VI.—*On the Brick Architecture of the North of Germany*; by ALEXANDER NESBITT, Esq. F.S.A.

Read 15th December, 1859.

THE surface of that part of Europe which lies between the Baltic and the German Ocean on the north, and the Carpathians, the Sudeten Gebirge, the Riesengebirge, Thüringerwald, and Hartz on the south, is composed of sand or clay, and affords no other building stone than granitic boulders, supposed to have been transported thither from the Scandinavian mountains. These boulders furnished the stone from which many churches were built in the twelfth and earlier part of the thirteenth centuries;^a but the deposit being superficial was soon exhausted, and the hardness of the material precluded the use of ornamental detail.

When, therefore, the progress of civilisation and luxury created a desire for large buildings of an ornamental character, it was necessary to seek for other materials;^b these were found in the clay of the country, and brick came into use, either exclusively, in districts (such as Prussia and Pomerania) to which the transport of even small quantities of freestone was too costly, or partially, for walls and piers, as in parts of Poland and Silesia, where sufficient freestone for dressings and ornamental parts could be obtained without immoderate expense.

Where stone was used for the decorative portions the employment of brick as the main material did not exert any great influence upon the style of the structure; but, where brick was exclusively used, a modification of each successive style of Gothic architecture was produced, exhibiting peculiarities due to

^a Kugler cites as the earliest monument of Christian architecture east of the Elbe the ruined church, called the Todtenkirche, at Loburg, some miles east of Magdeburg. This is wholly of granite, and he mentions several village churches in the same district as of the same material (*Geschichte der Baukunst*, vol. ii. p. 552). Examples of the same kind exist in the Altmark and in Pomerania, for instance in the cathedral of Cammin. All these buildings are extremely plain in style.

^b Wood was occasionally used, though not much in towns, unless perhaps in Poland; some wooden churches still exist, particularly in Prussian Upper Silesia, of as early a date as the beginning of the fourteenth century. ^aKugler, *Ges. der Baukunst*, vol. ii. p. 532.

the nature of the material employed. Of this pure brick architecture I propose to give some account. As far as I am aware, few notices of buildings of this character have hitherto been published in this country, excepting the paper by Mr. Repton in the *Archæologia*, vol. xxi. p. 158, and the chapter headed *Pomerania* in Fergusson's *Handbook of Architecture*. Several recent publications in Germany contain notices and engravings of examples of the style, as Kallenbach's *Atlas Deutscher Baukunst*, Püttrich's *Denkmale der Baukunst des Mittelalters in Sachsen*, Kugler's *Kleine Schriften* (vol. i.), Otte's *Handbuch der Kirchlichen Kunst-Archäologie*, and Essenwein's *Norddeutschlands Backstein Architektur*; a work now in course of publication, Adler's *Mittelalterliche Backstein Bauwerke des Preussischen Staates*, will give a very complete account of it so far as the kingdom of Prussia is concerned.

Although no very high degree of merit can be claimed for this Brick Architecture on the score of beauty, except, perhaps, as regards general outline, it deserves notice as well from the student of architecture in general as from him who confines his attention exclusively to that of the middle ages: from the first, as affording remarkable and perhaps suggestive examples of decoration in a material usually treated as little susceptible of ornament; and from the latter, as exhibiting a peculiar phase of pointed architecture. It is both interesting and instructive to observe in the best examples how the architect, instead of forcing his material into forms and combinations for which its nature was ill-suited, took advantage of its peculiarities, and produced buildings, sometimes elegant, often dignified and impressive, and almost always picturesque.

Whether the art of brick-making was introduced into the north-east of Europe from Italy through the intercourse which arose in consequence of the spread of Christianity in the eleventh and twelfth centuries, or whether it had been practised by the heathen inhabitants, is a question which no existing remains enable us to decide. The probability, however, would seem to be that the buildings anterior to the introduction of Christianity were of wood; whereas brick is well known to have been in frequent use in Italy in all periods from Roman times. At any rate the German antiquaries do not seem to have noticed any brick building in the tract of country above mentioned which can be ascribed to an earlier date than the latter half of the twelfth century, the period when Christianity and civilisation first took firm root in those districts, north and east of the Elbe, where this style of building has been the most fully developed.

In Poland Christianity was established at an earlier period; at Cracow, how-

ever, the buildings which date from the twelfth century, such as the crypt of the cathedral and the chapel of a convent in the Stradom, are wholly built of stone.

A very good example of brickwork of the twelfth century is afforded by the cathedral of Ratzeburg, in the duchy of Lauenburg, which appears to have been commenced in 1154; it consists of a nave with aisles, a large south porch, transepts, and a short chancel ending in a semi-circular apse. The piers are square masses, with half-engaged shafts at the angles; the vaulting slightly pointed. The ornamentation is of a very simple character: the corbel tables have in parts small human heads as corbels, which seem to have been formed in moulds. The capitals of the shafts of the doorways have some rather peculiar forms, and the gable of the porch (*vide* woodcut) is ornamented by the bricks being placed in the fashion known as herring-bone, and by projecting lines of semi-circular section, and an arrangement of small shafts and circles, imitating a circular window. These ornamental parts are glazed of a pale greenish colour, and are the earliest instances of the use of glazed work in architectural decoration which I have met with in the North of Europe.

Gable of Porch, Ratzeburg.

The cathedral of Lubeck, commenced about 1166, is chiefly of the same period; the west end has two vast towers, and between them a very deeply recessed doorway of seven or eight orders, without shafts, and with square-edged perfectly plain arches. The other parts of the building which belong to this period are extremely plain, in fact almost devoid of ornament.

The convent church of Jerichow, near the Elbe, below Magdeburg, begun about 1152, is a cross church with two western towers,^a and seems to afford a complete and well-preserved example of a church of the same character as Ratzeburg.

^a An engraving will be found in Otte, Handbuch der Kirchlichen Kunst-Archäologie.

The Marienkirche^a at Bergen, in the island of Rügen, has portions belonging to this century. A document of Jaromir the First, Prince of Rügen, dated 1193, mentions the building of this church “opere latericio,” and its dedication. The original plan consisted of a western porch, a nave with lower side aisles, a transept with semicircular chapels projecting from its eastern side, and a choir ending in a semi-circular apse. Altenkirchen,^b also in Rügen, is of the same period.

Gadebusch, in Mecklenburg, has nave and aisles of equal height; the piers are square, with a large semi-circular shaft projecting from the centre of each face; the south doorway has shafts and circular arches richly decorated.

The cathedral of Brandenburg is in great part of the same period, but much altered; the cloister, however, presents some good examples of detail in capitals ornamented with foliage. These would seem to have been carved from masses of brick rather than moulded. Some of the capitals in the church appear to be also of brick, others, however, of stone.

The Transition period in Germany includes a large part of our Early-English period. Although details closely corresponding with the Early-English style may be met with here and there, it appears to be the opinion of the German writers that no pure example of the pointed style is to be found of an earlier date than about 1230. Some curious examples of the Brick Architecture of this period exist in Pomerania, at Colbatz^c and Cammin. The date of the first of these cannot be certainly given from any historical evidence, and some may be inclined to doubt whether Kugler is right in assigning it to the beginning of the thirteenth rather than to the close of the twelfth century. The clerestory-windows and the cross-springers of the intersection of the transepts and choir are characteristic. The rose in the west gable evidently belongs to the early period of the fully developed pointed style. It is not a window, but merely an ornament.^d

The Dom of Cammin^e exhibits in its lancet and trefoiled arches forms more characteristic. The door-way of the sacristy,^f which is ornamented with figures of lions and foliage, is stated by Kugler to be of glazed brick. In the heads of the panels above the windows of the north transept^g are reliefs; in the centre two angels carrying a lamb, in the sides single figures of saints. The wall below the windows has alternate courses of glazed and unglazed brick, a mode of decoration in later times almost always found in these brick buildings. The

^a Kugler, *Kleine Schriften*, vol. i. p. 663.

^c *Ibid.* p. 669.

^e *Ibid.* p. 678.

^g *Ibid.* p. 683.

^b *Ibid.* p. 666.

^d *Ibid.* p. 674.

^f *Ibid.* p. 684.

pointed windows in the apse have shafts in the angles, which are of dark glazed brick for about a third of the height of the window, where they are broken by a fillet ; the parts above the fillet are of red unglazed brick. The glazed parts of the shafts of the central window are of a twisted pattern. In the south transept is a rich doorway with three slender shafts on each side. These shafts and their bases are glazed, the fillets which surround them of unglazed brick, but the foliated capitals and arches, ornamented with mouldings and branch work, are (according to Kugler) of stucco.^a

The choir of the church of St. Ansgar at Bremen (represented in the woodcut) has a triplet of lancet windows in the east end, which is rectangular, as in England ; a form much more common in the north and east of Germany than in the south and west. The nave and aisles of this church are of equal height, with sex-partite domed vaultings. Parts of this church are of stone, but the east end is wholly of brick, and each bay of the aisles has a brick gable. These gables, however, may be, and probably are, additions of a subsequent period.

Although, as has been said before, the churches of Cracow are not pure brick buildings, the tracery of the windows and the ornamental parts in general being of stone, the church of the Dominican Convent in that city affords a curious example of ornament in moulded brick (see woodcut) ; this forms a band between the windows of the apse, and also occurs in a like position in the church of the Dominican Convent at Breslau. Both buildings are of the same date, the latter part of the thirteenth century.

East end of the Church of St. Ansgar, Bremen.

Brick Moulding, Cracow.

^a Kugler, *Kleine Schriften*, vol. i. p. 682.

A part of the Rath-haus at Lübeck seems also to belong the 13th century; in this the shafts and capitals are of stone; the latter, with foliage characteristic of that century. The arches and pier buttresses are of brick, and, as well as the bricks filling the spandrels, are covered with a glaze of a very deep blue colour.

The Klosterkirche at Berlin was founded in 1271 by Otho and Albert of Brandenburg; Kugler has given engravings^a of some very characteristic capitals and corbels very boldly executed, and probably carved out of the brick after it had been burnt.

Towards the end of this century several very important churches were erected; foremost among them may be placed the Marienkirche at Lübeck, built between 1276 and 1310. It is about 350 feet in length; the central aisle is 130 feet in height, the side-aisles about 65. The clerestory is very tall and the general effect of the interior very fine, though there is a certain thinness and poverty about the mouldings. As, however, stone is used in the ornamental details, such as the capitals and in some other parts, it cannot be considered as a pure example of design in brick. The exterior has flying buttresses very clumsily designed but no pinnacles, and is in general very plain. The west end is flanked by two extremely massive towers covered by wooden spires which rise to the height of 400 feet. They are without buttresses and extremely simple. Inscriptions upon them contain the dates 1304 and 1310.

The church of St. Nicholas at Stralsund is also large and fine; it was commenced in 1311. The capitals, and perhaps some other small parts, are here, as in the Marienkirche at Lübeck, of stone.

It would appear that it was about this period that those characteristic peculiarities which distinguish the Brick Architecture of the North-east of Germany from other styles, attained their full development; and, though slightly modified from time to time, many of the forms were retained so little altered, until the introduction of the Italian style, that it is often difficult to decide whether a building belongs to the fourteenth or to the fifteenth century.^b The best and most characteristic buildings, however, belong to the period between 1330 and 1450. The distinctive peculiarities may be considered under two heads:—

1st. Of Construction and Design;

2nd. Of Ornamentation.

^a Kugler, *Kleine Schriften*, vol. i. pp. 106, 107.

^b The mouldings are in most cases peculiar to the style, and do not furnish the sure criteria of date which those of stone architecture do. *Vide* Kugler, *Kleine Schriften*, vol. i. p. 697, *et seq.* where many sections of mouldings are given.

The construction and general design of these brick buildings resemble, as might be expected, those of the contemporaneous stone buildings of the North of Germany. The great use of gables (as where each bay of the aisles of a church is gabled), their exaggerated size, the great amount of decoration bestowed upon them while much of the rest of the building is left plain, the strange and often uncouth forms of the towers, the immense roofs of one pitch covering both nave and aisles when they are, as is often the case, of equal height, the slenderness of the piers and general poverty of effect of the interiors, are all features common to stone and to brick architecture. The peculiarities of the latter are chiefly the great mass and thickness of the walls, the sparing use of buttresses, the great rarity of flying buttresses, the general squareness of forms, and the extreme poverty of the window tracery.

The churches scarcely differ in plan from those of the rest of Germany, except that a rectangular termination at the east end is not uncommon: in Prussia, according to Kugler, this is the ruling form. A few churches are met with which have a polygonal apse, surrounded by an aisle with radiating chapels, according to the French system; but the usual plan is for the choir and its aisles to end in three semi-hexagonal apses.

The piers in plan sometimes approach an octagon, sometimes a square, with more or fewer mouldings; in all instances however these mouldings are feeble and deficient in effect.

The capitals of the piers are usually merely strings; in the Marienkirche at Stargard the piers have niches just below the capitals.^a The capitals of the vaulting shafts are usually semi-octagonal in plan, with a few mouldings. Sometimes, as in the Marienkirche at Lübeck, they are of stone, and ornamented with foliage.

In a few chapels slender octagonal monolithic shafts of granite support the vaulting. In a chapel near the west end of the Marienkirche at Lübeck these are about thirty feet high. The Artushof at Dantzic and the Conventsremter at Marienburg have similar shafts.

Triforia are not common, and, where they exist, are extremely plain.

The vaultings of large spaces are usually of a very simple character; but in chapels or halls of moderate dimensions a sort of fan vault, with from sixteen to twenty-four cells radiating from a central shaft, is often found; and there is an ugly variety of this in which no ribs are used, and the face of each cell is hollowed, so as to have a triangular section.^b The windows, although often very

^a Kugler, *Ges. der Baukunst*, vol. iii. p. 477.

^b *Ibid.* pp. 437, 465.

large, have almost without exception no attempt at tracery except two or more mullions connected by unfoliated arches in the head of the windows; the effect resembling that of an Early-English triplet of unequal height, when included under a simple arched drip moulding. In late examples the mullions are carried up straight into the arch, with a most deplorable effect.

A few exceptions may be noticed: in the Marienkirche at Prenzlau, built about 1380, are some two-light windows with a large quatrefoil in the head;^a in a convent chapel at Brandenburg are some three-light windows with three foliated circles in the heads; and in the nave of the cathedral of Verden are windows of three and of four lights, with tracery of geometrical character entirely formed of moulded brick. These are somewhat remarkable as pieces of construction, the mullions being not less than from 30 to 35 feet long, though only about 7 inches wide; they are built up of a great many small pieces, and it is difficult to comprehend how they stand, unless an iron rod is passed through them. The lights of these windows are not foliated, but the upper openings are; the cusps in one window are of stone, but in the others of brick; and I feel some doubt whether these openings were not originally unfoliated, and whether the cusps may not have been inserted during a recent repair. These windows appear to date from about 1450.^b

The chief peculiarities to be noticed in the ornamentation are the general absence of shafts and pinnacles standing freely, of mouldings of large size or of bands of foliage, and of statues of considerable dimension or in full relief, the use of the same small moulding very frequently repeated, sometimes as often as six or seven times in the same archway, of strings of glazed panelling of geometrical forms usually inserted in a line sunk into the face of the wall, and of strong oppositions and contrasts of colour, the ornamental work being glazed (usually of a very dark colour), and so placed as to contrast forcibly with the red, unglazed brick, while the walling is in very many cases of alternate horizontal lines of glazed and unglazed bricks.

The colour of the glaze appears to have varied from time to time; at Ratzeburg, in the twelfth century, it is of a pale yellowish green; in the northern end of the Râth-haus at Lübeck, and in a house in the street at Wismar, called Die Hegede, both of which buildings seem to belong to the thirteenth century, we find

^a Kallenbach, *Atlas zur Ges. der D. M. Baukunst*.

^b Kugler (*Ges. der Baukunst*, vol. iii. p. 432) says that the nave of Verden was built 1473-1490. I should not have thought the windows of so late a date.

a very deep blue; the buildings of the middle and latter part of the fourteenth and early part of the fifteenth century have a very dark green glaze producing nearly the effect of black; while in the buildings of about 1450 it is usually of a yellowish green.

The unglazed bricks are usually red, but sometimes, as at Rostock, yellow.

The size and form of the bricks do not seem to have varied much from the twelfth to the sixteenth century; in the cathedral of Ratzeburg I found them to measure $10\frac{1}{2}$ inches in length by 3 in width and 3 in thickness, or $10\frac{1}{4}$ by $5\frac{3}{4}$ and $3\frac{3}{4}$; in St. George in Wismar (1350 to 1404) $11\frac{1}{4}$ by $5\frac{1}{4}$ and 3; in St. Mary in Stralsund (1423 to 1479) $11\frac{1}{2}$ by $3\frac{1}{2}$ and 3. The glazed ornamental pieces of course vary much in size, but I think rarely exceed 18 inches in their largest dimension.

The style the characteristics of which I have endeavoured to describe prevailed, as I have already said, throughout the flat country which in Germany and Poland lies between the mountains and the North Sea and Baltic: examples are to be found as far west as Hanover and (I believe) Oldenburg, as far east as Riga and Revel. The southern limit of the style is in Germany determined by the neighbourhood of the mountains, while in Poland it extends as far to the south as Cracow, and was probably prevalent throughout the greater part of the kingdom. It is found in Holstein and Schleswig, and to some extent in Denmark.

The purest and finest examples of churches and civic buildings are to be found in the Altmark and Neumark, Lübeck, Mecklenburg, and Pomerania, and, as regards castellated buildings, in Prussia. In these provinces few even of the smaller towns are without some remarkable example of a church, a town-hall, a gateway, or a house, and many can show several examples of each class. Among so many it is difficult to select, and I shall therefore confine myself to some description of a few of the more remarkable specimens of each class which I have examined and sketched, and which date from about 1330 to 1450, the best period, as I have before said, of this Brick Architecture.

The building represented in the foreground of Plate V. is a long range on the south side of the church of St. Mary at Wismar, intended probably as a residence for priests; one end and a part of the back are shown, affording one of the most curious and elegant examples of the style which I have seen. This building may, I think, be attributed to the second half of the fourteenth century. The tall parapet, with open arches, is a fine decorative feature, now very seldom to be found in an entire state, though fragments show it to have been frequently

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THE MARIENKIRCHE, WISMAR, AND ADJACENT BUILDINGS

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used. The walling is in alternate courses of red and dark-green brick, while the ornamental parts are dark-green, the green being, as it always is, glazed.

The chapel of the Holy Ghost, singularly placed in front of the Marienkirche, is entirely of dark green-glazed brick: the gable has no doubt been destroyed, and it is in other respects much mutilated. I believe it to belong to the second half of the fourteenth century. The Marienkirche, which is seen in the background, was commenced in 1339, and the choir was built between that date and 1354. It is a very plain building of large size, about 300 feet in length and 109 feet high in the interior. The tower, which rises from the middle of a western transept-like mass, is said by Herr Lubke (*Deutsches Kunst-blatt*, 4 Sept. 1852) to be of the fifteenth century; its character would, however, rather lead us to attribute it to an earlier date. Three stories of the tower rise above the roof of the nave, each having on each face two precisely similar windows, and each face finishes with a gable. Though almost devoid of ornament, this tower, from its great height and massiveness, and the good proportion of its parts, has a very fine and striking effect.

The Jacobi-kirche, at Stralsund, is attributed by Kugler to the close of the fourteenth century. The body of the church is very lofty, and very plain, almost rude, in style; the tower, on the other hand (Plate VI.), is one of the most highly-ornamented and best preserved examples which I have met with. It rises as will be seen from the centre of the west front; the immense arch, which includes both door and window, is a striking feature, and affords a good instance of the system of repeating mouldings which is so characteristic of the style. The mouldings of the doorway, including the arch, are in thirteen groups, six of which have a convex, and seven a concave, outline, each group being, I believe, a separate piece. The mouldings of convex outline are combinations of three or five rounds; the concave, in five instances, a hollow with a round in its centre. The windows in the tower are merely ornamental, the real windows being the narrow slits which are seen between the mullions; the tracery is all glazed. The octagonal story was no doubt once covered by a tall spire.

One church of the fourteenth century I cannot omit to mention, although I have not myself seen it, the Marienkirche at Prenzlau, not very far from Stettin; it would seem to have been begun about 1325, but much of its rich decoration probably dates from the end of the century. Kugler notices it as the most important work of the fourteenth century in that district, and as equally remarkable for boldness of construction and richness of decoration.* Engravings of

* Kugler, *Ges. der Baukunst*, vol. iii. p. 460.

A. Nesbitt, del.

J. H. Le Henx, sc.

THE JAKOBIKIRCHE STRALSUND.

the richest part, the east end, and of the details, will be found in Kallenbach (Atlas, Pl. 58, 59). The gable of the east end is peculiarly remarkable for the decoration of buttresses and tracery which cover its surface, in imitation of the rich ornament of the like kind which in districts where stone is abundant is frequently found in a corresponding position. The openwork parapets of the east end and of the towers are also very remarkable.

A somewhat later building, the church of St. Katharine at Brandenburg, exhibits a system of decoration not less deserving of notice. A portion of this is represented

Mouldings, St. Katharine's, Brandenburg.

in Plate VII. which shows one of four compartments^a of a screen of open tracery-work hiding the roofs of a sort of transept on the north side; some of the mouldings are shown in the accompanying diagrams;^b the moulded work is entirely glazed, and by its richness and dark colour contrasts strangely with the smooth red walls which it surmounts. The doorways have much elaborate ornament of a like kind, and in niches in the lower parts of the buttresses are figures of saints in full relief made of earthenware glazed of a dark-green colour. None of the figures that I saw exceeded eighteen inches in height. An inscription on a large brick in the south transept gives 1401 as the date when the church was begun.^c

The church of St. Nicholas at Wismar is of a still later date, having been dedicated in 1460.^d It is a very large church, and the vault of the choir is not less than 128 feet in height. The most peculiar feature of this church is the decoration of the gable of the south transept, built in 1437. In the upper part is a circular false window of fourteen lights, in the centre of which is a human face surrounded by rays (a representation of the sun) in low relief. This face has somewhat the appearance of being of metal, but probably is of glazed brick. The rest of the gable is covered with rows of sunk panels of small figures of

^a Kallenbach has given an engraving of two of these compartments, in which the pinnacles of the buttresses and the finials of the gables are shown as entire; these, however, did not exist when I made my sketch.

^b Of these sections No. 1 is of the larger buttresses, 2 of a lesser buttress, 3 of the circles, 4 of the mullions, and 5 of the cusps.

^c Inscriptions recording the dates of the building of churches are more common in Germany than in England; in the parts in which brick is used they are generally on large bricks, either glazed or unglazed. The great durability of the material has allowed them, usually, to remain in a perfect state.

^d Kugler, *Ges. der Baukunst*, vol. iii. p. 449.

ST. KATHERINE'S CHURCH, BRANDENBURG.

the Virgin and Child^a in relief, standing under a canopy, and of lions and grotesque human faces placed alternately. Four rows of the figures of the Virgin occur, the longest containing the same figure repeated about thirty times. The same number of rows of lions and faces, and of panels, with a few intervening lines of plain brick, cover the whole gable.

The civic buildings of the period between 1330 and 1450 are also numerous and remarkable: the town-halls (*Rath-häuser*) of Lübeck, Stralsund, and Rostock

Rathhaus, Lübeck.

are very similar, though that of Lübeck has been by far the most splendid. The usual plan was a parallelogram; below the ground were vaulted cellars, which in the rath-haus at Lübeck are peculiarly fine; the groundfloor was often (as at Stralsund) an open space serving as a market-place, entered by a range of arches, and with a vaulted roof supported on columns; the halls for the use of the municipality were above, and the gables of the roofs were concealed by a tall screen of moulded and glazed brick-work, ornamented with false windows, and divided into compartments by a sort of pilaster buttresses finishing in octangular turrets crowned by short spires. As these compartments are not unfrequently six, eight, or more in number, the numerous little spires, each crowned by a vane and rising high above the houses of the town, give these façades a singularly quaint and fantastic effect.

The town-halls of Stralsund and Rostock have been made neat at the expense of the decoration which they no doubt once possessed, but they retain their general form and outline. At Stralsund the vaulted market-place on the ground floor is well preserved; at Lübeck the lower part has been much altered and in parts rebuilt; but the decoration of the screen of the upper part is peculiarly well preserved and is very curious, as will be seen by the woodcut. The

^a The same figures of the Virgin are to be found on other parts of the church, and the faces occur in the remains of the Burg at Lübeck, and in a house in the Hopfenmarkt at Rostock.

screen of the northern end appears to date from the thirteenth century; that of the eastern side, here represented, was probably built a little before 1350.

The walls, and particularly the gate-towers, of these cities were also evidently objects upon which expense was willingly incurred: their strength and their stateliness were no doubt matters of much concern and pride to the dwellers in these Hanseatic cities, who, in the fourteenth century, were fast approaching the highest point of their wealth and power.

The walls and towers of Stargard (in Pomerania) are peculiarly fine and picturesque; but no examples exist more ornamental than the Holstein Thor and Burg Thor at Lübeck: the former, with an archway between two massive round towers, ornamented with a succession of elegant arcades, and crowned with high conical roofs, has been repeatedly engraved; but I do not know of any engraving in which the details are given with any approach to correctness. The Burg Thor (Plate VIII.), though much simpler in plan, presents almost exactly the same ornamentation, which is perhaps of as elegant a character as that to be found in any of these brick buildings. These gates would appear to be of about the same date as the eastern façade of the Rath-haus. Some of the same ornaments (particularly a trefoil ornament composed of foliage) are used in both.

The single tower which remains of the Mühlen Thor at Brandenburg bears, in an inscription on brick, the date of 1411 as that of its erection—it is a simple but very effective structure. Its form is octagonal—in each face is a long narrow panel with a pointed head; this is divided by a mullion carrying two segmental unfoliated arches, on which rests a circle, also unfoliated. There is a very bold cornice moulding carrying a battlement, and the whole is covered by a short brick spire.

The tower at Anclam, called the Stein Thor (Plate IX.), although wholly of brick, is a very singular structure; besides the gateway, it contains five stories of various heights, and above these is a gable screen of five divisions, ornamented with trefoil arches and panelling. The whole is of unglazed brick and of rather rough work. It probably dates from the earlier part of the fifteenth century.

The private dwelling-houses of this period are hardly less remarkable and characteristic than the public edifices. Very little remains

Window of House, Wismar.

A Nesbitt. del.

J. H. Stobbe. sc.

THE BURG-THOR, LÜBECK.

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STEIN THOR, ANCLAM.

which can be attributed to the thirteenth century ; but a house in the street called Die Hegede, at Wismar, may perhaps date from the close of the century. A part of this is represented in the woodcut, which shows one of a range of windows at the base of the gable ; excepting this range of windows, but little remains in an unaltered state. The sections of the mouldings, and the blue tint of the glaze of the bricks, are all in accordance with an early date ; and it corresponds very closely in style with the northern end of the Rath-haus at Lübeck, which I have no doubt is of the latter part of the thirteenth century. Houses of the fourteenth century are also rare : I shall presently notice two at Greifswalde, which I believe to date from that century, and a few examples may be met with elsewhere. Of houses of the fifteenth century examples abound, particularly at Anclam, Wismar, Stralsund, and Greifswalde ; it, however, but rarely happens that they remain in an unaltered state : for, as they have continued to be used as dwelling-houses, the lower stories have almost always been modernized ; and in cases where parts of the fictile ornaments of the upper stories have been lost through time or neglect, the whole of the remainder has been removed, and the despoiled building made neat by whitewash or plaster.*

The plan of the larger houses is usually an oblong, traversed through the length of the house by a passage of sufficient width to allow a loaded waggon to pass through. This was entered by doorways of proportionate size. On each side of this passage were the living-rooms ; in some but not in all cases the first and even the second floor contained sleeping-rooms ; but frequently the whole of the house above the ground floor served as a storehouse and granary, the immense roof containing three, four, or even five floors. This roof is hidden by a screen, usually taking a pyramidal form, spreading beyond and rising above it, and ornamented with false windows, panelled strip buttresses, and pinnacles. As the walling is usually in alternate lines of red and black bricks, and the ornaments of black glazed pottery, the effect of these fantastic fronts, particularly when lighted up by sunshine, is quaint, uncommon, and picturesque in the highest degree. In Wismar, Anclam, Greifswald, and Stralsund, these strange buildings often occur in groups of threes, fours, and fives together in a tolerably unaltered state, at least so far as regards their upper parts, making a most singular outline against the sky.

One very strange group of three occurs in the market-place at Anclam. One of these has the gable divided into eight, the next into two, and the third into five compartments.

* The same method of "restoration" is, I regret to say, the one generally employed in the case of churches, and very many are to be met with in this "restored" condition.

The most remarkable group, however, which I have met with is of three houses on the east side of the Market-place at Greifswald (represented in Plate X). Of these the one on the left is evidently later in date than the other two, having probably been built about 1410 to 1420, while the other two are probably not less than sixty or seventy years older. They may, perhaps, even be of a somewhat earlier date, the glaze of the bricks with which they are constructed having the blue tint which seems to indicate an early date.

It is to be regretted that the house on the right hand has been mutilated in the upper part; the central house also has evidently lost some part of its finishing. The doorways in these two houses may perhaps be original; that of the house on the left is certainly not so. An engraving is given by Kallenbach (plate lx.) of this house, in which he has restored the lower story, placing a wide pointed arch in the centre and windows headed by a segmental arch on each side of it. This conjectural restoration is not without probability, as many remains of ground floors so arranged are to be found in these cities. He says that the blank spaces between the mullions and in the spandrels were plastered white, so that the façade might have a surface variegated with red, white, and black. I did not myself observe this plastering, but I do not deny that it existed.

The mouldings of this house differ considerably from those of the other two, which last have mouldings of nearly the same sections, resembling those of the Rath-haus at Lübeck, which they also somewhat resemble in design.

Another very interesting house is in the Hopfenmarkt at Rostock, and is represented in the woodcut. This house may probably date from the first half of the fifteenth century; it retains the

House at Rostock.

A. Nesbitt del.

J.H. Le Yoeux, sc.

HOUSES IN THE MARKET PLACE, GREIFSWALDE.

doorway in an unaltered state; the windows of the first-floor were remarkably large. It is also remarkable on account of its decorations: over the door is the Crucifixion; the four lower medallions contain the symbols of the Evangelists; the four upper ones groups of figures representing subjects either scriptural or legendary; between these are inscriptions which I was unable to decipher in the failing light of an autumn evening. The subjects are all in relief and glazed. Lines of bricks, with figures of lions and roses alternating, are placed across the front and round the windows of the gable. It is to be regretted that the design has been mutilated by the loss of the finishing parts of the pinnacles.

I ought not altogether to omit to allude to the castellated architecture of this period, though, as I have not been able to examine any examples of it myself, I do not propose to go into any detail. An interesting chapter on the subject will be found in Kugler's *Ges. der Baukunst*, vol. iii., p. 142, and engravings of the most remarkable specimen, the Marienburg, the residence of the Grand Master of the Teutonic order, have appeared in the works of Frick and von Quast upon that building.^a The original castle at Marienburg, the Hochschloss, was a quadrangular edifice measuring from 160 to 190 feet, and enclosing a court surrounded by a cloister. The construction of this began in 1280. The style is severe and simple, the most decorated part being the covered gallery which crowns the walls. In 1309 a large new portion was commenced, and throughout nearly the whole of the century vast works were carried on. The most striking part of the exterior is the side towards the Nogat, a fine battlemented mass with deep recesses, covered by segmental arches, and fine octagonal bartizans springing from square masses at the angles. The interior is in general plain, but a richly decorated doorway leading to the chapel is mentioned by Kugler as probably the most complete and satisfactory composition which is to be found in the whole range of this style of Brick Architecture. In the great gateway Kugler thinks that reminiscences of Oriental architecture are plainly perceptible. The larger apartments have vaulted roofs springing from slender octagonal columns of granite, the capitals and bases of which are of Swedish limestone. The windows are more peculiar than elegant, and in most instances consist of three unfoliated square-headed lights, over which are two lights of the same size also square-headed and unfoliated. In some instances there is a double-feathered quatrefoil in the head of each light, and sometimes a double-feathered pointed arch below the quatrefoil.

Other castles in Prussia much resemble the Hochschloss at Marienburg. Of these the Episcopal Castle at Heilsberg appears to afford an excellent example;

^a See also Büsching, *Das Schloss der deutschen Ritter zu Marienburg*, Berlin, 1823.

it is a nearly square mass, about 153 and 157 feet in length and breadth, with a tower at one angle; in the centre is a small court surrounded by a cloister of two stories. The apartments in the interior are vaulted in much the same manner as those of the Marienburg. This castle was built between 1350 and 1400.^a

In the later period of pointed architecture, *i.e.* from 1450 to 1550, the construction of new buildings was less extensively carried on in the countries in which Brick Architecture was most practised; it was a period marked rather by decline than by advance in the fortunes of most of the Hanseatic cities, and the wealth and zeal of preceding generations had already provided an ample supply of fine churches. Those that were erected do not present very many marked features. The progress of the style, as in other parts of Germany, was to a less individuality and a greater fusion of parts; the mouldings are thinner, poorer, and less marked; the piers have no capitals, and are often octagonal and without mouldings; the ribs of the vaulting are of the poorest character, and the windows contain nothing that can be called tracery, the mullions being often merely upright bars running from the sill to the arch. The window arches are not unfrequently segmental or pointed segmental. The redeeming features which are met with in the stone buildings of this period, *viz.* elaborate ornamentation on the exterior, particularly about the doorways and the towers, and fanciful if not beautiful tracery in the windows, are wanting in the edifices of brick. The extremely bald effect of the interiors was, however, in their original state, much relieved by paintings on the walls, and very probably on the vaultings also, and by carvings in wood and other decorations about the altars. Vast triptychs, filled with figures carved in high relief in wood, were extremely common; and where, as at Breslau and Cracow, the churches still retain their ancient decorations, a surprising number of them are to be found. In the district with which we are now concerned some good specimens are preserved, as in churches at Wismar, Anclam, and Frankfort on the Oder. In Pomerania, however, according to Kugler, late restorations have caused the destruction of many very interesting examples.

One of the best examples of a church of this period is the Marienkirche at Stralsund, a fine building as regards size and proportions, but very bald and poor in detail; the windows are large and numerous, but of the poorest kind, the mullions being merely upright bars. This church was finished in 1470, having been in building during the greater part of the century.^b

^a Kugler, *Ges. der Baukunst*, vol. iii. p. 484.

^b Kugler, *Kleine Schriften*, vol. i. p. 744.

In some of the towns, where stone was more commonly used than brick during the fourteenth and fifteenth centuries, it is not uncommon to find that the transepts or walls of the aisles are carried up to the level of the roof in stone, and that the gables are constructed in black and red brick, ornamented in the usual manner. Unser liebe Frau and St. Ansgar at Bremen, and the cathedral of Verden, afford good examples; the effect, as may be supposed, is much more singular than pleasing. Kugler thinks that these are to be considered as completions of unfinished buildings, in what in the latter part of the fifteenth century had become the prevalent and fashionable style.^a

Some civic buildings of this period deserve notice, particularly on account of their curious ornamentation; one of these is the Town-hall at Hanover, which bears the date of 1455 in an inscription. Here the compartments of the gables contain armed figures about three feet high in low relief, and there is a broad band or frieze of foliage enclosing the escutcheons of the seven Electors, &c.; in another part are groups of figures said to represent the punishments inflicted upon criminals, and the like subjects. All this decoration is glazed, and executed in many small pieces laid in courses like bricks.

The Rath-haus at Zerbst,^b in Anhalt, is similarly decorated with statues about three feet high, said to have been originally coloured and gilt, and to have been sent from Magdeburg. The building bears the dates of 1479, 1480, and 1481.

Many dwelling-houses which belong to this period may be found; in general, however, the designs are nearly the same as those of the houses dating from the early part of the fifteenth century, and the ornament less well carried out. In Lübeck are many houses, apparently of the sixteenth century, the fronts of which are formed by panels rising either from the ground or from the level of the ground floor, and finishing with an arch in the gable. The most common ornaments in these panels are zigzag or cable mouldings, which are produced by using bricks with a curved face, the surface of which is moulded into three or four semi-cylinders placed obliquely. If these bricks are laid one over the other with the slopes all in the same direction, a cable moulding is produced, while if the alternate bricks are reversed and laid with the slope in the opposite direction a zigzag moulding^c is the result. These houses have at first sight the appearance of being of a very early date, but on examining the doorways and other parts it will be seen that they are not really earlier than the sixteenth century.

^a Ges. der Baukunst, vol. iii p. 451.

^b Puttrich, Denkmale, &c.

^c At Spalding, in Lincolnshire, is a small brick house with a porch; the latter is entered by a circular-headed doorway with a zigzag moulding.

In the middle of the sixteenth century, the influence of the revival of classical architecture had extended to the North-east of Germany; but the buildings of this period, although highly deserving of attention, do not come within the scope of this paper. I will therefore merely mention as examples the Fürstenhof at Wismar which bears the date of 1554, the Schloss at Schwerin, and that at Gadebusch. All these are richly decorated with ornament of a Renaissance character of considerable elegance. This ornament, however, is no longer glazed of a dark colour, and in small pieces, but is white or stone colour, unglazed, and executed in large slabs, closely resembling in fact Italian terra-cotta,^a and showing, no doubt, the effect of communication with the artists of Italy.

Before concluding, it may be well to mention some instances in which glazed bricks or tiles were used for purposes not strictly architectural. A few examples of sepulchral memorials, a good deal injured by the tread of feet, remain in the pavement of the cathedral of Brandenburg; they date from the sixteenth and seventeenth centuries, and most of them commemorate canons of that church. Some have effigies in low relief, and one fragment shows remains of shrine-work in incised lines, the surface having been subsequently glazed; several fragments of inscriptions executed in the same way also remain. Inscriptions executed either in relief or incised, but in either case glazed, not unfrequently record the dates of the erection of buildings. I have already noticed the occurrence of such at St. Katharine's, Brandenburg, with the date 1401, at the Mühlen Thor in the same city with 1411, and at the Rath-haus in Hanover with 1455. In Prussia, according to Kugler, it is not unusual to find inscriptions in large characters used as friezes or as ornamental bands round the arches of doors and windows, which he considers to be reminiscences of Sicilian and Eastern architecture.^b He notices an example in the Jakobskirche at Thorn which bears the date 1309.

^a Ges. der Baukunst, vol. iii. p. 481.

^b So at Layer Marney Tower, Essex, built about 1530, are ornamental details, some of Gothic, others of Renaissance character—the first of small pieces of red brick, the last of yellowish terra-cotta in large pieces. The curious battlement and cornice shown in the plate opposite page 23 in “Parker's Domestic Architecture,” vol. iii., exhibit the two in juxtaposition, the corbel-table being of the first class, the cornice and battlement of the second.