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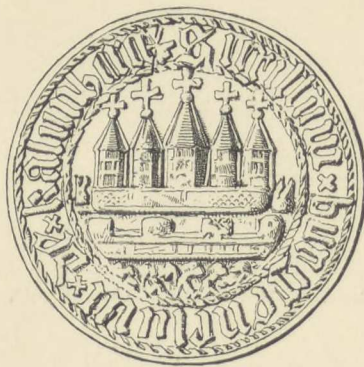


KALLUNDBORG KIRKE

KALLUNDBORG CHURCH

DENMARK

BY
MOGENS CLEMMENSEN
AND
VILH. LORENZEN



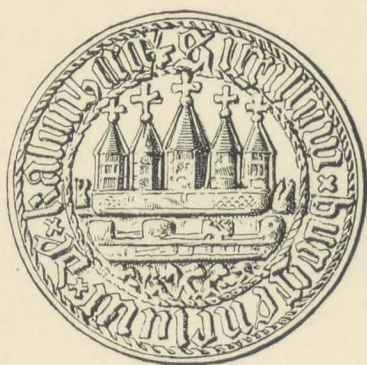
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MCMXXII

KALLUNDBORG KIRKE

AF
MOGENS CLEMMENSEN
OG
VILH. LORENZEN



UDGIVET AF
SELSKABET TIL UDGIVELSE AF DANSKE MINDESMÆRKER

HOS

HENRIK KOPPEL
KØBENHAVN

HUMPHREY MILFORD
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FORORD

EFTER at „Selskabet til Udgivelse af danske Mindesmærker“, der stiftedes 1920, Aaret efter kunde udsende: Uranienborg og Stjerneborg, med Tegninger af CHARLES CHRISTENSEN og Tekst af FRANCIS BECKETT og M. MACKEPRANG: Vases sacrés émaillés d'origine française du quatorzième siècle, conservés dans le musée national de Danemark, forelægges herved et Arbejde om Kallundborg Kirke.

Denne romanske Kirkebygning hører ikke blot dansk Arkitektur til, men Verdensarkitekturen og repræsenterer arkitektoniske Tanker, der — opstaaede og udviklede i Middelhavslandene i Antikens fjærne Dage — i 12. Aarhundrede genopstaar paa dansk Jord, i danske Omgivelser og knyttet til en af Datidens mest fremtrædende og folkekære Personligheder, Krigeren og Politikeren ESBERN SNARE.

Kallundborg Kirke har tidligt fængslet Forskerne. Allerede i Midten af forrige Aarhundrede, da Studiet af dansk middelalderlig Arkitektur først toges op paa rationel Vis, fremkom en Skildring af Kirkens Bygningshistorie, forfattet af WORSAAE, i Værket „Danske Mindesmærker“, og senere har andre Forskere behandlet Kirken og de mange forskellige Problemer, der knytter sig til den. Men først ved den nylig stedfundne Istandsættelse 1917—21 under Ledelse af

Arkitekt A. CLEMMENSEN blev Kirkens Bygningshistorie ret klarlagt, og det er Resultaterne af de ved denne Lejlighed stedfundne Undersøgelser, der forelægges i nærværende Arbejde. Men dette indeholder tillige en Paavisning af den mærkelige femtaarnede Kirkes arkitektoniske Berøringspunkter med samtidig dansk og fremmed Arkitektur, og sætter den paa dens rette Plads i Udviklingen som nærmest beslægtet med lombardisk Teglstensarkitektur.

Naar „Selskabet til Udgivelse af danske Mindesmærker“ har kunnet udsende nærværende Arbejde i det foreliggende Omfang og ledsaget af engelsk Tekst, skyldes det den Støtte, Selskabet har modtaget fra forskellig Side.

Fra Kallundborg By og Omegn er modtaget Bidrag fra HOLBÆK AMTS ØKONOMISKE SPAREKASSE, fra Fabrikant C. A. BROSTRØM, fra Fru Direktør F. DITLEFSEN, Hr. Boghandler TH. ELLING, Hr. Boghandler C. ELLING, Hr. Købmand S. P. JENSEN, Hr. Godsejer LAWÆTZ, Hr. Lensgreve LERCHE, Hr. Kredslæge I. S. MØLLER og Hr. Skibsmægler O. OMØE. Dem alle bringer Selskabet sin bedste Tak, og ligeledes takker man RASK-ØRSTED-FONDET, der har afholdt Udgifterne, den engelske Tekst har medført.



Fig. 1. Kallundborg Kirke, set fra Nordvest. — Kallundborg Church from the Northwest.

I BY OG KIRKE

HVOR Sjælland helt mod Nordvest strækker sig over mod den jyske Halvø, ligger Byen Kallundborg inderst ved Fjorden, der nu har Navn efter Byen, men i den ældre Middelalder hed Hærvig. Der er Klang af Vikingetog og Vikingefærd over dette Navn, men fra Fjordens inderste Vig har der sikkert fra ældgamle Tider ogsaa som den Dag i Dag været fredelig Overfart til Samsø og til Jyllands Østkyst.

Kallundborg By breder sig langs Fjordens nordlige Bred og bestaar af to Dele, omtrentlig lige store i Udstrækning Vest—Øst. Den østlige Dels Bebyggelse er i alt væsentligt bestemt af en lang Hovedgade, der nøje følger Foden af et Højdeplateau — Møllebakken — og er en Fortsættelse af den gamle Landevej, der fra Holbæk stiler mod det gamle Overfartssted. Over den lavtliggende Bydel, Nederbyen, løfter det skovklædte Bakkehæld sig højt og friskt og danner den lune Baggrund for Husenes Rækker og Klynger. Den vestlige Del, Øvrebyen, ligger paa en langagtig Bakke, mod Nord og Vest begrænset af lave Engstrækninger — Munkeengen — og mod Syd af Fjordens Vande (Fig. 4).

I den ældre Middelalder var de to Bydele langt skarpere adskilte, dels paa Grund af de siden da stærkt ændrede Terrainforhold og dels som Følge af Bebyggelsens almindelige Karakter. Den langagtige Banke var en regulær Halvø, der fra Møllebakkeplateauet, over en lavere Hals, skød sig frem mod Syd

I CHURCH AND CITY

FAR up in the northwest where Zealand stretches out an arm toward the Jutland peninsula lies the city of Kallundborg in the innermost cove of the fjord now bearing its name, but which during the Middle Ages was known as Haervig. The very sound of that word seems to suggest Viking exploits and expeditions, and yet, very probably, in olden times, even as to-day, the innermost cove was the peaceful ferry-crossing to Samsø and the eastern coast of Jutland.

Kallundborg city, stretching along the north shore of the fjord, is divided into two parts which spread equally toward east and west. The building on the east is largely determined by a long main street which closely follows the contours of the base of a plateau — Møllebakken (Mill Hill), — and is a continuance of the ancient roadway leading from Holbaek to the ferry. Above this lowlying section, the lower town, the woody slopes of the hill rise, high and fresh, forming a warm shelter for the rows and groups of houses. The western section, the upper town, follows a terrace fringed on the north and west by low meadow-lands, — the Munke-eng (Monk Meadow), — and on the south by the waters of the fjord (Fig. 4).

During the early part of the Middle Ages, the distinction between the two sections of the city was much sharper than now, as the land itself and the general character of the buildings have undergone many changes since then. In those days



Fig. 2. Kallundborg Kirke c. 1860, set fra Øst. — Kallundborg Church c. 1860, from the East.

og Vest mellem den daværende Munkesø og Havet. Hav og Sø var forbunden ved en smal Havarm.

Selve Fjordens Kystlinie maa i de Tider formodes at have gaaet omtrent helt op til Foden af Bakken, saa denne gjorde sig gældende paa en langt mere prægnant Maade end nu, som et virkeligt Forbjærg, der med bratte Skrænter hævede sig næsten direkte op af Havstokken og alvorligt og truende bød sig frem mod den eller dem, der nærmede sig ad Søvejen, løftende sin Del af Byen højt og synligt frem over Havet.

Nederbyens Bebyggelse er og var afgjort præget af naturligt skabte Trafikveje — foruden Hovedgaden af en Vej Nord paa, der fortsattes videre ud over Landet og af en anden Vej, der fra den lange Gade gik ned mod Kyst og Havn. Denne Bydel havde sin egen Kirke, indviet til den norske Helgen St. Olaf, en Kirke, der forlængst er nedbrudt, og laa umiddelbart Vest for den nordgaaende Vej i Bebyggelsens Udkant. Den vestligste Bydel, Øvrebyen, havde en ganske anden Karakter. Heller ikke dens Omraade var stort; Halvøen, hvorpaa den laa, gav — selv med en Bebyggelse omtrent helt ud til Skrænten mod Sø og Fjord — ikke altfor stor Plads og kunde kun naa ca. 500 m i Længde og mellem ca. 100 og ca. 180 m i Bredden. Den nuværende Bebyggelse har bevaret det samme Omfang undtagen mod Vest, hvor Byen paa et eller andet Tidspunkt i Middelalderen maa være rykket noget ind. Den lave Hals, der forbandt den højeste Del af Halvøen med Fastlandet, vides i al Fald fra Midten af 14de Aarh. at have været udsparet til et større *Borganlæg*, det i Danmarks Historie højst berømmelige, nu helt forsvundne Kallundborg Slot, omgivet af Grave, hvoraf den vestre skilte Borgen fra Øvrebyen. Dens Gadenæt bærer Præg af at være bleven til efter en bevidst Plan. Øvrebyen er i Virkeligheden noget langt mere end en almindelig Bydel — den er en helt selvstændig By. Rektan-

the long terrace was a regular peninsula, which from the Møllebakke plateau extended across a lower neck of land and stretched toward south and west between the Munke Sø (Monk Lake) of that time and the sea. Lake and sea were connected by an arm.

Then the line of the fjord probably extended to the base of the hill which made a far more impressive sight than it does to-day. With steep slopes rising abruptly from the edge of the water, and bearing aloft its section of the city, it towered grim and forbidding before the eyes of all who approached from the sea.

The development of building of the lower town was, and still is, determined by the natural lines of communication of the place, by the main highway already mentioned, by one leading toward the north and then further across the country, and another which diverges from the long road and turns toward the coast and harbour. This section had its own church dedicated to the Norwegian St. Olaf, long since demolished, but once lying due west of the northerly road on the outskirts of the city. The western section, the upper town, was very different in character. Its area was not large either. The peninsula on which it lay, even when the houses reached the edge of the slopes down to lake and fjord, afforded but narrow room and was indeed no more than 500 metres in length and between 100—180 metres in breadth. The settlement of to-day has kept the same proportions except toward the west, where at some time during the Middle Ages the spread of the city must have been checked. The lower neck which connected the highest part of the peninsula with the main land shows evidences that a large group of buildings was laid out about the middle of the 14th century, the Kallundborg Castle so famous in Denmark's history, but now

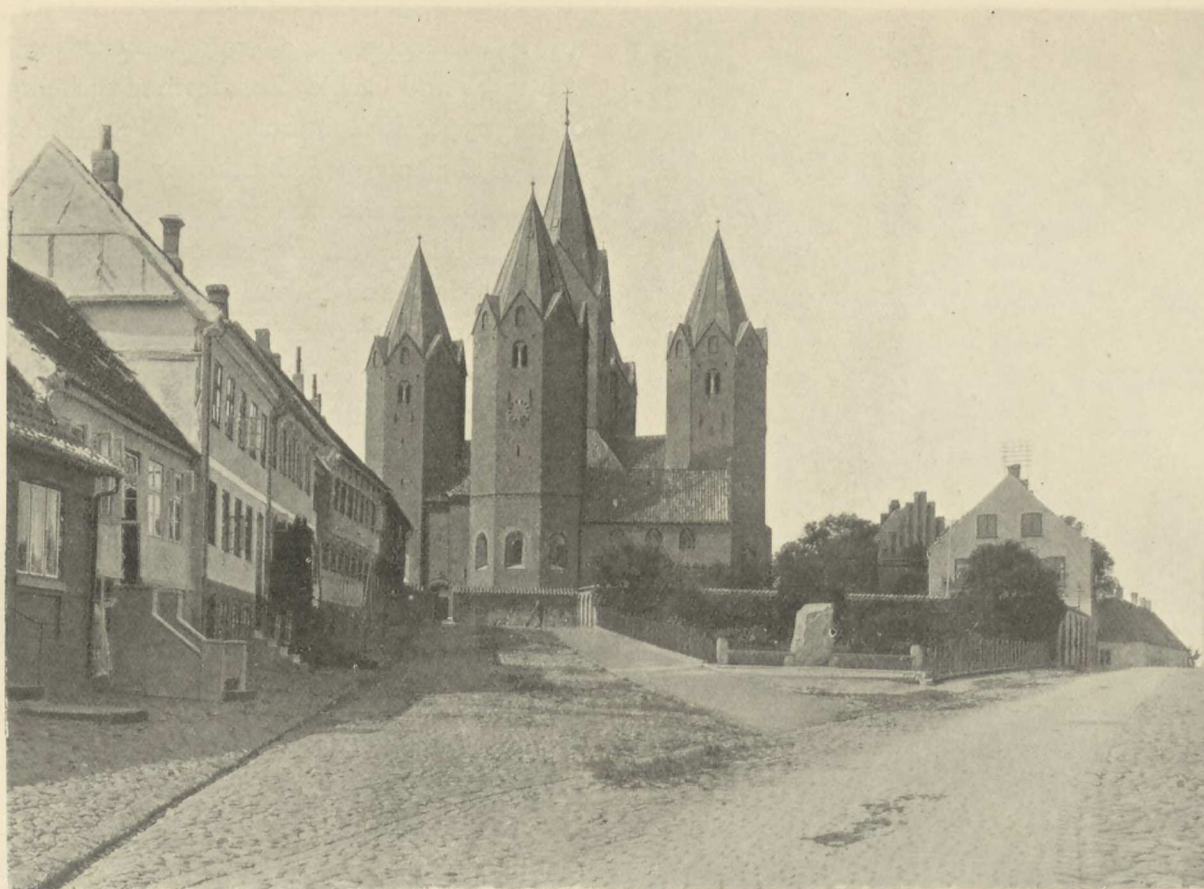


Fig. 3. Kallundborg Kirke 1922, set fra Øst. — Kallundborg Church 1922, from the East.

gulær, som Byen maatte blive efter Terrainets Form, maatte det være naturligt at lægge en Hovedgade Øst—Vest paa langs ned gennem det hele Byomraade; dertil sluttede sig saa Randgader mod Nord og Syd, der mod Vest løb ind i Hovedgaden noget før dens Udløb af Byen og mod Øst samledes med Hovedgaden foran Slotsgraven. Trafikken mellem Øvre- og Nedrebyen maa antages at være gaaet Nord om Borgen (Fig. 5).

Omtrent midt paa det højeste Punkt af Øvrebyen, ca. 14 m over Havet, og umiddelbart Syd for Hovedgaden, ligger Kirken, nu Kallundborgs eneste. Den er omgivet af en middelalderlig Kirkegaardsmur, der dog er forsvunden paa Østsiden og her erstattet af en nyere Mur. Mod Sydøst slutter Kirkegaardsmuren sig til den sengotiske Kirkelade og mod Nordvest til den ligeledes sengotiske Præstebolig, der nylig er indrettet til Ligkapel. Til Nordsiden af østre Korsarm (Koret) er tilbygget et gotisk Sakristi og tidligere var der foran Portalen i søndre Korsarms Østside et gotisk Vaabenhus. Indgangene i Kirkegaardsmuren er af nyere Form og findes i Vestsiden udfor Kirkens Vestportal samt i Østsiden for Enden af Adelgadetorvet. Af gamle Byplaner fremgaar, at der tidligere fandtes Indgang i Murens Vestsiden, nærmere Præsteboligen, og i dens Nordside udfor Kirkens Nordportal. Kirkens Grund vender mod Øst ud imod Smalsiden af den anseelige tresidede Torveplads, der er skabt ved en Udvidelse af Hovedgaden, Adelgaden, mod Syd. Dette Torv synes forsætteligt lagt saaledes, at Trafikken uhindret af Kirken og dens Grund kan fortsættes i lige Linie gennem Byen.

Kirke og Borg har dannet de monumentale Tyngdepunkter i det middelalderlige Kallundborg og har givet Øvrebyen en væsentlig Del af dens Karakter. Men denne var tillige bestemt af de Fæstningsværker, der omsluttede Byen. Er de kun

totalt destroyed, surrounded by its moats of which the one on the west separated it from the upper town. Here the network of streets shows that its existence is the result of a definite plan. The upper town is more than a common city section, it is indeed a city in itself. Rectangular in form due to the lay of the land, it was but natural to let the main street run east—west through the entire city. While on the west the outlying streets on the north and south ran into the main street shortly before it left the town, those on the east joined it near the moat. It is probable that traffic between the upper and lower town went north of the castle (Fig. 5).

Near the center of the highest part of the upper town, about 14 metres above sea-level and just south of the main street, lies Kallundborg Church, now the only one in the city. It is surrounded by a church-wall from the Middle Ages, of which the east side, having been destroyed, was later rebuilt. On the southeast the wall adjoins the late Gothic church barn, and on the northwest the late Gothic parsonage, recently made into a mortuary chapel. On the north side of the east transept, (the choir) a Gothic sacristy has been added, and earlier, in front of the entrance on the eastern side of the southern transept, a Gothic porch. The gates in the churchyard walls are newer in form and may be found on the west side opposite the western entrance of the church, and on the east side at the end of the Adelgade market-place. Old maps of the city show that there was once a door in the west side of the wall nearer the parsonage, and in the north side opposite the northern entrance of the church. The grounds of the church facing east turn toward the narrow part of the imposing triangular-shaped market-place, formed by the widening of the main street, Adelgade. This market-place seems to have been intentionally located in such a way, that the main



Fig. 4. Kallundborg Øvreby 1860. — Kallundborg Upper Town 1860.

delvis udgravne Bymures og Taarnes Alder end omtvistelig og for visse Partiers Vedkommende næppe yngre end 14. Aarh., viser dog andre Udgravninger, at Byen mod Vest, noget udenfor den nuværende Bygrænse, har haft et Forsvarsanlæg allerede i 12te Aarh. (Fig. 5).¹

At Kirken, som det vil blive paavist i det følgende, er bleven opført i sidste Tredjedel af 12. Aarh., giver Grund til at formode, at Traditionen har Ret, naar den tilskriver den danske Stormand Esbern Asserson, med Tilnavnet Snare, Æren for at have grundlagt Kallundborg ca. 1170 — uden at det dog er muligt med Sikkerhed at fastslaa, om det er ham, der har grundlagt Borgen paa dens senere kendte Plads østlig i Øvrebyen, har givet Øvrebyen dens nu eksisterende Gadenæt og befæstet den helt rundt. Overleveringen fortæller strængt taget kun, at han anlagde Kallundborg. Men Opførelsen af Kirken er paabegyndt ikke altfor længe efter, og eet er givet, at den har udpræget Karakter af *Borgkirke*. Dette ligger allerede i dens Form. Som et Centralanlæg — det mest udprægede i Middelalderens Danmark — staar den andre danske Centralkirker fra romansk Tid nær, særlig paa Sjælland, om hvilke der vides, at de fra først af har været, eller maa antages at have været anlagte i Forbindelse med en Stormandsgaard eller en Kongsgaard. Bjernede Kirke paa Sjælland var opført tæt ved en Stormandsgaard og af de andre sjællandske Kirker med Centralanlæg var Storehedinge og Selsø Kirker byggede paa Krongods og ligesaa den eneste fynske Centralkirke, Horne. Ogsaa Himlingeøje paa Sjælland, St. Mikael i Slesvig og St. Thøger i Vestervig kan muligvis have været kongelige Kirker eller Stormandskirker.² Ledøje Kirke paa Sjælland, der er en typisk Borgkirke og staar de tyske Dobbeltkapeller meget nær, er dog ikke noget egentlig Centralanlæg.³ Derimod har de særprægede Rundkirker paa Bornholm øjensynlig en anden Oprindelse; stærkt militært bestemte som de er, har de mere Karakter af folkelige Fæstningskirker.

Som Centralanlægget var almindeligt for Borgkirker i Danmark i den ældre Middelalder, er dette Forhold ogsaa i Udlandet saare velkendt i 12te og 13de Aarh. Her var Kirker

street, unhindered by the church and its grounds could follow its own course in a straight line through the town.

Church and Castle, then, formed the monumental key-stones of the upper Kallundborg of the Middle Ages, and gave this part of the town its characteristic appearance. However the fortifications surrounding the city likewise contributed to this in no small degree. Even though the age of the partially excavated walls and towers is disputable, and though some are scarcely younger than the 14th century, yet the excavations made show that on the west and somewhat outside the present city limits there was a line of fortifications at least as early as the 12th century¹ (Fig. 5).

That the church, as what follows will indicate, was built in the last third of the 12th century leads us to believe that tradition is right in ascribing to the Danish nobleman, Esbern, son of Asser, called Snare, the honor of founding Kallundborg, about the year 1170. However no proof exists as to whether or not he also built the castle where it was later found to have stood,—in the eastern part of the upper town,—gave the upper town its still existing network of streets and fortified it. Tradition only actually says that he planned Kallundborg (castle). However the building of the church was begun soon after, and the fact remains that it has all the characteristics of a *castle-church*. Its very form reveals this. As a centrally planned building, — the most characteristic of this type from the Middle Ages in Denmark, — it is closely related to other Danish central Romanesque churches, especially those from Zealand, which we know or suppose to have been built in connection with the estate of a nobleman or king. Bjernede Church in Zealand was built close to a nobleman's manor house and the other Zealand churches, central in construction, Storehedinge and Selsø, were built on royal dominions, as was the only central church on Funen, Horne. Himlingeøje Church, Zealand, the Church of St. Michael in Slesvig and that of St. Thøger in Vestervig were possibly built by royalty or noblemen². Ledøje Church, Zealand, though a typical castle-church and closely related to the German Dobbeltkapelle is not really central in construction³. The round churches on Bornholm, however, have a very different origin; strongly military in their destination, they have more of the characteristics of fortress churches for the people.

If the central type of construction was very common for the castle churches in Denmark during the early Middle Ages, the same type was well known abroad in the 12th and

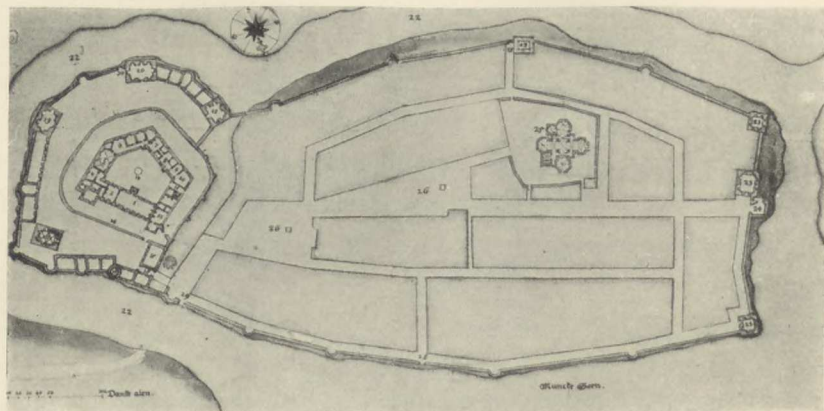


Fig. 5. Kallundborgs Øvreby i 17. Aarh. — Kallundborg Upper Town, 17. Cent.

eller Kapeller i Centralform stærkt benyttede ved verdslige og gejstlige Stormænds Borge og Gaarde, og Danmark har paa dette Omraade kun fulgt almindelig europæisk Sæd og Skik.

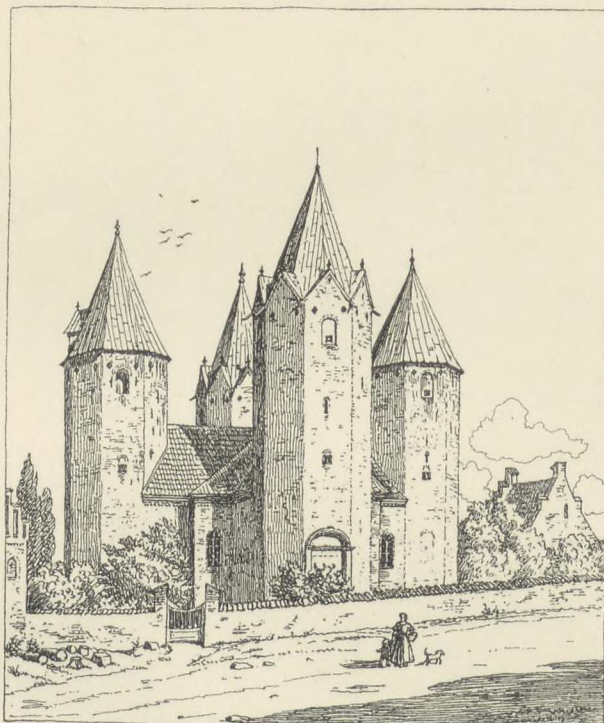
Føjes dertil den i sig selv borgagtige Karakter, den taarnrige Kirke frembød, og de Antydninger af fortifikatoriske Enkeltheder, der endnu hist og her spores i Kirkens Byggemaade, kan man med Tryghed karakterisere den nuværende Kallundborg Kirke som *Esbern Snares Borgkirke*, beregnet fortrinsvis til ham selv og hans Husstand. Det er ogsaa i denne Sammenhæng værd at lægge Mærke til, at der i vestre Korsarm hverken er Vinduer over Portalen eller i Vesttaarnets to Skraasider mod Vest. Dette tyder paa, at der her — over Portalen — har været et Pulpitur af Træ, bestemt for Borgens Herskab, et Herskabskor med særlig Opgang, svarende til lignende i saa mange andre af Datidens Kirkebygninger.

V. L.

13th centuries. Here the central form was much used for churches and chapels built in connection with the manor of both noblemen and clergy, and in this matter Denmark has only followed the general European custom and fashion.

Add to this the very castle-like appearance, which the many-towered Kallundborg Church presented, and the traces of fortifications observable in details in the construction of the church, and we are safe in characterising the Kallundborg Church of to-day as the *castle-church of Esbern Snare*, built for his own private devotion's and for his household. In this connection it is important to note that in the western transept there are neither windows over the entrance, nor in the west tower in the two walls sloping toward the west. This might indicate that here—over the entrance—was a wooden gallery, intended for the seigneurial family, and a room with a special entrance reserved for their use, similar to what is found in so many churches of that time.

V. L.



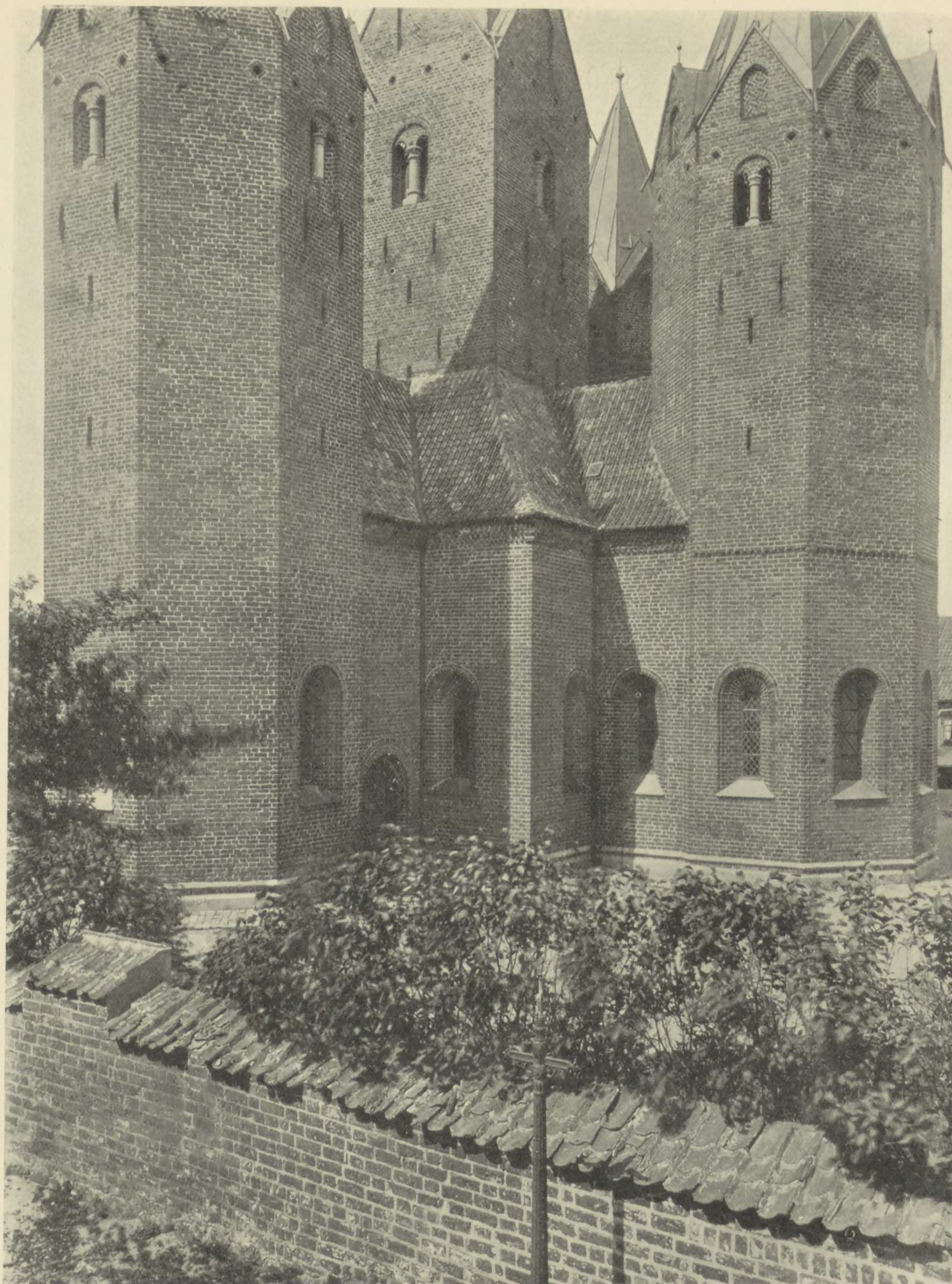


Fig. 6. Kirken fra Sydøst (før sidste Restaurering). — The Church from south-east (prior to the last restoration).

II KIRKEBYGNINGEN

VOR FRUE KIRKE i Kallundborg er i det hele sluppet forholdsvis uskadt gennem Tiderne, selv om den har været udsat for Mishandling. Den værste Ulykke overgik den, da det store Midttaarn i 1827 styrtede ned og knuste Skibets Hvælvinger og de Søjler som bar Taarnet. I Aarene 1867—71 gennemgik Kirken en Hovedstandsættelse under Arkitekt V. Tvedes Ledelse, og ved denne Lejlighed genopførtes Midttaarnet, ligesom man forsøgte at gengive Kirken dens oprindelige Skikkelse. Desværre blev mange af dens oprindelige Enkeltheder misforstaaede og gengivne i en misvisende Form, saaledes at en senere grundig Undersøgelse derved er blevet

II THE CHURCH-BUILDING

ON the whole the Church of Our Lady in Kallundborg has passed through the years comparatively unscathed, even though from time to time it has been subjected to mistreatment. Its worst misfortune befell it in 1827 when its central tower fell, crushing the vaultings of the nave and the columns which bore the tower. Between 1867—71 the church was submitted to a restoration under the leadership of the architect, Mr. V. Tvede, and on that occasion this tower was rebuilt and an attempt made to restore the church to its original appearance. Unfortunately misconceptions arose in regard to many of the original details and the form in which they were repro-

vanskeliggjort i en ikke ringe Grad. Som Kirken nu fremtræder, særligt for det Indres Vedkommende, er den gennemført i sin oprindelige Skikkelse ved en Restaurering i Aarene 1917—21 under Ledelse af Arkitekt A. Clemmensen med Arkitekt Mogens Clemmensen som Medarbejder. Paa Grundlag af meget indgaaende Undersøgelser er det lykkedes at fremdrage og genfremstille alle de Enkeltheder, som man ved den forrige Restaurering havde overset eller misforstaaet, og som man nu havde større Forudsætninger og Erfaringer for at kunne forstaa end for 50 Aar siden, da Kendskabet til vore romanske Teglstenskirker var meget begrænset.

Den efterfølgende Redegørelse for Bygningen er et Resultat af alle de Iagttagelser, der er gjort under den sidste Restaurering, samt de Studier over dens Arkitektur, som til forskellige Tider er blevne publicerede¹. De paa Pl. I—IX gengivne Opmaalingstegninger fremstiller Kirken i dens nuværende Skikkelse og er dels tegnede af Arkitekt Mogens Clemmensen (Pl. V, VI og VII), dels af Arkitekt Frederik Jensen.

Kirken bestaar af et kvadratisk Centralparti over hvilket et kvadratisk Taarn hæver sig højt, baaret af fire Granitsøjler, samt fire smallere Korsarme mod Øst, Vest, Nord og Syd — den østre danner Koret — og alle endende i et lidt bredere polygonalt Parti, hvorover der rejser sig et ottekantet Taarn. Planen udgør saaledes et ligearmet »græsk« Kors. De fire ottekantede Taarne, der slutter Kreds omkring det høje Midttaarn, giver Kirken dens enestaaende borgagtige Udseende og virkningsfulde Silhuet, som allerede fra Middelalderen har været

benyttet som Byen Kallundborgs Vaabenmærke (se Titelbladet).

Murene er opført af røde Teglsten (»Munkesten«) paa en Granitsokkel; Granit er ligeledes benyttet til Portalernes Karme og Tympana samt til de fire store Søjler, der bærer Midttaarnet. Fundamenterne bestaar af store Kampesten uden Bindemiddel og gaar kun til en Dybde af 30—70

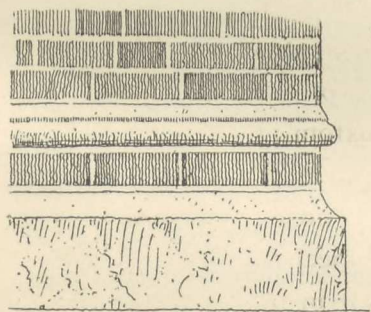


Fig. 7. Sokkel. — Socle.
1 : 25.

cm under Jordoverfladen og er lagt paa den faste Bund, der bestaar af stiv Ler. Fundamenterne er paa Oversiden udjævnet med Kalkmørtel, og herpaa er den tilhugne Granitsokkel med svagt hulet Skraakant sat som ydre Beklædning paa Murværket; over dette Sokkelskifte, der er ca. 40 cm højt, og hvis Kvadre gennemgaaende er lange, indtil 2,5 m, ligger et enkelt Skifte af Munkesten og over dette et 13 cm tykt Profilbaand af Granit (Fig. 7). Murene er udelukkende af Munkesten, liggende i Skifter gennem hele Murtykkelsen uden nogen indre Kærne af Kampesten, hvilket sikkert er Skyld i, at Kirken, trods dens dristige Konstruktion og den Mishandling den har været udsat for, har staaet sig saa godt gennem de 750 Aar, som er forløbne siden dens Opførelse. Murstenenes Størrelser varierer meget i de forskellige Dele af Bygningen; de største (i vestre Korsarm) maaler indtil $34 \times 15 \times 9\frac{1}{2}$ —10 cm, de mindste

duced was so misleading that later thorough investigations have been rendered extremely difficult. As the church appears now, and this is especially true of its interior, it resembles the original form, due to a restoration made in 1917—21 under the leadership of the architect, Mr. A. Clemmensen, with the architect, Mr. Mogens Clemmensen as assistant. Very careful studies have made it possible to bring to light and reproduce all the details which had been misunderstood or overlooked during the previous restoration and which are better understood and appreciated to-day than fifty years ago, when knowledge of Danish Romanesque brick churches was very limited.

The following description of the building is a result of all the observations made during this last restoration, as well as of the studies on the architecture of Kallundborg Church, which have been published from time to time¹. The drawings given in Plates I—IX show the church in its present form, and were drawn by Mr. Mogens Clemmensen (Plates V, VI and VII), and some by the architect, Mr. Frederik Jensen.

The church consists of a square central section, above which a square tower rises aloft, borne by four granite columns, and four narrower transepts,—toward the east, west, north and south,—the eastern one forming the choir,—and each terminating in a slightly wider polygonal section, above which rises an octagonal tower. The plan thus forms a »Greek« cross, with equal arms. The four octagonal towers, encircling the high central tower, give the church its unique castle-like and effective outline, which, as far back as the Middle Ages, appeared in the coat-of-arms of the city of Kallundborg (see the title page).

The walls are built of red brick (»monk-bricks«), on a granite socle. Granite has also been used in the casements of the entrances and the tympana, as well as for the four great columns bearing the central tower. The foundations are of large hard stones set together without cementing medium, and lie only 30—70 cm beneath the surface. They are placed directly on the ground which consists of stiff clay. On the top the foundations are levelled off with lime-mortar, and on this rests the hewn granite socle with its slightly concave bevel as an outer covering of the walls. Above this socle division which is about 40 cm high and whose surfaces, as a rule, are long,—up to 2.5 mètres,—is placed a single layer of bricks and above this a 13 cm broad profile strip of granite (fig. 7). The walls are wholly of bricks, lying in courses throughout the entire thickness, and without an inner core of stone. This is probably why the church, in spite of its bold construction, and the treatment to which it has been submitted, has survived so well the 750 years which have elapsed since it was built. The sizes of the monk bricks vary greatly in the various parts of the building; the largest (in the west transept) measure up to $34 \times 15 \times 9\frac{1}{2}$ —10 cm, the smallest $25 \times 13 \times 8$ — $8\frac{1}{2}$ cm. The majority, however, measure 28×13 — 30×13 — $14 \times 8\frac{1}{2}$ cm, which is the average size of the bricks in Danish Romanesque brick churches. At all the cor-



Fig. 8. Oprindeligt Murværk. — Original masonry.

25—26 × 13 × 8—8½ cm. Hovedparten af Stenene maaler dog 28—30 × 13—14 × 8½ cm, Gennemsnitsmaalet for Mursten i vore romanske Teglstenskirker. Ved alle Hjørner og paa alle Formsten er Murstenenes Yderside riffelhugget *efter* Brændingen, med Rifflerne i Reglen gaaende fra venstre skraat ned ad til højre som det falder naturligt, naar man ved Hugningen holder Stenen i venstre Haand og Hammeren med højre. Denne Riffelhugning er som bekendt karakteristisk for vor ældste Teglstensarkitektur og bliver omkring Midten af 13de Aarh. anbragt paa Stenen *for* Brændingen, for kort efter helt at gaa af Mode. — Mørtelen er ganske fortrinlig og nu af en saadan Haardhed, at Kalk og Mursten virker som en ensartet haard Masse; den er ret fed, iblandet groft Grus, og nu af en hvidgul Farve, der har gjort det let under Restaureringen at skelne det oprindelige Murværk fra senere Tiders. Fugerne er gennemgaaende tykke, 2—2½ cm, og noget uregelmæssigt ryg-skaarne, som det ses paa Fig. 8, der viser oprindelig *udvendig* Mur, som er bevaret ind mod Sakristiet. Det har ved Undersøgelsen vist sig, at Murværket overalt indvendig, og vistnok ogsaa udvendig, oprindeligt har staaet rødmalet med hvidt optrukne Fuger, som det nu efter Restaureringen er synligt mange Steder, og som der senere skal gøres Rede for ved Beskrivelsen af Kirkens Indre. Metoden viser sig at have været ikke ualmindelig i vore romanske Teglstenskirker, og er saaledes ikke noget enestaaende for Kallundborg Kirke².

Det fremgaar af Murværket, at man, da Kirken blev opført, ikke har haft senere Tiders Øvelse i at bygge med Teglsten, hvad der jo ikke er mærkeligt saa faa Aar efter at Teglstens-tekniken naaede her til Landet. Ofte ser man Skifter som »forløber«, Fugerne er meget uregelmæssige og Skiftegangen ligeledes, selv om den normalt bestaar af 2 Løbere og 1 Binder.

ners and at all the mould-bricks, the outer surface of the bricks is fluted *after* firing, with the flutings, as a rule, going obliquely from left to right, the natural direction, when in cutting the brick is held in the left hand and the mallet in the right. This fluting, as is well-known, is very characteristic of the oldest Danish brick architecture, and, about the middle of the 13th century, was placed on the bricks *before* firing; by degrees it has passed out of fashion. The mortar used is of excellent quality, and is so hard that lime and brick form a uniform solid mass; as it is now of a whitish yellow color and quite heavy, mixed as it is with coarse sand, it has been a simple matter under restoration to distinguish the original masonry from that of later periods. The joints are usually thick, 2—2½ cm and cut rather irregularly in ridges, as seen in Fig. 8, showing the original external wall, which has been preserved toward the sacristy. Investigations have shown that the walls everywhere on the inside, and presumably also on the outside, have been colored red with the joints whitened, which after restoration were visible in many places. Later, in our description of the interior of the church, we will return to this point. The method is not unusual in Danish Romanesque brick churches and is by no means an unique feature of Kallundborg Church².

The walls show that when the church was built the skill in brick-laying, gained in later years was wanting, not surprising so few years after the technical art of brick-laying had reached Denmark. Courses that overlap are often seen, the joints are very irregular, as is the bond, even though normally this only consists of 2 stretchers and 1 header. The brick-layers have had much difficulty in keeping the courses horizontal. All those in the transepts, from the nave and outwards sink, which cannot be due to settling on account of pressure of the towers, as all the vertical edges, — those in the windows for instance, — are fairly plumb, though not at right angles to the courses. A more probable explanation is that the brick-layers, as was the custom in Danish buildings from the Middle Ages, followed the fall of the land. A closer examination of the walls, especially those inside the church, shows that the east transept, and especially the central part, was built, or at least begun, first, for in the north and south

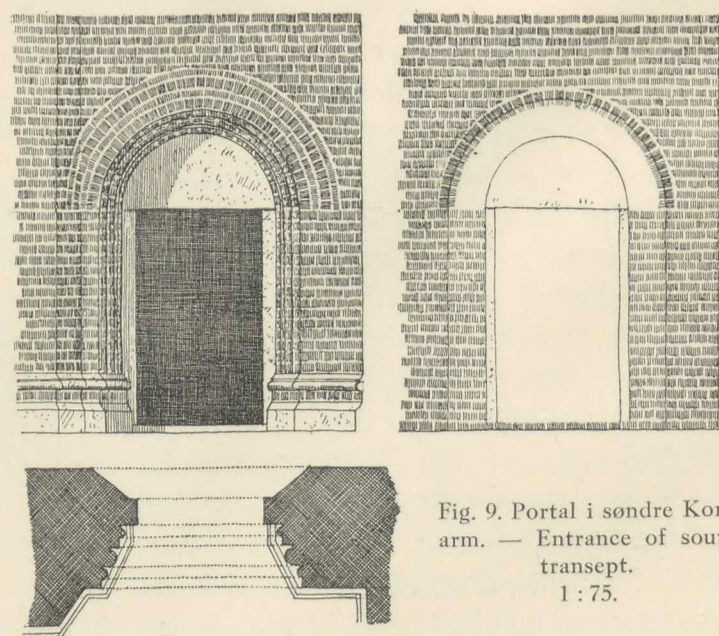


Fig. 9. Portal i søndre Korsarm. — Entrance of south transept.
1:75.



Fig. 10. Nordportal og Gavlf af Sakristi. — Northern entrance and gable of sacristy.

Endelig har det været meget vanskeligt for Murerne at holde Skifterne vandrette; saaledes falder Skifterne i alle Korsarmene fra Skibet og udefter, hvilket ikke kan skyldes Sætninger paa Grund af Taarnenes Tryk, da alle lodrette Kanter f. Eks. i Vinduerne staar nogenlunde i Lod og ikke vinkelret paa Skifterne; langt snarere skyldes det, at man, som almindeligt i vore middelalderlige Bygninger, har fulgt Terrainets Fald. — Ved nøjere at undersøge Murværket, især inde i Kirken, kan man se at østre Korsarm og selve Midtpartiet er opført eller paabegyndt først, idet der i nordre og søndre Korsarme ses Fortandinger, der viser at nordre og søndre Taarn er tilbyggede sidst; endvidere kan det ses, at man er begyndt fra Øst og har fortsat mod Vest, hvor den søndre Mur i vestre Korsarm og Taarn atter har været paabegyndt før den nordre Mur; Forhold, der giver Oplysning om mulige Ændringer i den oprindelige Byggeplan, som der senere skal gøres Rede for under Beskrivelsen af Portalerne og det Ydre. Under Gulvet i det søndre Taarn fandtes Fundamentet til Taarnets indre Sider at være afsat forkert, idet Vinklerne ikke har været nøjagtigt udmaalt, da man fra Vest begyndte paa Fundamentet, se Pl. I; ogsaa dette Forhold viser, at søndre Taarn først er paabegyndt senere end selve Korsarmens vestre og østre Mur.

Af Portalerne er den i søndre Korsarms Østside den bedst bevarede, idet hele Buepartiet med Leddelinger er det oprindelige (Fig. 9); forinden sidste Restaurering stod Portalen tilmuret

transepts we find toothing, proving that the north and south towers were added last. We find, moreover, that work was begun from the east and continued toward the west, where again the south wall of the west transept and tower were begun before the north wall. This fact throws light on possible changes in the original plan of building to which we will return later in our account of the entrances and the exterior. Beneath the floor in the south tower the foundation of the inner sides of the tower was discovered to have been marked off wrong, as the angles were not exactly measured when the foundations were begun from the west, see Pl. I. This indicates that the south tower was begun later than the east and west walls of the transept.

Of the entrances the one in the east side of the south transept is best preserved, the entire arch with its mouldings is original (Fig. 9). Prior to the last restoration the entrance was walled up without the granite casement and its tympanum, and with the brick profiles of the sides extending to the ground (the lower part, however, of modern monk bricks,—from 1870). On removing all the newer walls, remains of the original lower stones of the casement were found. They were hard limestone of a bluish gray color. In the walls were very clear imprints of the jambs of the casement, which were in one piece, of the stones of the tympanum and of the granite socles under the brick profiles of the sides³. As the granite jambs and



Fig. 11. Vestportal. — Western entrance.

uden Granitkarm og Tympanon, og med Sidernes Murstensprofiler fortsat helt ned til Jordlinjen (men forneden af nye Muresten fra 1870). Ved Fjernelse af alt nyere Murværk fandtes Rester af den oprindelige Underkarmssten af en blaa-graa haard Kalksten, og i Murværket fandtes meget tydelige Aftryk dels af Sidekarmsstenene, der havde udgjort een Længde, dels af Tympanonstenen og af Granitsoklerne under Sidernes Murstensprofiler³. Da Granitkarm og Tympanon i Vestportalen er oprindelige og uden nogen Slags Udsmykning, er søndre Korsarms Portals Granitdele ved den sidste Restaurering udførte paa samme Maade. Portalens Murstensprofiler bestaar af Formsten; det halvcirkelformede Buestik er halvtens og omgivet af et Fladskifte, hvorom igen et Rulskifte med Fladskifte; Stikket fortsætter sig ind paa den skraa Taarnmur. Indvendig har Portalen skraa Smige i Sider og Bue; Buesmigen er pudset indtil en halv Sten fra Bueanten. I Modsætning til de to andre Portaler har denne ikke haft indvendige Huller for Stængebomme⁴. Foran denne Portal var det nu forsvundne gotiske Vaabenhus, som det ses paa et gammelt Maleri af Kirken før 1827 (Fig. 16).

Nordportalen (P. VIII og Fig. 10) er paa de ældre Opmaalingssplaner vist med et ret stort Fremspring fra Taarnmuren, og alt tyder paa, at det er den oprindelige Portal man har bortrugget ved Restaureringen i 1870. Ved at fjerne alt nyere Murværk saa man de friske Brud af det borthuggede Fremspring, hvis Sidelinjer tydeligt kunde følges; endvidere fandtes i Jorden det oprindelige Kampestensfundament bevaret, ligesom tydelige Aftryk i Murværket af de oprindelige Granitkarmer med Tympanon viste, at Portalens Karmparti havde ligget betydelig

the tympanum of the west portal are original and show no decoration whatever, under the last restoration the granite parts of the entrance to the south transept were made in the same way. The profiles of the entrances consist of mould bricks. The semi-circular scheme-arch is of half-bricks and is surrounded by a flat-course about which again is an edge-course with a flat-course. The arch continues into the oblique wall of the tower. On the inside the entrance has oblique sides and arch. Underneath, the arch is plastered as far as half a brick from the edge of the arch. In contrast to the other two entrances, this one has not had inside holes for the wooden bars⁴. In front of this entrance was the Gothic porch, now destroyed, and which is seen in an old painting of the church prior to 1827 (Fig. 16).

Older drawings (Plate VIII and Fig. 10) show the north entrance to have been in a rather large projection from the wall of the tower. Everything seems to indicate that this entrance, untouched until then, was removed under the restoration in 1870. By removing the new walls the fresh marks from hewing away the projection appeared and the lines of its sides could be plainly traced. In the ground was found the original hard-stone foundation, and in the walls clear marks of the original granite casement with tympanum, all of which proved that the casement of the entrance lay much further forward than it was placed under the restoration in 1870. Older drawings plainly showed the profiles in which an original remaining mould-brick was found in the oldest walls. As according to the older drawings, this was the only form of profile used in this entrance, the projection of the entrance could be exactly determined and corresponds moreover to the foundations. Closer investigations of the original wall above the entrance behind the new shell-wall, revealed various vertical grooves and hewn headers showing that the upper part of the projection was completed by corbel-steps similar to crenellated gothic gables,—all of whose joints could be exactly determined. Under restoration the surfaces of the steps have been given a covering of bricks as it was impossible to determine whether they were covered in this way, with lead, or with tiles. On the inside the entrance has oblique sides and the arch plastered. In the bevels of the sides holes were found for bars⁵.

Before the restoration of 1870 the west entrance too, was placed in a projection which was considerably larger than the one on the north transept. However already at that time this had been changed to an entrance in Baroque style, which perhaps made the question of its genuineness doubtful. When the masonry was removed the same conditions were found as at the north entrance. The side lines of the projection, the upper contours and parts of the foundation were preserved in such condition that the entrance could be restored to its original form, which, in the detail of the corbel-steps, differed somewhat from the north entrance (Pl. VIII and Fig. 11). It appeared, moreover, that the granite slabs of the tympanum and the jambs were original, and were embedded undisturbed in their place in the original wall. However, in 1870 the granite seems to have been hewn and the corners bevelled. At this entrance, too, we were fortunate enough to find in the old walls a

længere fremme end det var anbragt efter Omdannelsen i 1870. Ældre Opmaalingstegninger viste tydeligt Murstensprofilerne, til hvilke en oprindelig tiloversbleven Formsten fandtes i det ældste Murværk; da det, iflg. de ældre Opmaalingstegninger, var den eneste Profilform, der havde været benyttet til denne Portal, kunde Portalfremspringet nøjagtigt bestemmes og svarer tillige til Fundamenterne. Ved nærmere Undersøgelse af det oprindelige Murværk over Portalen, bag den nye Skalmuring, viste det sig tydeligt ved forskellige Lodfuger og overhuggede Bindere, at Fremspringet foroven har haft en trappeformet Afslutning i Lighed med gotiske kamtakke Gavle, og hvis Led alle nøjagtigt kunde bestemmes. Ved Restaureringen har man givet Kammene Afdækninger af Mursten paa Fladen, da intet kunde oplyses om, hvorvidt de havde været dækkede paa denne Maade eller med Bly eller Tagsten. — Indvendig har Portalen skraa Smige i Sider og den pudsede Bue. I Sidesmigen fandtes Bomhuller⁵.

For Vestportalens Vedkommende var ogsaa den, førend den i 1870 blev ombygget, anbragt i et Fremspring, der har været en Del større end ved Nordportalen; den var imidlertid allerede dengang omdannet til en Barokportal, hvad der muligvis har givet Anledning til Tvivl om dens Oprindelighed. Forholdene var, efter at alt nyere Murværk blev fjernet, ganske som ved Nordportalen; Fremspringets Sidelinjer, Konturer foroven og Dele af Fundamentet var bevarede, saaledes at Portalen kunde restaureres i sin oprindelige Form, der for de aftrappede Kamms Vedkommende var noget anderledes end paa Nordportalen (Pl. VIII og Fig. 11). Det viste sig endvidere, at Granitkarme og Tympanon var de oprindelige og sad urørte i deres Leje i det oprindelige Murværk; kun synes Graniten at være blevet ophugget og forsynet med Affasning paa Hjørnerne i 1870. Ogsaa ved denne Portal var det saa heldigt, at en oprindelig tiloversbleven Formsten fandtes i det gamle Murværk og af en Form som ikke er benyttet ved de to andre Portaler eller andetsteds i Kirken. Med denne Formsten, tillige med den, der er benyttet i begge de andre Portaler, som Udgangspunkt er de nuværende Profiler komponerede i Analogi med Sydportalens Leddeling, — den eneste Sammenstilling der paa en harmonisk Maade kunde holdes indenfor Soklens Smigkant. Om den oprindelige Profilering af Portalen vides intet, da den som sagt allerede i Baroktiden blev omdannet. Indvendig har den Smige og pudset Bue, samt Bomhuller.

Ved Vestportalen er en Mærkelighed, der ikke er uden Interesse for Kirkens Bygningshistorie; det viste sig ved sidste Restaurering, da alt nyere Murværk var fjernet, at Taarnets Granitsokkel paa dets sydvestre Side havde fortsat sig ca. 50 cm ind i Portalfremspringet i absolut oprindeligt Murværk og med den gamle Mørtel, og at Murværket indtil 1 m over Soklen fulgte Soklens Retning bag Fremspringet, hvorimod dettes Murværk over denne Højde havde været i Forbandt med Taarnmuren. Ligeledes var Portalens indvendige søndre Smig ommuret helt op til Buens Vederlag, men *inden* Buen blev muret og Granitkarmen sat paa Plads. I Nordsiden var Murværket derimod homogent overalt og havde oprindeligt været muret samtidig med og i Forbandt med Portalfremspringet. Det synes da, som om man ved Kirkens Opførelse er naaet over 1 m over Soklen med Murværket syd for Portalen og

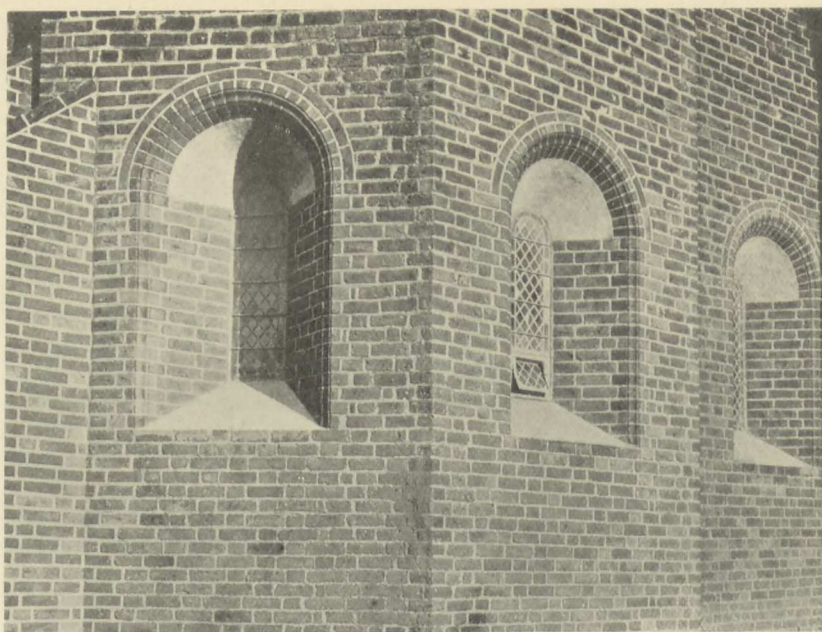


Fig. 12. Vinduer i oprindelig Form. — Original form of windows.

single mould-brick which had been left over, and of a form not used in the two other entrances or elsewhere in the church. With this brick and the other which is used in both the other entrances as point of departure, the present profiles were composed analogous to the joint-divisions of the south entrance, the only harmonious juxtaposition possible within the bevelled edge of the socle. Nothing absolutely definite is known about the original profiling of the portal, for, as has already been stated, it was changed during the Baroque period. On the interior it has bevels, plastered arches and holes for bars.

The western entrance has a feature which is not without interest for the history of the building of the church. Under restoration, when all the new masonry was removed, it was found that on the south-west side, the granite socle of the tower had continued about 50 cm into the projection of the entrance in absolutely original walls having the old mortar, and that these walls, one meter above the socle, followed the direction of the socle behind the projection, whereas *its* walls, above this height, were in bond with the walls of the tower. In the same way the inner south bevel of the entrance was re-bricked up as far as the abutment of the arch, but before the arch was bricked and the granite casement set in place. On the north side, however, the masonry was homogeneous everywhere and had originally been laid simultaneously and in bond with the projection of the entrance. It seems as if while under construction the masonry south of the entrance had progressed 1 metre above the socle, and first at that point, had it been decided to give the entrance a projection in contrast to the entrance in the south transept, which must have been finished at that time. The reason lies in the fact that it seemed dangerous to build the tower without the reinforcement which the projection of the entrance gave. Later, when the north tower was built, the necessity of the projection of the entrance was understood, and in the work done on this entrance there is no sign of uncertainty. In rebuilding the west and north entrances the granite socle has been continued as far as the granite casements. It is possible that this was not so originally, as the socle does not

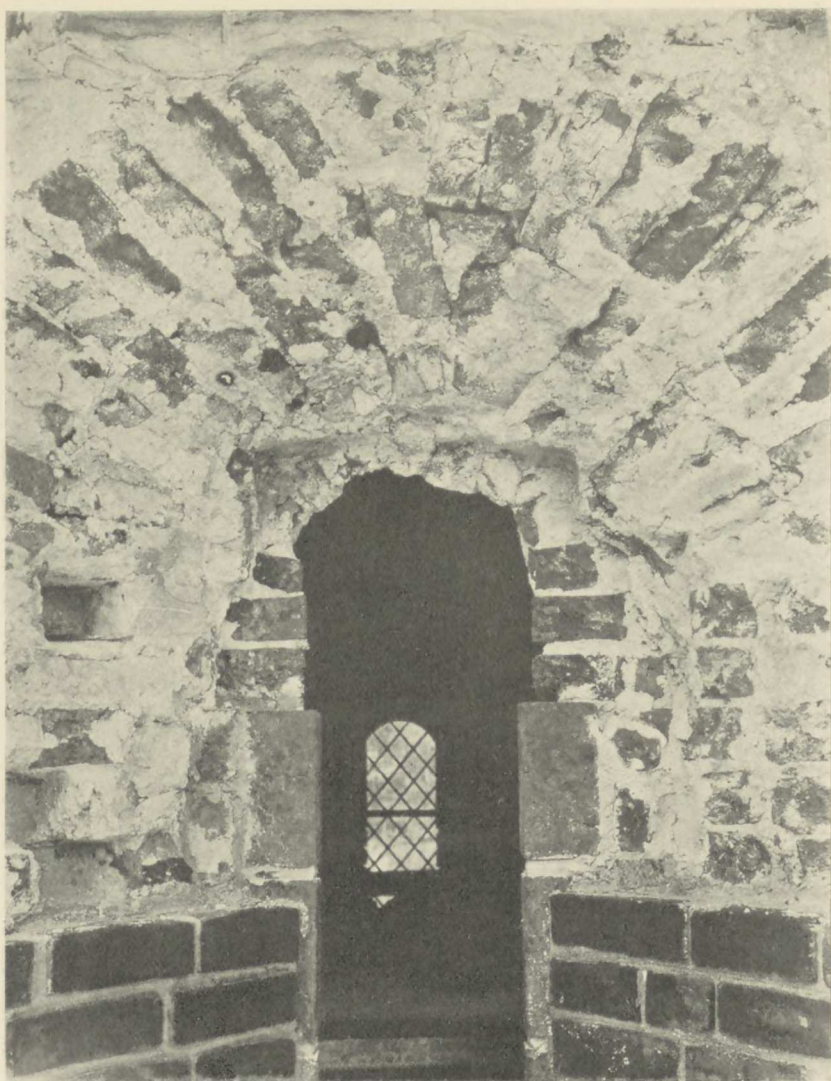


Fig. 13. Spor af oprindeligt Vindue. — Remains of an original window.

først paa dette Tidspunkt har bestemt at give Portalen Fremspring i Modsætning til Portalen i søndre Korsarm, der paa det Tidspunkt maa have været færdig. Aarsagen maa være, at man har været ængstelig ved at opføre Taarnet uden den Forstærkning, som Portalfremspringet gav. Da man senere opførte det nordre Taarn, var man klar over Nødvendigheden af Portalfremspringet, og der er da heller ikke i denne Portal noget Tegn paa Famlen ved dens Opførelse. — Ved Genopførelsen af vestre og nordre Portal har man ladet Granitsoklen fortsætte sig helt ind til Granitkarmen; men det er muligt at dette oprindeligt ikke har været Tilfældet, da Soklen ikke er vist paa Høyens Skizze fra 1832⁶, og heller ikke paa Arkitekt Tvedes Restaureringsforslag⁷, hvorpaa Portalernes Fremspring er bibeholdt. Paa andre samtidige Teglstenskirker, som Kirkerne i Ringsted, Gumløse i Skaane og Aarhus Domkirke, har Kirkens udvendige Sokkel ikke været fortsat paa de samtidige Portaler. Selv om Portalen paa Kallundborg Kirkes søndre Korsarm bevisligt har haft Granitsokkel ligesom Kirkens, hvad der er det naturligste, naar Portalen ikke har Fremspring, maa man derfor vistnok regne med den Mulighed, at de to andre Portaler ikke har haft profileret Sokkel⁸.

Kirken er, i Modsætning til de fleste af vore romanske Kirker, usædvanlig rig paa Vinduer; den har ind til selve Kirkerummet 31 Vinduer, ret højtiddende. Af alle disse var kun de tre, der nu vender ind til Sakristiets øvre Stokværk bevaret i deres oprindelige Form, omend forhuggede i Lysningerne; af de øvrige havde adskillige bevaret Dele af det indre Buestik, og det smalle Vindue vest for Vindeltrappen i Midtpartiets

appear in Høyen's sketch from 1832⁶, nor in the plans for restoration of the architect, Mr. Tvede⁷, in which, however, the projection of the entrance is retained. In other contemporary brick churches, like those in Ringsted and Gumløse, Skaane, and the cathedral in Aarhus, the socle was never continued to the entrances, even when it was original. Although the entrance in the south transept of Kallundborg Church can be proved to have had a granite socle like the others of the church, which is most natural when the entrance has no projection, it is very probable that the other two entrances have not had profiled socles⁸.

In contrast to the majority of Danish Romanesque churches, Kallundborg Church is very rich in windows. In the main body of the church there are 31 windows, placed quite high. Of these, only the three which open from the upper storey of the sacristy have preserved their original form, though the piercings are somewhat cut-up. Several of the others have retained portions of the interior arch, while the entire western side of the narrow window west of the winding stairway in the southeast corner of the central section is preserved. Examination showed that the windows were enlarged as early as the Middle Ages, but in most cases the old masonry could furnish information about the width of the windows, which has varied somewhat, from 32—44 cm in the opening,—the majority being about 40 cm. The original form of the windows has now been restored everywhere (Fig. 12) and is shown in Pl. IX. The opening lies in the middle of the wall-thickness, and is formed by a casement of bricks set on edge, with the arch at the top cut in two bricks placed at an angle to each other, as an impression in the wall from a single window in the east side of the south transept indicated (Fig. 13). The bevel of the sides and arch is quite flat, and on the outside the edge of the bevel is formed of mould-bricks with a profile like a hollow staff, which makes a fine and elegant impression⁹. The bevel of the arch was plastered, inside and out to within about 12 cm of the edge of the arch, as is usual in all brick buildings of that time. The bevel of the under part of the window was also plastered. That a plastered arch bevel was supposed to produce an esthetic effect, may be seen from the original coloring, for the plaster of the arch was originally whitewashed, with the joints in the visible scheme—arch traced in white, and a red and white scalloped border in the abutment toward the church (Fig. 14). It would have been an easy matter to allow the bricks of the bevel of the arch to remain visible, the more so, as coloring the bricks could have hidden possible careless work.

In spite of the fact that several windows were in a state of preservation at the time of the restoration in 1870, they were then made broader and considerably higher, but placed low (Fig. 6), and only after the last restoration, when their original form was restored, was it possible to see how well-proportioned they are and how beautifully they are placed seen both from without and within, and how unusually fine the light effects in the interior of the church now are.

It is natural that there are no windows above the entrances, nor have there ever been any in the two sloping sides toward the west of the west tower. This may indicate

sydøstre Hjørne havde hele den vestre Side bevaret. Ved Undersøgelsen viste det sig, at de fleste Vinduer var gjort større allerede i Middelalderen, men for Hovedpartens Vedkommende har det gamle Murværk dog kunnet give Oplysning om Vinduernes Bredder, der har været noget varierende, fra 32—44 cm i Lysningen, de fleste ca. 40 cm. Vinduernes oprindelige Form er nu overalt gennemført (Fig. 12) og har en Form som vist paa Tavle IX. Lysningen ligger midt i Murtykkelsen og dannes af en Karm af Mursten paa Kant og med Buen foroven, hugget i to Mursten staaende i en stump Vinkel mod hinanden, som det fremgik af Aftryk i Murværket ved et enkelt Vindue i søndre Korsarms Østside (Fig. 13). Smigen i Sider og Bue er ret flad og udvendig har Smigkanten Formsten med et hulstavagtigt Profil, der virker fint og elegant⁹. Buesmigen har været pudset, baade udvendig og indvendig, indtil c. 12 cm fra Buekanten, som almindeligt paa alle samtidige Teglstensbygninger; ligeledes har Undersmigen overalt staaet pudset. At den pudsede Buesmig har skullet virke æstetisk fremgaar af den oprindelige Maling, idet Buens Puds oprindeligt har staaet hvidkalket, med hvidmalede Fuger i det synlige Buestik og en rød-hvid Tungebort i Vederlaget indad mod Kirken (Fig. 14). Man kunde jo med Lethed have ladet Buesmigens Sten staa synlige, saa meget mere, som man ved Hjælp af Murbemalingen kunde have pyntet paa eventuelle Sjuketheder.

Til trods for at adskillige Vinduer har staaet helt bevaret inden Restaureringen i 1870, gjorde man dengang Vinduerne baade bredere og betydeligt højere, men lavtsiddende (Fig. 6), og først efter den sidste Restaurering, hvor Vinduerne har faaet deres oprindelige Form, ser man hvor velproportionerede og velanbragte de er, saavel udvendig som indvendig, hvor Lysvirkningerne i Rummet nu er usædvanlig smukke.

Over Portalerne har man ganske naturligt ikke anbragt Vinduer; men heller ikke i Vesttaarnets to skraa Sider mod Vest har der nogensinde været Vinduer, hvilket kunde tyde paa, at der i vestre Korsarm over Indgangen kan have været et Pulpitur af Træ, paa lignende Maade som det nye Orgelpulpitur er anbragt. —

Paa Centralpartiet og Korsarmene (indtil Taarnene) er murede Gesimser, bestaaende af 3 Savsnitsskifter, der er udkragede over hinanden undtagen paa Centralpartiets (Skibets) Øst- og Vestside (Fig. 15)¹⁰, hvor kun det øverste Skifte er udkraget paa en Maade der synes at vise, at man har været inde paa Tanken om her at opføre Gavle, som østre og vestre Korsfløjs Tage i saa Fald maatte udgaa fra. I Savsnitsskifterne er med visse regelmæssige Mellemrum anbragt sortbrændte Sten, vel sagtens som Prydelse. Gesimserne er uden Tvivl de oprindelige, men enkelte Steder fornyede i 1870¹¹.

Tagene over Centralpartiet og Korsarmene er nu dækkede med sortglasserede Tagsten, men har oprindeligt, ligesom alle Taarnspirene været dækkede med Bly, som det fremgaar af Fund af smeltet Bly, der ved Brand er løbet ned paa Hvælvingerne¹² og langs Murene i den oprindelige Vindeltrappe, der blev kompakt tilmuret allerede i Middelalderen. Gesimsen er fælles for Korsarme og Centralpartiet, hvis Tagflader løber op mod Midttaarnet med Grater i Hjørnerne, medens Korsarmenes Saddeltage løber ud imod de fire Ydertaarne. —



Fig. 14. Vindue i Koret. — Window in the choir.

that in the west transept, above the entrance, wooden gallery pews were placed in the same way as the organ-loft is placed to-day.

In the central section and the transepts (as far as the towers) are bricked cornices, consisting of 3 saw-notched courses, corbelled above each other, except on the east and west side of the central section (the nave), where only the upper course is corbelled (Fig. 15)¹⁰ and in a way which seems to indicate that it was the intention at this point to build a gable from which the roofs of the east and west transepts could extend. Black bricks are introduced, very evidently as decoration, at regular intervals in the saw-notch courses. The courses are without doubt original, but were repaired here and there in 1870¹¹.

The roofs above the central section and the transepts are now covered with black glazed tiles, but were originally, like all the spires of the towers, covered with lead, as is proved by finding melted lead, which during a fire ran down the vaultings¹² and along the walls of the original winding staircase which was compactly bricked up during the Middle Ages. The cornice is common for the transepts and central section, whose roof-surfaces run up toward the central tower with arrises at the corners, while the span-roofs of the transepts run out toward the four outer towers.—

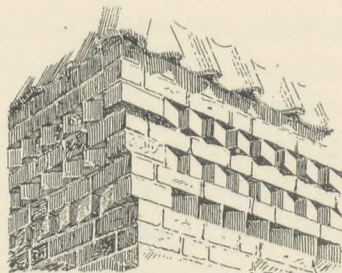


Fig. 15. Gesims. — Cornice.

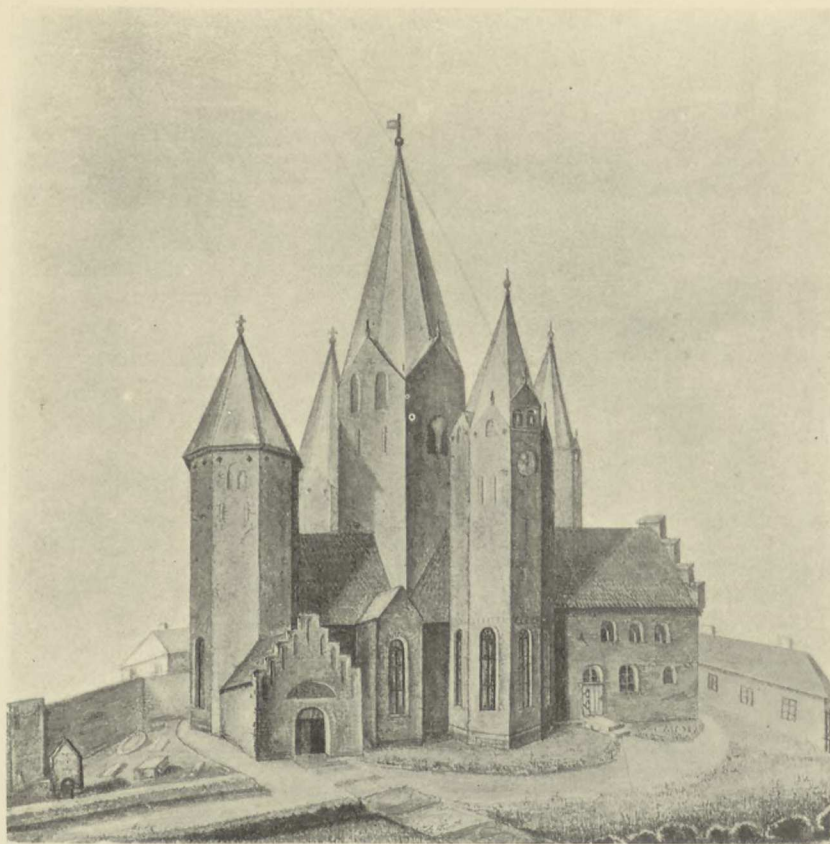


Fig. 16. Kirken før 1827; efter et gammelt Maleri. — The church prior to 1827; after an old picture.

Midtertaarnet er, som før nævnt, ganske moderne men opført paa Grundlag af gamle Opmaalinger og Billeder af Kirken fra Tiden før Taarnets Nedstyrtning den 7. September 1827 (Fig. 16 og 17). I de nedre Stokværker havde det til hver Side ganske smalle Glugger og i øverste Stokværk Dobbeltvinduer af lignende Art som i de øvrige Taarne. Paa hver Taarnside var en muret Spidsgavl med en spidsbuet Blinding. Over Gavlene rejste sig et højt ottekantet Spir, hvis Grater løb ud mod Taarnhjørnerne og Gavlspidserne. Hvorvidt de fire Spidsgavle har været der fra først af, kan være tvivlsomt; men da det oprindelige Midttaarn ikke mere eksisterer, er det umuligt at udtale sig bestemt herom.

Taarnene paa Korsarmene er ifølge disses polygonale Afslutning ottekantede og rejser sig op over Korsarmene, uden at disses Gesimser er ført omkring dem; kun paa Østtaarnet findes et enkelt Savnitsskifte, antagelig anbragt for at fremhæve Korpartiet fra de øvrige Korsarme. Fra en Højde af 7—8 Skifter under Skibets og Korsarmenes Gesims har de fire Taarnes Murværk en noget anden Karakter end det nederste Murværk, idet Stenene gennemgaaende er noget mindre og af en anden, gulligere eller lysere Farve; kun paa Østtaarnet er Forskellen mindre iøjnefaldende. Dette tyder paa, at man først kun har opført Taarnene i Højde med den øvrige Del af Kirken, og at der har været en — omend kun kort — Standsning i Arbejdet paa dette Tidspunkt.

Da disse Taarne hører til de Ting ved Kallundborg Kirke, som gør den saa enestaaende i Samtidens Arkitektur, ligger den Tanke nær, at spørge om de har været paatænkt og planlagt fra først af. Flere Forhold tyder paa, at man først under Arbejdet har besluttet at opføre de fire Korsarmstaarne. For det første fordrer Planens Korsform ikke med Nødvendighed Taarne for Enderne af Korsarmene, selv om disse er polygonalt afsluttede; for det andet er Taarnene mærkeligt ukon-

The central tower, as was stated earlier, is quite modern, but constructed on the basis of old measurements and pictures of the church from the period prior to the fall of the tower, September 7, 1827 (Fig. 16 and 17). On the lower storeys on each side were very small holes, and in the upper storey double windows similar to those in the other towers. On each side of the tower was a brick pointed gable with a pointed-arch facing. Above the gables rose a high octagonal spire whose arrises ran out toward the corners of the tower and the points of the gables. Whether or not the four pointed gables were there originally, is uncertain, but as the original central tower no longer exists it is impossible to make any definite statement in the matter.

The towers of the transepts, as determined by their polygonal finish, are octagonal and rise above the transepts whose cornices are not continued around them. On the east transept, only, is a single saw-notch course, presumably placed there to distinguish the choir from the other transepts. From a distance of 7—8 courses below the cornices of the nave and the transepts, the wall of the four towers has a character somewhat different from the lower part, the bricks are smaller and of another, more yellow, or lighter, color. In the east transept this difference is less noticeable. This would indicate that the towers were first built to the same height as the other parts of the church, and that there was an interruption, though only a short one, in the work at this point.

As the towers belong to those details of Kallundborg Church which make it so unique in the architecture of its time, it is quite natural to ask whether they were planned and designed from the very beginning. Many facts seem to indicate that the four towers of the transepts were decided upon while the building was under construction. In the first place a cruciform design does not necessarily require towers at the extremities of the transepts, even though these are polygonal. In the second place the towers are strangely unconstructive, for the three surfaces turned toward the central tower were built directly above the barrel-vaultings of the transepts, after these were rough-cast on the upper side, and without any arch of support having been built, so that almost the entire weight of the three sides of each tower rests upon the one-brick-thick vaulting, and is, moreover, placed just above the windows in the long side of the transept where the walls are weakest. If the towers had been planned from the beginning, pilasters and arches to bear those portions of the towers which extend in over the vaultings, thus relieving the strain, would also have been built. Finally, as has already been stated, the masonry of the towers, which for a time remained at the same height as the walls of the nave and the transepts, and too, the construction of the western entrance, which was first planned without projection, may be explained by the fact that only when the church was being constructed was it decided to build towers on the transepts, and this necessitated changing the half-completed entrance, and it was given a projection which could serve as a buttress. Naturally the desire to give the entrance a projection may have come from other reasons too. That motive is used in the almost contemporary entrance to the north transept of Ringsted Church, and is

strukture, idet deres tre Sider ind mod Centralpartiet er opførte direkte oven paa Korsarmenes Tøndehvælvinger, efter at disse har været berappede paa Oversiden, og uden at der over dem er opført nogen Aflastningsbue, saaledes at næsten hele Vægten af hvert Taarns tre Sider hviler paa den kun een Sten tykke Hvælving, tilmed lige over Vinduerne i Korsarmenes Langsider, hvor Murene er svagest. Havde Taarnene fra først af været paatænkte, vilde man sikkert paa en eller anden Maade have sørget for indvendige Pilastre og Buer til at bære den Del af Taarnene, som gaar ind over Hvælvingerne og ud over et stærkt Pres paa dem. Endelig viser altsaa, som før nævnt, Murværket i Taarnene, at disse en Overgang kun har staaet i Højde med Skibets og Korsarmenes Mure, ligesom det mærkelige førnævnte Forhold ved Vestportalen, som man først har tænkt sig *uden* Fremspring, kan forklares ved at man først under Arbejdet har besluttet sig til at rejse Taarnene paa Korsarmene og derfor fandt det nødvendigt at ændre den halvt færdige Portal, saaledes at den fik Fremspring, der kunde tjene som Stræbepille. Naturligvis kan man ogsaa af andre Grunde have faaet Lyst til at give Portalerne Fremspring. Motivet er benyttet f. Eks. til den næsten samtidige Portal paa nordre Korsarm paa Ringsted Kirke og er i det hele almindeligt paa samtidige italienske Kirker, der har været Forbilleder for vore romanske Teglstenskirker. Men det er næppe tilfældigt, at Portalen i søndre Korsarm, der maa være den først opførte af Kirkens Portaler, er uden noget Fremspring, og heller ikke af praktiske Grunde behøver det, fordi der ikke er noget Taarn over den.

De fire Ydertaarne er over Hvælvingerne inddelt i tre Stokværk, hvoraf de to nederste kun er forsynede med smalle Glugger af Form som Skydeskaar, udvendig vandret afsluttede foroven og indvendig med stærkt skraanende Smige i Sider og foroven i Rundbuen (Pl. IV). Hvert Stokværk har tre Glugger, vendende mod Verdenshjørnerne, men ikke ind mod Midttaarnet. Til de samme Verdenshjørner er i hvert Taarns øverste Stokværk tre Lysaabninger, der ligesom i Midttaarnet bestaar af en muret Søjle med to mindre Rundbuer og derover en stor Rundbue; paa de Aabninger, som har bevaret deres oprindelige Form, udgør Aabningen en halvcirkelformet Niche med en Halvkuppel foroven bag Søjlen og dens to Buer og i Nichens Bund sidder en høj smal Glug med Sidesmige og Bue ind mod Taarnrummet (Pl. IX, for neden). Senere i Tiden, rimeligvis allerede i Middelalderen, er i østre og nordre Taarn anbragt Klokker i øverste Stokværk, og derfor er Aabningerne udvidede i deres fulde ydre Størrelse. Siden Restaureringen i 1870 er alle Vinduessøjlerne af Cement, men i Høyens Dagbog fra 1832 findes en Tegning (Fig. 18) af et af de oprindelige Søjlevinduer, hvor Søjleskaft og Kapitæl er vist af Munkesten, medens Basen synes at være af huggen Sten, antagelig Granit. Kapitælet er rundt med to run-

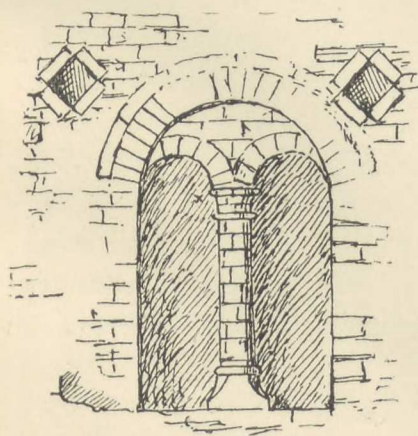


Fig. 18. Søjlevindue. — Columned window.

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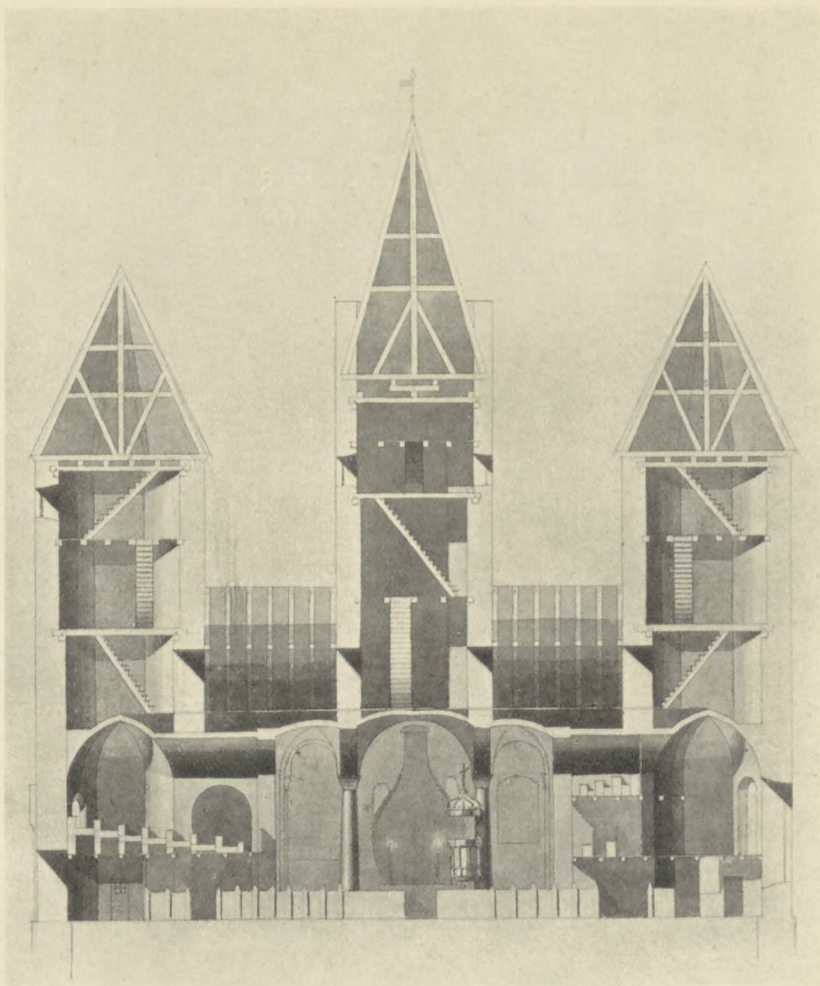


Fig. 17. Kirken før 1827; efter en gammel Opmaalingstegning. — The church prior to 1827; from an old drawing.

very common in Italian churches which have served as prototypes for our Romanesque brick churches. However it is hardly due to chance that the entrance in the south transept, which must have been the entrance of the first built church, has no projection, nor do practical purposes require it, for no tower rests above it.

The four exterior towers are divided above the vaultings into three storeys, of which the two lower ones are supplied with narrow openings shaped like loopholes, finished on the top on the outside horizontally, on the inside by sharp bevels along the sides and a round heading (Pl. IV). Each storey has three openings facing respectively north, south, west and east but none toward the central tower. Facing the same directions in the upper storey of each tower are three openings, which like windows of the central tower, consist of a brick column from which spring two small rounded arches and which in turn support a larger rounded arch, the heading of the opening. Those windows which have retained their original appearance form a semi-circular niche with a large half-dome above behind the column with its two arches, while at the back of the niche is a high narrow piercing with bevelled edges and an arch toward the interior of the tower (Pl. IX, below). Later on, presumably during the Middle Ages, bells were placed in the upper storey of the east and north towers, so we find the windows here enlarged to the full size of their outside dimensions. Since the restoration of 1870 the columns of all the windows are of cement, but in Høyen's diary from 1832 is a sketch of one of the original columned windows, showing that the shaft of the column and the capital were of monk bricks (Fig. 18), while

de Vulster, medens Basen ligner et omvendt Trapezkapitæl. Desværre er ingen af disse Detailler bevarede; kun en trekantet Teglstensblok, som ved den sidste Restaurering fandtes i noget nyere Murværk, er muligvis en Vederlagssten over Kapitælet fra et af disse Vinduer. Lige over Vinduerne saavel som i hver af Taarnsiderne findes to diagonalt stillede firkan- tede Huller, som gaar gennem hele Murtykkelsen. Disse Huller har givet Anledning til forskellige Gisninger om deres Be- tydning; den rimeligste Forklaring er, at de har været benyt- tet til deri at anbringe Bomme for et udvendigt Galleri af Træ, der kunde benyttes til Forsvar i urolige Tider ¹³. — Foroven har hvert af Ydertaarnene otte Spidsgavle som Afslutning paa hver af Taarnsiderne. Som det fremgaar af ældre Tegninger og Fotografier af Kirken (Fig. 2, 16 og 31) fandtes før 1870 kun Spidsgavle paa vestre og østre Taarn, hvorimod de to andre var vandret afsluttede, og det er ikke usandsynligt, at det fra først af har været saaledes, da Kirkens Længderetning derved var markeret i Modsætning til nu, paa samme Maade som man indvendig har givet Korsarmenes Pilastre en rigere Udsmyk- ning i Øst og Vest, i Modsætning til i nordre og søndre Bue. Spidsgavlene er forsynede med spidsbuede Blindinger, der danner tynd Mur mellem tindeagtige Murpartier, der har gi- vet Anledning til den Gisning, at Taarnene oprindeligt har staaet med Murtinder foroven, der først senere er blevet for- synede med Paamuring til Gavle og med Mellemrummet mel- lem Tinderne omdannet til Blindinger ¹⁴. Desværre er *alle* de gamle Spidsgavle helt nedtagne og ommurede i 1870, saaledes at det nu er umuligt med Vished at afgøre dette interessante Spørgsmaal; men netop det, at Blindingerne er *spidsbuede* og har Mønstermuring i Blindingsbunden, tyder paa, at Gavlene er opsat i tidlig gotisk Tid eller i Overgangsperioden mellem romansk og gotisk Tid, hvor man netop yndede at sætte man- ge Gavle ved Siden af hinanden paa vore Teglstenskirker, saaledes som det har været Tilfældet paa Roskilde og Aarhus Domkirkerne ¹⁵. Antagelig har Midttaarnets Gavle været paa- murede samtidig med Gavlene paa de øvrige Taarne. At Spi- rene med Spidsgavlene ikke har været oprindelige, synes til- lige at fremgaa af det Forhold, at i hvert Fald Vesttaarnets Spir engang har været brændt, idet der ses smeltet Bly nedad Muren paa Taarnets Nordside ¹⁶. — Nu har hvert af Kors- armstaarnene et spidst ottekantet Spir, dækket med Kobber; før Ombygningen i 1870 var alle Spir beklædte med Bly og havde, foruden i Spirtoppen, paa hver Gavlsids en »Brand« med Knop ¹⁷. Spirenes gamle Tømmerkonstruktioner blev i 1870 erstattede med nye og kun en Midtstolpe (»Kongen«) af Eg er nu bevaret i det søndre Taarn.

Efter en gammel Tradition ¹⁸ er Midttaarnet helliget Jomfru Maria, medens de fire Korsarmstaarne bærer Navne efter fire Helgeninder; det østre kaldes Skt. Anna, det vestre Skt. Gjer- trud, det søndre Skt. Maria Magdalena og det nordre Skt. Catharina.

the base seems to have been made of stone, presumably granite. The capital is round with two round cushions, while the base resembles an inverted trapezate capital. Un- fortunately none of these details are retained. Under the last restoration a three-sided block of masonry was found in the new walls and may have been a stone of abutment above the capital from one of these windows. Just above the windows, and in each of the sides of the tower as well, are two square openings, set diamond-wise and penetrating the entire thickness of the walls. Many theories are rife as to the purpose of these openings. The most probable explanation is that they served as rests for bars to support an out- side gallery used as a means of defence in turbulent times ¹³. Each tower has eight pointed gables, one completing each side. As old drawings and photographs of the church show (Fig. 2, 16 and 31), prior to 1870, pointed gables were only found on the west and east towers, whereas the two others were finished horizontally. It is not improbable that it is the original exterior, which in contrast to the present one, thus placed em- phasis on the lengthwise direction of the church, just as, in the interior, the pilasters of the transept in the east and west are more richly decorated, in contrast to those of the northern and southern arches. The pointed gables have pointed arch- facings forming a thin wall between the battlement-like posi- tions of the walls, and this has led to the supposition that the towers originally had battlements above and were first later bricked on the gables and the openings between the battle- ments made into facings ¹⁴. Unfortunately *all* the old pointed gables were torn entirely down and rebuilt in 1870, so that now it is impossible to decide this interesting question with certainty. However the very fact that the facings are pointed- arched and have bricks laid in patterns at the bottom of the facing indicates that the gables were built during the early Gothic period, or during the transition between the Romanes- que and Gothic periods when it was considered desirable to place one gable beside another, as has been done in the Ros- kilde and Aarhus cathedrals ¹⁵. Presumably the gable of the central tower was bricked at the same time as the gables of the other towers. That the spires with their pointed gables are not original may be deduced from the fact that the spire of the west tower, at all events, has once burned, for melted lead is found down the walls on the north side of the tower ¹⁶. Now, each of the towers of the transepts has a pointed octagonal spire covered with copper. Prior to the reconstruction of 1870 all the spires were covered with lead and were finished with a rod and ball on top which were also found on each gable point ¹⁷. The old timbered constructions of the towers were replaced in 1870 by new, and only one original central beam, »the King«, is to be found in the south tower.

According to an old tradition ¹⁸ the central tower is dedi- cated to the Holy Virgin, while the four towers bear names after four saints, the eastern is called Saint Anna, the western Saint Gjertrud, the southern Saint Maria Magdalena and the northern Saint Catharina.



Fig. 19. Det Indre set mod Koret. — Interior looking toward the choir.

Kommer man udefra, hvor Kirken med de fem Taarne og de mange udad- og indadgaende Vinkler virker stor og ret imponerende, forbauses man, ved at træde ind i Kirken, over hvor lille den i Virkeligheden er. Trods den stærke Opdeling af Rummet virker det dog usædvanligt harmonisk paa Grund af de gode Proportioner og velafvejede Enkeltheder, og de mange højsiddende Vinduer i deres stadigt vekslende Stillinger, giver Rummet en malerisk og afvekslende Lysvirkning, der fordeler Lys og Skygge under Rummets Hvælvninger paa en egen besnærende Maade.

Inden den sidste Restaurering, der hovedsagelig omfattede det Indre, stod Murfladerne her cementpudsede og med Enkelthederne saaledes forvanskede, at man ikke fik noget tydeligt eller rigtigt Indtryk af Rummets oprindelige Udseende. Under den sidste Restaurering fremkom saa mange mere eller mindre velbevarede Enkeltheder, at Kirken først nu kan sammenlignes med de øvrige samtidige Teglstenskirker og har kunnet istandsættes i sin oprindelige Skikkelse, idet de Ændringer som senere Tider har foretaget ved det Indre var saa betydningsløse, at man uden Betænkelighed kunde fjerne dem.

Murfladerne staar overalt med Stenenes naturlige røde Farve. Den Bemaling med rødt og kridhvide Fuger, som fra Kirkens Opførelse har præget Murfladerne indtil de sent i Tiden blev hvidkalkede, har man ikke genfremstillet; men hvor Be-

Approaching the church and impressed by the magnitude of its external dimensions, its five towers and its many obtuse and acute angles, one is invariably surprised on entering the building to discover how small it really is. However in spite of the fact that the room is much sub-divided it still makes a very harmonious impression due to its excellent proportions and well-balanced simple forms, while the many loftily and variously placed windows allow an artistic and inter-changing effect of light and shade beneath the vaultings which is very charming.

Prior to the last restoration which was mainly concerned with the interior, the surfaces of the walls were plastered and the details so changed that it was difficult to obtain a clear or concise impression of the original appearance of the room. Under this last restoration so many more or less well preserved details appeared, that we are now, for the first time, able to compare this church with other contemporary brick churches, restoring it at the same time to its original appearance, for the changes that had been made in the interior in the course of years were so few and so unimportant that they could be removed without hesitation.

On all the surfaces of the walls the natural red color of the bricks is retained. The effect gained by painting the bricks red and the joints white, which characterised the church from



Fig. 20. Det Indre set mod Nord. — Interior looking toward the north.

malingen var bevaret hist og her, har den faaet Lov at staa. Som Kontrast til de røde Mure har alle Buesmige i Vinduer og Døre saavel som Hvælvingerne staaet hvidkalkede, og for at mildne Overgangen har der været malet en Tungebort i Vinduessmigenes Vederlag, som det endnu er bevaret et enkelt Sted, i det ene Vindue i Korets Nordside, hvor Tungerne i rødt og hvidt er forskelligt ordnede i hver Side (Fig. 14). Der er Spor af, at en tilsvarende Bort af skiftende røde og hvide Trekanten har været malet, eller paatænkt, foroven langs Vederlaget for Korsarmenes Hvælvinger, idet et kort Stykke af en saadan Bort sporedes paa Vestvæggen i søndre Korsarm. Da denne Bort ikke er fundet andre Steder i Kirken, er det muligt, at det bevarede Spor kun skyldes et opgivet Forsøg; men Farven kan ogsaa tidligt være forsvundet ved senere Tiders Kalkning af Væggene. Det skal her bemærkes, at det før omtalte Vindue i Korets Nordside endnu har bevaret Rester af sentromansk Halvfresko, forestillende bevingede Engle, og at svage Farvespor ved sidste Restaurering fandtes paa Korets Hvælving. Det synes saaledes som om kun Koret har været pudset og forsynet med Malerier, medens den øvrige Del af Kirken har staaet uden andre Dekorationer end de ovennævnte Tungeborter. Da den røde Murbemaling og Vinduets Tungebort sidder velbevaret under de sentromanske Maleriers Puds, er det givet, at Bemalingen er fra romansk Tid, og da den røde Maling er indsuget i den friske Fugemørtel, maa den være samtidig med Kirkens Opførelse. Bemalingen findes ikke alene i selve Kirkerummet men ogsaa i de øvre Taarnrum,

the time it was built until much later, when they were plastered over, has not been restored. However, here and there where the color remained, it has been allowed to stay. As a contrast to the red walls, all the bevels of the arches in the windows and doors, as well as all the vaultings, were plastered white, while to soften this effect a scalloped border was painted on the abutment of the bevel of the windows of which faint traces may be dimly seen at a single point, in the one window in the north side of the choir where the scallops in red and white are variously arranged on each side (Fig. 14). There are traces which indicate that a corresponding border of alternating red and white triangles was painted or projected above, along the abutment of the arches of the transepts, for a small piece of such a border may be faintly seen on the west wall of the south transept. As no such border is found anywhere else in the church it is possible that the traces are from an abandoned experiment, still, under the successive plasterings of the walls the color might soon have vanished. Note, too, that the window in the north side of the choir, already referred to, still retains traces of a late Romanesque half-fresco portraying winged angels, and that during the last restoration faint shades of color were observed on the vaultings of the choir. It seems then, as if the choir only was plastered and decorated with paintings, while the remainder of the church had no other decoration than the scalloped border mentioned above. As the red color of the bricks and the scalloped border of the window are well-preserved beneath the plaster of the late Romanesque frescoes there is no doubt that the coloring is from the Romanesque period, and as the red paint has sunk into the fresh mortar of the joints it must be contemporary with the building of the church. Painted bricks are found not only in the body of the church but also in the upper tower rooms which are now plastered, and on the wall-surfaces of the towers toward the roof of the transepts.

Of the interior of the church, the central section (the nave), is the most rich, with its four huge granite columns bearing the central tower, with brick semi-columns and grooves on each side of the arches toward the transepts, which, in contrast to the nave, are very simple with no special architectural decoration. The four granite columns (Pl. V and Fig. 19), which with base and capital are about 6.2 meters in height, rest upon heavy square granite bases shaped like inverted cubical capitals whose sides form almost semi-circular surfaces with the curve uppermost where the base ends in an astragal as transition to the shaft of the column. This is composed of two sections, of which the lower ends above in an astragal, forming a ring in the center of the column. The granite capital has trapezate, slightly concave sides; above the astragal at its base it is octagonal terminating on top in a square cover-plate. —It is a very bold undertaking to erect above these comparatively slender shafts, built in two pieces, a high, heavy tower which seems never to have had any pillars to divide the strain with the outer walls¹⁹.

Of the present columns several parts are original, while the broken fragments, lying in the churchyard, or used for steps, have been renewed. The granite columns are mutually con-

der nu staar hvidkalkede, og paa Taarnenes Murflader ind mod Korsarmenes Tagrum.

Af Kirkens Indre er Midtrummet (Skibet) det rigest udstyrede, med de fire vældige Granitsøjler, der bærer Midttaarnet, og med murede Halvsøjler og False paa hver Side af Buerne ind til Korsarmene, der i Modsætning til Skibet er ganske enkle, uden særlig arkitektonisk Udsmykning. De fire Granitsøjler (Pl. V og Fig. 19), der med Base og Kapitæl er c. 6,2 m høje, har svære firkantede Granitbaser af Form som omvendte Terningkapitæler, hvis Sider danner næsten halvcirkelformede Flader med Rundning opad, hvor Basen afsluttes med en Rundstav som Overgang til Søjleskaftet; dette bestaar af to Stykker, hvoraf den nedre Skaftdel ender med en Rundstav foroven, der danner en Ring midt paa Søjleskaftet. Granitkapitælet har trapezformede, svagt hulede Sider og er nederst over en Rundstav ottekantet, foroven gaaende over i en firkantet Dækplade. — Det er en saare dristig Tanke ovenpaa disse, af to Stykker sammensatte, Søjleskafter af forholdsvis ringe Tykkelse at bygge et højt og svært Taarn, som ikke synes at have haft Støttepiller, der fordelte Trykket ud paa Ydermurene¹⁹.

Af de nuværende Søjler er adskillige Dele de oprindelige; medens de sønderslaede, der endnu henligger paa Kirkegaarden eller blev benyttede til Trappesten, er erstattede med nye. Granitsøjlerne er indbyrdes forbundne med rundbuede Gjordbuer, der bærer Midttaarnets Mure; desuden er der mindre Gjordbuer fra Søjlerne over til Halvsøjlepilastrene paa hver Side af Bueaabningerne ind til Korsarmene. Mellem Gjordbuerne er overalt i Midtrummet Krydshvælvinger med Grater af den sædvanlige romanske Form uden fremspringende Ribber. Krydshvælvingerne, der nu alle er nye²⁰ og kun en halv Sten tykke, maa antages oprindelig at have været een Stens, som altid i romansk Tid og som de oprindelige Hvælvinger er det i Korsarmene. Den Form Skibets Hvælvinger nu har faaet svarer imidlertid ganske til deres oprindelige Former, der kunde konstateres, dels af Hvælvingkappernes bevarede Spor paa alle Vægfladerne, dels paa Grundlag af den gamle Opmaalingstegning fra før 1827 og endelig efter en Fremstilling af Kirkerummet paa et Præsteepitafium fra 1661²¹, som hænger i Kirken. Det viste sig, at Gradbuerne overalt har været halvcirkelformede; derved bliver Skjoldbuerne i de smaa Hjørnehvælvinger spidsbuede, hvilket er bemærkelsesværdigt, da man ellers maa undres over at finde Spidsbuer i saa tidlig en Tid; af samme Grund bliver Skjoldbuerne over Korsarmenes Bueaabninger meget fladt rundbuede. Forøvrigt er *alle* Hvælvinger og Buer i Kirken noget fladtrykte, hvad der særligt ses paa Korsarmsbuerne, og Centrum for de Halvcirkler, hvor over Buer og Hvælvinger er konstruerede, viser sig at ligge ca. 30 cm under Vederlagshøjden. De smaa Hjørnehvælvinger hviler paa smalle halvtens Hjørnelicenser, der ved Halvsøjlepilastrene først begynder højt oppe over Gulvet (Pl. VI og VII). — Korsarmene har Tøndehvælving nærmest Skibet og kantet Kuppel i Taarnet; Hvælvingerne er en Sten tykke og bestaar af to Lag Løbere (Fig. 22).

Halvsøjlepilastrene paa hver Side af Aabningerne ind mod Korsarmene er af Mursten som det øvrige Murværk. Halvsøjlerne, der sidder paa fremspringende Pilastre, har forskelligt



Fig. 21. Det Indre set mod Vest. — Interior looking toward the west.

nected with round transverse arches which bear the walls of the central tower. Besides these, smaller transverse arches connect the columns with the semi-columnar pilasters on either side of the opening into the transepts. Everywhere in the nave between the transverse arches are cross-vaultings with arrises of the usual Romanesque form without projecting ribs. The cross-vaultings which now are all new²⁰ and only one half-brick thick were probably one brick thick originally, for that was customary in Romanesque architecture, and matches the original vaultings of the transepts. The form, which the vaultings of the nave have now received, corresponds exactly to their original form as determined from the remains of the channelling of the vaultings on all the wall-surfaces as shown in an old drawing prior to 1827, and, too, from a representation of the church on a memorial tablet for a priest from 1661²¹, hanging in the church. It was found that the curved arris rafters were always semi-circular; this made the arches of the shields in the small corner vaultings pointed, curiously enough, for it is surprising to find pointed arches at so early a period. For the same reason the arches of the shields above the openings of the arches of the transepts were very flatly rounded. Indeed *all* the vaultings and arches of the church are rather flat which is especially noticeable in the arches of the transepts, while the center of the semi-circles over which arches and vaultings are constructed is found to lie 30 cm below the height of the abutment. The small corner vaultings rest on narrow half-brick corner pilasters, which

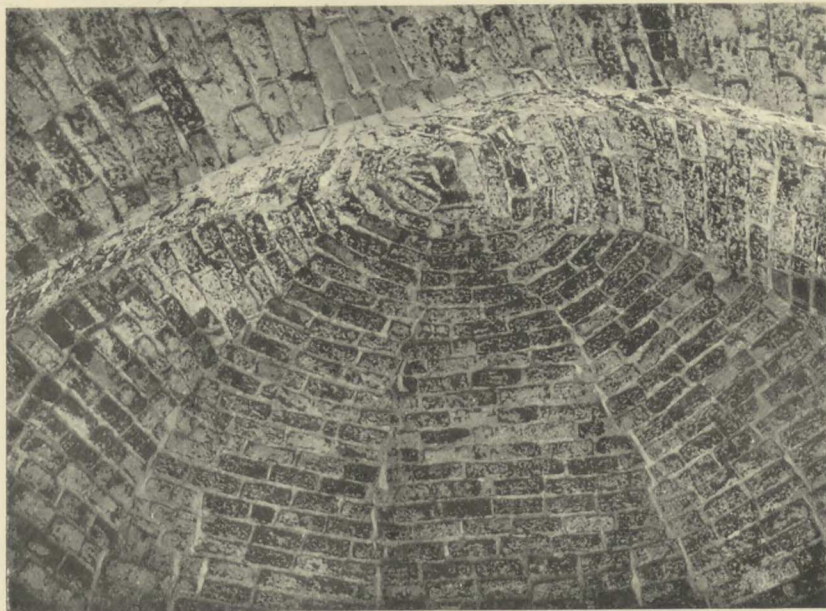


Fig. 22. Kuppelhvelving. — Barrel-vaulting.

formede Baser ved hver af Buerne ind til Korsarmene; disse Baser var før sidste Restaurering alle stærkt forhuggede og ødelagte, kun den vestre ved søndre Bue var helt bevaret under tykke Cementlag og manglede kun den øverste Rundstav, der var afhugget men kendelig i Pilastermurværket. Imidlertid viste de i Murværket bevarede Profiler, Murforbandtet og de under Gulvet bevarede Skifter og Spor, hvorledes hver enkelt Base oprindeligt har været, saaledes at det har været muligt at rekonstruere dem.

De søndre Halvsøjle-Baser, hvoraf den vestre altsaa er urørt (Pl. VII og Fig. 23), er kubeformede med to flade, fremspringende Baand foroven under Profilbaandene, der bestaar af to Rundstave med en mellemliggende Hulkehl; Profilbaandene fortsættes omkring Pilasteren, Falsene og Pilasteren inde i Korsarmen. Denne Baseform er mærkelig og hører ikke hjemme i den Stenarkitektur, der er Forudsætningerne for Arkitekturen i Kallundborg Kirke; derimod er det en almindelig Baseform i den nordiske Træarkitektur og findes ganske tilsvarende i de norske Stavkirker (Fig. 24)²². Der kan saaledes ikke være Tvivl om, at vi her staar overfor en i Sten overført Efterligning af en Enkelthed fra *samtidig dansk Træarkitektur*; et Forhold, som ogsaa har gjort sig gældende ved andre romanske Bygninger her i Landet. Det bør ved denne Lejlighed

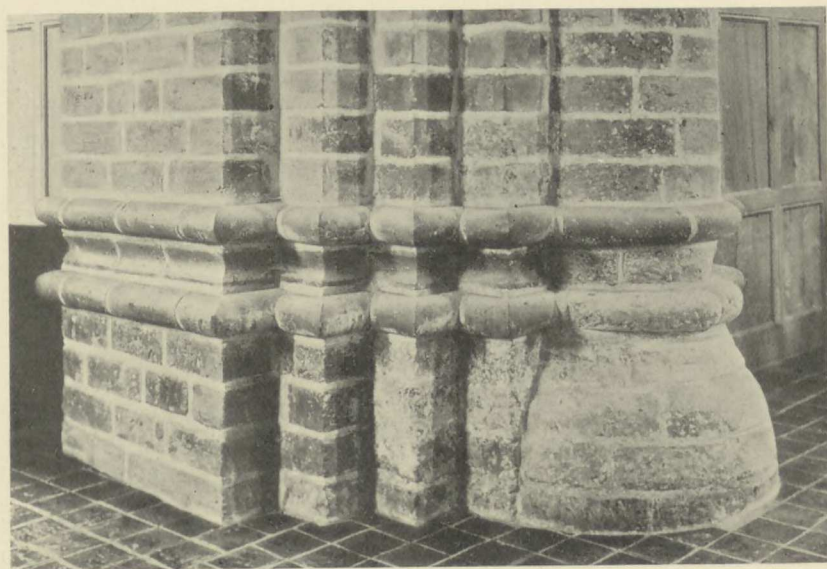


Fig. 23. Søndre Halvsøjlebase. — Base of southern half-column.

near the half-columnar pilasters first begin high above the ground (Pl. VI and VII).—The transepts have barrel-vaultings nearest the nave and a squared dome in the towers; the vaultings are one brick thick and consist of two layers of stretchers (Fig. 22).

The half-columnar pilasters on either side of the openings toward the transepts are of brick like the other masonry. The half-columns rest on projecting pilasters and have bases of various forms at each of the arches leading to the transepts. Prior to the last restoration these bases were hewn up and destroyed; only the one on the west side of the south arch was preserved under a thick layer of cement. It lacked indeed the upper astragal, but of this traces were found in the bricks of the pilaster. Moreover the profiles preserved in the masonry, the band and courses under the floor, gave clues to the original appearance of each separate base and made a correct restoration possible.

The bases of the half-columns on the south, of which the one toward the west is intact (Pl. VII and Fig. 23), are cubical in form with two flat projecting bands on the top beneath the bands of the profile which consists of two astragals with an interjacent fluting. The profile bands are continued about the pilaster, the grooves and the pilasters into the transept. This form of base is unusual and does not belong to the type of stone architecture on which Kallundborg Church is built. On the other hand it is the usual fundamental form for Norse wooden architecture and is found duplicated in the Norwegian »Stave-churches« (Fig. 24)²². There is no doubt, then, but that we are here brought face to face with a stone copy of a detail taken from contemporary *Danish wooden architecture*, a relation observed in other Romanesque buildings here in Denmark. At this point note should be made that the central section of Kallundborg Church not only shows a certain relationship to the architecture of the south but at many points resembles the mode of construction of a stave church. The four columns, all the semi-columns, even the small corner pilasters in the outer corner of the central section, might all have been made of wood in a way both natural and constructive for a wooden building²³.

The bases of the semi-columns on the north have a similar form (Pl. VI and Fig. 25). The base itself is profiled with three oblique phases, and the profile bands above also consist of two astragals, but in this case with a sharply projecting profile between, found, however only on the columns, not on the pilasters and flutings where this joint is smooth. This unusual form is presumably derived from wooden architecture and is merely a variation of the form of the south base.

The bases on the east and west (Pl. V) are of a very different type and should be described rather as square plinths beneath the columns. The west plinth (Fig. 26) has two bevelled joints, on top the edge is now rounded, but was perhaps once bevelled there as well, with furrows cut in the corners, as a kind of corner leaf, as is used in other contemporary Danish brick churches. Above the plinth the column has a low base consisting of a projecting round edged joint with an astragal above. The profiles of the plinth and the base

hed bemærkes, at Kallundborg Kirkes Centralparti, foruden at vise Slægtskab med Sydens Arkitektur, tillige frembyder mange Lighedspunkter med Opbygningen i en Stavkirke; de fire Søjler og alle Halvsøjlerne, selv det lille fremspringende Led i Centralpartiets Yderhjørner, kunde altsammen have været udført i Træ paa en for en Træbygning naturlig og konstruktiv Maade²³.

En lignende Form har de nordre Halvsøjlebaser (Pl. VI og Fig. 25); selve Basen er her profileret med tre Skraafaser, og Profilbaandene foroven bestaar ogsaa af to Rundstave men her med et skarpt udstaaende Profil imellem, som dog kun findes paa Søjlen, men ikke paa Pilastre og False, hvor dette Led er glat. Ogsaa denne usædvanlige Form stammer formodentlig fra Træarkitekturen og er jo forøvrigt kun en Variation af den søndre Baseform.

Vestre og østre Baser (Pl. V) er af en helt anden Type og maa snarere betragtes som firkantede Plinter under Søjlerne. Den vestre Plint (Fig. 26) har to Skraakantled, og øverst er den afrundet paa Kanten og har her maaske haft lignende, med indskaarne Furer forsynede Hjørner, som er benyttet i de andre samtidige danske Teglstenskirker som en Slags Hjørneblade; over Plinten har Søjlen en lav Base, bestaaende af et fremspringende rundkantet Led og derover en Rundstav. Plintens og Basens Profiler er fortsat paa Pilastre og False og danner et højt Sokkelled under Pilasteren ind mod Korsarmen.

Den østre Plint (Fig. 27) er ret lav, paa Forsiden med en Hulkehl i nederste Skifte og derover en tilbagetrukken firkantet Blinding, der paa begge Sider begrænses af smaa Hjørnesøjler, hvorover en fremspringende Rundstav paa Plintens tre Sider. Søjlen Base bestaar af et fremspringende Hulkehl-Led og derover en Rundstav, som begge fortsættes paa Pilaster og False og danner Sokkel paa Pilasteren ind mod Korsarmen (Pl. V.). Medens de tre førstnævnte Baseformer, trods deres Ødelæggelse og ukendelige Form let lod sig rekonstruere paa Grundlag af alle bevarede Profiler og de delvis borthuggede Stens Leje og Forbandt, voldte det østre Basepar store Vanskeligheder; thi selv om de tre øverste Profiler og Plintens firkantede Form let kunde konstateres, var der Vanskeligheder med at faa Murforbandtet til at passe efter de bevarede Spor og Aftryk af de enkelte Sten. Ved et mærkeligt Tilfælde fandtes, indmuret i det oprindelige Murværk lige over Vinduesbuen vest for Nordportalen, en Mursten formet som en lille Halvsøjle med primitivt formet Kapitæl og Base. Stenen maa altsaa være blevet tilovers og kasseret og kan ikke have været udført til andre Steder i Kirkebygningen end til en lille Blindingsarkade paa Portalfremspringene, paa samme Maade som paa Ringsted Kirkes nordre Korsarmsportal, eller den kunde stamme fra en Søjleplint af lignende Art som Plinterne i Sorø Kirke (Fig. 29). Ved at anbringe Søjlen paa de østre Søjleplinters Hjørner viste det sig, at den rigtige Løsning for Plinternes Murforbandt var fundet, idet hver enkelt Sten, i begge Plinter, derved nøje passede ind i de bevarede Aftryk af de helt eller delvis borthuggede Sten. Selv om Plinten saaledes helt er Rekonstruktion, er der al Sandsynlighed for, at dens nuværende Form svarer til den oprindelige.

Halvsøjlernes Skafter var, selv om de var borthuggede og ødelagte enkelte Steder, dog bevarede i stor Udstrækning, især

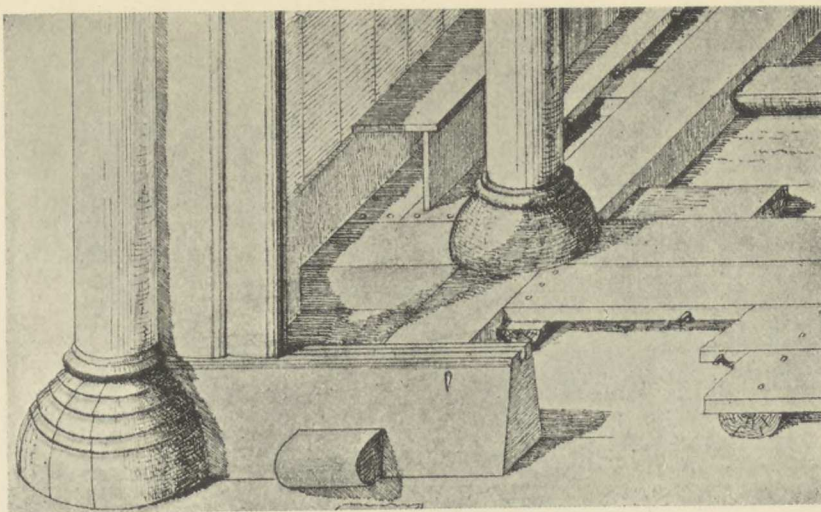


Fig. 24. Søjlebaser i Hopperstad Stavkirke. — Bases of columns in Hopperstad Church.

are continued on the pilasters and grooves forming thus a high socle joint beneath the pilaster toward the transept.

The east plinth is quite low (Fig. 27), on its face is a groove in the lowest courses and above that a sunken square facing bound on both sides by small columns at the corners, and above, a projecting astragal on the three sides of the plinth. The base of the column consists of a projecting grooved joint with an astragal above, both are continued on the pilaster and grooves and form the socle of the pilaster toward the transept (Pl. V). While the three first base forms described, in spite of their condition, were easily reconstructed from all the other profiles, which had been preserved and from the bed and bond of the bricks which had been hewn partially away, the two base-forms toward the east afforded many difficulties. Even though it was an easy matter to identify the three upper profile joints and the square form of the plinth, it was by no means easy to make the bond of the wall coincide with the impressions and remains of the single bricks. However by a lucky chance there was found walled into the original masonry, just above the arch of the windows west of the north portal, a brick formed like a small semi-column with a primitive capital and base. The brick must have been left over and rejected and can not have been made for any other part of the church building than the small facing-arcade on the projection of the entrance, in the same way as in the entrance of the north transept of Ringsted Church, or in

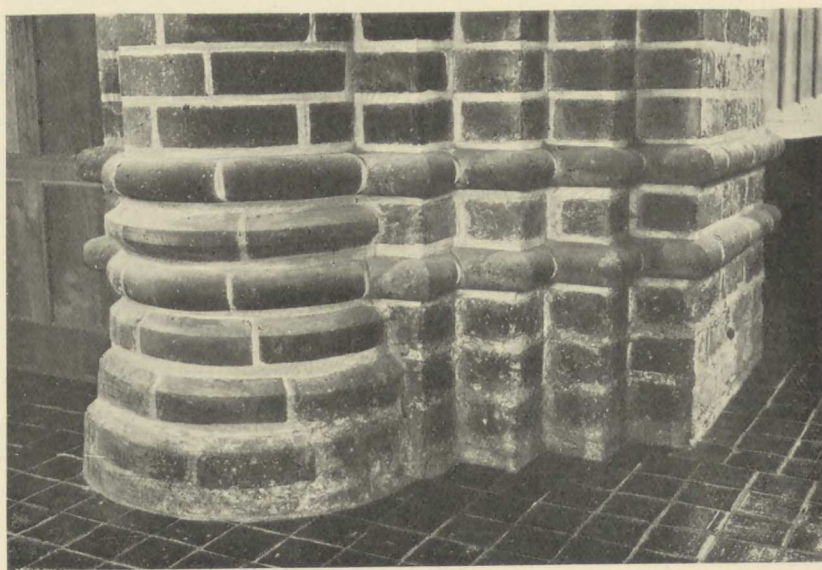


Fig. 25. Nordre Halvsøjlebase. — Base of northern half-column.

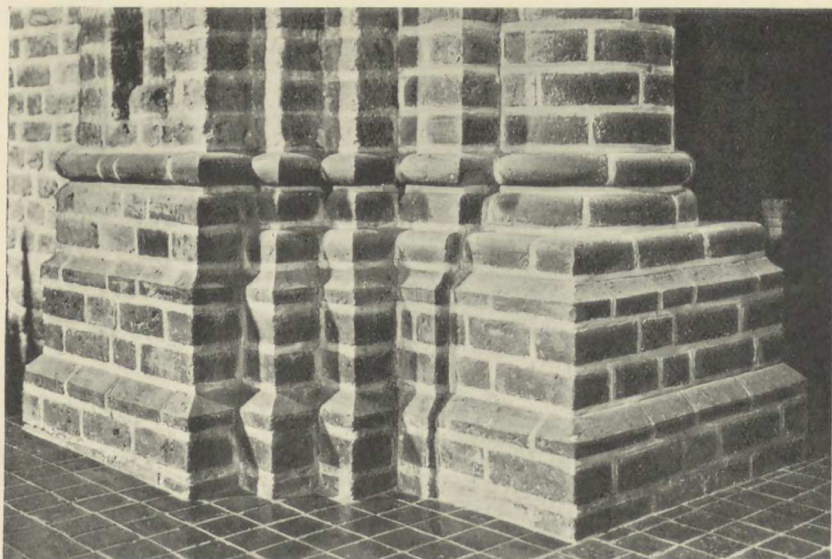


Fig. 26. Vestre Halvsøjlebase. — Base of western half-column.

foroven, medens alle Kapitælerne var borthuggede ved Restaureringen i 1870 og erstattede med store cementpudsede Kapitæler af moderne gule Sten. Dog var Rundstaven under Kapitælet bevaret paa den nordre Søjle ved Vestbuen, men afhugget paa alle de øvrige Søjler. Kapitælets Sidelinje var bevaret i 5 Skifters Højde ved nordre Søjle ved Østbuen, og af selve Kapitælet var det nederste Skifte bevaret paa vestre Søjle ved Nordbuen, hvor det dannede en Halvcirkel svarende til Halvsøjle's Skaft. At Kapitælerne imidlertid har haft den i den danske, romanske Teglstensarkitektur almindelige Form med mere eller mindre trapezformede Sider og skraat affasede Hjørner fremgaar dels af ældre Opmaalingstegninger fra Tiden før 1870, dels af det førnævnte Præsteepitafium, hvor Kapitælerne foroven er firkantede og afsluttes med en Rundstav. Det nederste Kapitælskiftes runde Form viser, at de trapezformede Sider forneden er gaaet blødere over i de affasede Hjørner, end det senere blev almindeligt, hvilket muligvis er en lidt ældre Form af disse primitive Murstenskapitæler, hvis Lighed med Midtsøjle's Granitkapitæler tyder paa, at de har udviklet sig af det i den ældre Middelalder benyttede degenererede »korintiske« Kapitæl. — Afhuggede Hulkehlprofiler paa Pilastre og False viste endvidere, at Kapitælerne over Rundstaven maa antages at have haft en tilsvarende fremspringende Hulkehl, hvis de skulde naa den rette Højde som Vederlag for Gjordbuerne. Dette Vederlag ligger forøvrigt i lidt forskellig Højde paa de forskellige Korsarmsbuer. Hulkehlprofilet vender kun ind mod Buen og er ikke forkrøbbet om Hjørnerne i Falsene; det mangler helt paa de Halvstensfalse, som fortsætter sig i Hvælvingsgraterne. Rundstavene paa Halvsøjlerne var oprindelig baade ved Kapitæl og Base dannet af store kvartcirkelformede Formsten.

Korsarmenes Buer ind mod Midtpartiet bæres, som foran berørt, af fremspringende Pilastre med Sokkelprofiler og Vederlagsprofil i Tilslutning til Halvsøjlerne og disses Pilastre. Pilastre i vestre og østre Korsarm er prydede med Halvsøjler, liggende forsænkede i Pilasterfladen, een Halvsøjle med rundet Base i Vestbuens Pilastre og to tætstillede uden Baser i Østbuens (Pl. V, Fig. 26 og 27). Halvsøjlerne løber lige op under Vederlagets Hulkehl uden nogen Art af Kapitæler²⁴. Korsarmsbuerne, der overalt er de oprindelige for de nederste Partiers Vedkommende, har oprindelig staaet pudsede og hvide

the plinth of a column of the same kind as the plinths in Sorø Church (Fig. 29). When the column was placed on the plinths of the east columns at the corners, the solution of the bond of the plinths was found, for every single brick in both plinths could now be fitted exactly into the impression of the bricks that had been partially or entirely hewn away. Even though the plinth is entirely reconstructed, there is every probability that its present form corresponds to the original.

Although in some places the shafts of the semi-columns were hewn away and destroyed, the upper portions were for the most part preserved. All the capitals were cut away under the restoration in 1870 and replaced by large plastered capitals of modern yellow bricks. However the astragal below the capital of the north column by the west arch was preserved, though that of all the other columns had perished. The side line of the capital on the north column by the east arch was preserved to a height of 5 courses, and of the capital itself, the lowest course was preserved on the west column by the north arch where it formed a semi-circle corresponding to the shaft of the semi-column. That the capital possessed the form quite common to the Danish Romanesque brick architecture, with more or less trapezate sides and obliquely bevelled corners, is seen partly from the old plans prior to 1870, partly from the memorial tablet to the priest to which reference has already been made, and in which the capitals are square above and end in an astragal. The round form of the lowest course of the capital shows that the trapezate sides passed less sharply over to the corners than was the custom later, perhaps a slightly older form of these primitive brick capitals whose resemblance to the granite capitals of the central columns would indicate that they have developed from the degenerated »Corinthian« capitals so much used in the early Middle Ages.—Traces of flutings on the plasters and grooves showed, moreover, that above the astragal the capitals must have had a corresponding fluting if they were to reach the height necessary to serve as abutment for transverse arches. This abutment lies at a different height on the different arches of the transepts. The profile of the flutings turns only toward the arches and is not hidden around the corners in the grooves. On the half-brick groove which continues into the arrises of the vaultings it is lacking. The astragals of the semi-columns were originally both at the capital and the base formed from large quartercircle moulded bricks.

The arches of the transepts toward the nave are borne, as indicated earlier, by projecting pilasters, with the profiles of the socle and the profile of the abutment adhering to the semi-columns and their pilasters. The pilasters in the west and east transepts are decorated with semi-columns sunk in the surface of the pilaster, one semi-column with rounded base in the pilasters of the west arch and two placed close together without bases in the east arch (Pl. V, Fig. 26 og 27)²⁴. The semi-columns rise straight up to the fluting of the abutment without any capital whatever. The lower sections of the arches of the transepts, which are everywhere original, were originally plastered and white-washed on the underneath side to within a half-brick from the edge. Toward the nave the arch has a half-brick groove as a continuation of the single

kalkede paa Undersiden indtil en halv Sten fra Kanten. Ind mod Skibet har Buen en Halvstensfals som Fortsættelse af den ene Fals mellem Pilastrene. Det ret komplicerede System af Pilastre, Halvsøjler og Halvstensfals er saaledes konsekvent gennemført; kun den Pilaster, hvorpaa Halvsøjlerne er anbragt, slutter foroven uden konstruktiv Mening, da den er for bred i Forhold til Granitsøjlernes Kapitæler, det eneste Punkt, hvor den betænksomme Bygmester synes at have forregnet sig; forøvrigt en Forregning som der findes utallige Eksempler paa i Datidens Bygningskunst. Meget virkningsfuld er Maaden, hvorpaa alle Gjordbuernes røde Kanter tegner sig mod det hvide og ligesom fremhæver Bygningens Konstruktion (Fig. 19).

Tilslut skal omtales Vindeltrappen i Skibets sydøstre Hjørne. Allerede i Middelalderen synes den at være borthugget, hvor den sprang frem inde i Kirkerummet og samtidig blev den inde i Muren kompakt tilmuret. Tilmuringen er sandsynligvis sket, da Sakristiets øvre Etage i gotisk Tid blev paabygget, saa man, som nu, fik Adgang derfra til Kirkens Tagrum og Taarne. Foruden det firkantede Fundament og de under Gulvet bevarede Skifter, var Dørfalsen i Muren bevaret; desuden stod den runde Vindelsøjle, alle Trin og den snoede Tøndehvælvning med oprindelig Puds ualmindelig velbevaret inde i Murtykkelsen; der var saaledes ingen Vanskelighed ved at supplere den manglende mindre Del af Vindeltrappen. Og saa de smalle Glugger med indvendig Smig var bevarede, og tydelige Aftryk i Murværket viste, at Gluggerne indad havde været overdækkede med ca. 2 cm tykke Egebrædder. Trappen udmunder over Skibets Hvælvninger. —

I Jordfylden fandtes under det nye Gulv enkelte Gulvfliser af Brændtler, 12×12 cm og $2\frac{1}{2}$ cm tykke, med grøn og gulbrun og hvid Glasur; enkelte havde en dyb Ridse efter Diagonalen, saa de let kunde deles til to trekantede Fliser, hvilket viser, at de har været lagt i Mønster eller ligget diagonalt i Rummet. Fliserne er antagelig ikke de oprindelige, men tidlig gotiske. Ved sidste Restaurering blev Gulvet i Kirken lagt med grønne og brune Fliser som de gamle. —

Gaar man fra Vindeltrappen op over Skibets Hvælvninger, kan man komme til alle Taarnene, idet disse har rundbuede Døre, med Halvstensstik og omløbende Fladskifte, ind til Skibets Tagrum. Ind mod Taarnrummet har Dørene skraa Smige i Sider og Bue, men ingen Huller for Stængebom og ingen Rest af Stabeljern; Buesmigen er pudset indtil ca. 12 cm fra Buekanten, hvilket viser, at Murene, i Modsætning til nu, har staaet ukalkede. Murværket viser under Kalkningen den oprindelige Rødmaling med hvidt optrukne Fuger, saavel i Taarnrummene som ud mod Skibets Tagrum. Bjælkelagene i Taarnene er alle nye, fra 1870. Alle Tagværker og Spir er ligeledes moderne; kun en enkelt »Konge« af Egetræ er bevaret fra et af de gamle Taarnspir²⁵; den er smukt behandlet med Affasninger og profilerede Fortykkelser som Støtte for Skraastøtterne ud mod Spærene. Midttaarnets oprindelige Forhold kan kun skønnes af den gamle Opmaalingsstegning (Fig. 17) og er i Hovedtrækkene fulgt ved det nye Taarn, der dog har faaet solide Stræbepiller ud mod Ydermurene for at fordele Taarnets Vægt ud paa disse. Det oprindelige Taarns Mure var ogsaa tykkere end det nyes. —

Samtidig med Kirken er dens Døbefont af Granit (Fig. 28).

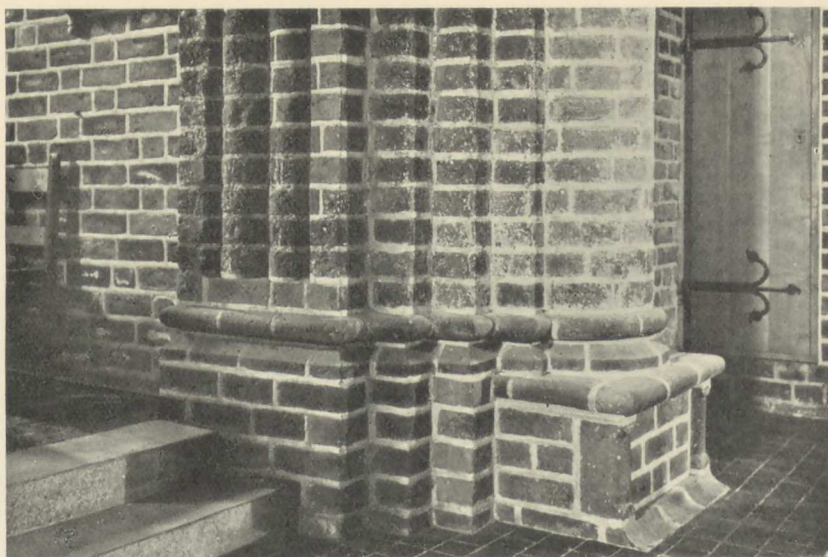


Fig. 27. Østre Halvsøjlebase. — Base of eastern half-column.

groove between the pilasters. The rather complicated system of pilasters, semi-columns and half-brick grooves is consistently carried out. Only that pilaster on which the semi-columns are placed ends on top without constructive intention for it is too broad in proportion to the capitals of the granite columns, the only point at which the judicious master-builder seems to have miscalculated. Of miscalculations of that nature, however, many an example is to be found in the architecture of the period. Very effective is the way in which the red edges of all the transvers arches are outlined against the white, thus setting off the construction of the church. (Fig. 19).

Finally mention should be made of the winding staircase in the southeast corner of the nave. As early as the Middle Ages this seems to have been cut away where it projected into the body of the church and at the same time the part in the wall was completely bricked up. This probably took place when the Gothic upper storey, was added to the sacristy, so that then, as now, admittance was gained from there to the loft and towers of the church. In addition to the square foundation and the courses beneath the floor, the groove of the door in the wall were also preserved. The round column about which the staircase wound, all the steps and the twisted barrel-vaulting with original plaster are remarkably well preserved in the thickness of the walls. There was no difficulty in supplying the parts of the staircase which were lacking. The narrow apertures with inside bevel were preserved, and traces in the wall showed very plainly that the apertures had been covered on the inside with oak beams about 2 cm thick. The staircase debouched above the vaultings of the nave.

In the earth beneath the new floor a few floor tiles of burnt clay $12 \times 12 \times 2\frac{1}{2}$ cm with green and yellowish brown and white glaze were found. A few of them had deep diagonal markings rendering them easily divisible into two three-cornered tiles, showing that they were laid in patterns or placed diagonally in the room. The tiles are probably not the original ones, but early Gothic. Under the last restoration the floor of the church was laid with green and brown tiles similar to the old ones.

If one climbs from the winding staircase up above the vaultings of the nave it is possible to reach all the towers.



Fig. 28. Døbefonten. — Baptismal font.

Kummen er hugget af een Sten, som det er almindeligt, og har langs den øvre Kant en kraftig Tovsnoning. Paa Siden er i Relief et Palmetmotiv af lombardisk Oprindelse²⁶. Foden er dannet som et omvendt Trapezkapitæl, der i Form ganske svarer til de fire Granitkapitæler paa Søjlerne i Skibet. Vulsten mellem Kumme og Fod bestaar af en Snoning af Hulkehlbaand, og paa Fodens trapezformede Sider er et Palmetmotiv i Slægt med Kummens. Døbefonten staar nu i Koret. —

Nedenstaaende lille romanske Krucifix-Figur af Bronze findes nu paa Alteret.

M. Cl.

These have round-arched doorways with half-brick scheme arches and flat courses toward the roof of the nave. Toward the interior of the tower the doors have oblique bevels on the sides and arch, but no holes for bars and no traces of hinges. The bevel-angle of the arch is plastered until within about 12 cm from the edge of the arch, showing that the walls then, in contrast to now, were unplastered. Under the plaster the masonry shows the original red paint on the bricks with the courses outlined in white both inside the towers and toward the loft of the nave. The tiers of beams in the towers are all new, from 1870. All parts of the roof and spire are likewise modern. Only one single central-beam or »King« of oak is preserved from one of the old spires²⁵. It is beautifully made with bevels and profiled protuberances as support for the props toward the spars. The original proportions of the central tower can only be approximated from the old drawings (Fig. 17). These have, on the whole, been followed in the new tower, but it has also been given solid buttresses to the outer walls to divide the weight of the tower on to these. The original walls of the tower were thicker than the new.

Contemporary with the church is its baptismal font of granite (Fig. 28). The basin is hewn from a solid block, as was customary and along the upper edge a bold rope outline is carved. On the sides is a relief showing a palmetto motive of Lombardian origin²⁶. The base is formed like an inverted trapezite capital, in form corresponding exactly to the four granite capitals above the columns of the nave. The cushion between the basin and the base consists of an intertwining of fluted bands, and on the trapezate sides of the base is a palmetto motive similar to that on the basin. The baptismal font now stands in the choir. —

The small Romanesque crucifix-figure shown below is now to be found on the altar.

M. Cl.



III

SAMTIDIG DANSK TEGLSTENSARKITEKTUR

KALLUNDBORG KIRKE slutter sig nøje til den Gruppe af de ældste danske Teglstenskirker, som blev opført i Slutningen af 12. Aarh., og som særligt repræsenteres af de tre store Klosterkirker i Ringsted, Sorø og Vitskøl. Den svarer til disse i Materiale, Teknik og Detailler, men staar dog paa flere Omraader for sig selv og er i Forhold til dem mærkelig ved sin Form og dristige Komposition, ligesom den har Enkeltheder, der foreløbig ikke er fundet i de øvrige samtidige Kirker.

Typisk for Teglstenskirkerne i Slutningen af 12. Aarh. og første Halvdel af 13. Aarh. er Halvsøjlerne med den særligt danske Kapitælf orm, Trapezkapitælet med de afskraaede Hjørner. At denne Kapitælf orm findes i Kallundborg Kirke er saaledes næsten en Selvfølgelighed. Halvsøjlebaserne ved vestre og østre Korsarmsbuer kendes ligeledes fra de samtidige Kirker, og Basen med de smaa Hjørnesøjler er anvendt i forskellige Variationer i Sorø Klosterkirke paa Skibets Arkadepiller¹ (Fig. 29). En lignende lille Søjle, til dannet af en Munkesten, findes anvendt i Gesimsernes Arkadefrise paa Klosterkirken i Ringsted samt Nørre Løgum Kirke i Sønderjylland. — De mærkelige Søjlebaser ved søndre og nordre Korsarmsbuer er, som foran bemærket, utvivlsomt Reminiscenser fra Træarkitekturen; lignende Søjlebaser findes imidlertid (af Granit) paa Søjlerne under Pulpituret i Fjenneslev Kirke² (Fig. 30), hvor de er prydede med hugne Ornamentter, der saa nøje svarer til Ornamentterne paa den oprindelige Granit-Døbefont i Kallundborg Kirke (Fig. 28), at man maa antage, at det er den samme Stenhugger, der har været virksom i begge Kirker. Disse Søjler i Fjenneslev Kirke har tillige Kapitæler, der ganske svarer til Kapitælerne paa de fire store Granitsøjler i Kallundborg Kirkes Midtparti. Dette nære Slægtskab er ikke tilfældigt, idet Fjenneslev netop var Esbern Snares Fædrenehjem, og Kirken, som skal være opført af hans Fader, Asger Ryg, har først i Esberns Tid faaet Pulpituret indbygget og Dobbelttaarnene derover opførte. Kapitælf ormen findes ogsaa i andre af de samtidige Kirker, f. Eks. Thorsager Kirke i Jylland³ og Bjernede Kirke paa Sjælland⁴. Begge disse Rundkirker har tillige et Hvelvingssystem svarende til Skibets i Kallundborg Kirke.

De forsænkede Halvsøjler i Pilastrener i vestre og østre Kors-

III

CONTEMPORARY DANISH BRICK ARCHITECTURE

KALLUNDBORG CHURCH is very closely related to that group of the oldest Danish brick churches which were built at the close of the 12th century and which are most splendidly represented by the three cloister churches in Ringsted, Sorø and Vitskøl¹. It corresponds to these in the material used, in its technical construction, and in many details,

differing at the same time, in several unique features. When a comparison is made with other churches the form and bold construction of Kallundborg Church seem very remarkable, while certain details of the building are not yet found in any other contemporary church.

Typical of the brick churches of the close of the 12th century and the first half of the 13th are the semi-columns with the special Danish capital form—trapezate with oblique corners. It becomes almost a matter of course to find this form used in Kallundborg Church. The bases of the semi-columns at the arches of the east and west transepts are also characteristic of churches of that period, and the base with the small columns at the corners is used in many variations in the pil-

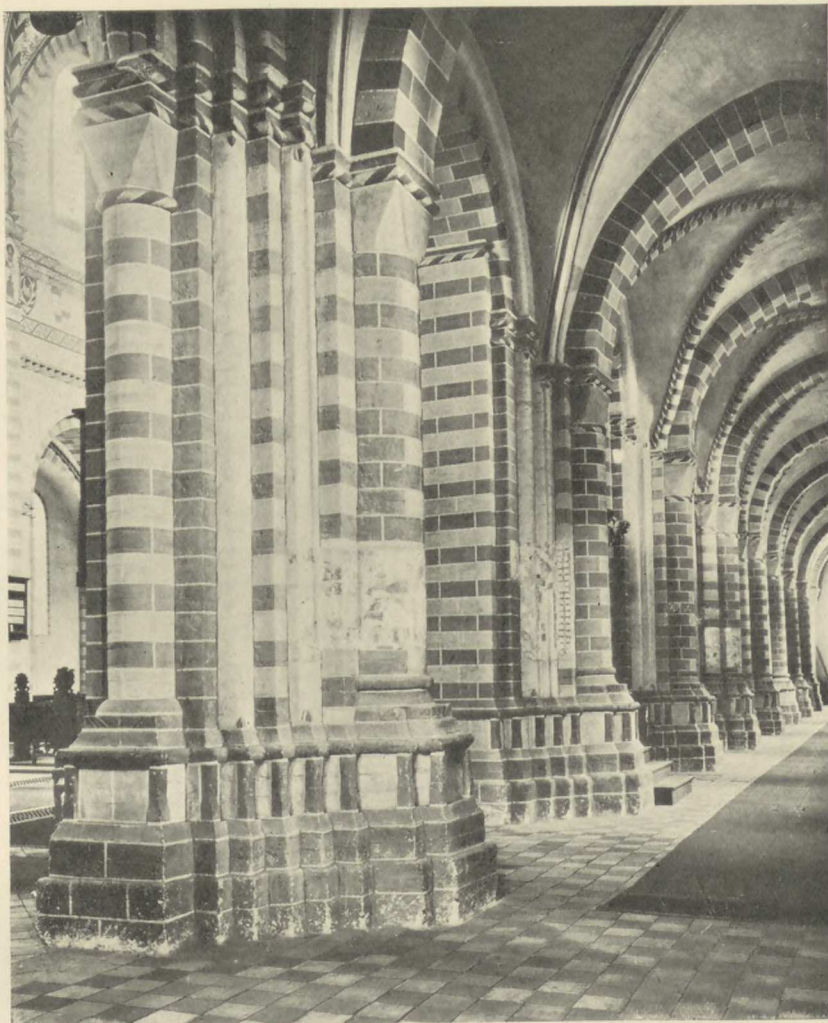


Fig. 29. Sorø Kirkes Sideskib. — The side nave of Sorø Church.

lars of the arcade of the nave in the cloister church at Sorø¹. (Fig. 29). A similar little column formed of one monk brick is likewise found in the arcade facings of the cornices in the choir and transepts of the cloister church in Ringsted, as well as in the church at Nørre Løgum in Southern Jutland. The curious bases of the columns of the arches in the north and south transepts are doubtless, as already stated, reminiscent of wooden architecture. Similar bases of columns, however, are found (in granite) below the columns bearing the gallery of Fjenneslev Church² (Fig. 30), where they are decorated with hewn ornaments, corresponding so exactly to the ornaments on the original granite baptismal font in Kallundborg Church (Fig. 28), that it is only reasonable to suppose that the same sculptor has been at work in both churches. The columns in Fjenneslev Church moreover have capitals which correspond exactly to the capitals of the four large granite columns in the nave of Kallundborg Church. This close relationship is no mere chance for Fjenneslev was the home of Esbern Snare's forefathers, and the church, which is said to have been built by his father, Asger Ryg, was first given a



Fig. 30. Søjlebase fra Fjenneslev Kirke. — Base of column from Fjenneslev Church.

armsbuer er et Motiv der forekommer i Benediktinerkirken i Ringsted, i Cistercienserkirken i Vitskøl⁵, i Domkirken i Aarhus, i Benediktinernonnernes Kirke i Dalum og i Kollegiatkirken, Vor Frue, i Odense⁶, alle af Tegl. Det skal i denne Sammenhæng ogsaa nævnes, at Motivet med forsænkede Halvsøjler forekommer i huggen Sten i Lyngby Kirke i Jylland, der er opført af Kridtsten⁷. Det er i et Fragment, hvis oprindelige Anbringelse er usikker, ligesom det foreløbig er umuligt med Bestemthed at udtale sig om, hvorvidt Kirken er ældre eller yngre end Kallundborg Kirke. Ogsaa i den nu nedrevne sjællandske Kirke Uggerløse forekom et lignende Motiv⁸.

Dobbeltvinduerne i Taarnene findes ofte øverst paa romanske Taarne, saavel herhjemme som i Udlandet; men den mærkelige Kombination af Dobbeltvindue og halvrund Niche med smalt Skydeskaar kendes der vistnok ikke noget andet Eksempel paa. Muligvis har lignende Vinduer været anvendt paa profane romanske Bygninger; men ingen saadanne er tilstrækkeligt bevarede i Danmark. Naar de findes paa Kallundborg Kirke, er det neppe uden Grund, og de kan fortaas i Sammenhæng med de andre Tegn paa, at Kirken har været tænkt som et Led i Byens Befæstning⁹. — Særegne for Kallundborg Kirke er de elegante Profiler omkring Vinduerne; tilsvarende Profiler findes dog anvendt paa Nordportalerne paa Ols og Østerlars Kirker paa Bornholm¹⁰. — Mærkelige er ogsaa de kamtakkeede Gavlparter paa vestre og nordre Portalfremspring; de findes dog paa Korportalerne paa Kirken i Nykøbing Sj. og paa Fejø Kirke, samt paa Vestportalen paa Bækkeskov Præmonstratenserkirke i Skaane, der alle er romanske Teglstenskirker, de to sidstnævnte fra Periodens Slutning. Man maa derfor indtil videre-gaa ud fra, at disse kamtakkeede Gavle, der skulde blive saa almindelige i vor gotiske Arkitektur, optræder første Gang i Danmark paa Kallundborg Kirke.

Et Motiv der ogsaa skulde blive almindeligt paa vore gotiske Bygninger, er den udkragede Gesims med Savsnitsskifter, som er mærkelig at træffe paa en romansk Kirke fra denne Periode. Men at en saadan Gesims ikke har været ukendt her i Landet paa samtidige Bygninger, fremgaar af de sidste Aars Undersøgelser af Nyborg Slot, hvis Hovedbygning, der er samtidig med den romanske Ringmur, har haft en lignende Gesims. Nyborg er efter Traditionen opført omkring 1170, og ligesom Borgen i Kallundborg, som et Led i den Række af Borganlæg der opførtes til Beskyttelse mod Venderne Angreb. —

gallery and twin towers in Esbern's own time. The form of the capitals is also found in other churches of the period, for instance Thorsager Church in Jutland³ and Bjernede Church, Zealand⁴. Both of these churches have also a system of vaultings which correspond to that in the nave of Kallundborg Church.

Semi-columns sunk in pilasters as in the arches of the east and west transepts is a motive found in the Benedictine church in Ringsted and in the church of the Cistercians in Vitskøl⁵, in the church of the Benedictine nuns at Dalum, and in the collegiate church. Our Lady in Odense⁶, all of which are built of brick. In this connection mention should be made of the fact that the motive with sunken half-columns is found carved in stone in a church built of limestone at Lyngby, Jutland⁷. It is in a fragment whose original position is uncertain, just as it is impossible to state positively at present how much older or younger this church is than Kallundborg Church. A similar motive is found in the church at Uggerløse, Zealand, now demolished⁸.

Double windows in towers are often placed uppermost in Romanesque towers, both here in Denmark and abroad, however the curious combination of double window and semicircular niche with narrow embrasure is probably known nowhere else. Of course similar windows have been used in profane Romanesque buildings, but of these none have been sufficiently preserved in Denmark. That they are found in Kallundborg Church is hardly due to chance, and is further proof that the Church was planned as a link in the fortification of the city⁹. — Very characteristic of Kallundborg Church are the beautiful profiles around the windows. Corresponding profiles are found on the north entrances of Ols and Østerlars Churches, on Bornholm¹⁰. — Strange too, are the gables with corbel-steps on the projections of the north and west entrances. However these are to be found on the entrances to the choir of the church in Nyköping, Zealand, on Fejø church, and on the west entrance to the church of the Premonstrants at Bækkeskov in Skaane, all of which are Romanesque brick churches, the two latter from the close of the period. For the present then, at least, it must be supposed that these corbel-gables, which were to become so common a feature of our Gothic architecture, made their first appearance in Denmark in Kallundborg Church.

A motive, which was also destined to become common in Gothic buildings in Denmark, is the corbelled cornice with saw-notch courses, and it is strange indeed to find it on a Romanesque church of this period. However such cornices were not known on contemporary buildings, for the investigations of Nyborg Castle made during recent years have shown that the main building, which is of the same age as the Romanesque wall of defence had a similar cornice. According to tradition Nyborg Castle was built about 1170 as a link in that chain of castles which, like Kallundborg Castle, were intended as a measure of defence against the Wends.

All these details from the close of the 12th century substantiate the old tradition that Esbern Snare built the church when in 1171 he also built Kallundborg Castle¹¹. Unfortunately no year for the construction of the other contemporary and close-

Alle disse Enkeltheder fra Slutningen af 12. Aarh. bekræfter saaledes den gamle Tradition, at Esbern Snare har opført Kirken 1171, da han anlagde Kallundborg¹¹. Desværre kendes ikke noget Opførelsesaar for de ovennævnte, samtidige og beslægtede Kirker; men som paavist af Löffler¹² maa Koret og Korsarmene paa Ringsted-Kirken antages at have været færdige i Sommeren 1170, da Knud Lavards Helgenskrin blev henstillet paa Højaltret. Det er ikke her Stedet at gøre Rede for de forskellige Byggeperioder i Ringsted Kirke¹³; det skal blot fremhæves, at de i Kallundborg-Kirken benyttede Enkeltheder, som ogsaa findes i Ringsted Kirke, er benyttede saavel i dennes Østparti, som i dens noget senere opførte Vestparti. Det er bemærkelsesværdigt, at man i Ringsted Kirkes Vestparti benytter Krydshvælvinger i Forbindelse med Halvsøjler i Sideskibene, straks efter 1170, da man begynder paa Opførelsen af Skibet, regnet fra dettes næstsidsste Fag i Øst. Kallundborg Kirke har fra først af været anlagt til Hvælvinger, og da disse har den ældste romanske Krydshvælvinges-Form, uden fremspringende, profilerede Ribber, er der al mulig Grund til at tro, at den er bygget i Aarene lige efter 1170. — Den eneste af de ældste Teglstenskirker, hvis Opførelsesaar kendes, er Gumløse Kirke i Skaane, der vides at være indviet af Esbern Snares Broder, Ærkebiskop Absalon den 26de Okt. 1191¹⁴. Sammenligner man denne Kirke med Kallundborg Kirke, vil man se, at den i sine Former (Hjørnepilastre og Buefrise) repræsenterer et lidt senere Stadium i vor ældste Teglstensarkitektur; man fejler derfor næppe ved at sætte Kallundborg Kirkes Opførelsestid til Aarene 1170—1190.

I den Gruppe af vore romanske Teglstensbygninger, hvori Kallundborg Kirke ifølge sine Enkeltformer indgaar, er Kirkerne i Ringsted og Sorø Hovedmonumenterne og de ældste; det vil derfor være rimeligere at behandle deres Slægtskab med den norditalienske Teglstensarkitektur i den Publikation som vil udkomme om Ringsted Kirke. Her skal kun nævnes, at saavel Planudformning og arkitektoniske Enkeltheder, som Stenstørrelser og Materialets Behandling tyder paa en direkte Paavirkning — uafhængig af den samtidige nordtyske Teglstensarkitektur — fra Milano og Pavia, hvorfra den Bygmester synes at være hentet, der maa have ledet Opførelsen af Kirkerne i Ringsted og Sorø, og som det nedenfor vil blive omtalt ogsaa af Kirken i Kallundborg. Som foran paavist peger Døbefontens Ornamentik ogsaa mod Milano. Heri er der for saa vidt intet usædvanligt; allerede i Begyndelsen af 12. Aarh. var lombardiske Bygmestre virksomme her i Danmark ved Opførelsen af Domkirken i Lund¹⁵.

M. Cl.

ly related churches is known. However, as Löffler¹² has shown, the choir and transepts of Ringsted Church were probably finished in the summer of 1170 when the reliquary of Knud Lavard was placed beneath the high altar. There is no room here to discuss the various building periods of Ringsted Church¹³; let it suffice to emphasize the fact that the details common to Kallundborg Church and Ringsted Church are found in both the east section and also in the west section, built somewhat later. It is interesting to observe that in Ringsted Church cross-vaultings with half-columns are used in the side aisles immediately after 1170, when the construction of the nave was commenced at the next to last bay toward the east. From the very beginning Kallundborg Church was planned with vaultings, and as these are of the oldest Romanesque cross-vaulting form without projecting profiled ribs, there is every reason to believe that it was built during the years immediately after 1170. — The only one of the oldest brick churches of which the date of building is known is Gumløse Church in Skaane which is known to have been consecrated by Esbern Snare's brother, Archbishop Absalon, on October 26, 1191¹⁴. If this church is compared with Kallundborg Church, we find, judging by its corner pilasters and the friezes of the arches, that it represents a slightly later stadium of the oldest Danish brick architecture. There is no great scope for error if the *building of Kallundborg Church is placed between the years 1170—1190*.

In the group of Romanesque brick buildings to which Kallundborg Church belongs by virtue of its details, the churches in Ringsted and Sorø are the main monuments, and the oldest. It would therefore seem more reasonable to discuss their relation to the brick architecture of northern Italy in the article on Ringsted Church soon to be published. Here, however, it must be stated that everything — the way in which the plan was followed, architectural details, the size of the bricks and the treatment of the material — seems to point to the direct influence,—independent of the contemporary north German brick architecture,—of Milano and Pavia from whence the master-builder who directed the construction of the churches in Ringsted and Sorø and too, of Kallundborg Church has presumably been fetched. As has been indicated earlier, the Ornamentation of the baptismal font seems also to point to Milan. This is no surprising fact, for already in the beginning of the 12th century Lombardy builders were busied in Denmark constructing Lund Cathedral¹⁵.

M. Cl.

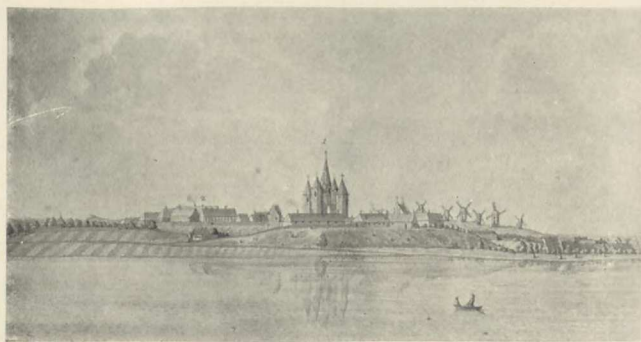


Fig. 31. Kallundborg set fra Fjorden, 1753. — Kallundborg seen from the fjord, 1753.

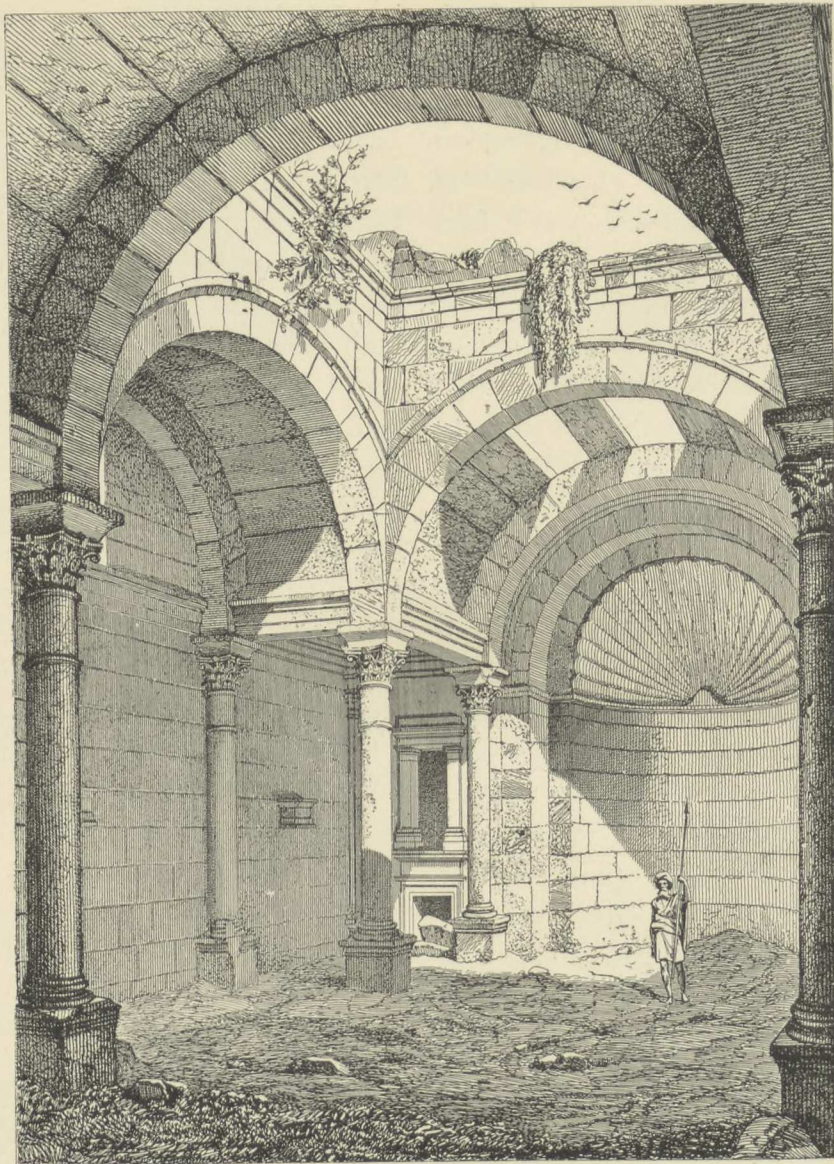


Fig. 32. Prætoriet i Mousmich i Syrien. Indre. — The Prætorium at Mousmich, Syria. Interior.

IV FORBILLEDER OG HERKOMST

I Kallundborg Kirkes Plan og Opbygning krydses forskellige arkitektoniske Ideer. I denne Bygning har bundfældet sig Tanker, opstaaede til vidt forskellige Tider i den klassiske Oldtid, ændrede og udviklede i Middelalderens ældre Aarhundreder, indtil de paa mærkelig selvstændig Vis er bleven bragt i Anvendelse paa denne sjællandske Murstenskirke i Valdemarernes frodige og skabende Tid. Men Kallundborg Kirke

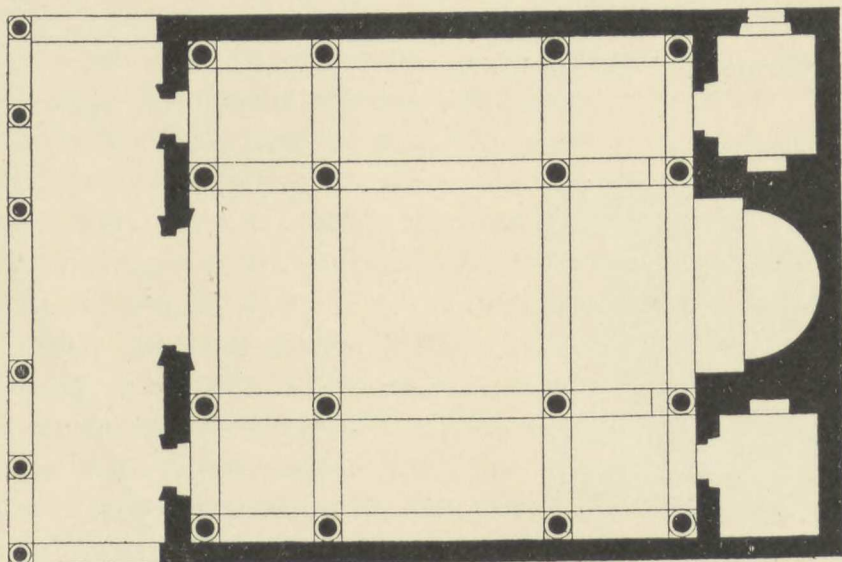


Fig. 33. Prætoriet i Mousmich. Plan. — The Prætorium at Mousmich. Plan.

IV PROTOTYPES AND ORIGIN

IN the plan and construction of Kallundborg Church many architectonic ideas cross. In this building are blended thoughts derived from various periods of classical antiquity, modified and developed through the later centuries of the Middle Ages, until, with a strange and independent understanding, they are given form in this Zealand brick church from the luxuriant creative period of the Valdemars. However the rich variety in Kallundborg Church may not be fully understood without an analytical investigation of the basic principles on which it is composed.

The church, both in plan and construction, is built, plainly enough, over a main central section and over four transepts extending from this.

The *central section* seems to be an independent building. Here it is that the original idea of the church as a unity must be sought.

Very characteristic of this section of the church is the square form, divided on a double axis into three naves in such a way that the central section forms a complete *independent central construction of which the middle square section dominates* leaving only room for small squares in the corners and narrow rectangular sections off the central section. This composition already gives the main part of Kallundborg

forstaas ikke i sin fulde Mangfoldighed uden en analyserende Undersøgelse af de Grundelementer, hvorover den er komponeret.

Kirken er — saavel i Plan som i Opbygning — tydeligt formet over et Centralparti og fire fra dette udgaaende Korsarme.

Centralpartiet er som en Bygning for sig. Det er her, man maa søge den oprindelige Tanke til Kirken som Helhed.

Ejendommeligt for denne Del af Kirken er dens kvadratiske Form, delt efter Dobbeltaksen i tre Skibe paa en saadan Maade, at Centralpartiet danner et helt selvstændigt Centralanlæg, hvis store midterste, kvadratiske Fag er det herskende og kun giver Plads til smaa kvadratiske Fag i Hjørnerne og smalle rektangulære Fag ud for Midtfaget. Allerede denne Komposition giver Kallundborg Kirkes Hovedparti en særlig Stilling indenfor Verdensarkitekturen, overordentlig sjælden som den er udenfor det af byzantinsk Kunst beherskede Omraade. Men netop derfor er denne Kompositionsform ogsaa af væsentlig Betydning for Studiet af Kirkens Afstamning og derigennem af Oprindelsen til den højst originale arkitektoniske Tanke, der ligger til Grund for den hele Kirkebygning.

Planmotive lader sig føre tilbage til den hellenistisk-romerske Bygningskunst og selvom det nu kun lader sig paavise i faa bevarede og kendte Monumenter, er der næppe Tvivl om, at det i antik Tid har været langt mere udbredt. Derpaa tyder ogsaa, at de nu kendte Bygninger, der er bestemt af dette Motiv, ligger i den hellenistisk-romerske Civilisations Yderkanter, Rhinegnene og Syrien. At Plantypen stammer fra Romerrigets centrale Dele er derfor paa Forhaand sandsynligt og det er her af allerstørste Værdi, at en Tegning, der gengiver Planen af et Bygningsværk i selve Kulturcentret Rom og skyldes Fra Giacondo, viser netop denne Plantype¹. Med lige høje Skibe og fladt Loft forekommer den i den ældste fra Romertiden stammende Del af Domkirken i Trier fra 4. Aarh.² (Fig. 34, 35), medens Prætoriet i Mousmieh i Syrien, opført i andet Aarh. e. Chr. havde Midtkvadraten dækket af en Kuppel og de underordnede Rumdele af Hvælvinger. Det er muligt, at hele dette Overdækningssystem først stammer fra en senere Ombygning, der dog maa formodes at falde indenfor

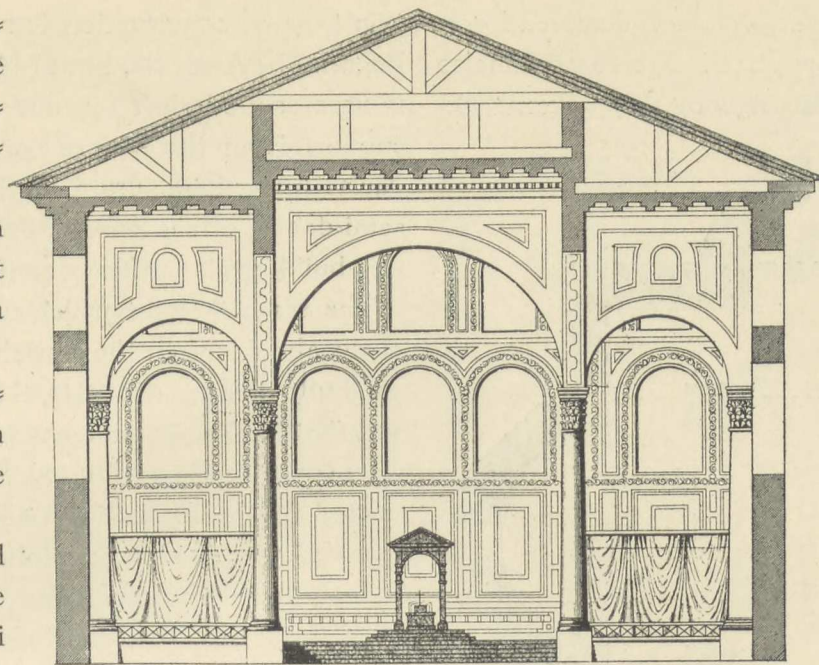


Fig. 34. Ældste Del af Domkirken i Trier, Tyskland. Snit. — The oldest part of the Cathedral at Trier, Germany. Cut.

proof of this is furnished by the fact that buildings based on this motive are found on the outskirts of the territory of the Hellenic-Roman civilisation, — in the Rhine districts, and in Syria. That the type originated in the center of the Roman Empire seems probable at the outset. Note in this connection that a drawing showing the ground-plan of a building from the center of civilisation, Rome, and attributed to Fra Giacondo, shows the exact samt type¹. The cathedral at Trèves from the 4th century² (Fig. 34, 35) has, in its oldest parts, dating from the time of the Romans, naves of the same height and a flat roof, while in the praetorium in Mousmieh in Syria, built in the 2nd century, the square in the center is covered by a dome, while the subordinate sections are vaulted. It is possible that this entire system of covering dates from a later rebuilding, which, even so, may be supposed to have taken place in ancient times³ (Fig. 32, 33). However this only shows that this plan was very early used in combination with the

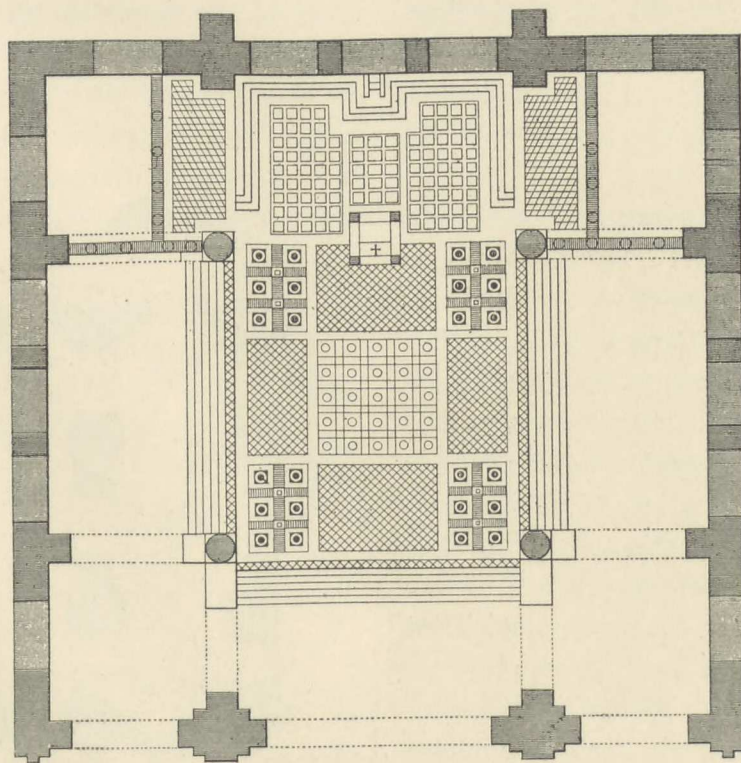


Fig. 35. Ældste Del af Domkirken i Trier. Plan. — The oldest part of the Cathedral at Trier. Plan.

Church a special place in world architecture, so unusual is it to find this type of composition outside the domain of Byzantine art. For this very reason this composition form is of primary importance in studying the origin of the church, and the very original architectonic thought underlying the entire church building.

The plan-motive may be traced back to Hellenic-Roman architecture, and even though nowadays it is to be found in but few of the existing monuments known, there is no doubt but that in ancient times it was very much more widespread. Further

proof of this is furnished by the fact that buildings based on this motive are found on the outskirts of the territory of the Hellenic-Roman civilisation, — in the Rhine districts, and in Syria. That the type originated in the center of the Roman Empire seems probable at the outset. Note in this connection that a drawing showing the ground-plan of a building from the center of civilisation, Rome, and attributed to Fra Giacondo, shows the exact samt type¹. The cathedral at Trèves from the 4th century² (Fig. 34, 35) has, in its oldest parts, dating from the time of the Romans, naves of the same height and a flat roof, while in the praetorium in Mousmieh in Syria, built in the 2nd century, the square in the center is covered by a dome, while the subordinate sections are vaulted. It is possible that this entire system of covering dates from a later rebuilding, which, even so, may be supposed to have taken place in ancient times³ (Fig. 32, 33). However this only shows that this plan was very early used in combination with the vaulted and domed constructions of the time of the Roman emperors, and in more complicated arrangements of rooms as shown in the drawings left by Fra Giacondo. For, in this building, the type, — also in construction, — must have been expressed by a central part with a central dome towering above the lower sections, and it is in this form, plainly enough a heritage from antiquity, — that it appears early in the Middle Ages, where it finds a rich growth in the Orient, especially in Asia Minor and Armenia, and attains the fullest flower of its development in Byzantium.

In its purity, but developed with four axially-placed apses,

antik Tid³ (Fig. 32, 33). Men dette afslører kun den Kendsger-
ning, at Plantypen ret tidligt er benyttet i Overensstemmelse
med den romerske Kejsertids Hvælvinge- og Kuppelkonstruk-

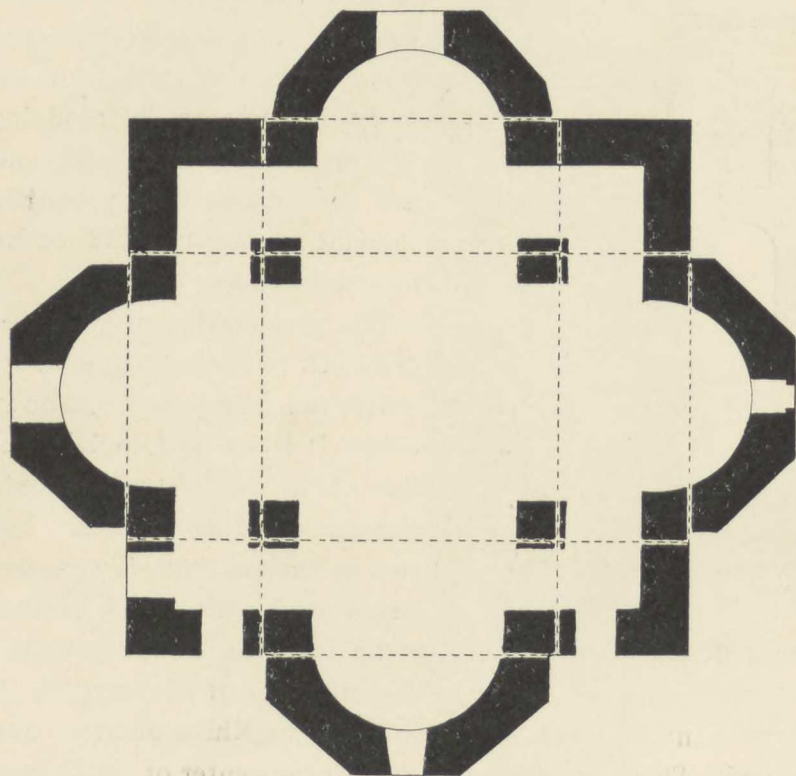


Fig. 36. Kathedraalen i Bagaran. Armenien. Plan. — The Cathedral at Bagaran. Armenia. Plan.

tioner og til Udformning af mere sammensatte Rumkomposi-
tioner, som det netop fremgaar af Fra Giacondos efterladte
Tegning. Thi i denne Bygning maa Typen ogsaa i Opbygning
have været formet som et Centralanlæg med Midtkuplen hæ-
vet op over lavere Partier og det er atter i denne Udformning
Typen — tydeligt nok som ren antik Arv — forekommer tid-
ligt i Middelalderen, hvor den faar en frodig Udvikling i
Orientens, særlig i Lilleasien og Armenien, og i Bysantz skulde
naa de største Resultater.

I sin Renhed, men udvidet med fire aksialt anbragte Absi-
der, er Plantypen med denne Opbygning repræsenteret af Ka-
thedraalen i Bagaran i Armenien, opført 624—31. Kuppelkva-
draten bæres her af fire Piller, der afstives af de kvadratiske
Hjørnepartier, medens Tøndehvælvingerne ind mod Kuppel-
kvadraten støttes af Absidernes Halvkupler⁴. Statisk er denne
Bygning upaaklageligt gennemført (Fig. 36).

Samme Tanke som i Domkirken i Bagaran gaar igen i Kir-
ken St. Goiana ved Etschmiadzin, opført i Tiden mellem ca.
628 og ca. 640, dog kun med een østlig Apsis, der er flankeret
af Siderum, et Motiv, der her skyldes liturgiske Hensyn (Fig.
38). En Bygning som denne staar den byzantinske Korskuppel-
kirke meget nær⁵. Men det maa stærkt understreges, at Lig-
heden er en rent overfladisk. Thi den byzantinske Korskuppel-
kirke, klarest og smukkest repræsenteret i Agia Irene i Kon-
stantinopel fra Justinians første Regeringsaar, har den sæd-
vanlige Plantype af rektangulær Grundform, og hele denne
store Gruppe af Kirkebygninger falder derfor typologisk set
ganske udenfor den Plantypes, der alene har Interesse for Stu-
diet af Kallundborg Kirke. Og dog er der mangfoldige byzan-
tinske Korskuppelkirker, hvor en kvadratisk Plan i Forbindelse
med Kuppel over Midtpartiet udgør den egentlige Kærne i
Anlægget som i den i 10de Aarh. opførte Myrileion Kirke i

this type of construction is represented by the cathedral of
Bagaran in Armenia, built 624—631. The square of the dome
is here carried aloft by four columns, which gain additional
support from the square corner sections, while the barrel-
vaults toward the drum of the dome are supported by the
semi-domes of the apses⁴. From the point of view of statics
this building is perfectly constructed (Fig. 36).

The same thought which underlies the cathedral in Baga-
ran is also found in the church of St. Goiana near Etschmiad-
zin, built between 628—640, though with only one eastern apse
and that flanked by side-chambers, a motive here due to litur-
gical considerations (Fig. 38). Such a building as this is closely
related to the Byzantine domed churches in the form of a
cross⁵. Let me strongly emphasize the fact that the similarity
is but a surface resemblance. The Byzantine domed churches
in the form of a cross, most clearly and beautifully represented
by Agia Irene in Constantinople, from the first years of the
reign of Emperor Justinian, are of the ordinary type of plan
with a square foundation. Therefore this entire great group of
church buildings is, typologically speaking, quite distinct from
those of interest to us in our study of Kallundborg Church. To
be sure there are many Byzantine domed churches in the form
of a cross in which a square plan combined with a dome over
the central section forms the actual heart of the construction,
as the Myrileion Church in Constantinople⁶, built in the 10th
century (Fig. 37). Even where the section of the dome is not
combined with an interior square, but with an octagonal plan,
as in the church of Sergios and Bakchos in Constantinople from
the middle of the 6th century (Fig. 38), which was the point of
departure for St. Sophia itself, the type of plan under discus-
sion still forms the basis, even though the construction may
vary much from the more primitive form inherited from an-
tiquity. All this shows as clearly as possible how frequent this
very plan had become in Byzantine church architecture,—
doubtless a natural result of the fact that from the point of
view of statics its connection with the dome motive could
be made in a very clear and natural way.

It is perhaps more important, however, to trace the fate of
the above type of plan in Italy and the countries north of the
Alps, which are more closely allied to Kallundborg Church
both geographically and culturally. In northern Italy, in the
church of San Lorenzo in Milan, we find a building, which, in

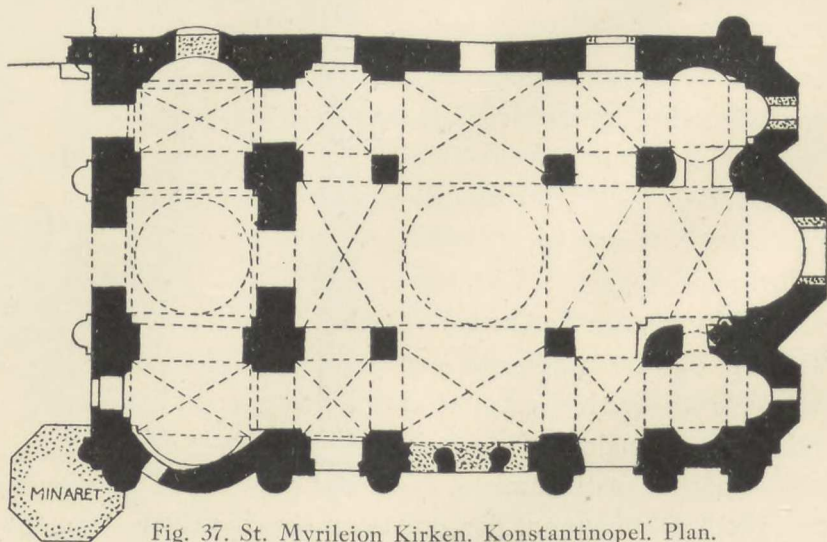


Fig. 37. St. Myrileion Kirken. Konstantinopel. Plan.
The Church of St. Myrileion. Constantinople. Plan.

Konstantinopel⁶ (Fig. 37). Selv hvor Kuppelpartiet kombineres ikke med en indvendig Kvadrat, men med Oktogonformen, som i Sergios og Bakchos Kirke i Konstantinopel fra 6te Aarh.s anden Fjerdedel (Fig. 39), der var Forudsætningen for selve Sofiakirken, ja, i denne selv, ligger tydeligt nok den her behandlede Plantype til Grund, hvor forskellig Opbygningen end kan være fra den mere primitive, fra Antiken nedarvede Udformning. Det her udviklede viser da med al mulig Klarhed, hvor tilvant netop dette Planskema var bleven i byzantinsk Kirkebygningskunst — sikkert en naturlig Følge af, at Forbindelsen mellem det og Kuppelmotivet statisk lod sig udforme paa en saa overordentlig klar og naturlig Maade.

Nok saa stor Interesse har det dog at følge den her behandlede Plantypes Skæbne i selve Italien og Landene Nord for Alperne, der ligger Kallundborg Kirke geografisk og kulturelt nærmere. Og i Norditalien i Kirken San Lorenzo i Milano, møder os da en Bygning, der — trods sin rige komplicerede Planordning og trods sine betydelige Dimensioner — er komponeret over Centralkvadraten som Hovedmotiv.

Netop en saa monumental og differentieret Bygning som San Lorenzo viser tilfulde, at Plantypen i sin Renhed maa have været vel kendt i Overgangstiden imellem Oldtid og Midelalder ogsaa i selve Italien og bekræfter den tidligere fremsatte Anskuelse, at den har været langt hyppigere benyttet i de centrale Dele af det romerske Kejserrige, end Antallet af bevarede Monumenter her lader formode. San Lorenzo, der blev opført i 6te Aarh. og muligvis af samme Arkitekt, Julius Argentarius, der er Mester for San Vitale i Ravenna⁷, har ligesom den lidt ældre, men langt beskednere Kirke i Armenien radiale Apsider.

I samme Tidsrum, da Karl den Store efterlignede San Vitale i Ravenna i sit berømte Paladskapel, opførte Biskop Theodulf, der mulig selv var Italiener, Kirken St. Germigny des Prés ved Orléans (Fig. 40). G. T. Rivoira anser denne for en Efterligning af San Lorenzo. Men da den griber tilbage til Motivets rent primitive Form, dog ogsaa her udvidet med Aksialapsider, er det nok saa rimeligt at antage, at det i den franske Kirke er selve Grundtypen, der lever videre; denne kan meget vel forudsættes at have været velkendt i Italien endnu helt op i den karolingiske Periode, og at det forholder sig saaledes turde

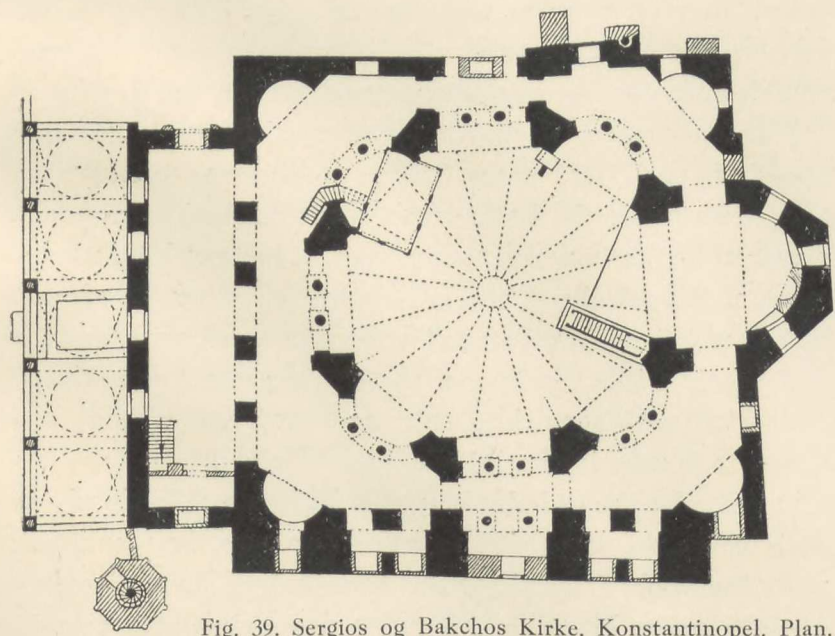


Fig. 39. Sergios og Bakchos Kirke. Konstantinopel. Plan.
The Church of Sergios and Bakchos. Constantinople. Plan.

spite of its great dimensions, is composed on a central square as its main motive.

It requires just so monumental and differentiated a building

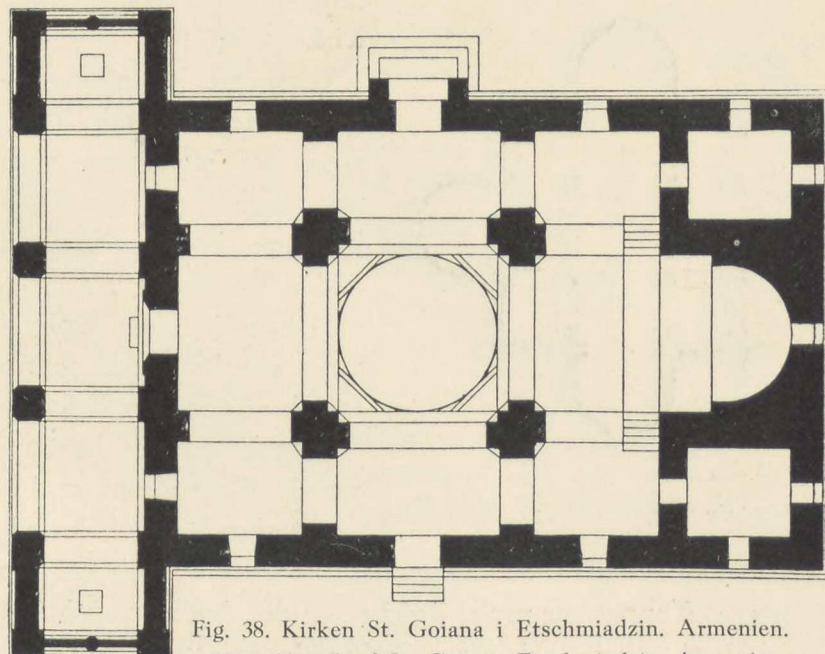


Fig. 38. Kirken St. Goiana i Etschmiadzin. Armenien.
The Church of St. Goiana. Etschmiadzin. Armenia.

as San Lorenzo to prove completely that this type of plan in its purity must have been well known during the transition period between ancient times and the Middle Ages, even in Italy, and it substantiates the theory claimed earlier that it was much more often used in the central parts of the Roman Empire than the number of monuments of that type remaining, would lead us to suppose. San Lorenzo, built in the 6th century, and possibly by the same architect, Julius Argentarius, who is the creator of San Vitale in Ravenna⁷, has radial apses similar to those of the slightly older but far less pretentious churches in Armenia.

At the same time as Charles the Great was imitating San Vitale in Ravenna in his famous palace chapel, Bishop Theodulf, who perhaps himself was an Italian, built the church of St. Germigny des Prés near Orléans (Fig. 40). G. T. Rivoira considers this a copy of San Lorenzo. However, as it seeks back to the purely primitive form of the motive, though here, too, enlarged by axially placed apses, it is probably right to suppose that the fundamental type is continued here in the French church. Nothing prevents its being well-known in Italy even far into the Carolingian period, and that this is really so is proved by the fact that it again appeared in the glory of its strength a couple of generations later in the little chapel of San Satiro, which, in 876, was annexed to its far larger and more imposing relative, the church of San Lorenzo (Fig. 41).

These three buildings, the only ones of this type which can be shown to have existed in European ecclesiastical architecture prior to the 9th century, follow the traditions of the late Roman school in their construction also. They are vaulted and the determinative central room is further emphasized by a dome which towers high above the other parts of the building. How the dome of San Lorenzo was covered is not easy to say, after the extensive rebuilding which has taken place, especially during the 16th century. However the churches of San Satiro and St. Germigny des Prés have, — and

fremgaa af den Kendsgerning, at den et Par Menneskealder senere viser sig i fuld Livskraft i det lille Kapel, San Satiro, der 876 blev bygget op til sin langt større og stateligere Slægtning — selve San Lorenzo Kirken (Fig. 41).

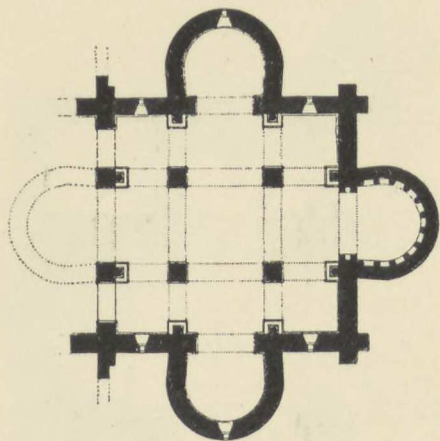


Fig. 40. Germigny des Prés. Frankrig. Plan. — St. Germ. d. Prés. France. Plan.

Disse tre Bygninger — de eneste af denne Planstype, der har kunnet paa-vises indenfor Vesteuropas kirkelige Bygningskunst i Tiden før 9ende Aarh. — er ogsaa i deres Opbygning ganske efter senromersk Tradition; de er hvælvede og det bestemte Centralrum er betonet af en Kuppel, der løfter sig højt op over Bygningens øvrige Dele. Hvorledes San Lorenzos Kuppel har været dækket, er det dog nu vanskeligt at udtale sig om efter de store Ombygninger, særlig den i 16de Aarh. Men baade San Satiro og St. Germigny des Prés har, hvad det med Henblik paa Kallundborg Kirke er af Interesse at forstaa, markeret Kuppelen udvendig med et *Centraltaarn*.

Det ser unægtelig ud, som Bygherrers og Arkitekters Interesse for Plantypen er bleven mere end svækket i de følgende Aarhundreder, og at en Kirke som St. Germigny des Prés for de følgende Slægtled i Frankrig stod som en Slags Vidunderbygning⁸ er et Vidnesbyrd om, hvor fremmedartet den allerede da har virket i Vesteuropa. Ikke et eneste Mindesmærke, komponeret over denne ædle og skønne antike Planstype i dens rene Form, vides at være bleven opført i noget af Kristenhedens Lande efter San Satiros Opførelse i Milano — før den blev lagt til Grund for Centralpartiet af Kallundborg Kirke 400 Aar senere⁹. Og saameget mærkeligere er det, som Kallundborg Kirkes Hovedparti ikke blot saa længe efter, men ovenikøbet i en saa fjern Udkant af Europa pludselig gør Brug af dette i lange Tider ubenyttede arkitektoniske Motiv.

Sammenlignet med de omtalte vester- og østerlandske Kirker indtager den danske Kirke dog paa væsentlige Punkter en Særstilling. Det kvadratiske Midtfag har saaledes aldrig haft Kuppel, men alle Dage en almindelig Krydshvælving i Højde med Krydshvælvingerne over de andre Fag; Centralhvælvingen bæres af slanke Søjler som i San Satiro, medens St. Germigny des Prés her har svære, firkantede Piller. Men Tilbøjeligheden til at fremhæve det herskende Midtfag ogsaa i det Ydre, har den danske Kirke tilfælles med de to nævnte Kirker; de 4 slanke Søjler tjener her tillige som Underbygning for et svært og højt, firkantet *Centraltaarn*.

Efter Plan og Opbygning leder Kallundborg Kirkes Centralparti Tanken hen paa Norditalien — og ganske særlig paa Milano. At Kirken ved Orléans skulde have kunnet øve Indflydelse paa denne Del af den danske Kirkebygning er mindre troligt¹⁰.

Centralpartiet med Taarnet over Midtfaget er jo imidlertid kun en Del af Kallundborg Kirke. Det er de fire Korsarme

this point is interesting, with Kallundborg Church in mind, — accentuated the dome on the outside by a *central tower*.

It certainly looks as if the interest shown by builder and architect in this type greatly diminished in the following centuries, and that a church like St. Germigny des Prés should seem nothing short of a marvel of creation⁸ to the following generation in France, is but a proof of how foreign it had already become in Western Europe. As far as is known, not a single monument composed over this noble and beautiful type in its pure form was constructed anywhere in Christendom after the building of San Satiro in Milan, until 400 years later it was used in the central section of Kallundborg Church². Strange indeed it is that so many years later, and in so remote a corner of Europe an architectonic motive so long disregarded should be used.

Compared with the churches of the west and of the east already referred to, the Danish church assumes a position that in many respects is very unique. The square central section has never been covered by a dome but by an ordinary *cross-vaulting of the same height as the vaulting above the other sections*; the main vaulting is borne aloft by slender columns as in San Satiro, while in St. Germigny des Prés the pillars are heavy and square. In common with these two churches, however, the Danish church has a tendency to emphasize the dominating central section, also from the outside; the four slender columns serve too as a support for a high and heavy, square *central tower*.

In plan and construction the central section of Kallundborg Church leads our thoughts to northern Italy, especially to Milan, but that the church at Orléans has had any influence on this portion of the Danish ecclesiastical building¹⁰ seems less probable.

The central section with the tower above the middle crossing forms, however, only a part of Kallundborg Church. The four transepts with their appertinent towers more than anything else give the church its character, even though these transepts, — as has already been emphasized, — from a plan-typological point of view are subordinate to the central section. Although this central section may have had its prototypes, the motive of the transepts is rather inexplicable, and yet certain connections may also be found between the Danish church and other monuments throughout the world.

The *cruciform with four arms of equal length* is generally known as the Greek cross. Still in architecture it might just as well be called the Latin cross, for it has had considerable vogue in the Latin world even though it has not been used as much as the so-called Latin cross with the longer fourth arm. In the world of Roman civilisation, the cross with arms of equal length, like the central section in general, was closely connected with sepulchral cult, and that type of plan continues to appear in the Middle Ages (Fig. 42).

During the time of the Emperor Justinian it is closely associated in the East with memorial chapels, first and foremost the mighty church of the Apostle in Constantinople —, a rival even to Hagia Sofia — with a dome above the crossing of the cruciform, and one above each of the four transepts.

med tilhørende Taarne, der mere end noget andet giver Kirken Karakter, selvom disse Korsarme, som det allerede tidligere er fremhævet, plantypologisk set er Centralpartiet underordnede. Kan Centralpartiet siges at have haft Forbilleder andetsteds, lader Motivet med Korsarmene os derimod saa temmelig i Stikken, om det end er muligt ogsaa her at knytte visse Forbindelser mellem den danske Kirke og andre Monumenter ude i Verden.

Korset med de 4 ligelange Arme gaar i Almindelighed under Benævnelsen det »græske« Kors. Men i Arkitekturen kan det med ligesaa god Grund kaldes det »latinske«; thi det har ogsaa i den latinske Verden haft en betydelig Udbredelse (Fig. 42), om det end ikke har faaet den Anvendelse som det saakaldte »latinske« Kors med længere Fjerdearm. I den romerske Kulturverden var Korset med de ligelange Arme — som overhovedet Centralanlægget — nøje knyttet til Gravkulturen. Og Plantypen lever videre ind i Middelalderen.

I Kejser Justinians Tidsalder er den i Østen nøje knyttet til Memorialkirker, først og fremmest den mægtige Apostelkirke i Konstantinopel — en Rival til selve Hagia Sofia — med Kuppel over Korsskæringen og Kuppel over hver af de 4 Korsarme. Den var en Fornyelse og en Forstørrelse af en tidligere af Konstantin opført, og til Gravkirke for ham selv bestemt Kirke, komponeret over samme Planmotiv. Dette var ligeledes anvendt i en anden Justiniansk Bygning, Evangelisten Johannes Kirke i Efesus og Typen holdt sig indenfor den byzantinske Kunstkreds endnu udover Justinians Tidsalder som særlig anvendt i Memorialkirker. Der er ingen Tvivl om, at de to store Justinianske Korskirker, der begge tilintetgjordes allerede i Middelalderen, er bleven efterlignet i den i 11te Aarh. ombyggede St. Marcus Kirke i Venedig¹¹. Men allerede Konstantins Apostelkirke havde været Forbillede for den 382 af Ambrosius opførte Apostelkirke i Milano, senere, 396, indviet til St. Nazarius. Den hellige Ambrosius interesserede sig overhovedet stærkt for Korssymbolet — en Interesse, der snart bredte sig ogsaa i Vestens Lande, og i Frankrig rejste sig i 5te Aarhundrede et Par Kirker, komponeret over det græske Kors. Den ene af dem var den i Aarene efter 496 af Merovingerfyrsten Clodevig stiftede Gravkirke, indviet Apostlene¹². Fra Milano er øjensynlig ogsaa Galla Placidias Gravkapel i Ravenna inspireret.

Men særlig yndet blev denne Plantype ikke i Vestens Lande efter Romerkulturens Sammenbrud. Længe holdt sig dog en Forestilling om, at den særlig hørte til i Gravkirker og helt op i 12te Aarh. kunde det hænde, at Gravkapeller havde Form af et græsk Kors som Kirken i Schwartz-Rheindorf ved Bonn, der blev anlagt ca. 1157 som Gravkapel for Ærkebiskop Arnold af Kolln. Naar ogsaa Esbern Snares Borgkirke fik Form af et græsk Kors, kunde det mulig skyldes, at han tillige har tænkt sig den som en Gravkirke. Han blev dog efter sin Død 1204 ikke bisat her, men i Sorø Klosters Kirke, hvor ogsaa hans Broder, den fremragende danske Statsmand, Ærkebiskop Absalon, 3 Aar i Forvejen havde fundet sit Hvilested.

Den eneste endnu bevarede Kirke, der i sit Planprincip har nogen Lighed med Esbern Snares Kirke er St. Marco i Venedig¹³. Men Sporene kan ogsaa pege i Retning af Milano og Lombardiet, hvor den hellige Ambrosius's Bygningsværker

This was a renewal and enlargement of a church built earlier by Constantine on the same plan and destined for a mausoleum for himself. It had also been used in another of Justinian's buildings, the church of St. John the Evangelist at Ephesus and the type remains within the circle of Byzantine art beyond the time of Justinian, as one especially adopted to memorial churches. There is no doubt but that the two great cruciform churches of Justinian which were both destroyed during the Middle Ages are imitated in the church of St. Mark's at Venice, rebuilt during the 11th century¹¹. However Constantine's church of the Apostle had already been the prototype for the church of the Apostle at Milan, built by Ambrosius in 382, later, in 396, dedicated to St. Nazarius. The holy Ambrosius was much interested in the cross as symbol, — an interest which soon spread to the countries of the west, so that in the 5th century in France, we find two churches being built with the Greek cross as motive. One of them was the mausoleum, built by the Merovingian prince, Clodevig, and dedicated to the apostles¹². From Milan, very evidently, comes the inspiration for the mausoleum of Galla Placidia at Ravenna.

After the decline of Roman civilisation this type of plan was not very popular in western lands. However the feeling that it was especially suitable for mortuary chapels long prevailed and far into the 12th century these were often given the form of a Greek cross like the church in Schwarz-Rheindorf, near Bonn, which was dedicated about 1157 as a mortuary chapel for Archbishop Arnold of Cologne. That the castle church of Esbern Snare was given the form of a Greek cross might possibly be due to the fact that he had perhaps intended it as a mortuary chapel. Yet on his death in 1204, he was not buried here, but in the church of Sorø Cloister, where his brother, the eminent Danish statesman, Archbishop Absalon, who had died three years previously, had also been laid to rest.

The only church still existing which, in any way, resembles the church of Esbern Snare in plan is St. Mark's in Venice¹³. However indications also point to Milan and Lombardy where the architectural accomplishments of the holy Ambrosius may have had imitators, even though these are no longer known.

The type of plan, then, of Kallundborg Church has, in its main points, and especially in the central section, analogies elsewhere though they are from distant centuries.

In its inner construction it was noticeable that the middle bay of the central section was covered by a common cross-vaulting of the same height as the cross-vaulting of the other parts, and not covered by a dome. At this point the resemblance to other churches fails and Kallundborg Church shows a form of vaulting of its own.

However this is equally true of the external construction, determined as it is by the towers of the transepts and with

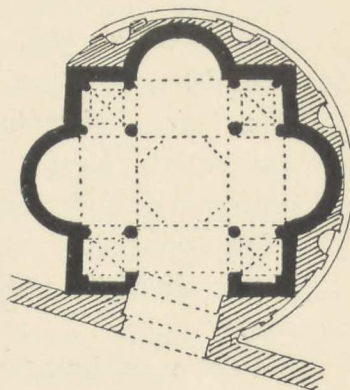


Fig. 41. St. Satiro i Milano. Plan.
— St. Satiro at Milan. Plan.

kan tænkes at have faaet Efterfølgere, selvom disse nu ikke mere kendes.

Til Kallundborg Kirkes Plantype i de store Træk, særlig dog for Centralpartiets Vedkommende, kunde der paavises Analogier andetsteds, omend fra fjærne Aarhundreder.

I den *indre Opbygning* var det derimod paafaldende, at Centralpartiets Midtfag havde en almindelig Krydshvælving i Højde med de andre Fags Krydshvælvninger og ikke dækkedes af en Kuppel. Her svigter Ligheden med andre beslægtede Kirker, og Kallundborg Kirkes Form for Overhvælving er noget for sig.

Men dette gælder ogsaa og i fuldt saa høj Grad Kirkens *ydre Opbygning*, som denne er bestemt af Korsarmenes Taarne, der i Forbindelse med Centraltaarnet er af en saa ejendommelig Virkning og mere end noget andet gør Kallundborg Kirke til et saa enestaaende Monument i samtlige Kristenheds Lande. At de 4 Korsarmstærne, konstruktivt set, er saa slet forberedte i deres Opbygning, giver, som allerede anført, den Tanke Rum, at de ikke har været paatænkte fra første Færd, men er komne til under Arbejdets Gang; ogsaa Ejendommeligheder i Taarnenes Murværk peger i samme Retning. Naar Fem-Taarnmotivet har fundet Anvendelse paa Kallundborg Kirke skyldes det øjensynlig een af to Aarsager.

Bestemte Forbilleder kan have foresvævet Bygherren eller Bygmesteren. Det kan være Kirker af Type som de to Justinianske Kirker og St. Marco i Venedig. Disse Kirkers Kupler har paa afgørende Vis markeret Korsarmene opæfter, og i den danske Kirke, hvis indre Kupler savnedes, erstattede man da Kuplernes Virkning i den ydre Opbygning med de i Norden saa yndede Taarne. Man har i saa Tilfælde gjort det samme som en langt senere Tids — 15—16de Aarh.s Bygmestre — gjorde i endnu bevarede ukraineske Trækirker i Form af et græsk Kors, der, ganske som den danske romanske Kirke, pranger med fem Taarne. Men det lader sig ogsaa tænke, at man her staar overfor en Idé, der — hvad enten den skyldes Bygherren eller Bygmesteren — uimodsigeligt er Kirkens mest originale og følgelig betegner en dansk Indsats i Tidens Arkitektur.

Kallundborg Kirke er en i høj Grad enkel Bygning. Dens Virkninger inde og ude beror paa selve Arkitekturen i den — det centraliserede, sluttede Rum, det mangfoldigt sammensatte Ydre og overalt store rolige Flader, kun afbrudt af ret beskedne Lysaabninger og af saare prunkløse Portaler. De *dekorative Motiver*, der er bragt i Anvendelse er saare faa. For Kirkens almindelige Historie og Spørgsmaalet om dens Oprindelse har dog et Par af disse Motiver en betydelig Interesse; de knytter sig til de i Kirkens Indre anvendte Søjleordener — de fire Granitpiller, der bærer Midttaarnet og til de i Væggene forsænkede Halvsøjler.

Anvendelse af Søjler, der bærer Hvælvninger i et treskibet Rum forekommer ikke ellers i Danmark, fraregnet Kryptkirkerne i Lund og Viborg og er overhovedet overodentlig sjælden i nordeuropæisk romansk Arkitektur, naar bortses fra tidligromanske Basilikaer med fladt Loft og fra Motivet: Søjler, der, skiftende med Pille i rytmisk Vekslen, bærer Høj-

the central tower producing so unusual an effect that it, more than anything else, makes Kallundborg Church a unique monument in all Christendom. The four transeptal towers,

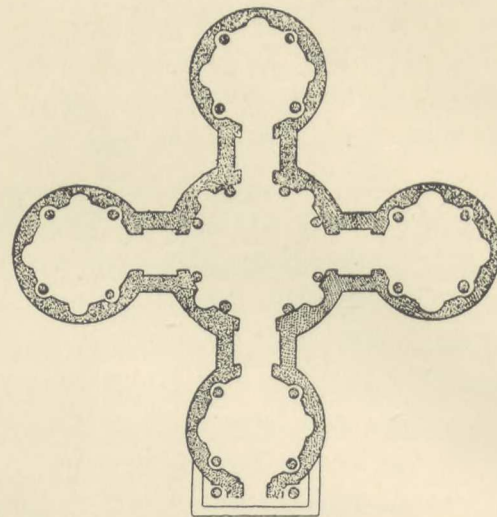


Fig. 42. Antik romersk Bygning. Efter Rivoira.
Antique roman Building. From Rivoira.

are, constructively speaking, poorly prepared which, as has already been said, seems to suggest that they were not originally planned, but added while the building was being erected. That the five-tower motive has been used in Kallundborg Church is apparently due to one of two causes.

The architect or builder may have had definite prototypes in mind, churches of the same type as the two Justinian churches and St. Mark's in Venice. The domes of these churches have very decisively defined the transepts upward, and in the Danish church then, the dome-effect has been gained in external construction by the use of towers which are so greatly esteemed in the north. In that case the same thing has been done as was done by the master-builders of a much later period, the 15th and 16th centuries, in the wooden churches of Ukraine which still exist and which are constructed in the form of a Greek cross, and which, like the Danish Romanesque church, flaunt their five towers. Or it may be that here, in Kallundborg Church, we are brought face to face with an idea, which, whether due to architect or builder, is undeniably the most original part of the church and may show a special Danish contribution to the architecture of the period.

Kallundborg Church is an extremely simple building. The impression it makes within and without, is mainly due to its architecture, — the centralised enclosed room, the multifarious, complex exterior, and everywhere large quiet surfaces, broken only by modest fenestration and very unostentatious entrances. The *decorative motives* used are but sparse. However for the general history of the church and the question of its origin, a few of these are extremely interesting. These are mainly the orders of columns used in the interior, the four granite pillars bearing the central tower and the half-columns sunk in the walls.

The use of columns to bear vaulting in a three-naved hall is found nowhere else in Denmark; except in the crypt churches in Lund and Viborg, and is, moreover, extremely rare in Romanesque architecture in northern Europe if we except the early Roman basilica with flat roofs and the motive, columns, which, alternating with pillars, bear high church walls in se-

kirkemurene i en Række tyske, ligeledes tidligromanske Kirker, særlig i Sachsen. Det er fortrinsvis i Syden, Søjlen er bleven bibeholdt i senere romansk Tid, og den er i Italiens kirke- lige Bygningskunst aldrig helt bleven fortrængt af Pillen, selvom den i Norditalien og særlig i det lombardiske Omraade, allerede tidligt i Middelalderen, er bleven benyttet vekslende med Piller. Det er netop dette Bæresystem, der i Nordeuropa udtrykkelig kaldes »det lombardiske Skema«. Men naar Kallundborg Kirke benytter hvælvingsbærende Søjler i sit Centralparti, har man sikkert Lov til heri at se en Tilknytning til en italiensk Tradition, og der er i denne Sammenhæng atter Grund til at minde om en Bygning som San Satiro i Milano. I særlig Grad leder ogsaa Kallundborgkirkens Søjlekapitæler, der er af udpræget Trapezform, Tanken hen paa Norditalien.

Højest mærkelige er de forsænkede Halvsøjler, der markerede Kirkens liturgiske Hovedakse, idet de kun smykker Gjordbuepillerne ind mod vestre og østre Korsarm.

Motivet er ejendommeligt for den Række større romanske danske Teglstenskirker, der udgør en saa væsentlig og saa vigtig Del af nordeuropæisk Teglstensarkitektur og som allerede er omtalt tidligere. Men udenfor denne Kreds af danske Kirkebygninger kan det kun paavises i et Par belgiske Kirker: Tværskibet i Kathedralen i Tournai fra ca. 1200¹⁴, hvor Motivet er anvendt paa en Maade, der ganske svarer til Anvendelsen i de danske Kirker, og i den indenfor belgisk Arkitektur særprægede Kirke, St. Severin i Condraz ved Liège fra ca. 1150, hvor det er benyttet over Arkadepillerne i Midtskibet i det Murefremspring, der var bestemt til at bære Hvælvingerne her¹⁵. Den Mulighed, at Motivet er benyttet indenfor norditaliensk-lombardisk Murstensarkitektur og derfra gaaet videre til Belgien, vinder i Sandsynlighed ud fra den Omstændighed, at den omtalte treskibede Kirke i Condraz har vekslende Piller og Søjler i Midtskibet. Men om en anden belgisk Kirke, Cistercienserkirken i Rolduc, der blev grundlagt ca. 1200 og var komponeret med samme Bæresystem, siges det udtrykkeligt, — og netop med Hensyn til dette System — at den var planlagt »efter lombardisk Skema« — »scemate lombardico«¹⁶. At Motivet med de forsænkede Halvsøjler ogsaa i Kallundborg Kirke kan skyldes lombardisk Tradition, synes da at have en ikke ringe Sandsynlighed for sig¹⁷.

Mange Spor peger da hen imod Italien, særlig det lombardiske Omraade, som Egne hvor de arkitektoniske Tanker, der ligger til Grund for Kallundborg Kirke, er at søge. Kirkens Centralparti har nu sit mest talende Forbillede i San Satiro i Milano. Ogsaa Motivet med de fire ligelange Korsarme peger mod St. Ambrosius Byggevirkksomhed i samme By og selv Femtaarnmotivet kunde tænkes opstaaet ud fra den af ham opførte Apostelkirke. Mod Italien i Almindelighed pegede Anvendelsen af Søjlen som bærende Hovedled, og endelig syntes de forsænkede Søjler at staa i Forbindelse med lombardisk Byggeskik.

Ganske vist — nogen bestemt Bygning som Forbillede for den danske Kirke lader sig ikke paavise, og det maa tillige indrømmes, at de til dens Plan og Opbygning benyttede Motiver kun kendes fra Bygninger, der er blevne til Aarhundre-

veral German churches, especially in Saxony, but also of early Romanesque origin. It is especially in the south that the column was retained in the later Romanesque period, and in the ecclesiastical architecture of Italy it has never been entirely replaced by the pillar, even though early in the Middle Ages in northern Italy and especially Lombardy, it was used alternately with pillars. This is the system of bearing which in northern Europe is known as the »Lombardy form«. In the vault-bearing columns used in the central section in Kallundborg Church we are right in seeing a connection with Italian tradition, and in recalling a building like San Satiro at Milan. The capitals of the columns in Kallundborg Church, trapezate in form as they are, also lead our thoughts to northern Italy.

Very strange indeed are the sunken half-columns which mark the liturgical main axis of the church, for they are only found decorating the corner pillars toward the east and west transepts.

The motive is characteristic of a series of larger Danish-Romanesque brick churches which form so important a part of the brick architecture of northern Europe and to which reference has already been made. Outside of this series of Danish ecclesiastical buildings, it is only to be found in a few Belgian churches: in the transept of the cathedral at Tournai from about 1200¹⁴, where the motive is used in a way which corresponds to its use in the Danish churches, and in the church of St. Severin at Condraz near Liège, from about 1150, — a church which occupies a special place in Belgian architecture, — it is placed above the pillars of the arcade in the central nave in the pilaster destined to bear the vaultings¹⁵. The possibility that the motive arose in the northern Italian Lombardy brick architecture and passed from thence into Belgium gains probability from the fact that the three-naved church in Condraz referred to above, has alternating pillars and columns in its central nave. But of another Belgian church, the Cistercian church in Rolduc, founded about 1200 and constructed with the same system of vaulting, it is expressly stated, —and the statement applies to this very system,—that it was planned in the »Lombardy form«,—»scemate lombardico«¹⁶. That the motive of the sunken semicolumns in Kallundborg Church, is due to Lombardy tradition seems very probable¹⁷.

Many indications, then, point to Italy, especially Lombardy, as the place where the architectonic thoughts on which Kallundborg Church rests, must be sought. The central section of the church has its most striking prototype in San Satiro in Milan. The motive of the four transepts of equal length suggests the architectural accomplishments of St. Ambrosius in the same city, and even the motive of the five towers might have originated in the Church of the Apostle built by him. In general we must turn to Italy to find the column used as the main motive, and the one of the sunken columns seems to be related to the Lombardy style of building.

True it is, that no definite building can be shown as the prototype of the Danish church, and it must furthermore be admitted, that the motives used in its plan and construction are only known in buildings which were completed centuries before the ground on which the church of Esbern Snare rests,

der før Grunden udgravedes til Esbern Snares Kirke. Det har tilmed i levedygtige, nyskabende Tider i Arkitekturen aldrig været Sæd og Skik at tage altfor direkte Lære af umoderne Bygninger. Og dog vil det være muligt at opretholde Tanken om Lombardiet og særlig Milano som Stedet for Kallundborg Kirkes Herkomst. Her stod, netop i 12te Aarh., Teglstensarkitekturen i sin højeste Blomstring. Teknik og Konstruktioner havde naaet en betydelig Fuldkommenhed og er paa væsentlige Punkter analoge med den danske Kirkes. Og naar et eller flere tydelige Forbilleder for Kallundborg Kirke ikke har været at paavise i Norditaliens Stæder, har det sin rimelige Forklaring i det højst beklagelige Forhold, at af den rige romanske Bygningskunst, der gjorde særlig Milano til den fornemste By i de Tiders arkitektoniske Virke i Italien og langt udenfor dette Lands Grænser, er saare lidt bevaret. Frederik Barbarossas Hævn ramte den blomstrende Stad paa frygtelig Vis. 1162 blev Byen hærget og ødelagt og ved den følgende Genopbygning blev Byen en anden.

Milano kan have ejet Bygningsværker, vi nu ikke kender, men som meget muligt vilde bekræfte, hvad der her kun kan fremsættes som en Formodning — at *Bygmesteren for Kallundborg Kirke maa have kendt kirkelig lombardisk Arkitektur af Selvsyn og muligvis selv have hørt hjemme i Lombardiet.*

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was broken. Moreover in viable, creative, architectural periods it has never been the custom to seek too direct instruction from buildings no longer modern. Yet it is impossible to dismiss the thought that in Lombardy, and more especially in Milan, the origin of Kallundborg Church is to be sought. Here, and just in the 12th century, brick architecture stood in its flower. Technical details and construction had attained a great degree of perfection and at important points are analogous to those in this Danish church. If it is impossible to actually point out one or several prototypes for Kallundborg Church in northern Italy, the explanation lies in the very-much-to-be-regretted fact that of the rich Romanesque architecture which made Milan the most important city from an architectural point of view of those times in Italy, and indeed far outside the boundaries of that country as well, very little still exists. The revenge of Frederick Barbarossa fell with frightful might upon that fair capital. In 1162 the city was harried and destroyed, and when rebuilt, it was quite another.

Milan may have possessed buildings we no longer know, but which would very possibly confirm what here can only be urged as a conjecture, — *that the architect of Kallundborg Church must have been acquainted with the ecclesiastical architecture of Lombardy through personal knowledge and may even have been a native of Lombardy.*

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NOTER

I

¹ Om Øvrebyens Anlægsform og Befæstning se Hugo Matthiessen: *Architekten XXII* og C. M. Smidt: *Hist. Aarb. for Holbæk Amt*, 1908.

² *Bjernede Kirke*: I. B. Løffler: *Sorø Akademis Landsbykirker* p. 1 ff. Hugo F. Frölén: *Nordens befæsta Rundkyrkor II*, p. 16 ff.

Store Hedinge Kirke: Tegner. af ældre nordisk Arkitektur III S., I. R. Vilh. Lorenzen: *Églises à plan rayonnant en Danemark* i *Revue de l'art Chrétien* 1907. — ¹⁵/₁₆ 1529 fik N. Clausen Livsbrev paa den Grund i Hedinge, der kaldes *Kongsgaarden*. Denne Ejendom er den nuværende Gaard Erikstrup, hvis Jorder støder tæt op til Kirken mod Øst. (Erslev og Møllerup: *Kong Frederik den Førstes danske Registr.* p. 214) Kong Valdemars Jordebog nævner blandt Kongelevet: Hædding cum attinenciis suis. (Udg. af O. Nielsen, p. 47).

Selsø Kirke: Hugo Frölén: *Anf. V. II*, p. 144 ff. — Hovedgaarden Selsøgaard laa tidligere umiddelbart Syd for Kirken. Paa Valdemar Atterdags Tid tilhørte den Kronen (Ældre danske Arkivregistraturer I, p. 62), senere Roskilde Bispestol.

Thorsager Kirke: H. B. Storck og M. Clemmensen: *Danske Teglstenskirker* 1918 p. 18 f. Hugo Frölén: *Anf. V. II* p. 23 ff. — I Kong Valdemars Jordebog (Udg. af O. Nielsen, p. 7) omtales blandt Kong Valdemars fædrene Gods Storsakær cum attinenciis suis, 100 m auri. — Den Kongsgaard, der maa have været her, er mulig senere af Erik Menved flyttet til Kalø (omtalt første Gang 1323). Endnu i Slutningen af 17de Aarh. fandtes Thorsager Birk (Kronens Skøder II, 94), der da laa under Kalø.

Horne Kirke: Hugo Frölén: *Anf. V. II*, p. 28 ff. I Kong Valdemars Jordebog (Udg. af O. Nielsen, p. 22) opført blandt Kong Valdemars fædrene Gods: Horn cum attinenciis suis valet XXX m. auri. Den Kongsgaard, der maa antages at have ligget i Horne, er formodentlig senere fortsat i den nuværende Hovedgaard Hvedholm (W. Norvin: *Danske Herregaarde* ved 1920).

Himlingøje Kirke: Hugo Frölén II, p. 149 ff. — I Sognet fandtes tidligere en Lokalitet, Grubbeholm, der tilligemed flere Gaarde i Byen i Midten af 14de Aarh. ejedes af Slægten Grubbe (Erslev: *Repertorium* 3098). — Der kan her muligvis være Tale om en Hovedgaard, der er flyttet ud af Landsbyen.

En Centralkirke som *St. Mikaelsskirken i Slesvig By* fra 12. Aarh. (J. Helms: *Danske Tufstenskirker I*; Samme: *Architekten* 1905. Hugo Frölén: *Anf. V. II*, p. 5 ff) kan mulig tænkes opført i Forbindelse med et nu ukendt Borganlæg; den ligger meget højt i den gamle Bys nordligste Udkant, tæt indenfor den gamle Fæstningslinie. At dens Opførelse staar i Forbindelse med en kongelig Besiddelse, kunde fremgaa af den Omstændighed, at Knud VI 1196 lod Guldholm Klosteret Nord for Byen oppebære Kirkens Indkomster mod at varetage Gudstjenesten i Kirken.

St. Thøgers Kirke i Vestervig i Jylland fra 12te Aarh., der omtales som et Centralanlæg i Form af et græsk Kors og forlængst er forsvunden, foreligger desværre meget mangelfuldt oplyst, saa det ikke med Sikkerhed kan fastslås, om den ogsaa fra første Færd har haft denne Form. (J. B. Løffler: *Udsigt over Danmarks romanske Kirkebygninger*, p. 152 f.). At det nærliggende Augustinerkloster antagelig er oprettet af Krongods kunde peges hen paa Tilstedeværelse af en Kongsgaard paa Stedet.

³ Tegner. af ældre nord. Arkitektur, I. S., 3. R. J. L. Ussing: *Ledøje Kirke* og de tyske Dobbeltkapeller i *Det filosofiske Fakultets Festskrift* 1879.

II

¹ *Danske Mindesmærker*, Kbhvn., 1869, S. 1—7, Pl. I—III. J. B. Løffler: *Udsigt over Danmarks Kirkebygninger*, Kbhvn. 1883, S. 238—242. H. Storck: *Tegninger af ældre nordisk Arkitektur*, IV Samling, 3. Række, Pl. 1—5. *Aarbøger for nordisk Oldkyndighed og Historie*, 1895, S. 71 ff. — 1899, S. 46 ff. — 1902, S. 37 ff.

² Om dette Forhold se: Mogens Clemmensen: *Udvendig Murbemaling i Renæssancetiden*, »*Architekten*» XX, S. 428 ff. Til de nævnte romanske Eksempler kan nu ogsaa føjes Ringsted Kirke og Aarhus Domkirke.

³ Lige indenfor Aftrykket af den nordre Sidearmssten fandtes Rester af det oprindelige, indmurede Stabeljern for Døren, der altsaa har hængt i højre Side (udefra), medens middelalderlige Døre i Reglen hænger i venstre Side.

⁴ Antagelig har denne Dør kunnet stænges udefra og været den, man gik ud ad, naar de øvrige var stænget indefra.

NOTES

I

¹ For the plan and fortification of the upper town, see Hugo Matthiessen: *Architekten XXII* and C. M. Smith: *Hist. Aarb. for Holbæk Amt*, 1908.

² *Bjernede Church*: J. B. Løffler: *Sorø Akademis Landsbykirker*, p. 1 ff. Hugo F. Frölén: *Nordens befæsta Rundkyrkor II*, p. 16 ff.

Store Hedinge Church: Tegner. af ældre nord. Arkitektur III. S., I. R. Vilh. Lorenzen: *Églises à plan rayonnant en Danemark* in *Revue de l'art chrétien* 1907. — In June 15, 1529 N. Clausen received a life title to the property in Hedinge known as *Kongsgaarden*. This domain is now known as Erikstrup Farm whose fields adjoin the church on the east. (Erslev and Møllerup: *Kong Frederik den Førstes danske Registr.* (The Danish Rent-roll of King Frederick I, p. 214). King Valdemar's Rent-roll mentions among the letters patent: Hædding cum attinenciis suis. (Pub. by O. Nielsen, p. 47.)

Selsø Church: Hugo Frölén: I. c. II, p. 144 ff. — The main farm, Selsø Farm, formerly lay due south of the church. At the time of King Valdemar Atterdag it belonged to the crown, (Ældre danske Arkivregistraturer I, p. 62) later to the bishopric of Roskilde.

Thorsager Church: H. B. Storck and M. Clemmensen: *Danske Teglstenskirker* (Danish brick churches), 1918, p. 18 ff. Hugo Frölén: I. c. II, 23 ff. — In King Valdemar's Rent-roll (Pub. by O. Nielsen, p. 7) mention is made among King Valdemar's ancestral lands of Storsakær cum attinenciis suis 100 m auri. — The Kongsgaard (King's Farm) which must have been located here was possibly moved later by Erik Menved to Kalø (first mentioned 1323). As late as the close of the 17th century Thorsager Birk (county) existed (Kronens Skøder II, 94), and it then belonged under Kalø.

Horne Church: Hugo Frölén: I. c. II, p. 28 ff. In King Valdemar's Rent-roll (pub. by O. Nielsen, p. 22) mentioned among the ancestral possessions of King Valdemar. Horn cum attinenciis suis valet XXX m. auri. The royal farm which was presumably located at Horne was possible later transferred to the present main farm Hvedholm (W. Norvin: *Danske Herregaarde* ved 1920).

Himlingøje Church: Hugo Frölén II, p. 149 ff. There was formerly in the parish a locality, Grubbeholm, which, with several other farms of the town, belonged in the middle of the 14th century to the Grubbe family. (Erslev: *Repertorium* 3098). There may perhaps have been a main farm which was moved away from the town.

A central church like *St. Michaels in the town of Slesvig* from the 12th century (J. Helms: *Danske Tufstenskirker I*; same, *Architekten* 1905. Hugo Frölén: I. c. II, p. 5 ff.), may possible have been built in connection with a castle no longer known. It has a very high location in the northern outskirts of the old town, just inside ancient line of fortifications. That it was built under royal protection might be proved by the fact that in 1196, Knud VI allowed Guldholm cloister north of the city to receive the revenues of the church and be responsible for the church services.

Of *St. Thøgers Church in Vestervig*, Jutland, from the 12th century, which is mentioned as being a central construction in the form of a Greek cross, and long since disappeared, very few facts are known, so it is impossible to state whether that was its original form or not. (J. B. Løffler: *Udsigt over Danmarks romanske Kirkebygninger*, p. 152 f.) That the nearby Augustine cloister was presumably built on crown lands seems to indicate that there was once a royal farm there too.

³ Tegner. af ældre nord. Arkitektur, I. S., 3. R. J. L. Ussing: *Ledøje Kirke* og de tyske Dobbeltkapeller i *det filosofiske Fakultets Festskrift* 1879.

II

¹ *Danske Mindesmærker*, Copenhagen, 1869 pp. 1—7, Pl. I—III. J. B. Løffler: *Udsigt over Danmarks Kirkebygninger*, Copenhagen, 1883, pp. 238—242. H. Storck: *Tegn. af ældre nordisk Arkitektur*, IV. Samling, 3. Række, Pl. 1—5. *Aarbøger for nordisk Oldkyndighed og Historie*, 1895, pp. 71 ff. — 1899, p. 46 ff. — 1902, p. 37 ff.

² On this point see: Mogens Clemmensen: *Udvendig Murbemaling i Renæssancetiden*, »*Architekten*» XX, p. 428 ff. — To the examples of Romanesque architecture already mentioned, may be added Ringsted Church and Aarhus Cathedral.

³ Just inside the impression of the northern jamb remnants were found of the original walled-in iron hinge of the door. This, then, has hung on the right side (from without), whereas, as a rule, doors from the Middle Ages hang on the left side.

⁴ Presumably this door could be barred from without and was the one used for exit when the others were barred from within.

⁵ At Portalens høje Fremspring har været tænkt som og har virket som en Stræbepille for Taarnet, turde fremgaa af, at dettes Murværk havde slaet en stor Revne opefter fra Portalaabningen, efter at Fremspringet i 1870 blev fjernet, idet der blev for svage Piller mellem Portalen og Vinduerne paa begge Sider. Under Ombygningen ved sidste Restaurering udvidede denne Revne sig, da Granitkarmen blev udtaget, til Trods for den stærke Tømmerafstivning, indtil Fremspringet var muret helt op og kunde give den fornødne Støtte.

⁶ Høyens Dagbøger i Nationalmuseets Arkiv. — Sjælland, 1832.

⁷ Velvilligst udlånt af hans Søn, Arkitekt Gotfred Tvede.

⁸ Naar man ved den sidste Restaurering gav de to Portaler Granitsokkel, skyldes det først og fremmest praktiske Hensyn.

⁹ Profilet er vist paa Pl. IX nederst tilhøjre. — De to smalle Vinduer ved Vindeltrappen i sydøstre Hjørne har paa Grund af Pladsmangel og den mindre Smigvinkel ingen Profiler.

¹⁰ Fig. 15 fra: Tegn. af ældre nordisk Architectur, IV S., 3. R., Pl. 5.

¹¹ Derved er Gesimsen paa østre Side ved sydøstre Hjørne fejlagtig muret med alle 3 Skifter udkragede.

¹² Bly fandtes i smeltet Tilstand løbet ned mellem Stenene i den vandrette Udmuring over Tøndehvælvingen i søndre Korsarm.

¹³ I et diagonalt stillet Bombul kan baade en rund og en firkantet Bom anbringes i fast Leje, selv om Bommen er af mindre Dimensioner end Hullet.

¹⁴ Otto Blom: Befæstede Kirker i Danmark fra den ældre Middelalder. Aarb. f. nord. Oldk. og Hist., 1895, S. 71 ff. — Emil Ekhoft: Om kyrkornas forna egenskab af försvarsverk. Aarb. 1899, S. 46 ff. — J. B. Löffler og M. Mackeprang: Har Kallundborg Kirke haft Murkrone og Skyttegang? Aarb. 1902, S. 37 ff.

¹⁵ J. Kornerup: Roskilde Domkirke, Kbhvn. 1877, Pl. III og V.

¹⁶ Som foran nævnt er der ogsaa andre Steder i Kirken fundet smeltet Bly, der viser, at Kirkens Tagværk er brændt engang i ældre Tid. Det vides, at Kirken brændte 1314. *Scriptores rerum danicarum*. Hafniae 1772. I, S. 190. — Ogsaa 1776 var der Ild i Kirken.

¹⁷ Disse er efterlignede paa de nye Spir, men er ikke gengivne paa de smaa Taarngavle paa Pl. II, III og IV.

¹⁸ E. Pontoppidan: Den danske Atlas, Kbhvn. 1764, II, S. 412.

¹⁹ Den egentlige Aarsag til at Taarnet styrtede ned, har sikkert været, at Begravelser i Kirkegulvet var ført for nær ind til Søjlefundamenterne.

²⁰ Hvælvingerne i Midtskibet blev knuste ved Taarnets Nedstyrtning og genopførte i 1870 i en misforstaaet Form, hvorfor de atter blev ombyggede ved den sidste Restaurering.

²¹ E. F. S. Lund: Danske malede Portræter, Kbhvn. 1903. IX, S. 95.

²² Harry Fett: Norges Kirker i Middelalderen, Kristiania 1909, S. 31. Herfra er Fig. 24 laant.

²³ L. Dietrichson: De norske Stavkirker. Kristiania og København, 1892.

²⁴ Disse Halvsøjler blev delvis fremdragne i 1905 og undersøgt af Arkitekt C. M. Smidt for Nationalmuseet.

²⁵ Afbildet i: Tegn. af ældre nordisk Architectur, IV S., 3. R., Pl. 5.

²⁶ Ganske tilsvarende Ornament findes i S. Ambrogio i Milano. Dartein: *Etude sur l'architecture lombarde*, Pl. 35. I og Pl. 42. XXII. — Et beslægtet Ornament findes i Siponto. Wackernagel: *Die Plastik des XI. und XII. Jahrh. in Apulien*, Pl. II e.

III

¹ Danske Mindesmærker. Pl. XXXVII.

² Danske Mindesmærker. Pl. VII. J. B. Löffler: Udsigt over Danmarks Kirkebygninger, S. 227 ff. — En lignende Søjlebasis findes i Vordingborg, vistnok stammende fra den romanske Borgkirke. Aarb. f. nord. Oldk. og Historie, 1906, S. 320.

³ H. Storck og M. Clemmensen: Danske Teglstenskirker, Kbhvn. 1918, Pl. 35 og 38.

⁴ Löffler: Udsigt over Danmarks Kirkebygninger. S. 253.

⁵ J. B. Löffler: Ruinerne af Vitskøl Klosterkirke. København 1900. Pl. II og III, 4.

⁶ M. Mackeprang i: Tegninger af ældre nordisk Architectur, VI S., 2. R.

⁷ H. Storck: Grenaa-egnens Kridtstenskirker, Kbhvn. 1896, Pl. 26.

⁸ Dahlerup, Holm og Storck: Tegn. af ældre nordisk Architectur, Kbhvn. 1872, Pl. 1.

⁹ Særegent for Kallundborg Kirke er den runde Niche med den smalle Lysaabning bag Søjlen. Man fristes til at tro, at denne Aabning har været tænkt som et Skydeskaar, der sad godt dækket bag Søjlen, men hvorfra en Skytte har kunnet bestryge et stort Terrain uden selv at være særlig udsat. Man kan saaledes ikke nærme sig Kirken fra noget Punkt uden samtidig at være udsat for at blive ramt fra mindst 8 af Taarnenes Skydeskaar.

¹⁰ Hans J. Holm: Bornholmske Kirker, Pl. 13 og 19.

¹¹ E. Pontoppidan: Den danske Atlas, II, S. 412.

¹² J. B. Löffler: Udsigt over Danmarks Kirkebygninger. S. 170.

¹³ En Publikation om Kirken i Ringsted er under Udgivelse af H. Storck og Mogens Clemmensen.

¹⁴ J. B. Löffler: Udsigt over Danmarks Kirkebygninger. S. 221.

¹⁵ E. Wrangel: Lunds Domkyrkas äldsta ornamentik. I Aarb. f. nord. Oldk. og Hist., 1910, S. 101 ff.

⁵ That the high projection of the wall not only was planned as, but has filled the office of a buttress for the tower is proved by the fact that the wall of the tower sprung a great crack from the opening of the entrance upwards after the projection was removed in 1870, for the piers between the entrance and the windows on both sides were too weak. Under building during the last restoration, when the granite casement was removed, in spite of staying with heavy timber, this crack widened until the projection was entirely walled up and could furnish the required support.

⁶ Høyens Dagbøger in the archive of the National Museum. — Zealand, 1832.

⁷ Kindly lent by his son, the architect, Mr. Gotfred Tvede.

⁸ That these two entrances were given granite socles under the last restoration is due, first and foremost, to practical grounds.

⁹ The two narrow windows near the winding stairway in the southeastern corner have no profiles, due to lack of room and the lesser angle of the bevel.

¹⁰ Fig. 15 from: Tegn. af ældre nord. Architectur. IV S., 3. R., Pl. 5.

¹¹ Then, by a mistake, the cornices on the east side by the southeast corner were bricked with all three courses corbelled.

¹² Lead was found to have melted and run down between the stones in the horizontal outer bricking above the barrel-vaulting in the south transept.

¹³ In a diagonally placed bar-hole both circular and square bars can be placed firmly, even though the bar is of smaller dimension than the hole.

¹⁴ Otto Blom: Befæstede Kirker i Danmark fra den ældre Middelalder. Aarb. f. nord. Oldk. og Hist. 1895, p. 71 and ff. — Emil Ekhoft: Om kyrkornas forna egenskab af försvarsverk. Aarb. 1899, p. 46 and ff. — J. B. Löffler and M. Mackeprang: Har Kallundborg Kirke haft Murkrone og Skyttegang. Aarb. 1902, p. 37 and ff.

¹⁵ J. Kornerup: Roskilde Domkirke, Copenhagen 1877, Pl. III and V.

¹⁶ In other parts of the church, as has already been stated, melted lead has been found showing that the church roof was burned once at an earlier period. The church is known to have burned in 1314. *Scriptores rerum danicarum*. Hafniae. 1772. I, p. 190. — In 1776 there was also a fire in the church.

¹⁷ These are imitated on the new spire, but are not repeated on the small tower gables in Pl. II, III and IV.

¹⁸ E. Pontoppidan: Den danske Atlas, Copenhagen, 1764, II, p. 412.

¹⁹ The real reason why the tower collapsed was because graves were dug in the church floor too near the base of the columns.

²⁰ The vaultings of the central nave were crushed by the fall of the tower and rebuilt in 1870 in a mistaken form, for which reason they were again rebuilt under the last restoration.

²¹ E. F. S. Lund: Danske malede Portræter. Copenhagen, 1903. IX, p. 95.

²² Harry Fett: Norges Kirker i Middelalderen, Christiania 1909, p. 31, Fig. 24 is taken from this work.

²³ L. Dietrichson: De norske Stavkirker. Christiania and Copenhagen, 1892.

²⁴ These semi-columns were partly uncovered in 1905 and were examined by the architect C. M. Smidt for the National Museum.

²⁵ Pictured in: Tegn. af ældre nordisk Architectur, IV S., 3. R., Pl. 5.

²⁶ Quite similar ornaments are found in San Ambrogio in Milan. Dartein: *Étude sur l'architecture lombarde*, Pl. 35, I and Pl. 42, XXII. — An ornament having some points in common is to be found in Siponto. Wackernagel: *Die Plastik des XI. und XII. Jahrh. in Apulien*, Pl. II e.

III

¹ Danske Mindesmærker. Pl. XXXVII.

² Danske Mindesmærker. Pl. VII. J. B. Löffler: Udsigt over Danmarks Kirkebygninger, p. 227 ff. — A similar base of a column is found in Vordingborg, presumably from the Romanesque castle church. Aarb. f. nord. Oldk. og Hist., 1906, p. 320.

³ H. Storck and M. Clemmensen: Danske Teglstenskirker, Copenhagen, 1918, Pl. 35 and 38.

⁴ Löffler: Udsigt over Danmarks Kirkebygninger. p. 253.

⁵ J. B. Löffler: Ruinerne af Vitskøl Klosterkirke. Copenhagen 1900, Pl. II and III, 4.

⁶ M. Mackeprang in: Tegninger af ældre nordisk Architectur, VI S., 2. R.

⁷ H. Storck: Grenaa-egnens Kridtstenskirker, Copenhagen, 1896, Pl. 26.

⁸ Dahlerup, Holm and Storck: Tegn. af ældre nord. Architectur, Copenhagen, 1872, Pl. 1.

⁹ Peculiar to Kallundborg Church is the round niche with the narrow piercing behind the column. One is tempted to believe that this piercing was planned as a loophole, well protected behind the column, from which a marksman could control a wide territory without being much exposed himself. It is impossible to approach the church from any point without running the danger of being hit from at least 8 of the loopholes of the towers.

¹⁰ Hans J. Holm: Bornholmske Kirker, Pl. 13 and 19.

¹¹ E. Pontoppidan: Den danske Atlas, II, p. 412.

¹² J. B. Löffler: Udsigt over Danmarks Kirkebygninger, p. 170.

¹³ An article on Ringsted Church by H. Storck and Mogens Clemmensen is under publication.

¹⁴ J. B. Löffler: Udsigt over Danmarks Kirkebygninger, p. 221.

¹⁵ E. Wrangel: Lunds Domkyrkas äldsta ornamentik. In Aarb. f. nord. Oldk. og Hist. 1910, p. 101 ff.

- ¹ G. T. Rivoira: *Moslem Architectures* 1918, Fig. 166.
- ² v. Wilmovsky: *Der Dom zu Trier*. 1874.
- ³ Borrmann u. Neuwirth: *Gesch. d. Baukunst* I, 304.
- ⁴ Strykowski: *Die Baukunst d. Armenier u. Europa* I, p. 95 ff.
- ⁵ G. T. Rivoira: *Anf. Værk* p. 188.
- ⁶ O. Wulff: *Altchristliche u. byz. Kunst* II, Abb. 386.
- ⁷ Rivoira: *Anf. V.* p. 286.
- ⁸ R. de Lasteyrie: *L'architecture religieuse en France à l'époque romane*, p. 145.
- ⁹ Det er dog værd at anføre, at ved en Udvidelse eller Ombygning af St. Lars Kirke i Visby paa Gotland fra Begyndelsen af 13de Aarh. møder os et Skib, der er komponeret over samme Planmotiv og hvis Hvælvingssystem er det samme som Kallundborg Kirkes. Da dette Bygningsværk er noget yngre end den danske Kirke, synes den Mulighed ikke udelukket, at Kallundborgkirken er Visbykirkens Forudsætning. Dette kunde yderligere finde en Bekræftelse i, at der ogsaa til Visbykirkens Centralparti knytter sig ligelange Udløberfløje mod Nord, Vest og Syd, saa denne Del af Kirken nærmer sig Formen af et græsk Kors. H. Hildebrand i *Wisby och dess Minnesmärken*, p. 91 ff. Tegn. af ældre nordisk Architektur, III S., 3. R.
- ¹⁰ Ejendommeligt nok kan en beslægtet Plantype paavises i en Række nogenlunde samtidige Monumenter — ikke blot i Danmark, men ogsaa i de to øvrige skandinaviske Lande. Det er i Skibet i den mærkeligt selvstændigt udformede Gruppe Rundkirker, der her i Danmark er repræsenteret af de allerede tidligere i anden Sammenhæng nævnte Kirker Bjernede, Horne og Thorsager, i Sverige af Valleberga Kirke i Skaane (Hugo F. Frölén: *Anf. V.* II, p. 16 ff.). Alle disse Kirkers Skib har tilfælles med Kallundborg Kirke den centraliserede Plan med herskende kvadratisk Fag, og ogsaa i disse Kirker er Midtfaget i det Ydre markeret af et Centraltaarn. Den afgørende Forskel er, at Planen her er cirkulær, og Ligheden med den i Kallundborg Kirke forekommende rent antike Planordning er øjensynlig fremkommen rent tilfældigt paa Grund af disse Skibes runde Form. De er at opfatte som stærkt reducerede Gentagelser af de store statelige Rundkirker med pille- eller søjlebaaret Midtparti, der er saa talrige i den romanske Kirkebygningskunsts førende Lande. Et kvadratisk Skib med lignende Inddeling af Hvælvingfag som Midtpartiet af Kallundborg Kirke forekommer ogsaa i den noget yngre Dobbeltkirke, Ledøje paa Sjælland, der er opført med tyske Dobbeltkapeller som Forbillede. (*Revue de l'art chrétien* 1906: Vilh. Lorenzen: *Les églises à plan rayonnant en Danemark*). Men alle Fag i Kirken i Ledøje er tilnærmelsesvis lige store, og det for Plantypen særlig karakteristiske Træk, at Midtfaget er det herskende, mangler.
- ¹¹ Osc. Wulff: *Altchristl. u. byzant. Kunst* II, p. 380 ff.
- ¹² R. de Lasteyrie: *Anf. V.* p. 185.
- ¹³ St. Front i Perigieux var — efter de nyeste Undersøgelser — anlagt i Form af et latinsk Kors. R. de Lasteyrie: *Anf. V.* p. 469 f.
- ¹⁴ R. Lemaire: *Les origines du style gotique en Brabant*, 1906, p. 38.
- ¹⁵ *Anf. V.* p. 55.
- ¹⁶ E. Måle: *L'art allemand* 1917, p. 82.
- ¹⁷ At Motivet har en ældre og fornem Afstamning og i Virkeligheden stammer fra antik Arkitektur, viser et af Piranesi gengivet gammelt romersk Gravmæle, opført af Mursten. Mærkværdigt nok forekom Motivet i sin rene form fra Danmark kendte Form som Indfatning om Blændingsbuer i den tidlig middelalderlige Kirke i Ammon i Moab. (J. Strykowski: *Ursprung d. christl. Kirchenkunst* 1920, Afb. 29.).

ILLUSTRATIONER

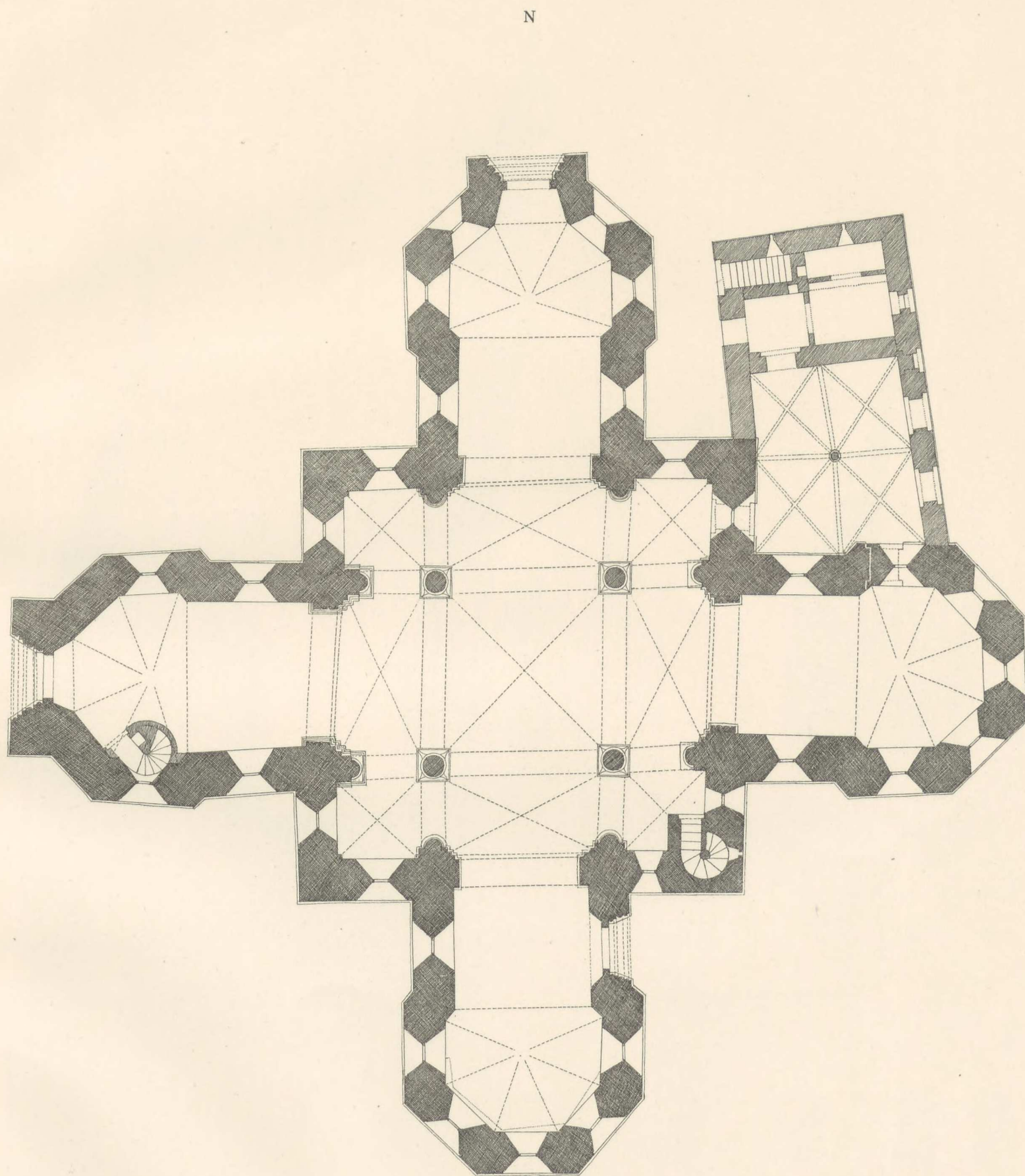
Fig. 2 og 16 er efter gamle Billeder i Kallundborg Museum. — Fig. 5 og 17 efter gamle Tegninger i Nationalmuseets Arkiv. — Fig. 6, Kr. Hude fot. — Fig. 14, 29 og 30, samt Vignet S. 24, M. Mackeprang fot. — Fig. 8, 13 og 22, M. Clemmensen fot. — Vignet S. 5 efter en Tegning af J. Kornerup, 1851 (Privateje). — Fig. 31, Tegning fra Fr. V's Danske Atlas (Store kgl. Bibliotek). — Alle de øvrige Fotografier af Kallundborg Kirke skyldes Fotograf Ad. Jeppesen i Kallundborg.

- ¹ G. T. Rivoira: *Moslem Architecture* 1918, Fig. 166.
- ² v. Wilmovsky: *Der Dom zu Trier*. 1874.
- ³ Borrmann u. Neuwirth: *Gesch. d. Baukunst* I, 304.
- ⁴ Strykowski: *Die Baukunst d. Armenier u. Europa*, I, p. 95 ff.
- ⁵ G. T. Rivoira: *I. c.*, p. 188.
- ⁶ O. Wulff: *Altchristliche u. byz. Kunst* II, Abb. 386.
- ⁷ G. T. Rivoira: *I. c.*, p. 286.
- ⁸ R. de Lasteyrie: *L'architecture religieuse en France à l'époque romane*, p. 145.
- ⁹ However mention must be made of the fact that in enlarging and rebuilding St. Lars' church in Visby, Gotland, dating from the beginning of the 13th century, we find a nave built on the same plan-motive and with a system of vaulting similar to that of Kallundborg church. As this building is somewhat younger than the Danish church, it is not impossible that Kallundborg Church is the prototype of Visby Church. This theory is further strengthened when we note that adjoining the central section of Visby Church are transepts extending equally far toward the north, west and south, so that part of the church suggests the form of a Greek cross. H. Hildebrand in: *Wisby och dess Minnesmärken*, p. 91 ff. Tegn. af ældre nordisk Architektur, III S., 3. R.
- ¹⁰ Strangely enough a related type of plan may be found in a series of somewhat contemporaneous monuments, — not only in Denmark, but in the two other Scandinavian countries as well. This is in the nave in the curious, independently developed group of round churches, represented here in Denmark by Bjernede, Horne and Thorsager, already mentioned in another connection, and in Sweden by Valleberga church in Skaane (Hugo F. Frölén: *I. c.* II, p. 16 ff.). The naves of all these churches have, in common with Kallundborg church, a centralised plan with dominating square sections, and in these churches, too, the central section is further emphasized by a central tower. The decisive difference is that here the plan is circular and the resemblance to the pure antique plan-arrangement of Kallundborg church has apparently arisen by chance on account of the circular form of these churches. They must be considered as greatly reduced repetitions of the large stately, circular churches with a central section borne aloft by pillars or columns, so numerous in countries where Romanesque ecclesiastical architecture prevails. A square nave with the vaulted sections divided, as in the central section of Kallundborg Church, is also seen in the much younger double church, Ledøje, Zealand, which is constructed with the German double chapels as prototype. (*Revue de l'art chrétien* 1906: Vilhelm Lorenzen: *Les églises à plan rayonnant en Danemark*). However all the rooms in the Ledøje church are of approximately the same size, and the characteristic feature of this type of plan, — a dominating central section, — is wanting.
- ¹¹ Osc. Wulff: *Altchristl. u. byzant. Kunst* II, p. 380 ff.
- ¹² R. de Lasteyrie: *I. c.* p. 185.
- ¹³ St. Front in Perigieux was, according to the most recent investigations, built in the form of a Latin cross. R. de Lasteyrie: *I. c.*, p. 469 ff.
- ¹⁴ R. Lemaire: *Les origines du style gotique en Brabant*, 1906, p. 38.
- ¹⁵ *I. c.* p. 55.
- ¹⁶ E. Måle: *L'art allemand* 1917, p. 82.
- ¹⁷ That the motive has an older, aristocratic origin and is really derived from antique architecture is shown by an old Roman epitaph, quoted by Piranesi and built in brick. Strangely enough the motive in its pure form as known in Denmark appeared as the frame about the arch of the niches in a church of the early Middle Ages at Ammon in Moab. (J. Strykowski: *Ursprung d. christl. Kirchenkunst* 1920, Afb. 29.).

ILLUSTRATIONS

Fig. 2 and 16 are from old pictures in Kallundborg Museum. — Fig. 5 and 17 from old drawings in the Archive of the National Museum. — Fig. 6, photograph by Kr. Hude. — Fig. 14, 29 and 30 as well as the vignette, p. 24 from photographs by M. Mackeprang. — Fig. 8, 13, 22 from photographs by M. Clemmensen. — The vignette on p. 5 is from a drawing by J. Kornerup, 1851 (Private possession). — Fig. 31 a drawing from Frederik V's Danish Atlas (Royal Library). — All the other photographs of Kallundborg Church were taken by the photographer Ad. Jeppesen of Kallundborg.

KALLUNDBORG KIRKE



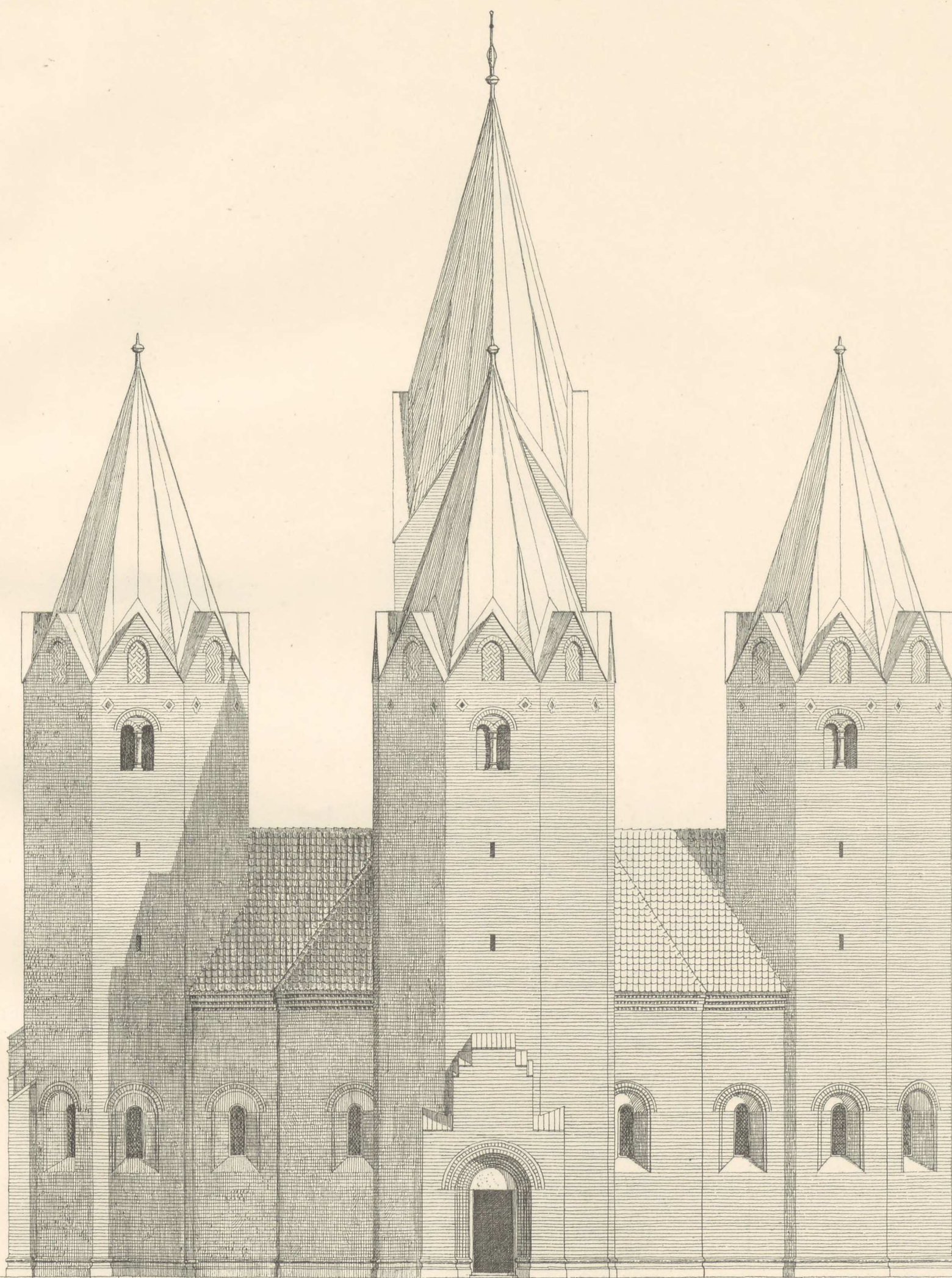
S

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 Meter.

1 : 150

PLAN

KALLUNDBORG KIRKE



0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 Meter.

1 : 150

VESTSIDE

WEST ELEVATION

KALLUNDBORG KIRKE



0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 Meter.

1 : 150

ØSTSIDE

EAST ELEVATION

KALLUNDBORG KIRKE



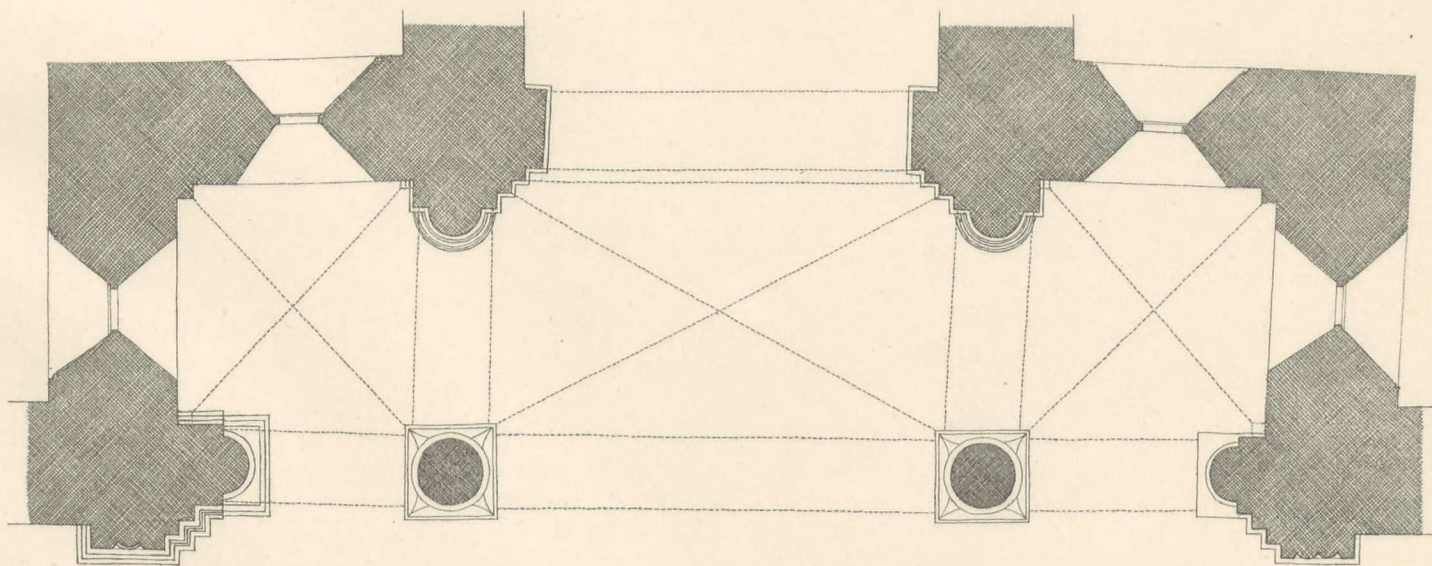
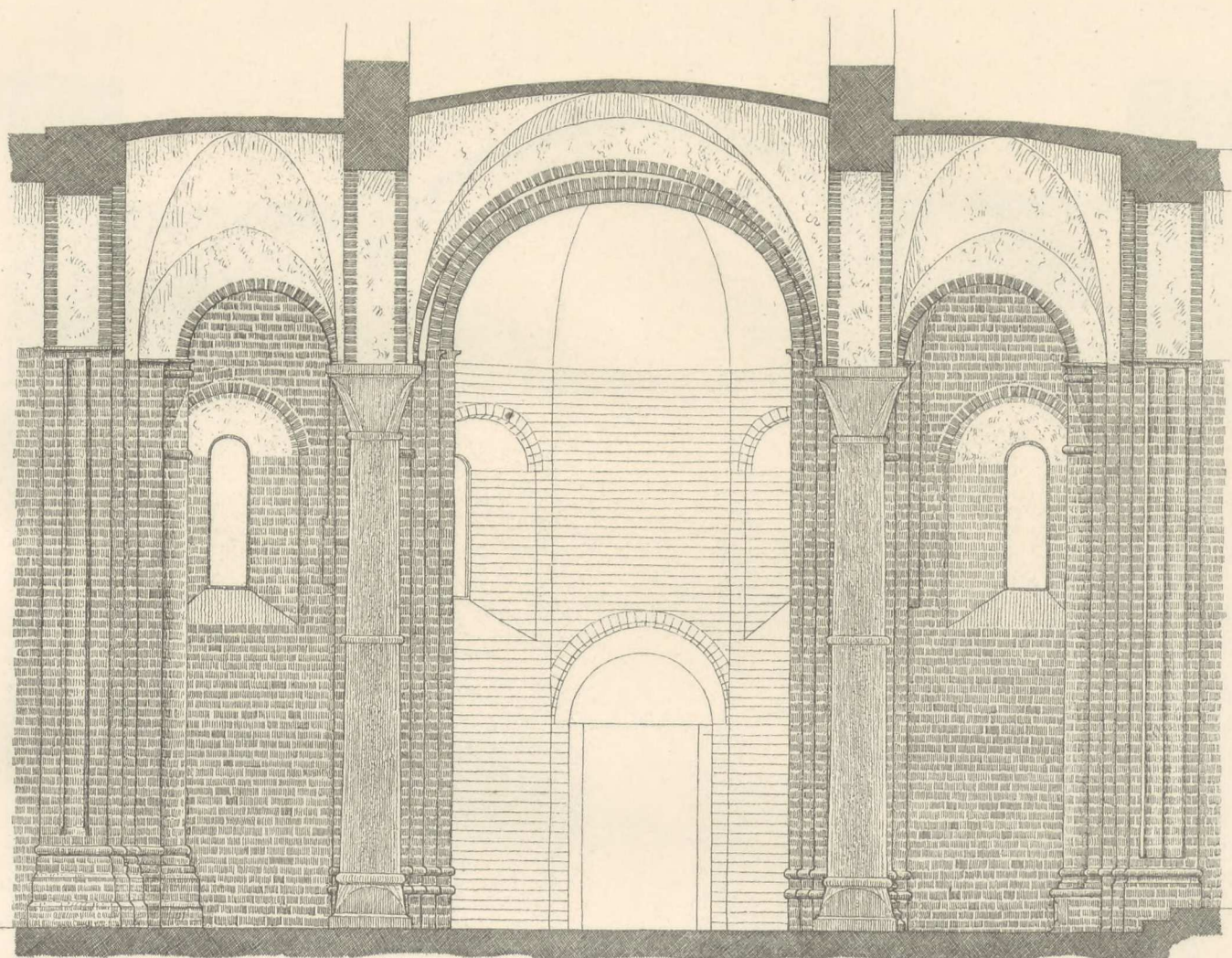
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 Meter.

1 : 150

SNIT ØST—VEST

SECTION EAST—WEST

KALLUNDBORG KIRKE



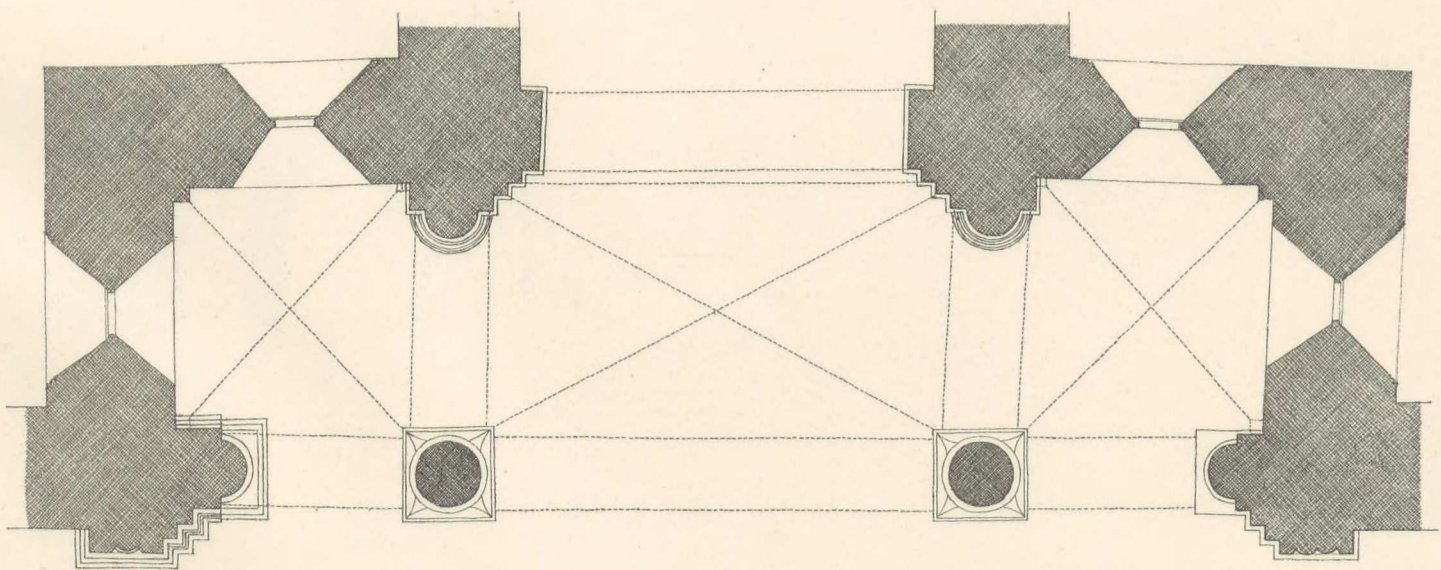
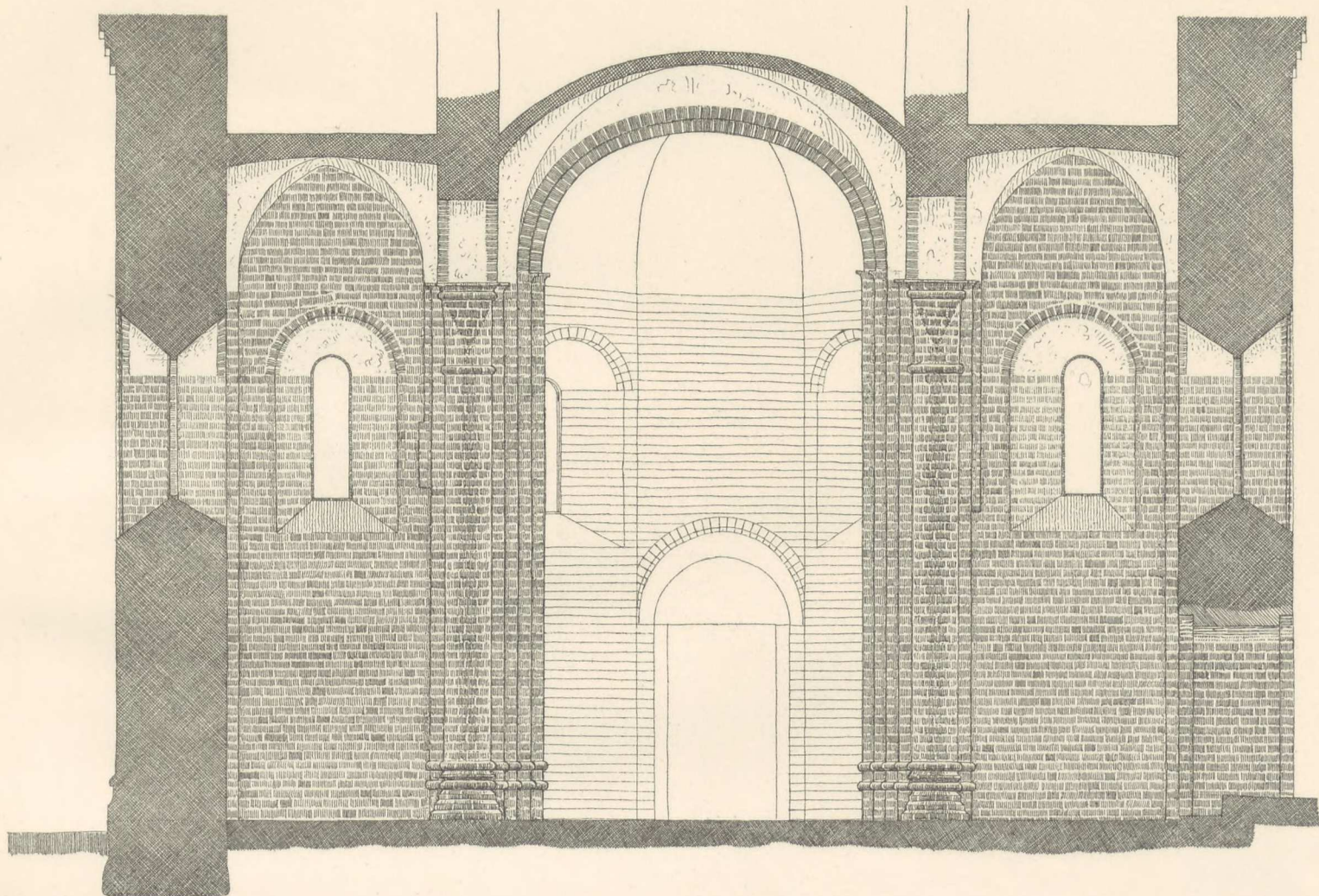
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1 : 75

SNIT VEST—ØST

SECTION WEST—EAST

KALLUNDBORG KIRKE



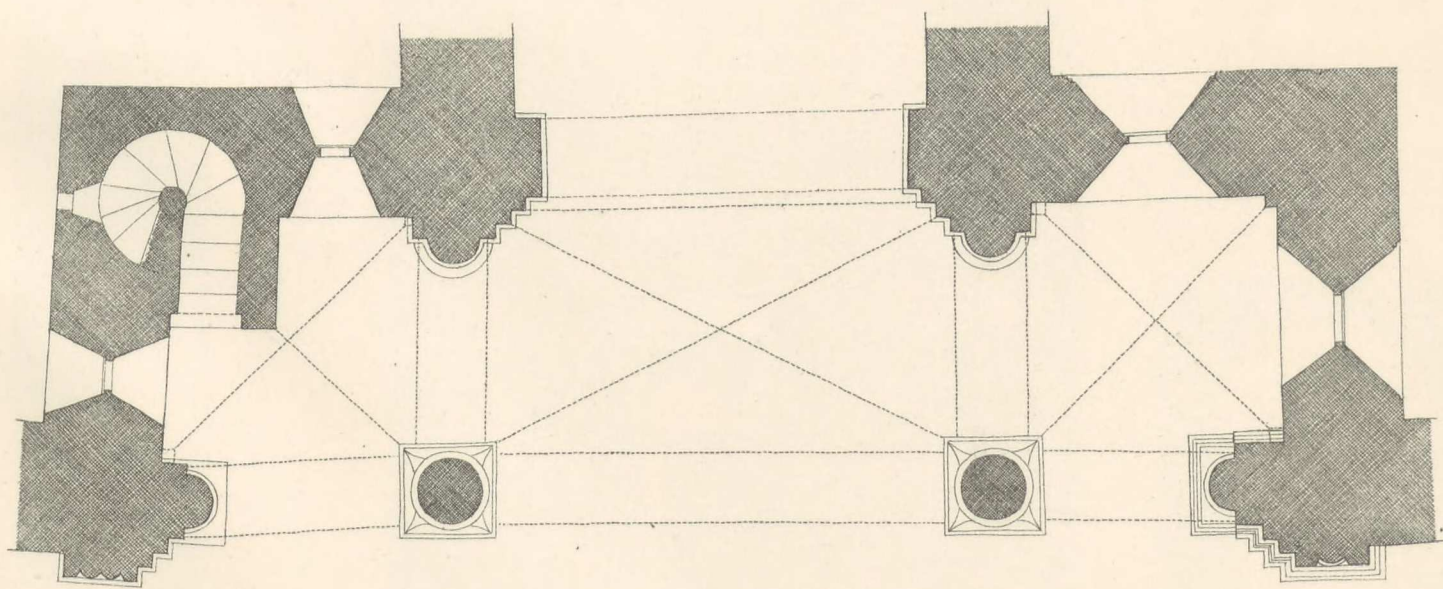
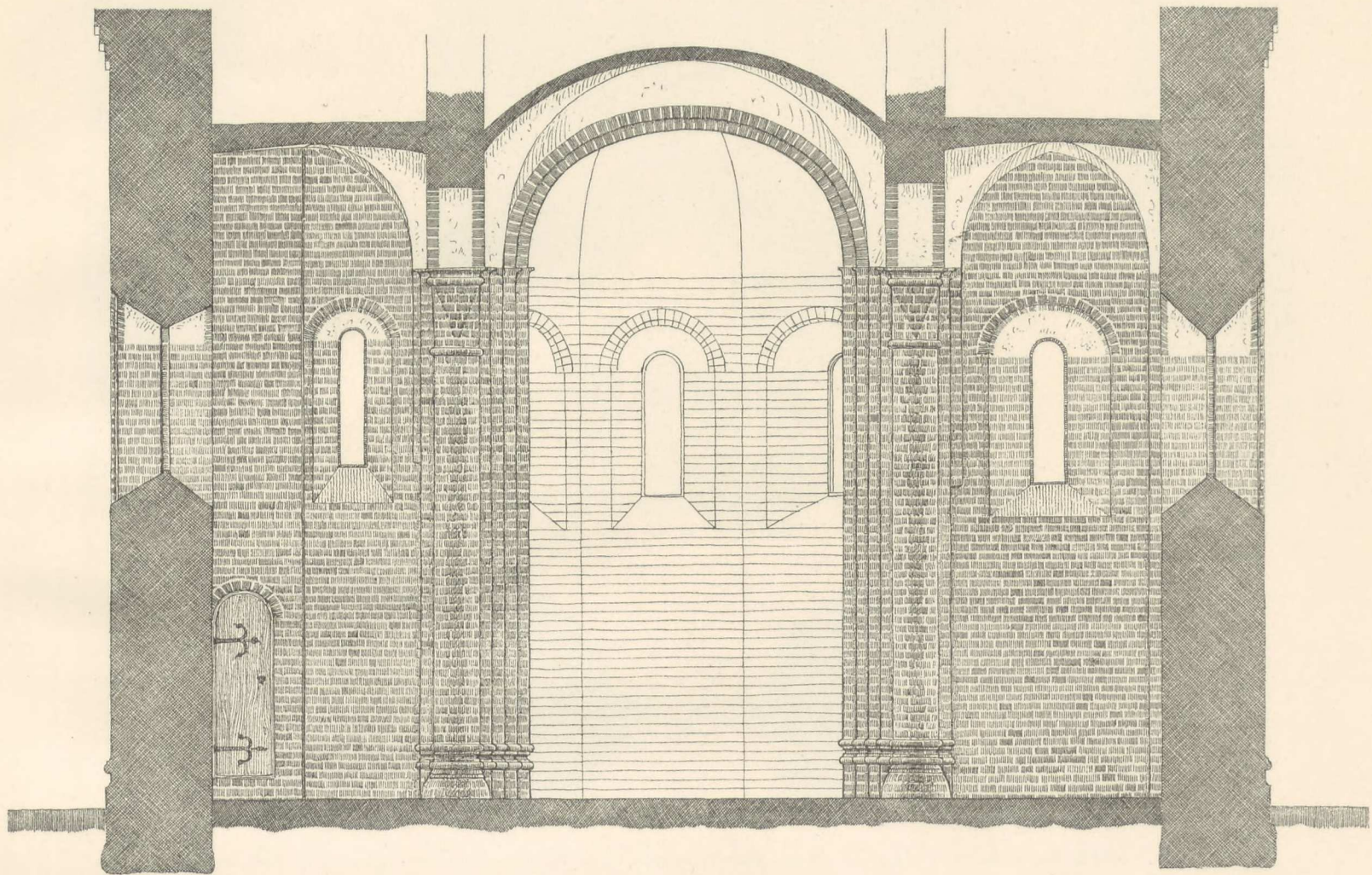
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1 : 75

SNIT VEST—ØST

SECTION WEST—EAST

KALLUNDBORG KIRKE



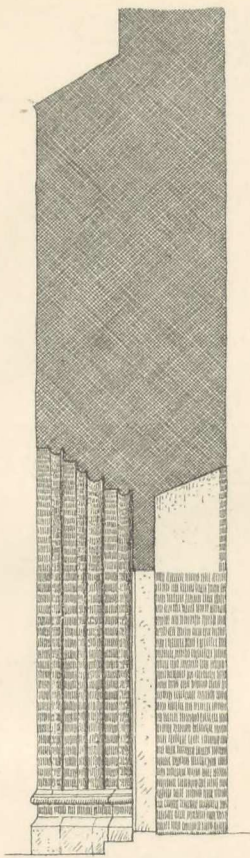
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1 : 75

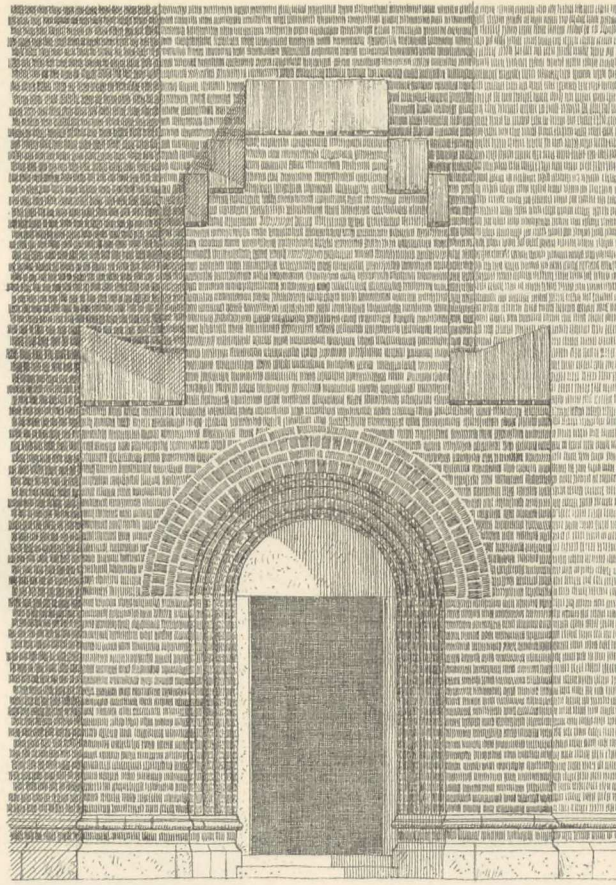
SNIT ØST—VEST

SECTION EAST—WEST

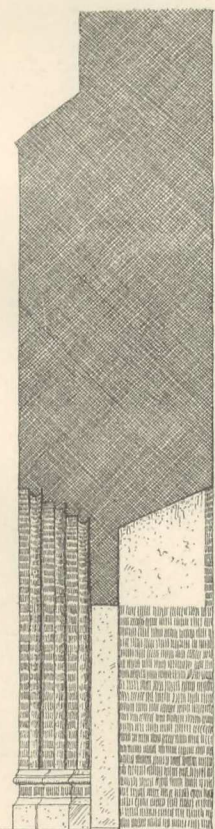
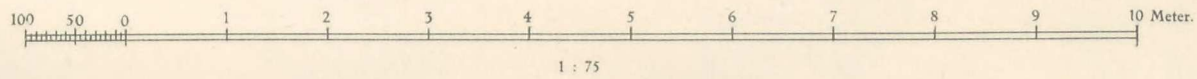
KALLUNDBORG KIRKE



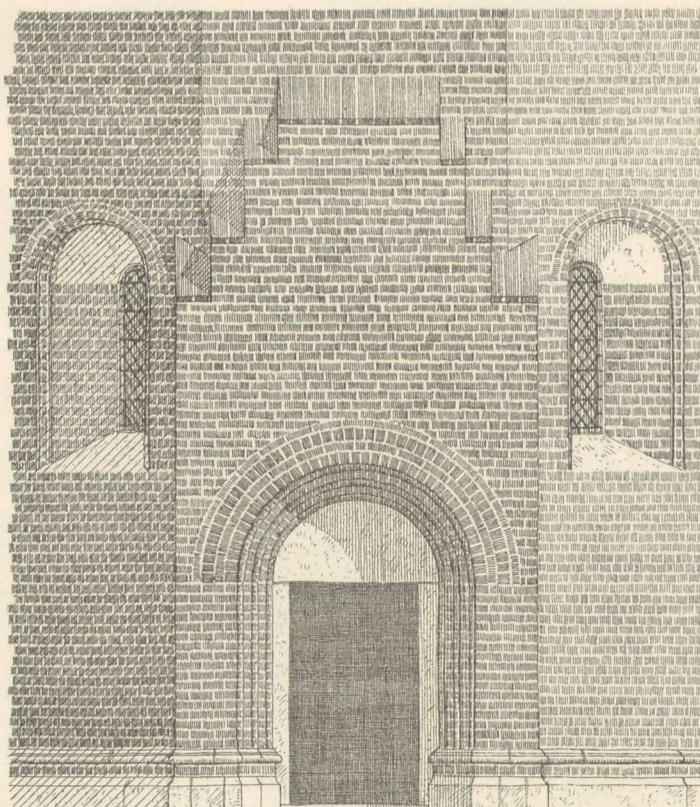
VESTPORTAL



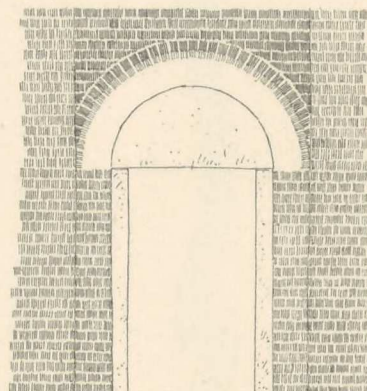
WESTERN ENTRANCE



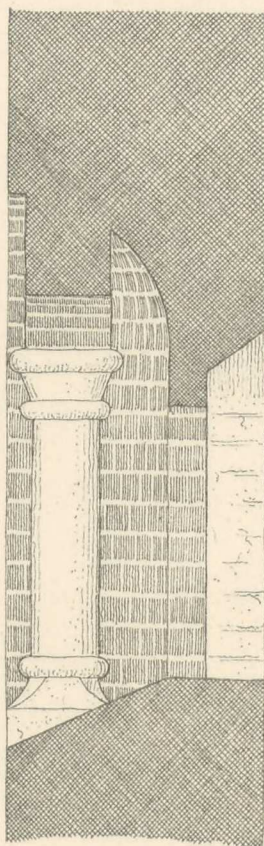
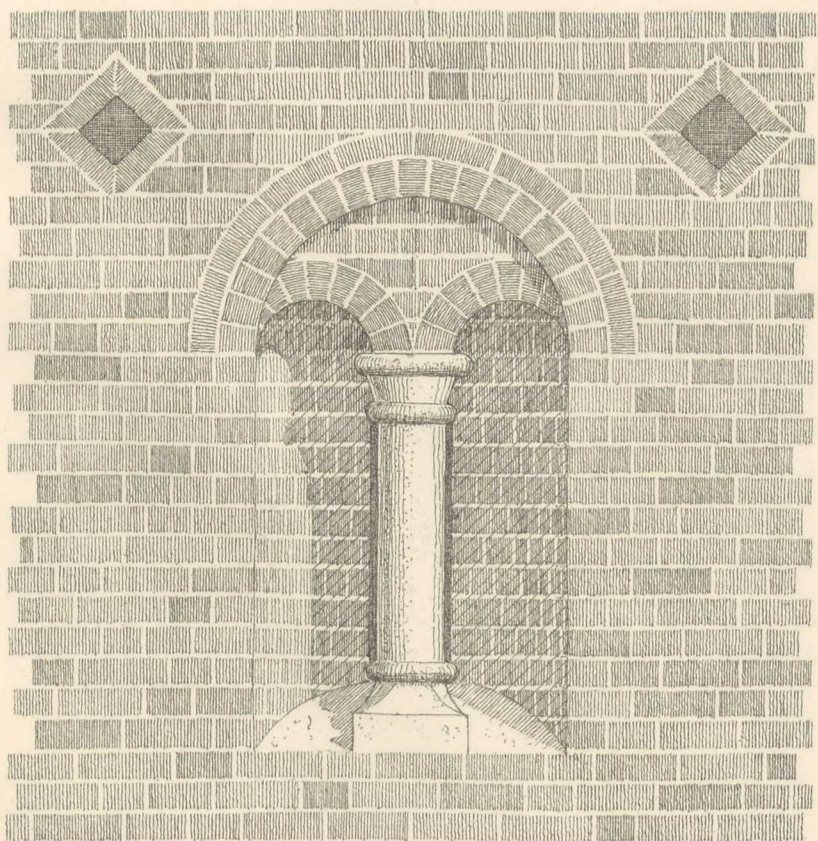
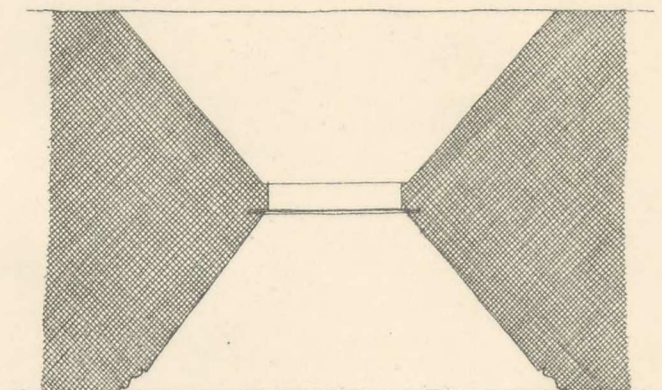
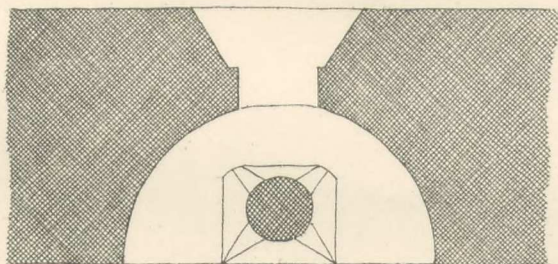
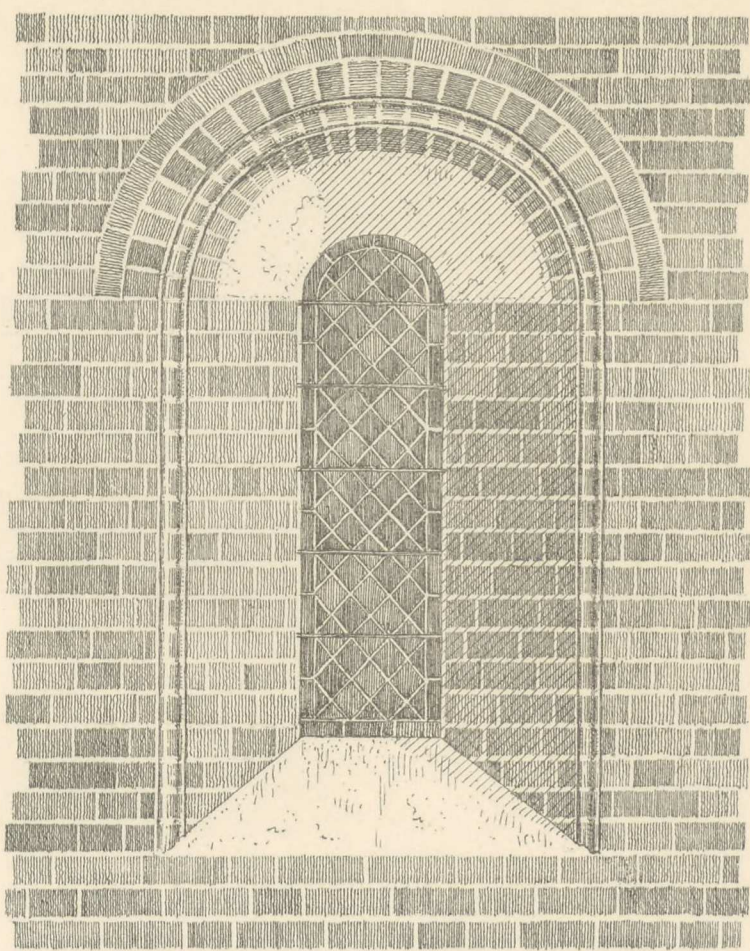
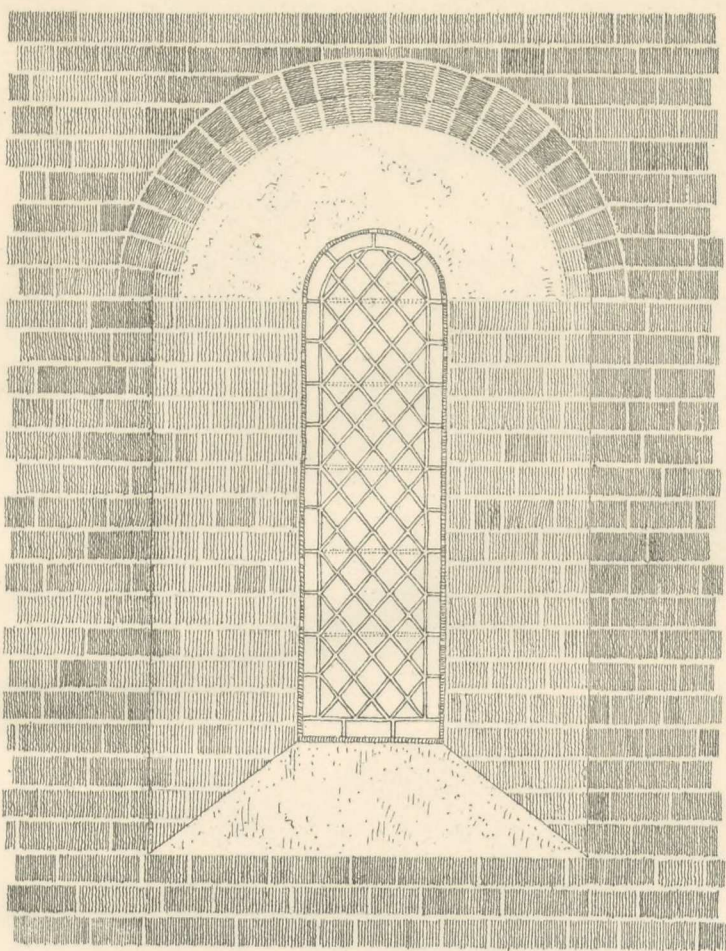
NORDPORTAL



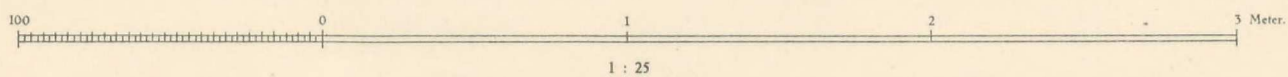
NORTHERN ENTRANCE



KALLUNDBORG KIRKE



1 : 2



DTV Danmarks Tekniske
Videncenter
Teknologihistorisk Samling

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