZES THE HISTORY OF THE CHURCH IN WORLD BY TEMPESTS.

ments, seven gifts of the Holy Spirit, seven patron saints of Christendom, seven deadly sins, seven penitential psalms, the seven virtues and the seven planets and so on indefinitely.

8. The number of regeneration. The eight Beatitudes are symbolized by a Maltese Cross with its eight points. It is the symbol of completion. Many other symbols for 8 were given when fonts were treated.

9. The Fruits of the Holy Spirit, which are love, joy, peace, longsuffering, gentleness, kindness, faith, meekness, temperance, and their symbol is the ninepointed star.

The nine choirs of angels.

10. The Ten Commandments, typical of the Old Law.

12, again, is a rich lumber:

The 12 Disciples.

The 12 stones of the breastplate of the High Priest.

The 12 tribes and so on.

Just as a practical suggestion it is perhaps worth while to start a list of the vices and virtues arranged to show the name of the vice, its Latin name, its antenim with its Latin name, its symbolic flower, animal, jewel, symbol and type.

For example: Victue Antenim Virtue Latin Virtue Antenim Humility Humilitas Pride Superbia Flower: Lily-of-the-valley, violet, con-

volvulus.

Animal: Ass and swan.

Jewel: Amethyst. Color: Grey. Symbol: Ashes. Type: St. Francis.

And so on for pride, etc.

Perhaps the most interesting of all is the symbolism which the Middle Ages at-



THE PEACOCK; SYMBOL OF IMMORTALITY

tached to animals. This was due, in part, to that most naive and moral of natural histories, the Physiologus. This work was made up not only of fabulous tales of travelers, such as that of Caesar's elk with jointless legs, misreadings of Aris-

totle; but also very largely of descriptions of habit assigned to the various animals because of the various references to them in the Scriptures. For example, the lion. According to the Physiologia, after the lion scents the huntsman he obliterates his footsteps with his tail. "In like manner our Lord concealed all traces of his Godhead and became man." As the king of beasts and the symbol of Christ, he sleeps with his eyes open for, "He that keepeth Israel shall neither slumber nor sleep"; hence the lion is a symbol of vigilance. "The lioness always brings forth her cubs dead, but on the third day, their father, the lion, comes and brings them to life by his breath" (Genesis, 49-9). Origen says, "This is very apt of Christ who slept three days." Therefore, like the phænix and the pelican the lion is a symbol of the Resurrection.

Because of this breathing on the dead cub and, so "the Father calling to life the son," the lion is assigned to Mark because Mark dwelt especially on the resurrection of Christ and His kingship. The lion is associated with various saints, particularly St. Jerome, because of its use in the Bible, as when Samson asks, "What is stronger than the lion?" It is the emblem of strength, majesty, courage and fortitude. A crouching lion, holding a lamb or calf in its paws, at the church entrance, symbolizes the powers of evil compelled against their will to carry a church porch on their backs. At the feet of ecclesiastics, on tombs, the presence of the lion signifies trampling on the Evil One, suggested by the text, "They shall tread upon the lion and the adder, the young lion and the dragon shalt thou trample under foot."

In general, animals outside churches may serve as a warning to worshippers to leave evil passion outside, or, suggest the forces of evil escaping from the holy structure.

Oxen, etc., are there as a reward for their service in building the church and because of their presence at the manger.

The ant is the emblem of industry; while the ape is that of unseemly levity; the ass of peace and sovereignty; the bear of self-restraint; and the boar of sensual-

ity. The bee is the emblem of busy forethought and symbolized regal favor in Egypt (Napoleon). A swarm of bees lit on the mouth of Plato, St. Ambrose and others when they were children as a prestige of their coming eloquence. A bee-hive is a symbol of eloquence, and bees of labor and chastity. The bird is the emblem of the human soul, the butterfly of the resurrection, while the caterpillar typifies life and the chrysalis death. The crocodile, because it sheds tears to attract the sympathy of the passersby (the mournful crocodile), in order to reach and devour them, is the symbol of dissimulation. The dog stands for fidelity. All are familiar with the symbolism of the dove and the dragon. Again, according to the Physiologus, "When the eagle grows old and its eyes dim it flies toward the sun until it purges the film from its eyes, then plunges thrice into a spring of pure water, when it recovers its sight and renews its youth." It continues, "So, when the vision of God is obscured we fly on wings to the Son of Righteousness and dip ourselves thrice in the water of baptism in the name of the Father, and of the Son and of the Holy Ghost, we shall be pure again." The Septuagint and the Vulgate say, "Thy youth shall be renewed as the eagle's."

The fishing eagle, poised in air and emerging from the water with a fish in its claws, is a symbol of Christ, the sea being the world and the fish of Christians. As the bird of the Roman Emperor it became immortal upon his apotheosis and is consequently a symbol of the Resurrection and immortality just as is the peacock and the scarab.

Through rather labored symbolism, the elephant typifies Adam and Eve and also priestly chastity and might.

The fish, earliest of Christian emblems, is a familiar one. The ermine signifies purity; the fox, craft; the goat, evil; the hen and chickens, God's providence; the horse, war; and the hyena, vice. The lamb, the ox, the peacock, the pelican and the phænix are all too well known to need comment. Sheep is the emblem of the faithful. The twelve tribes of Israel are represented under this symbol. The stork typifies filial piety.

Finally, the wolf, symbol of the Evil One and of cruelty, and denoting a seditious person, is typical of stiff-necked people, for it could not move its head from side to side. But, "From sunset on December 6, St. Nicholas Day, to sunrise

next morning, the wolves will not touch even children. They spend the night in meditation and will not hurt you even if you step on their tails." Thus we are able to learn that there may be found good in all things.

If service be thy meane to thrive,

Thou must therein remaine

Both silent, faithful, just and true,

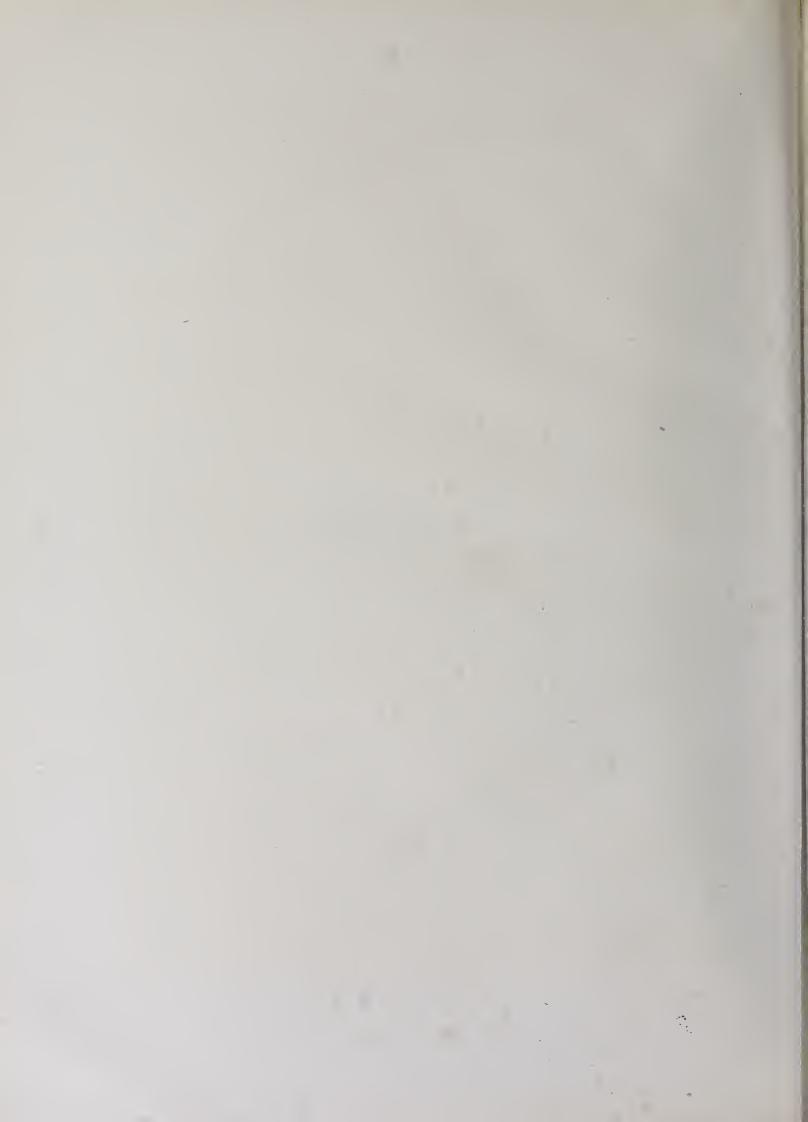
Content to take some paine.

If love of virtue may allure,
Or hope of worldly gaine,
If feare of God may thee procure
To serve doe not disdaine.

Motto for Ladies' Parlor, F rst Baptist Church, Pittsburgh



PLATES





CHAPEL OF THE UNITED STATES MILITARY ACADEMY, WEST POINT, N. Y. CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS

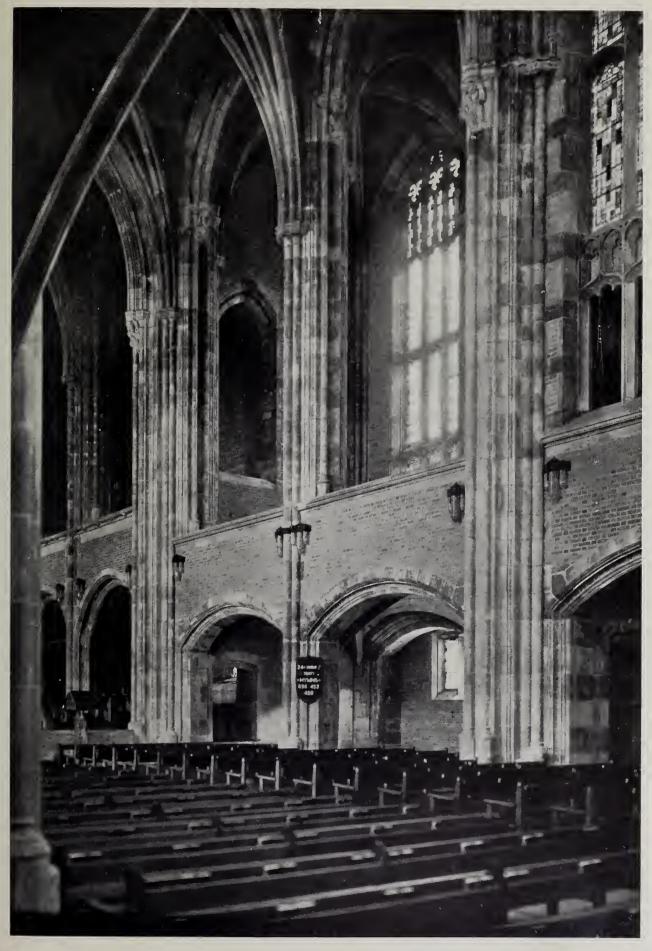




CHAPEL OF THE UNITED STATES MILITARY ACADEMY, WEST POINT, N. Y.

CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS





CHAPEL OF THE UNITED STATES MILITARY ACADEMY, WEST POINT, N. Y.

CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS





CHAPEL OF THE UNITED STATES MILITARY ACADEMY, WEST POINT, N. Y.

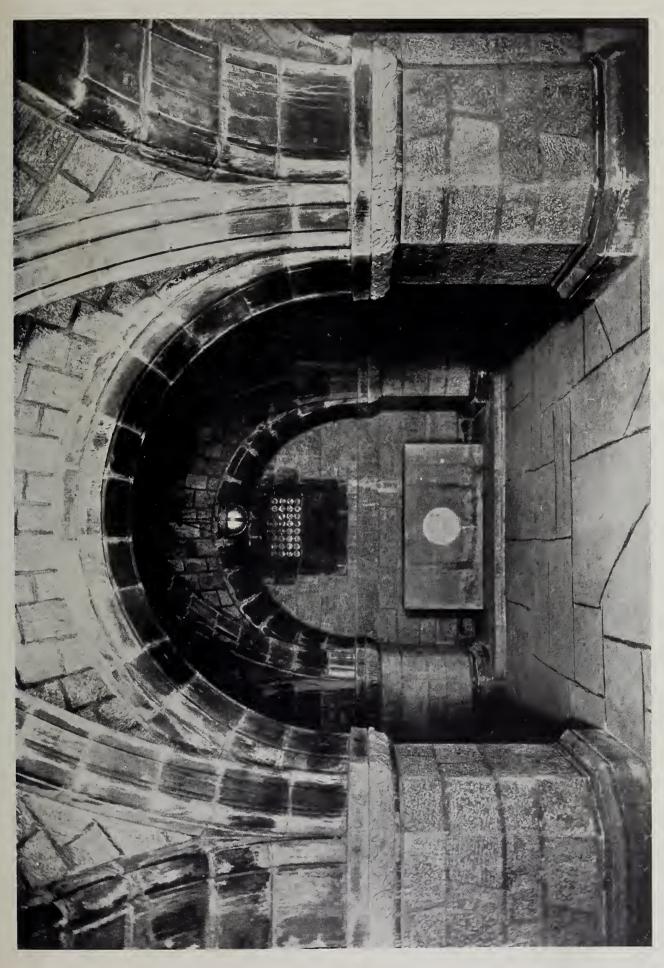
CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS





ORGAN CASES, CHAPEL OF THE U.S. MILITARY ACADEMY, WEST POINT, N.Y. CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS





CRYPT, CHAPEL OF U. S. MILITARY ACADEMY, WEST POINT, N. Y. CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS





ST. THOMAS'S CHURCH, NEW YORK
CRAM, GOODHUE & FERGUSON (NEW YORK AND BOSTON), ARCHITECTS





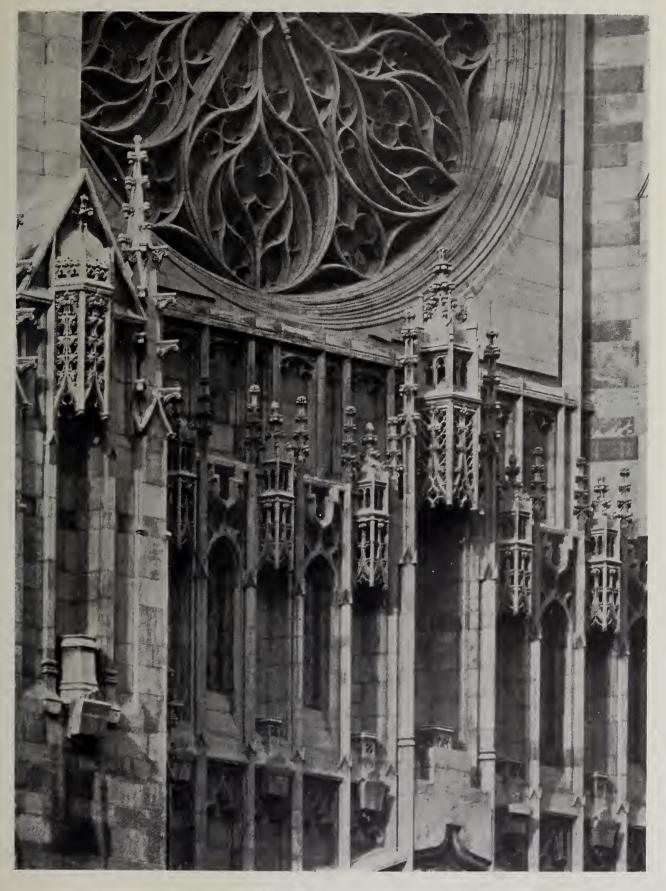
ST. THOMAS'S CHURCH, NEW YORK CRAM, GOODHUE & FERGUSON (NEW YORK AND BOSTON), ARCHITECTS





ST. THOMAS'S CHURCH, NEW YORK CRAM, GOODHUE & FERGUSON (NEW YORK AND BOSTON), ARCHITECTS





DETAIL—ST. THOMAS'S CHURCH, NEW YORK CRAM, GOODHUE & FERGUSON (NEW YORK AND BOSTON), ARCHITECTS





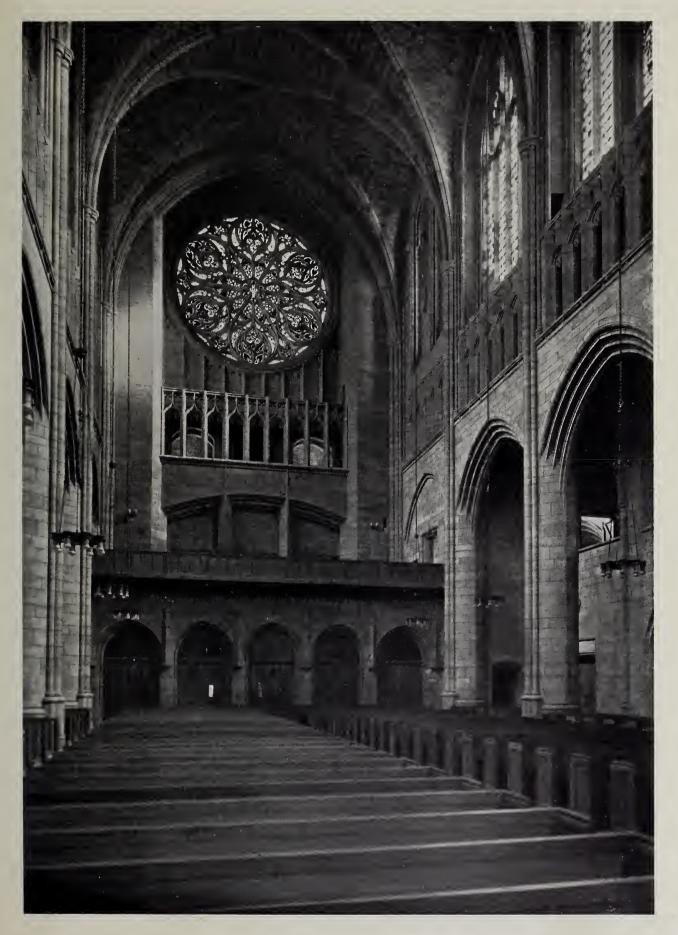
DETAIL—ST. THOMAS'S CHURCH, NEW YORK CRAM, GOODHUE & FERGUSON (NEW YORK AND BOSTON), ARCHITECTS





ST. THOMAS'S CHURCH, NEW YORK CRAM, GOODHUE & FERGUSON (NEW YORK AND BOSTON), ARCHITECTS





ST. THOMAS'S CHURCH, NEW YORK CRAM, GOODHUE & FERGUSON (NEW YORK AND BOSTON), ARCHITECTS







IN THE CLERGY SACRISTY

ST. THOMAS'S CHURCH, NEW YORK

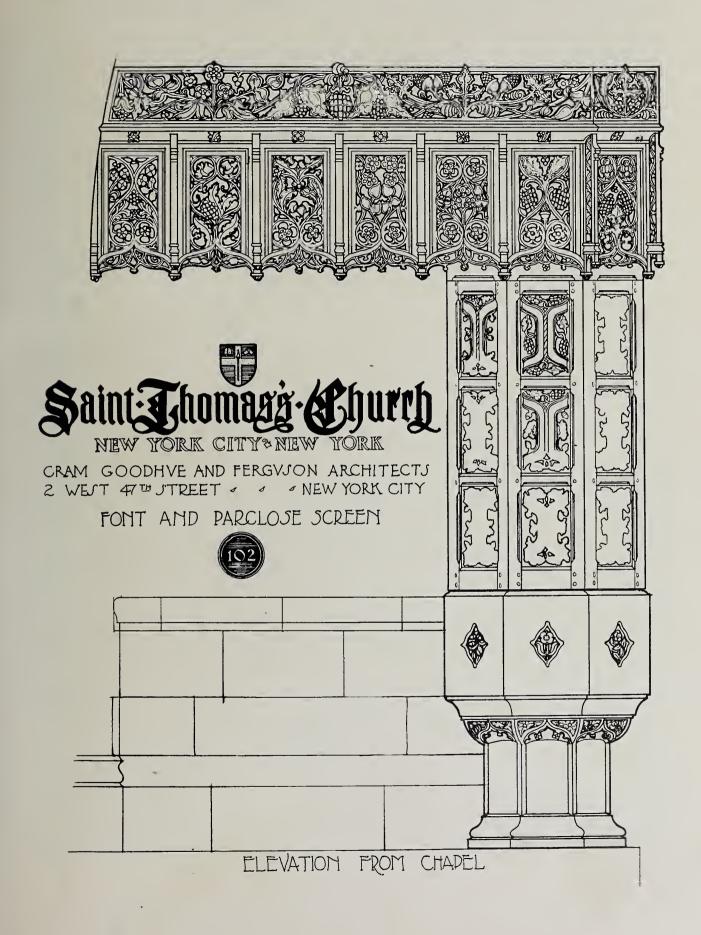
CRAM, GOODHUE & FERGUSON (NEW YORK AND BOSTON), ARCHITECTS





REPRODUCTION OF THE ARCHITECTS' DRAWING, RENDERED IN COLOR, ST. THOMAS'S CHURCH, NEW YORK
CRAM, GOODHUE & FERGUSON (NEW YORK AND BOSTON), ARCHITECTS







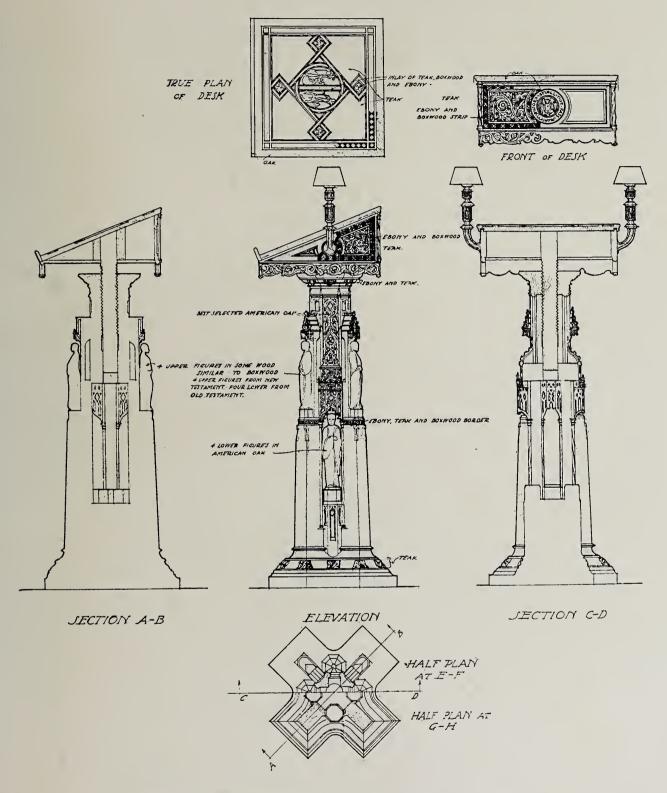


FONT (SIDE TOWARDS CHURCH)

ST. THOMAS'S CHURCH, NEW YORK

CRAM, GOODHUE & FERGUSON (NEW YORK AND BOSTON), ARCHITECTS





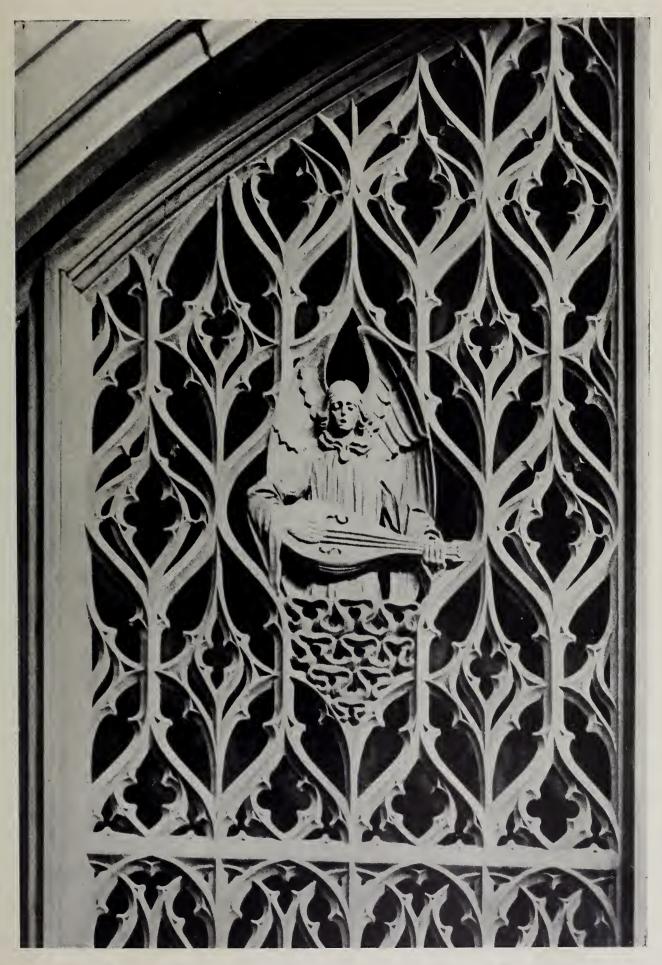
LECTERN FOR ST. THOMAS'S CHURCH, NEW YORK
CRAM, GOODHUE & FERGUSON (NEW YORK AND BOSTON), ARCHITECTS





AISLE ORGAN, ST. THOMAS'S CHURCH, NEW YORK CRAM, GOODHUE & FERGUSON (NEW YORK AND BOSTON), ARCHITECTS





DETAIL OF ORGAN SCREEN, ST. THOMAS'S CHURCH, NEW YORK CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS







DETAIL OF ORGAN CASE ST. THOMAS'S, NEW YORK CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS PULPIT FIRST BAPTIST CHURCH, PITTSBURGH, PA.

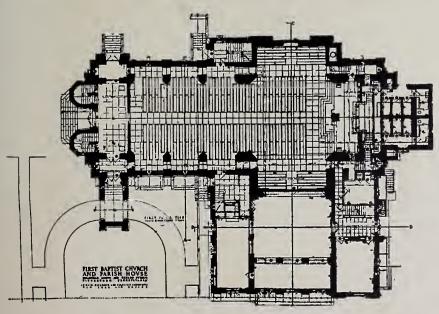




FIRST BAPTIST CHURCH, PITTSBURGH, PA.
CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS







FIRST BAPTIST CHURCH, PITTSBURGH, PA.

CRAM, GOODHUE & FERGUSON (New York Office), ARCHITECTS





FIRST BAPTIST CHURCH, PITTSBURGH, PA.
CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS





PARISH PARLOR



ASSEMBLY ROOM IN BASEMENT

FIRST BAPTIST CHURCH, PITTSBURGH, PA.
CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS

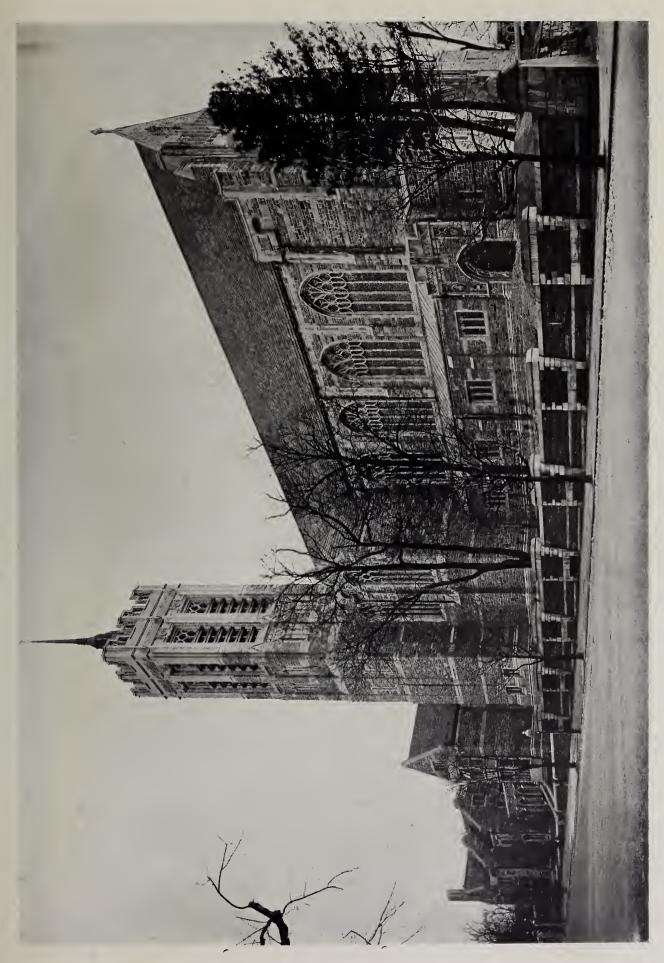




CHAPEL OF THE INTERCESSION, NEW YORK

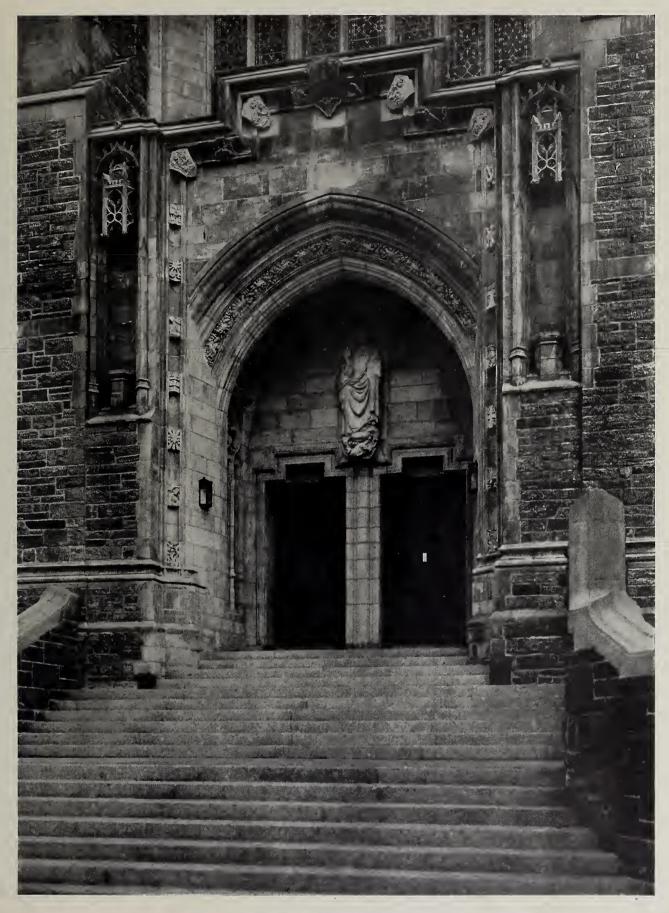
BERTRAM GROSVENOR GOODHUE; CRAM, GOODHUE & FERGUSON
(NEW YORK OFFICE), ARCHITECTS





BERTRAM GROSVENOR GOODHUE; CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS CHAPEL OF THE INTERCESSION, NEW YORK





CHAPEL OF THE INTERCESSION, NEW YORK

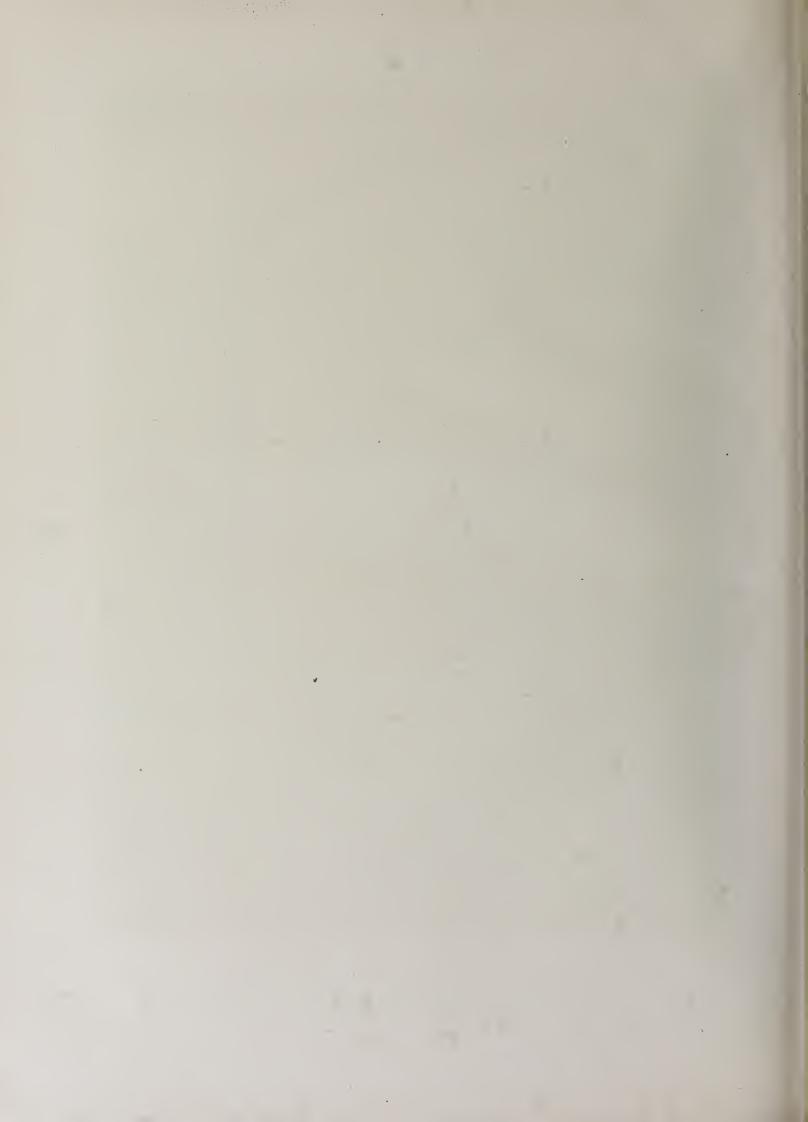
BERTRAM GROSVENOR GOODHUE; CRAM, GOODHUE & FERGUSON
(NEW YORK OFFICE), ARCHITECTS





ENTRANCE TO VICARAGE

CHAPEL OF THE INTERCESSION, NEW YORK





CHAPEL OF THE INTERCESSION, NEW YORK





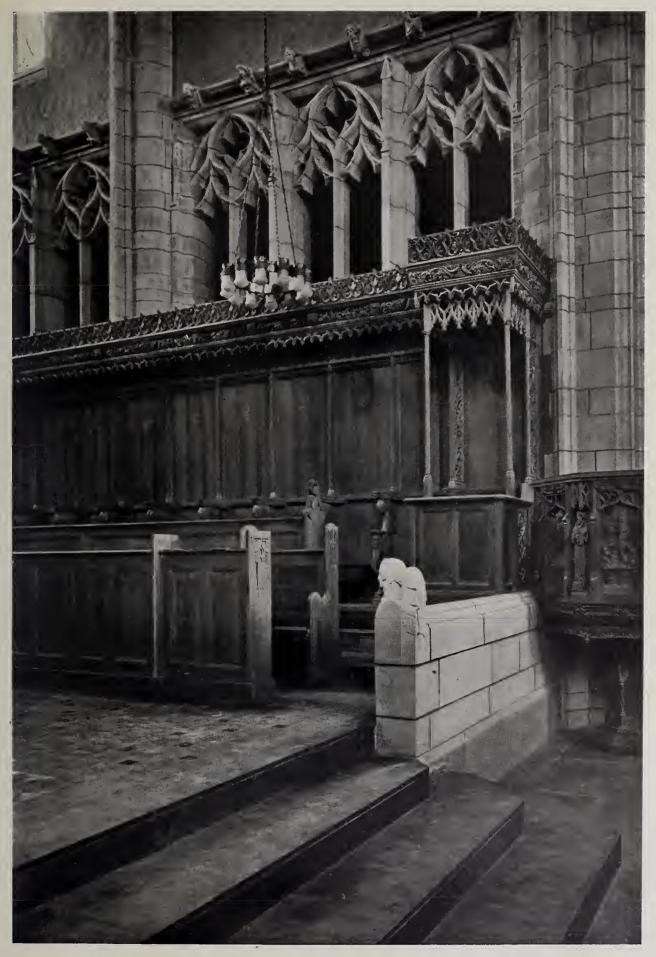
CHAPEL OF THE INTERCESSION, NEW YORK





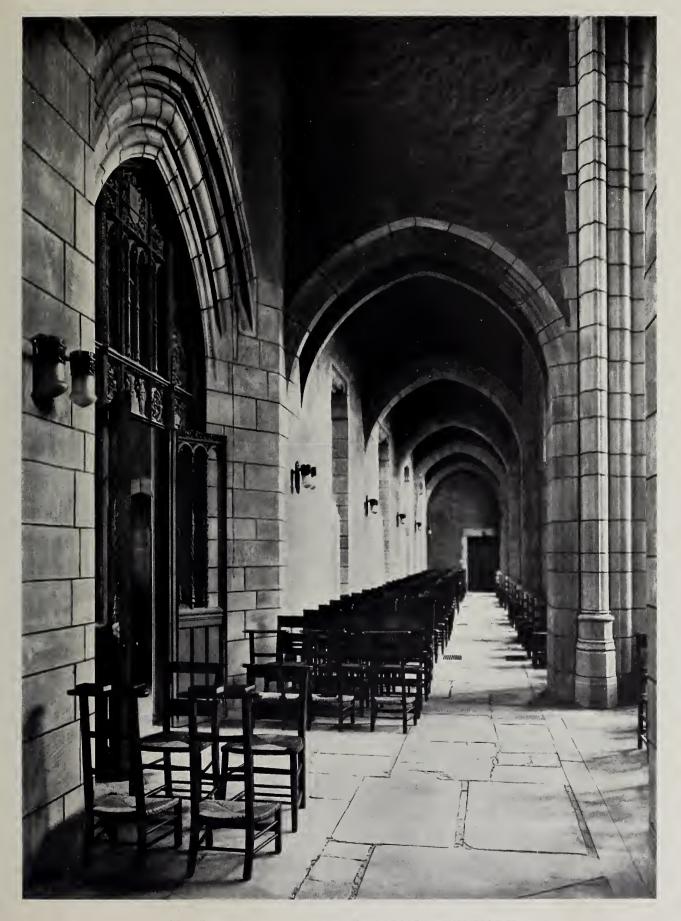
CHAPEL OF THE INTERCESSION (EPISCOPAL), TRINITY PARISH, NEW YORK BERTRAM GROSVENOR GOODHUE; CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS





NUNS' GALLERY AND RECTOR'S STALL, CHAPEL OF THE INTERCESSION, NEW YORK BERTRAM GROSVENOR GOODHUE; CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS





CHAPEL OF THE INTERCESSION, NEW YORK



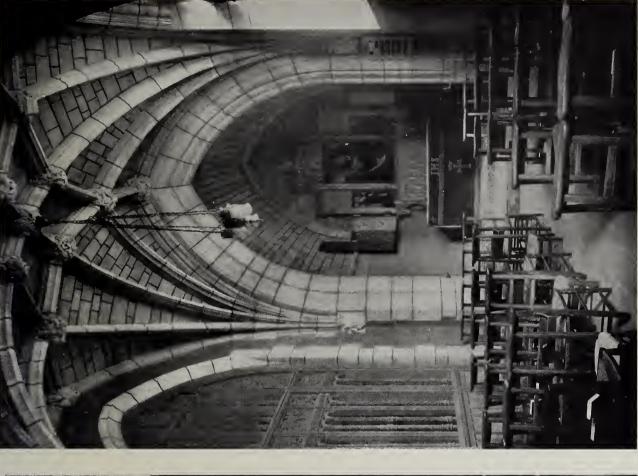


CHAPEL OF THE INTERCESSION, NEW YORK

BERTRAM GROSVENOR GOODHUE; CRAM, GOODHUE & FERGUSON
(NEW YORK OFFICE), ARCHITECTS



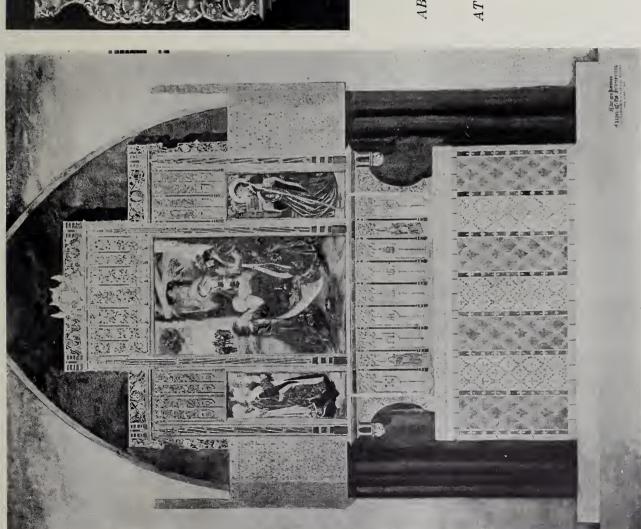


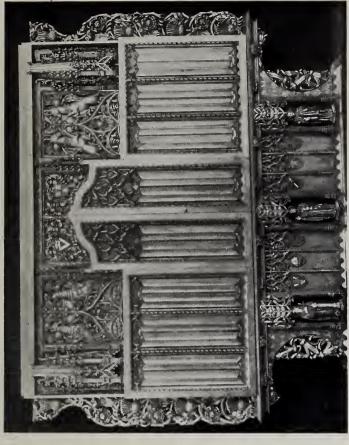


ALTAR AND DOSSAL

BERTRAM GROSVENOR GOODHUE; CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS LADY CHAPEL LADY CHAPEL, CHAPEL OF THE INTERCESSION, NEW YORK







ABOVE: DETAIL (WITH DOORS CLOSED), REREDOS, ST. ANDREW'S CHAPEL

AT LEFT: SKETCH FOR THE LADY CHAPEL REREDOS, CHAPEL OF THE INTERCESSION

BERTRAM GROSVENOR GOODHUE, ARCHITECT





DETAIL OF REREDOS

LADY CHAPEL, CHAPEL OF THE INTERCESSION, NEW YORK
BERTRAM GROSVENOR GOODHUE, ARCHITECT





CHAPEL OF THE INTERCESSION, NEW YORK
BERTRAM GROSVENOR GOODHUE; CRAM, GOODHUE & FERGUSON
(NEW YORK OFFICE), ARCHITECTS

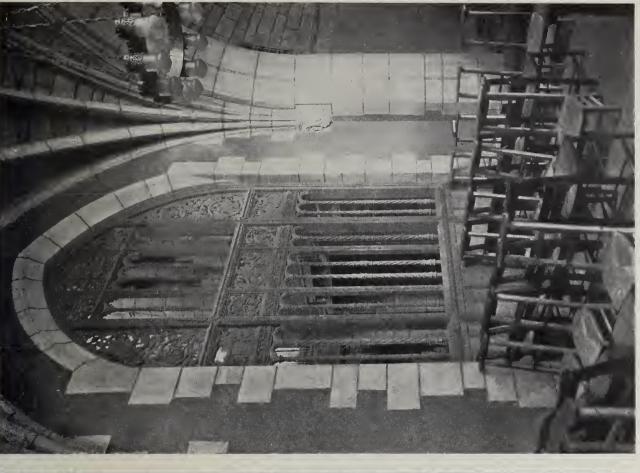




CHAPEL OF THE INTERCESSION, NEW YORK
BERTRAM GROSVENOR GOODHUE; CRAM, GOODHUE & FERGUSON
(NEW YORK OFFICE), ARCHITECTS



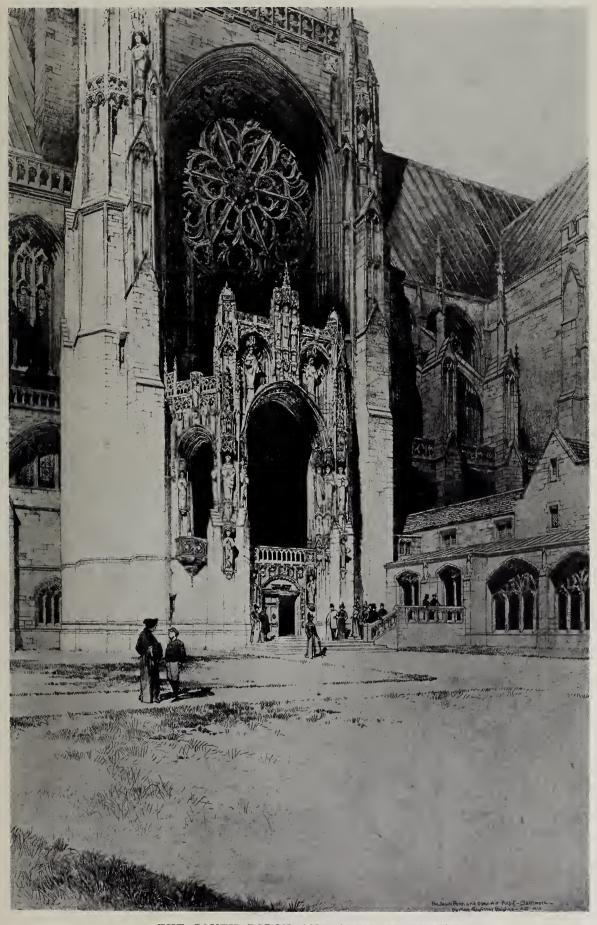




ST. PAUL'S CHURCH, NEW HAVEN, CONN.

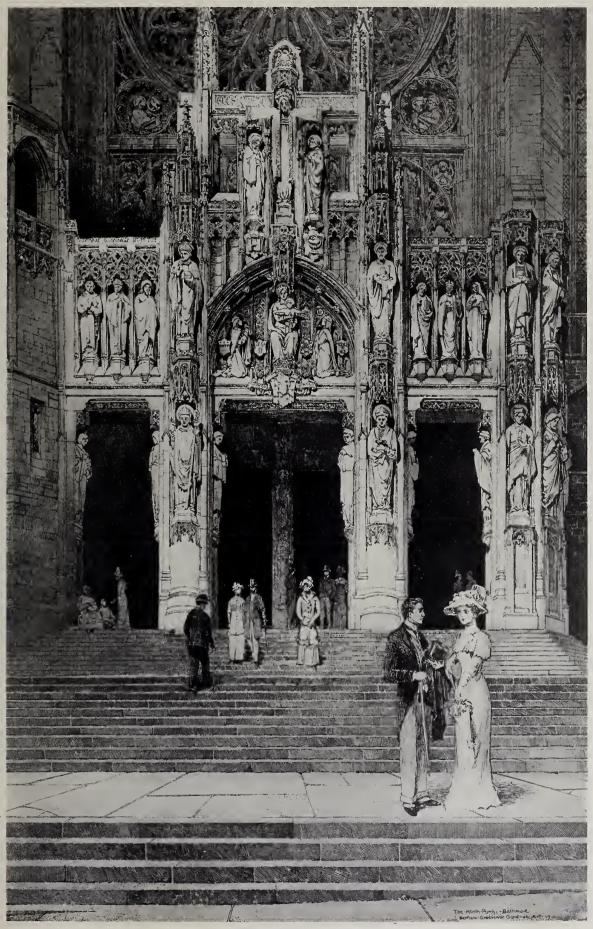
MORNING CHAPEL, CHAPEL OF THE INTERCESSION, NEW YORK CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS





THE SOUTH PORCH AND OPEN-AIR PULPIT
CATHEDRAL OF THE INCARNATION, BALTIMORE, MD.
BERTRAM GROSVENOR GOODHUE, ARCHITECT





THE NORTH PORCH

CATHEDRAL OF THE INCARNATION, BALTIMORE, MD.

BERTRAM GROSVENOR GOODHUE, ARCHITECT





THE MORNING CHAPEL

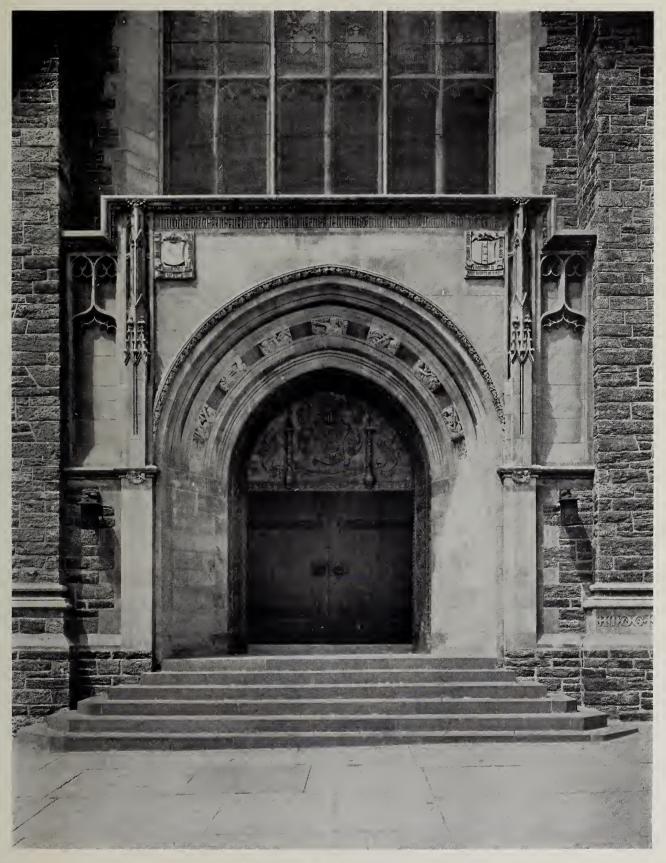
CATHEDRAL OF THE INCARNATION, BALTIMORE, MD.
BERTRAM GROSVENOR GOODHUE, ARCHITECT





SOUTH CHURCH, NEW YORK CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS





DETAIL OF MAIN ENTRANCE
The Tympanum and Surrounding Band Are of Cast Lead

SOUTH CHURCH, NEW YORK CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS



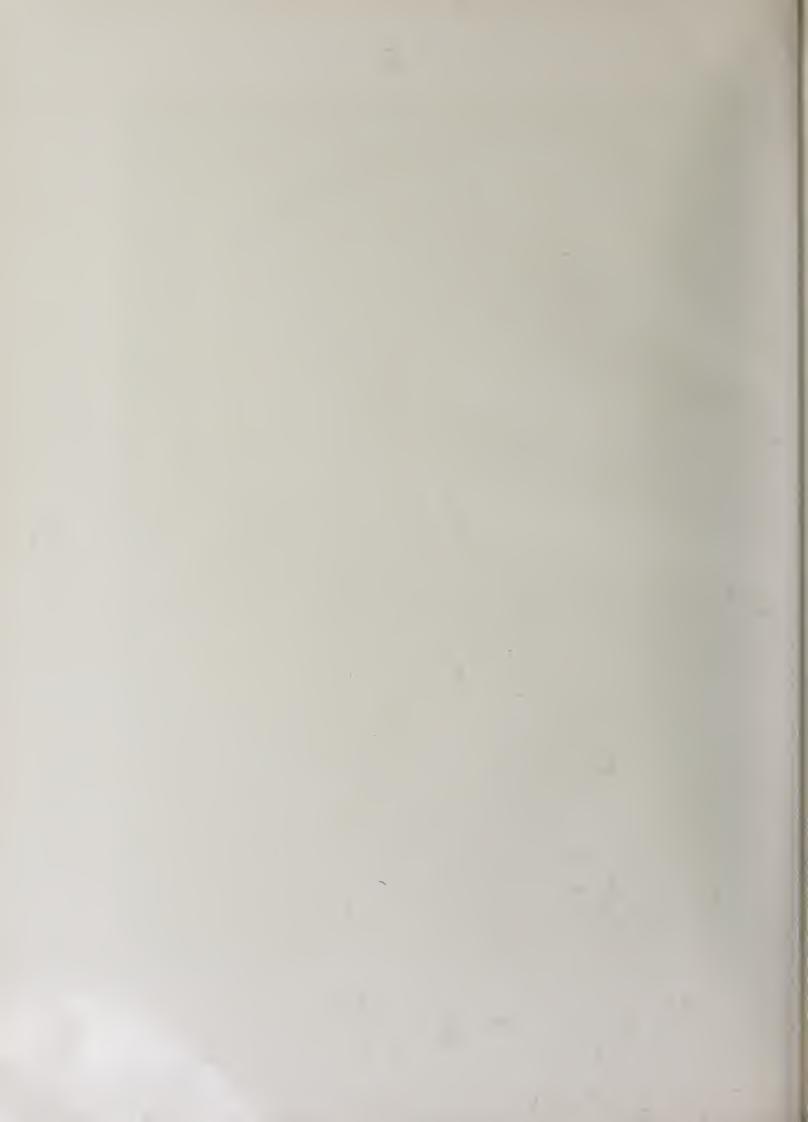


SOUTH CHURCH, (DUTCH REFORMED) NEW YORK CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS



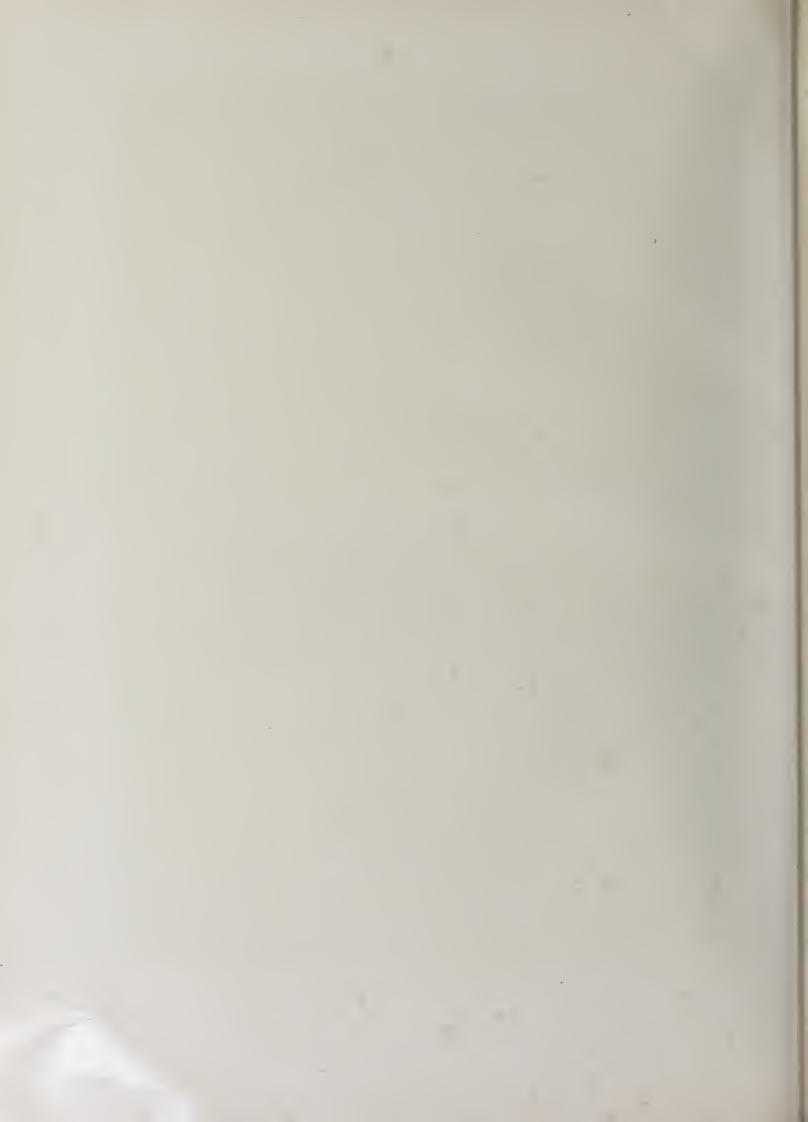


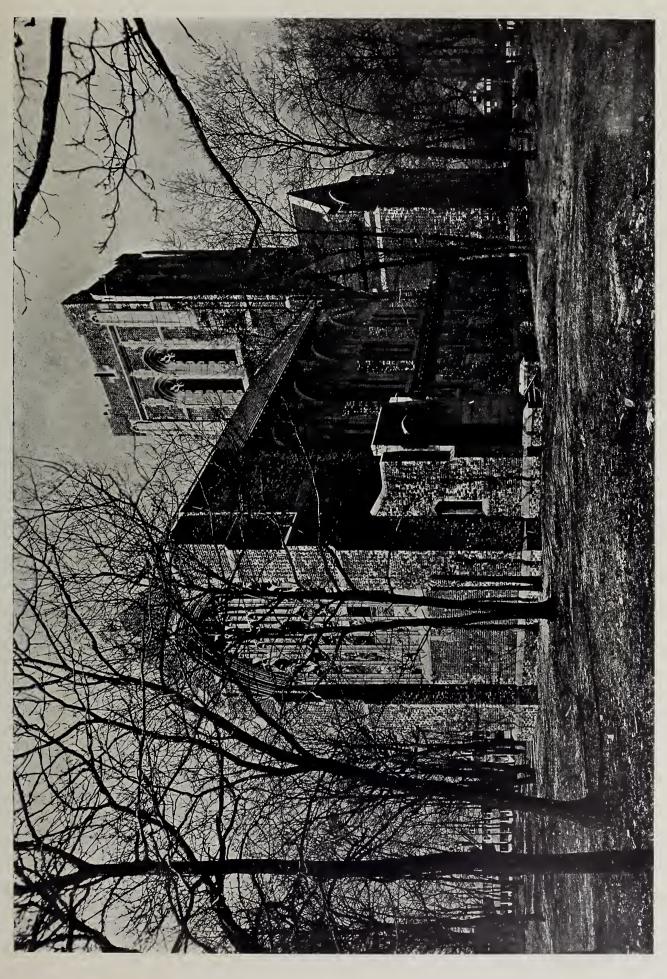
SOUTH CHURCH, NEW YORK
CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS





SOUTH CHURCH, NEW YORK CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS





SAGE MEMORIAL CHURCH, FAR ROCKAWAY, N. Y. CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS





SAGE MEMORIAL CHURCH, FAR ROCKAWAY, NEW YORK CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS

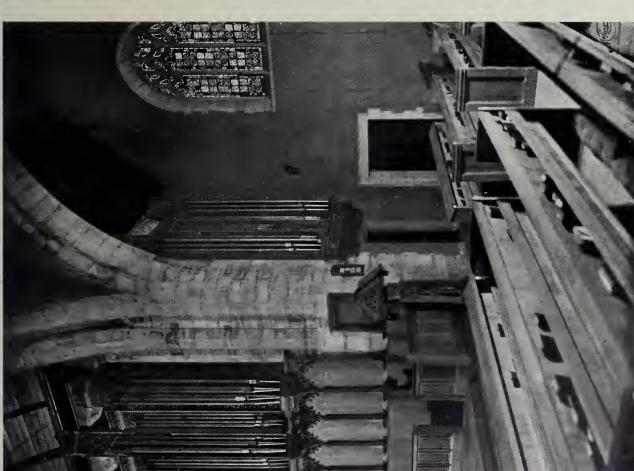






SAGE MEMORIAL CHURCH, FAR ROCKAWAY, N. Y. CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS ST. ANDREW'S CHAPEL, CHICAGO







ST. PAUL'S CHURCH (EPISCOPAL), DULUTH, MINN.

SAGE MEMORIAL CHURCH (PRESBYTERIAN), FAR ROCKAWAY, N. Y. CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS





SAINT JOHN'S CHURCH, WEST HARTFORD, CONN. CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS





ORGAN CASE, ST. JOHN'S, WEST HARTFORD, CONN.
CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS







INTERIOR VIEW

LEAD FONT
ST. JOHN'S CHURCH, WEST HARTFORD, CONN.
CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS







CHRIST CHURCH (EPISCOPAL), WEST HAVEN, CONN. CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS ST. JOHN'S CHURCH (EPISCOPAL), WEST HARTFORD, CONN.





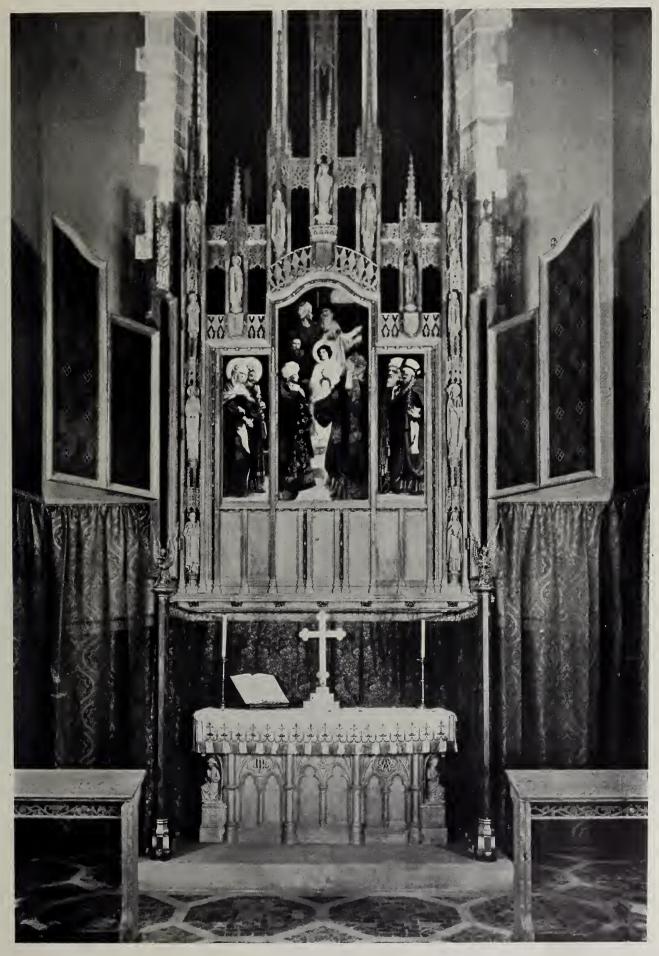
CHANCEL, TRINITY CHAPEL OF TRINITY CHURCH (EPISCOPAL), BUFFALO, N. Y. CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS





STALLS, TRINITY CHAPEL OF TRINITY PARISH, BUFFALO, N. Y. CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS





ALTAR, TRINITY CHAPEL, BUFFALO, N. Y. CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS





SCREEN, NAVE SIDE

ST. MARK'S CHURCH, MT. KISCO, NEW YORK CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS

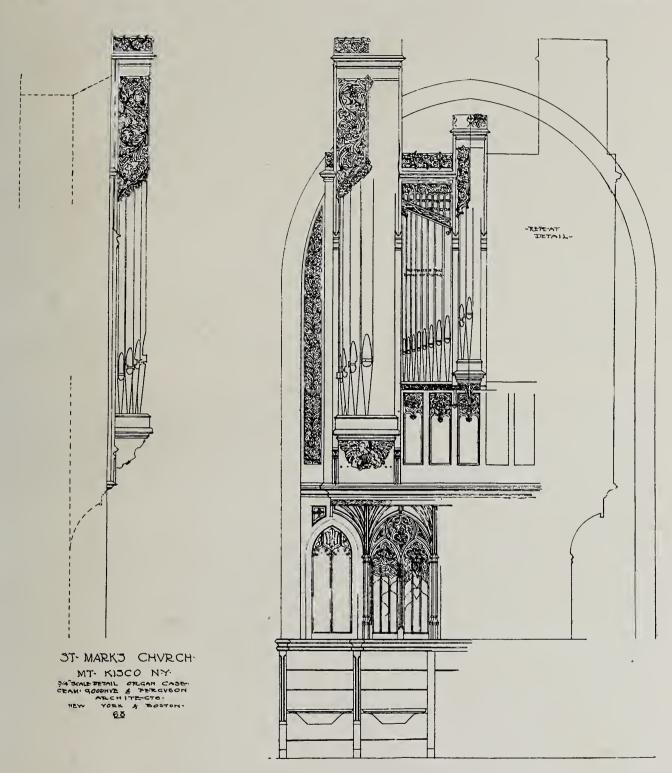
SCREEN, CHANCEL SIDE





ST. MARKS CHURCH, MT. KISCO, N. Y.
CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS

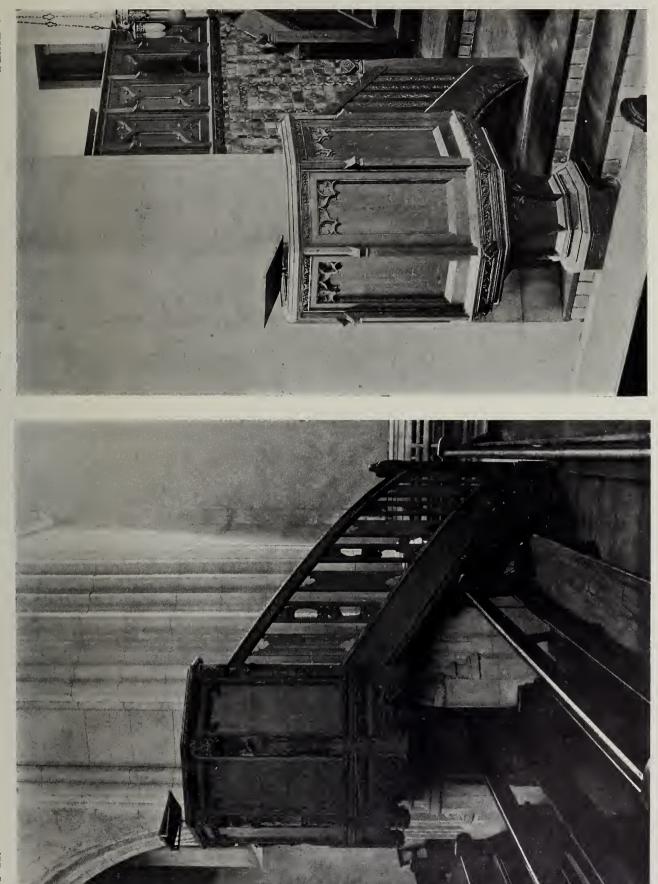




DETAIL OF ORGAN CASE

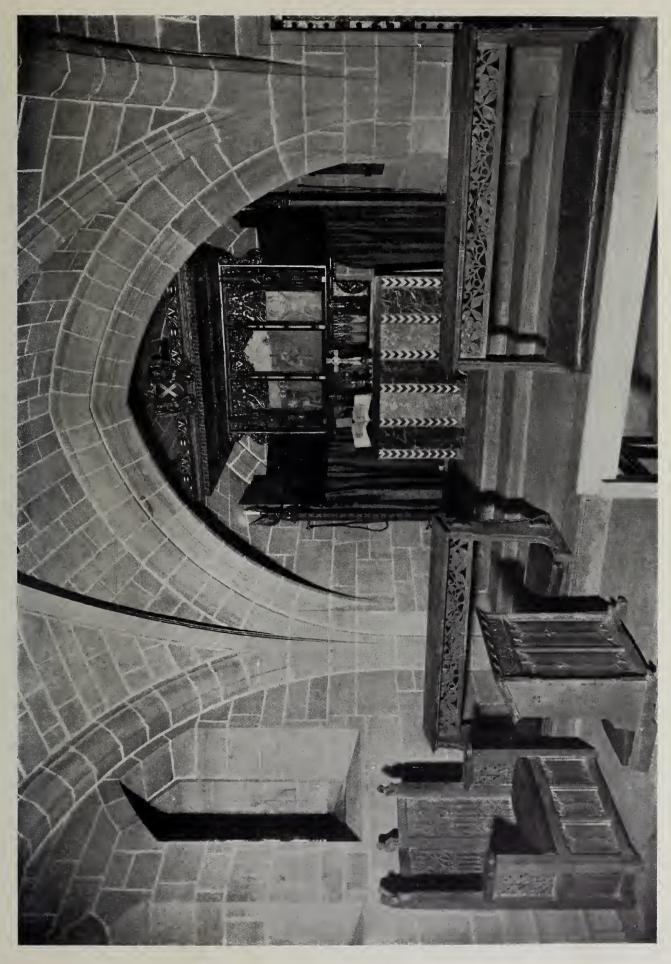
ST. MARK'S CHURCH, MT. KISCO, NEW YORK CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS



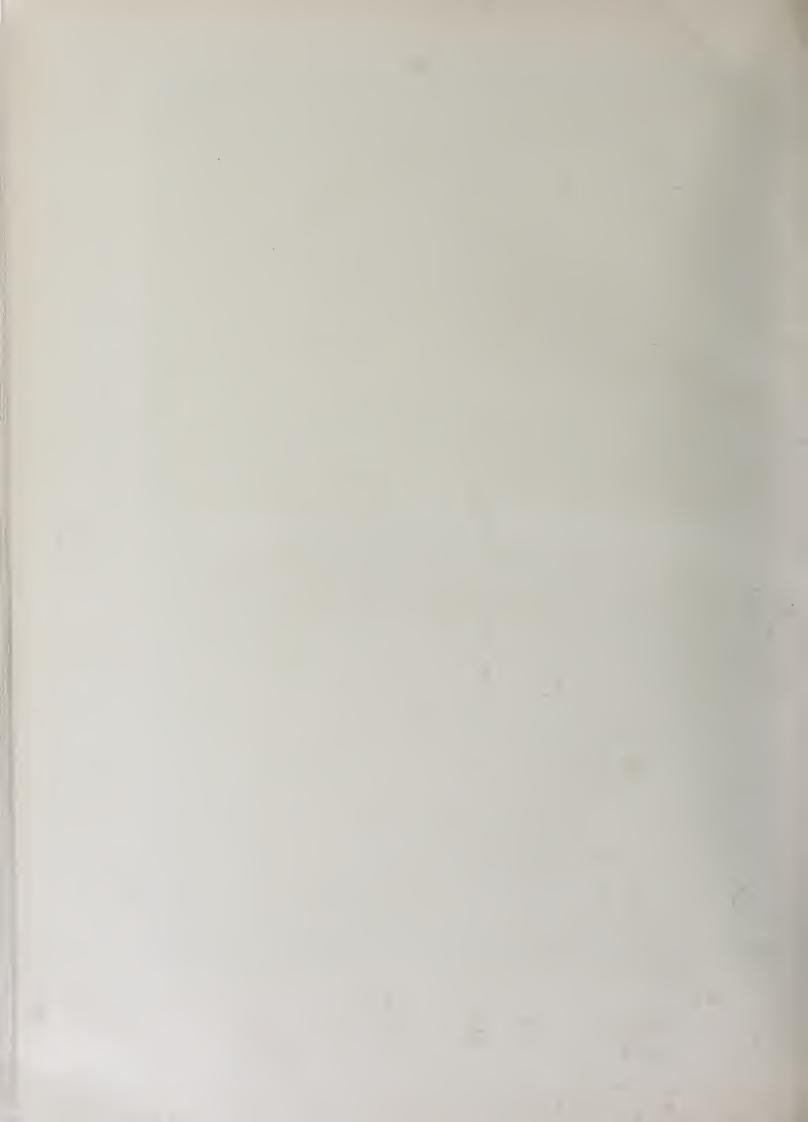


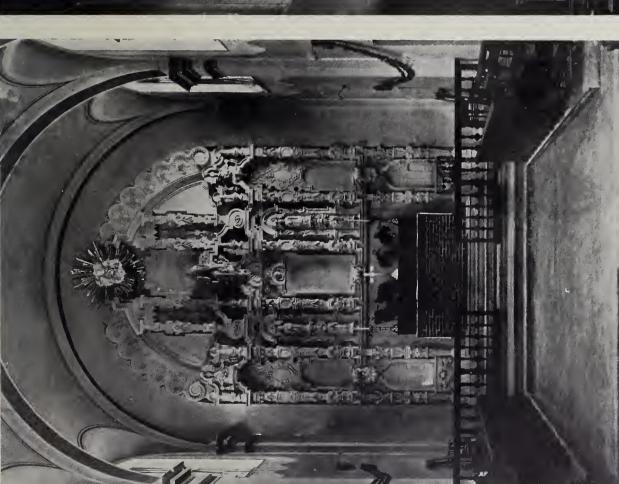
SAGE MEMORIAL CHURCH, FAR ROCKAWAY, L. I. CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS ALL SAINTS' CATHEDRAL, HALIFAX, N. S.

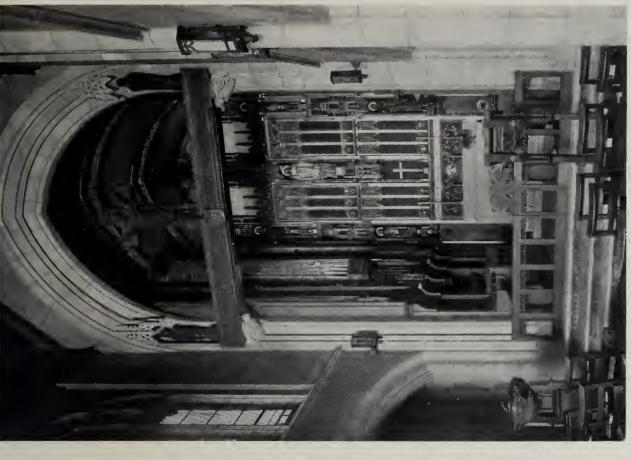




ALTAR, ST. ANDREW'S CHAPEL, CHICAGO, ILL. CRAM, GOODHUE & FERGUSON (NEW YORK OFFICE), ARCHITECTS





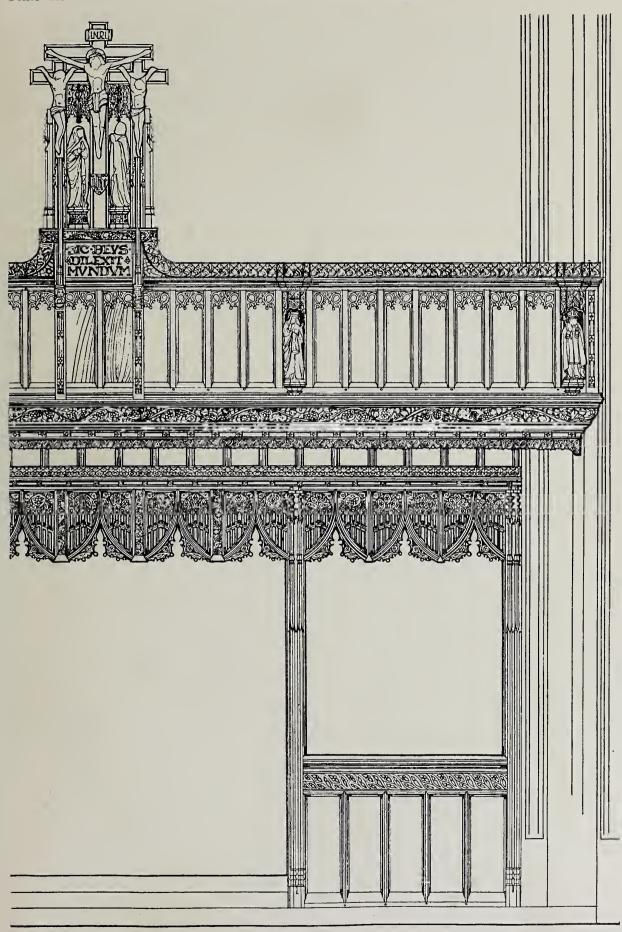


IGLESIA DE LA SANTISIMA TRINIDAD (EPISCOPAL PRO-CATHE-DRAL), HAVANA, CUBA

HIBBARD MEMORIAL CHAPEL, GRACE CHURCH (EPISCOPAL), CHICAGO, ILL.

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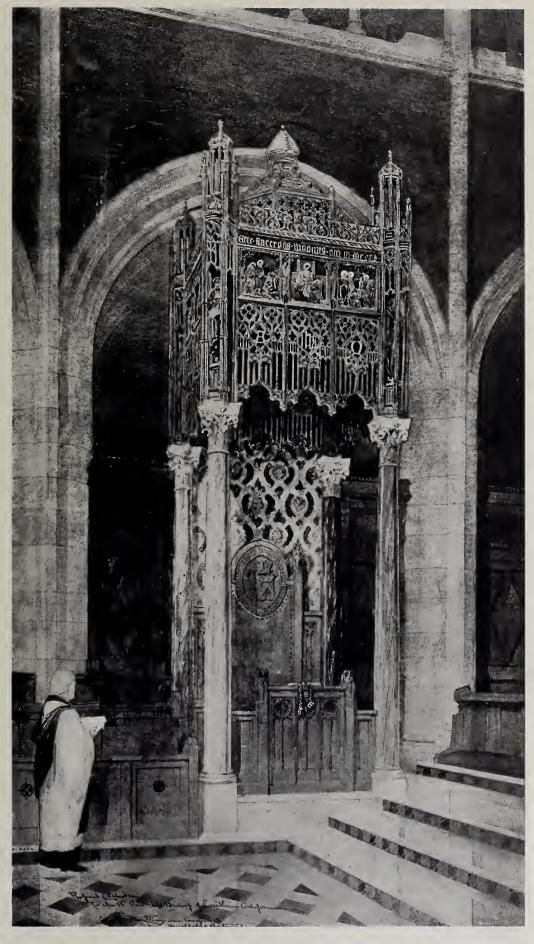




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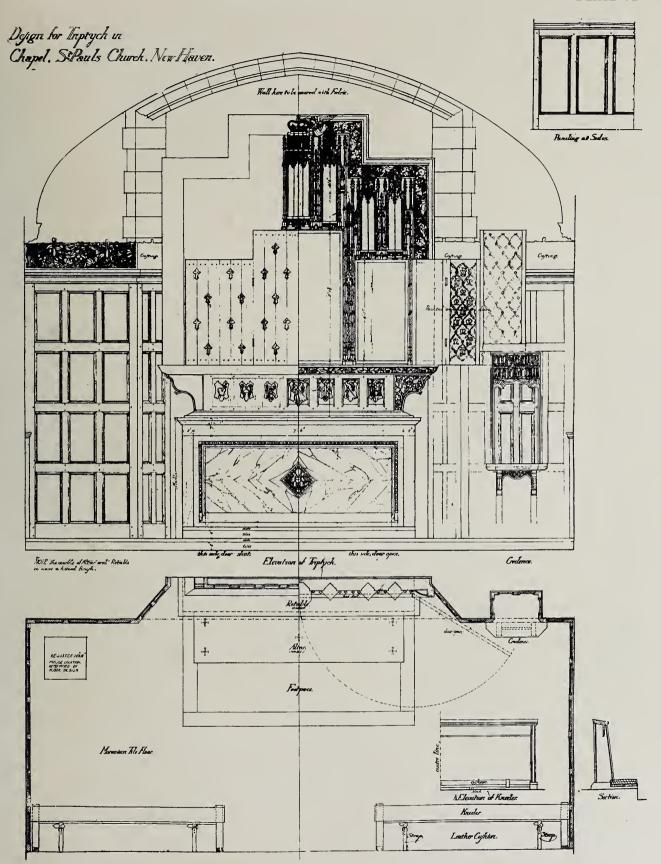
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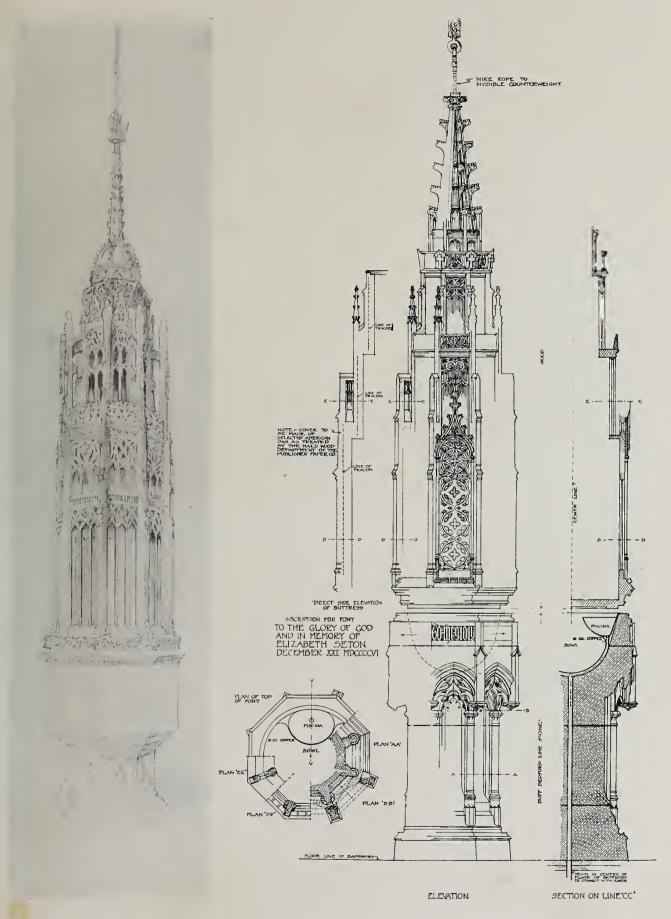
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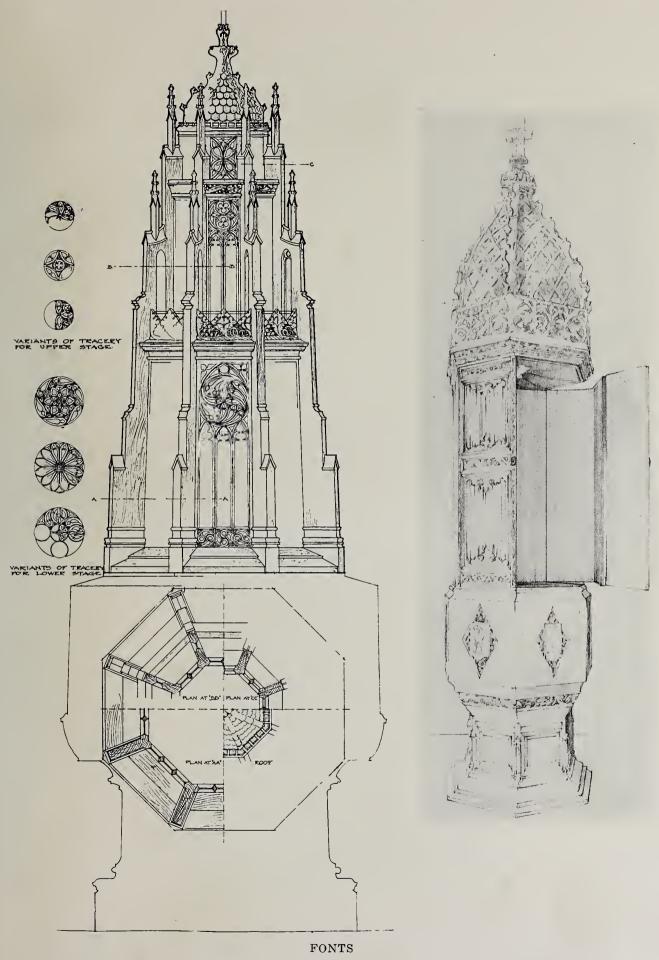
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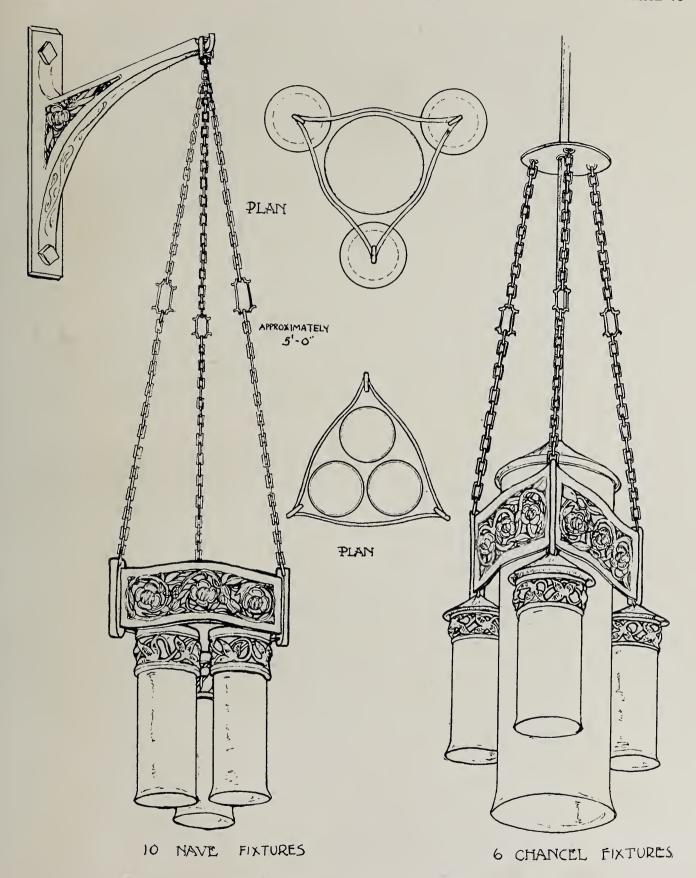
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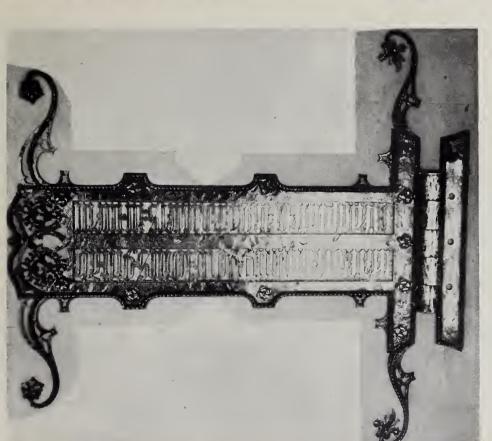




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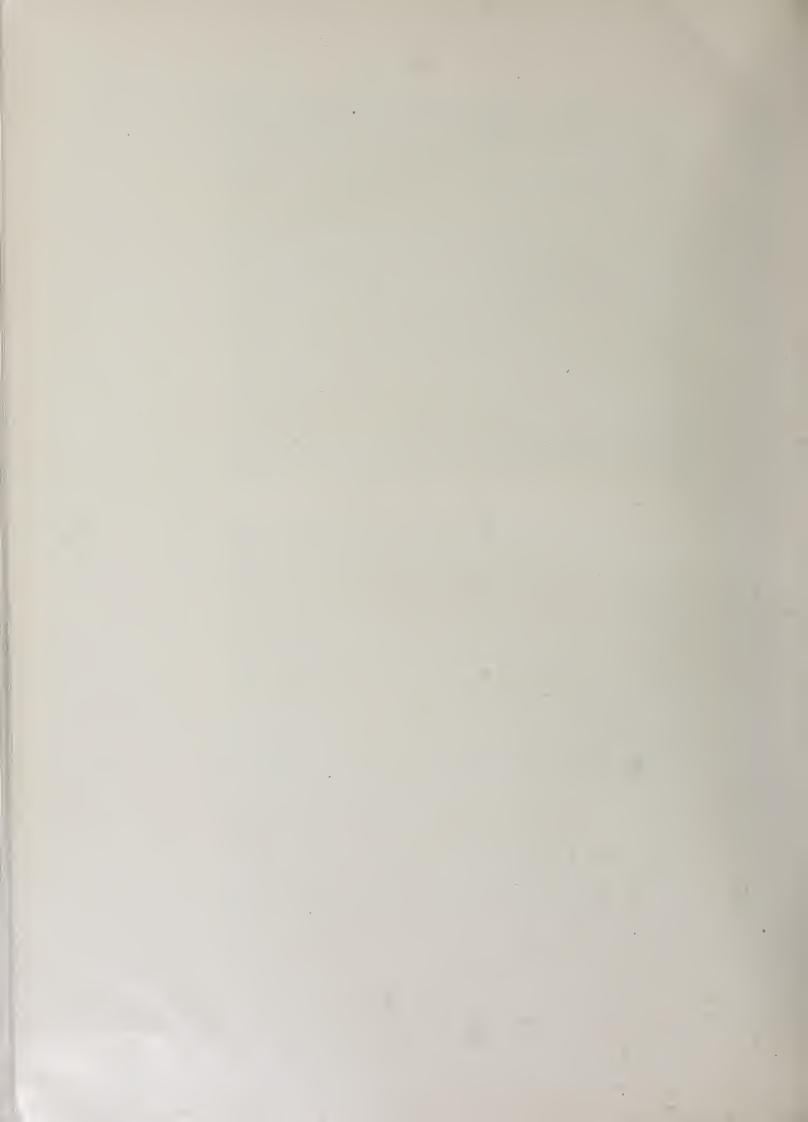
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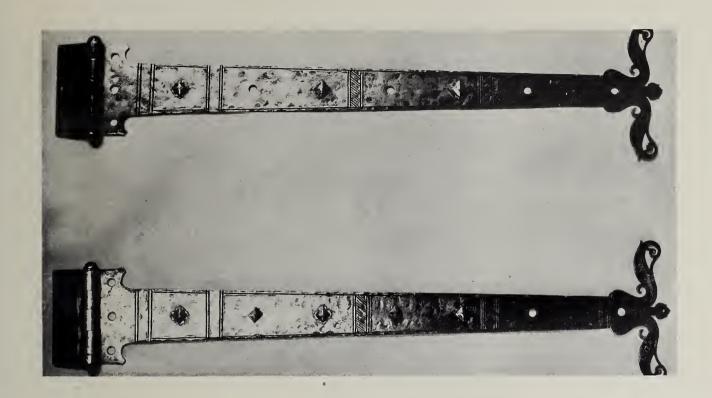


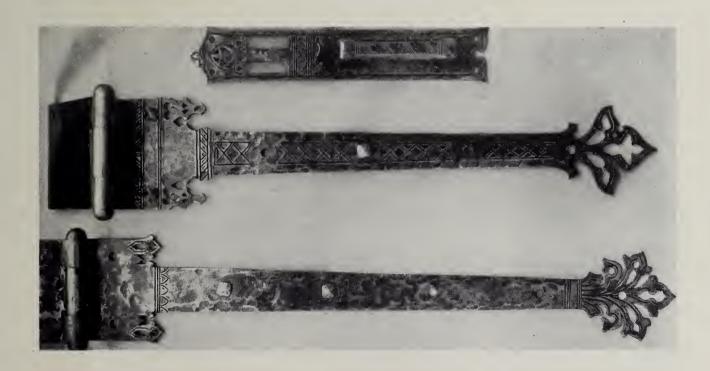




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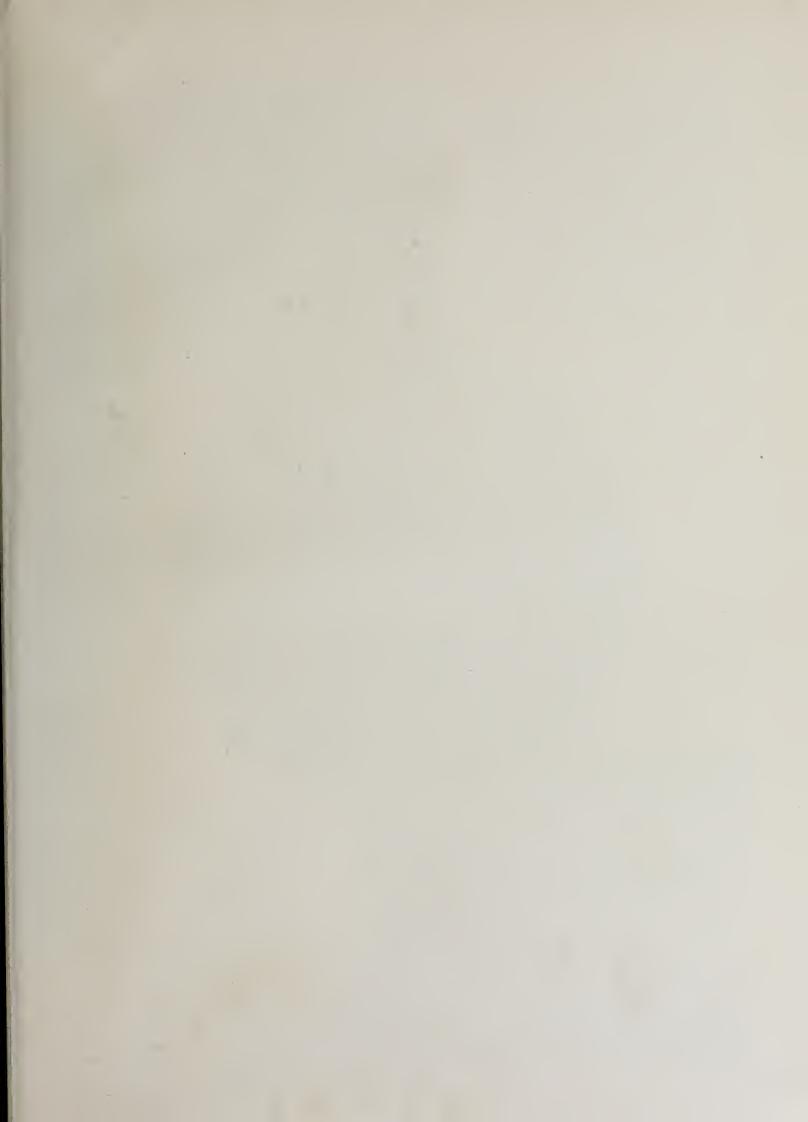
INDEX

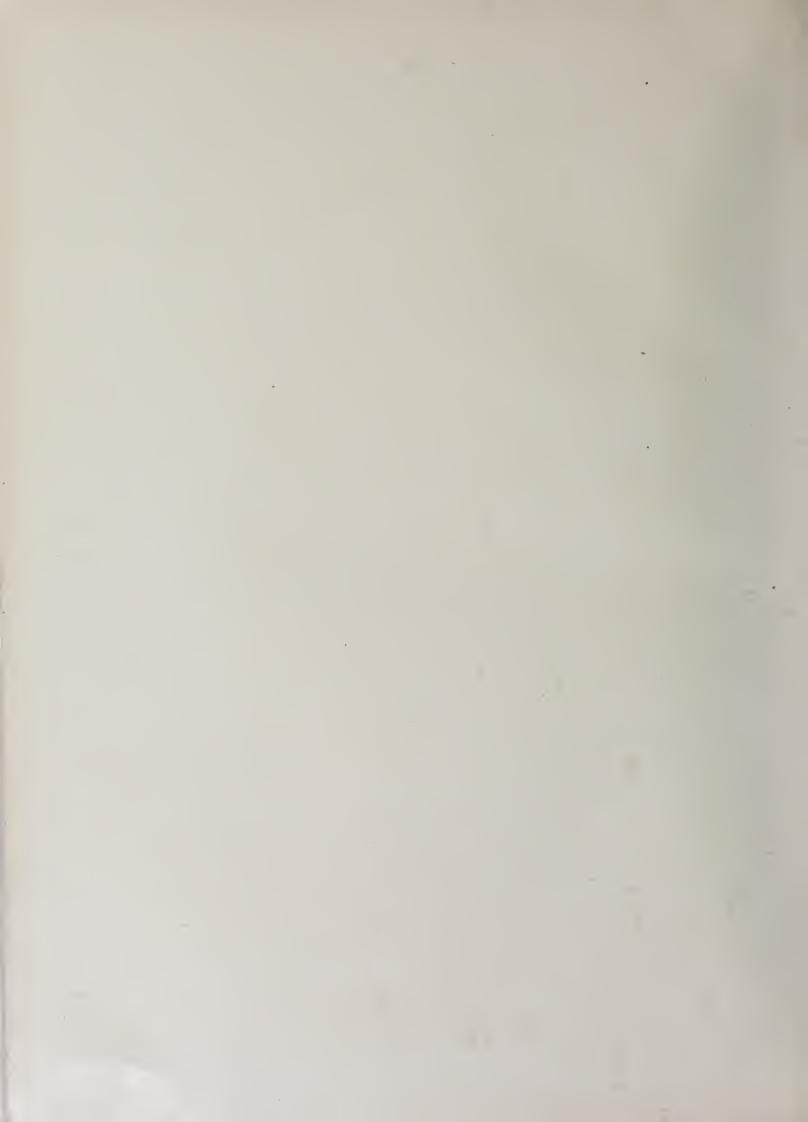
TEXT

Page	Page
ALMS BASINS 82	HYMN BOARDS 79
ALTARS 53	LECTERNS 43
Altar Books 81	LIGHTING FIXTURES 97
ALMS BOXES 79	LITANY DESKS 65
ALTAR CROSSES 83	Notice Boards
CANDLESTICKS 79,	ORGANS 45
CANDLESTICKS (floor)	PARAPETS 36
CHAIRS 67	PRIE DIEU
Chalice	PULPITS
CHANCELS	REREDOS
Chancel Rails	RIDDELPOSTS
CIBORIUM 63	SCREENS
COMMUNION TABLES 63	
CREDENCE	SEDILIA
FONTS 68	STALLS 36
HARDWARE	SYMBOLISM105
ILLUSTR.	ATIONS
ALL SAINTS CATHEDRAL, HALIFAX. Text. Interior	CHRIST CHURCH, CHICAGO, ILL. Plate
Plates	
ALTAR BOOK, pages from Text	CHRIST CHURCH, WEST HAVEN, CONN. Text—General view
CATHEDRAL OF THE INCARNATION, BALTIMORE. Text—View towards altar	Plate 57
Ground plan	FALL RIVER, MASS., A CHURCH AT Text—Reredos
CHAPEL OF THE INTERCESSION, NEW YORK. 32 Text—Lectern and Vicar's Stall	FIRST BAPTIST, PITTSBURGH, PA. Text—Stalls and screen 27 Altar 57 Supper room 6 Ladies' room 12 Plan of chancel 18 Main entrance 112 Plates 21 to 25

AMERICAN CHURCHES

GRACE CHAPEL, CHICAGO, ILL. Text—Organ console	St. Patrick's Church, Huntington, L. I., N. Y. Plates
HARDWARE, SPECIAL DESIGNS FOR Plates	St. Paul's, Brooklyn, N. Y. 54 Text—Reredos 54 Cleric's chair 79 Altar cross and Candlesticks 81 Sedilia 94 Plate 73
Los Angeles Cathedral. Plate	St. Paul's, Duluth, Minn. Text—Sketch for font. 72 Plates 53, 73 to 75
Prie-Dieu, Chapel of Bishop of Rhode Island. Plates	ST. PAUL'S, NEW HAVEN, CONN. Plates
PRO-CATHEDRAL, HAVANA, CUBA. 59 Main entrance 14 Plate 66 SAGE MEMORIAL, FAR ROCKAWAY, N. Y. 72 Ladies' room 6	St. Thomas's, New York. 35 Chancel 49 Figures on Organ Case 64 Communicants' Rail 2, 70 Sketch for Font 74 Font (completed) 3 Armory 10 Plan 10
Plan of chancel 18 Electrolier 96 Plates 50 to 53, 64	Chancel (elevation) 22 Section through Nave 22 Alms Basin 92 Guild Hall Fixtures 95
ST. Andrew's Chapel, Chicago, Ill. Text—Paintings in reredos	Hardware
ST. JOHN'S, WEST HARTFORD, CONN. Text—Stalls and Nuns' Gallery	Chancel 15 Chancel plan 24 Flèche 101 Plates 45 to 49
St. Luke's, New York. Text—Altar	TRINITY CHAPEL, BUFFALO, N. Y. Text—Pulpit 43 Plates 58 to 60
ST. MARK'S, MT. KISCO, N. Y. 29 Altar Cross and Candlesticks	UNITED STATES MILITARY ACADEMY, WEST POINT, N. Y. Text—Parclose Screen



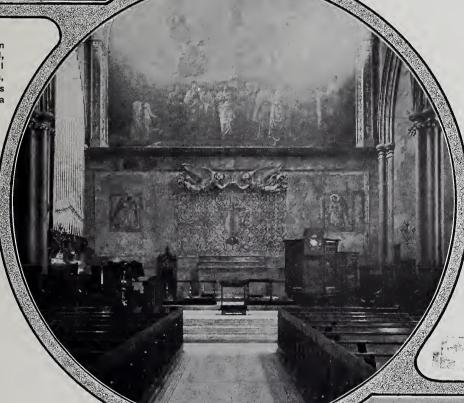




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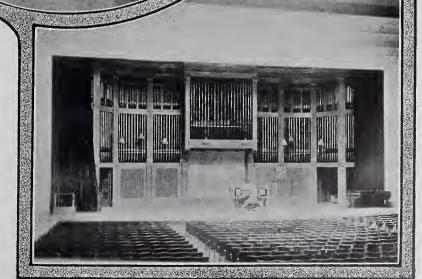
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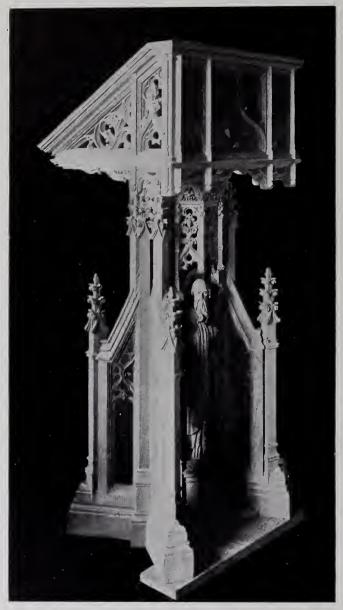
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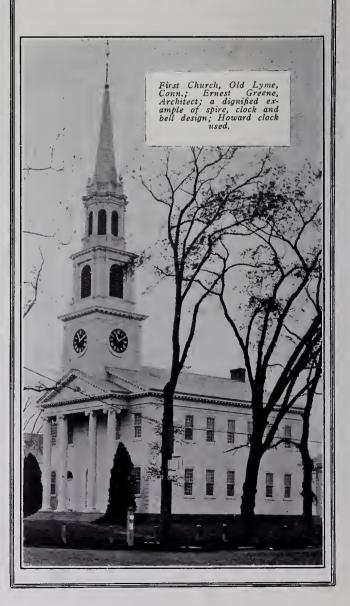
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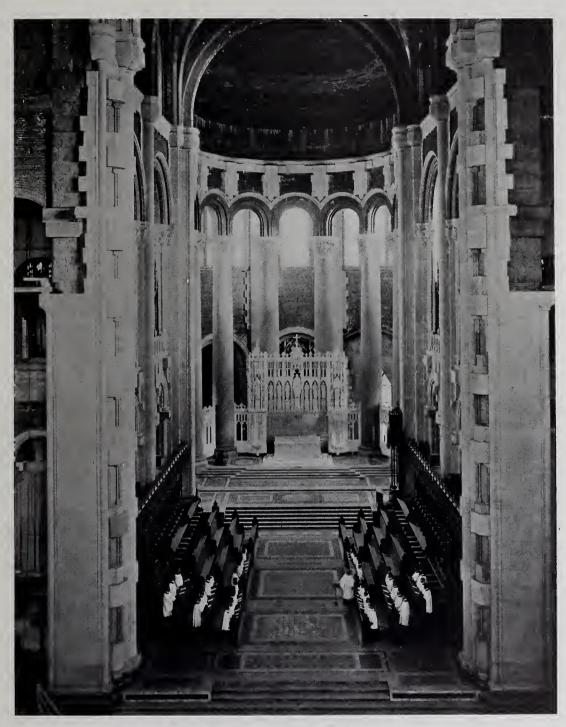
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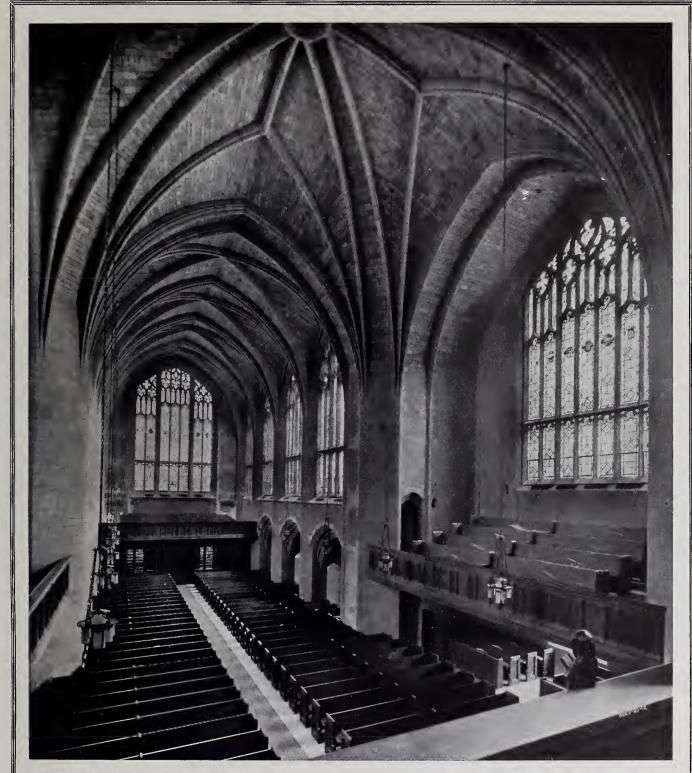
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St. Paul's Chapel, New York, N. Y.	1764
Old South Church, Boston, Mass.	1729
First Church, Hingham, Mass	1681
St. John's Chapel, New York, N. Y.	1803
First Congregational Church, Canandaigua, N. Y.	1812
St. Peter's P. E. Church, Philadelphia, Pa.	1758
Gloria Dei Church, Philadelphia, Pa	1700
and others.	1100
and others.	
PUBLIC BUILDINGS	Date
City Hall, New York, New York	1803-12
Old State House, Boston, Mass	1748
Pennsylvania Hospital, Philadelphia, Pa	1755
Carpenter's Hall, Philadelphia, Pa.	1770
Independence Hall, Philadelphia, Pa	1729
Faneuil Hall, Boston, Mass	1741
and others.	
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Royall Mansion, Dedham, Mass	1737
Philipse Manor House, Yonkers, New York	1745
Tudor Place, Georgetown, D. C.	179-
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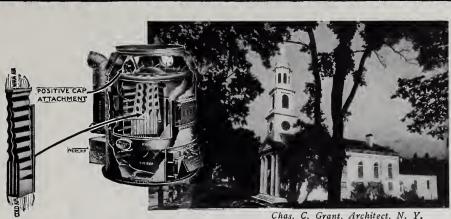
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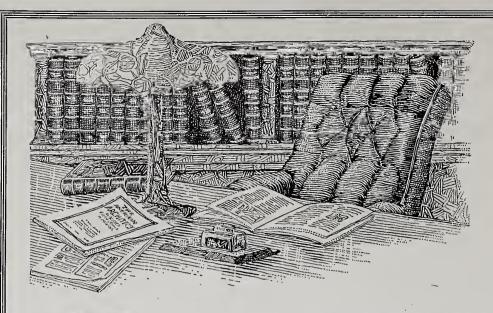
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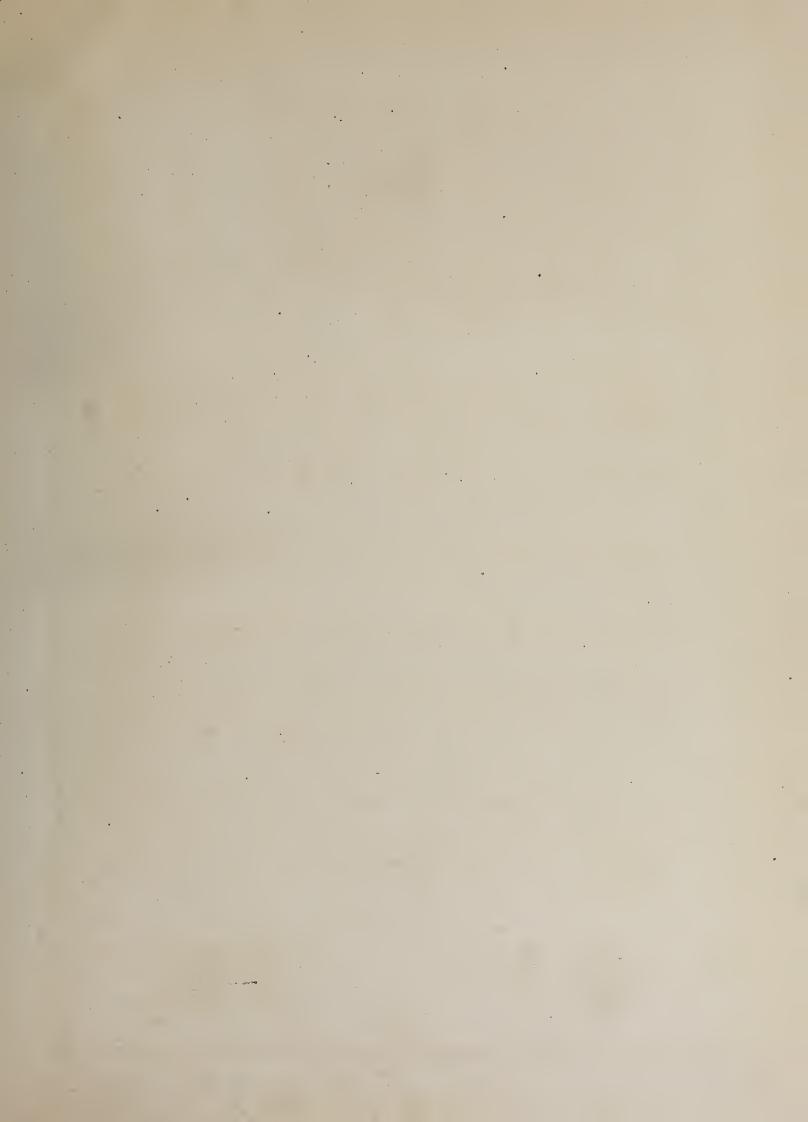
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