



N.B. THE WRITING UPON THIS COMPARTMENT OF THE ORIGINAL IS OBLITERATED AND ITS DESTINATION CONSEQUENTLY UNKNOWN.

COMMON ENTRANCE.

FARM BUILDINGS.

PLAN of the Monastery of S.Gall, in the Ninth Century
 N°2. to illustrate the Fac-simile of the Original Plan

	THE CHURCH.
	PRINCIPAL MONASTIC BUILDINGS.
	BUILDINGS FOR EDUCATION.
	DO. DO. HOSPITALITY.
	DO. DO. FOR THE SICK & INFIRM.
	FARM BUILDINGS.

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DESCRIPTION OF THE ANCIENT PLAN OF THE MONASTERY OF ST. GALL, IN THE NINTH CENTURY.

The materials for the following concise history I have principally derived from Goldast, who published in 1606 a collection of the chroniclers and biographers of the monastery of St. Gall, under the title "Alamannicarum rerum Scriptores aliquot vetusti. Francf. fol. 1606." I regret that the limits of this essay have prevented me from entering more at large into the contents of this most curious volume. I refer throughout to its pages under the letter G. The Latin sentences *printed in Italics* and *distinguished by inverted commas* are the inscriptions upon the ancient plan.

I. INTRODUCTORY REMARKS.

ST. GALL was born in Ireland in the middle of the sixth century. He accompanied St. Columban into France A.D. 585, and afterwards to a place called Arbon, near the lake of Constance. St. Columban, after three years, went into Italy and died there. St. Gall finally removed to a desert place called Himilinberg, near the same lake, the neighbourhood of which appears to have been always his residence. In this spot (in 614) he fixed his habitation, and it was formally granted to him by King Sigebert, together with the necessary funds for building a cell. He afterwards erected an oratory here, with small dwellings round about it for twelve brethren, who had associated themselves with him; and this was the origin of the monastery which in after ages became one of the most celebrated in Europe, as well for the number of learned men which it produced, and for its complete library, as for its extensive and powerful dominions. It was suppressed in 1808, but the library and the buildings appear to be still in existence.

But to return to the history. St. Gall died at Arbon on the 16th of October, about the year 646. His body was removed to his oratory, and buried in a grave dug between the altar and the wall. Forty years after, his sepulchre was violated by plunderers, who mistook the coffin for a treasure chest, but Boso, bishop of Constance, replaced the coffin, fix-

ing it this time above ground, between the altar and the wall, having filled up the grave which it formerly occupied. He constructed over the coffin a lofty arch, according to the usual fashion^a. A certain priest named Othmar obtained authority from Charles Martel, the father of Pepin and Carloman, by virtue of which he introduced the Benedictine rule into this monastery, and was made the first abbot (in 720.) He constructed various edifices for the use of the monks.

A complete rebuilding of the church and monastery was commenced by Abbot Gozpertus at the beginning of the ninth century; and it is to his period that the plan of the monastery, which is the principal object of the present paper, must be referred. We know very little of the state of the church before this rebuilding. We are not told whether Othmar enlarged or altered the oratory of St. Gall; and indeed our only sources of information are certain scattered hints in the book of the miracles of St. Gall, which was written by Walafrid Strabus, abbot of the neighbouring monastery of Augia. He was a contemporary of Gozpertus, and wrote the biographies of St. Gall and St. Othmar at his request. However, as Strabus mentions that these miracles partly happened in his own period^b, the allusions to the numerous lights in the church, the glass windows, the crypt, &c., which are to be found in these tales, may be probably referred to the new basilica.

Gozpertus began this new basilica in the year 829^c, having previously pulled down the old one. He completed it in seven years, and dedicated it in the ninth year.

Evidently the new church stood on the same site as the old

^a "Sumens loculum, in quo sanctum corpus erat, posuit super terram inter parietem et altare, et desuper ut moris est archam altiore construxit, fossam vera terra replevit."—Vit. S. Galli, lib. ii. cap. 2. G. pp. 257, 258.

^b Vit. S. Galli, lib. i. cap. 35. G. p. 256.

^c Ratperti, de origine et cas. Mon. S. Galli, cap. 6. "Ad augmentum quoque nostri monasterii, veteri destructa novam S. Gallo cœpit ædificare basilicam," &c. G. p. 25. The monks themselves acted as the workmen. In the "Analecta" of Mabillon (tom. iv. p. 329) is a fragment by Ermenricus, a monk of Augia, and contemporary of the Abbot Grimaldus, in which he praises the monastery of St. Gall. "Longum est sane per singulos nominatim velle discurrere, quantos, qua-

lesque Dei famulos in omni arte et virtutum stemmate redimitos ibi viderim. Sed neque in ædificiis construendis ex omni materia tam industrios viros, vel raro usquam repperi, sicuti bene in nido apparet, quales volucres ibi inhabitant. Cerne basilicam et cœnobii claustrum, et non miraris quod refero. Et ne omnibus sileam, quid est WINIHARTUS, nisi ipse Dædalus? vel quis ISENRICUS nisi Beseleel secundus? in cujus manu versatur semper dolabrum, excepto quando stat ad altaris sacri ministerium." He speaks also of a certain Gozpertus, the nephew of the Abbot Gozpertus, (p. 335.) Keller suggests that this may be the Gozpertus alluded to in the inscription upon the plan. Winihartus is also mentioned as the builder of the church in some lines by Notkerus, quoted in the Benedictine Annals, p. 570.

one, else he would have finished the one before he demolished the other. The same abbot set about to reconstruct the whole monastery on an enlarged scale, but did not live to complete it. Abbot Grimaldus succeeded in 841, and in his time Hartmotus, his sub-abbot, *pro abbas*, completed the whole of the claustral edifices, and erected the *abbatia*, or residence of the abbot. He also decorated the church with various ornaments. He constructed for the most part the tomb of St. Gall with the other altars^d, the *analogium*, or pulpit, and the confessionary, provided silver coronas and other lights for the church, and decorated the apse behind the altar of St. Gall with gilding and painting.

The plan of the monastery which accompanies this essay is a fac-simile, on a reduced scale, of an original drawing which is preserved in the library of St. Gall. That it was intended to represent the monastery of St. Gall is shewn by the dedication of the high altar of the church, but it does not appear at first sight whether the plan is a representation of existing buildings or a design for new ones. There is an inscription upon the original, which runs in the following terms :

“For thee, my dearest son Gozpertus, have I drawn out this plan of the position and arrangement of the offices, concisely described; with which you may exercise your ingenuity and recognise my friendship, which I trust you have not found slow to satisfy your wishes. Do not imagine that I have worked out this scheme supposing you to stand in need of our artistic skill, but rather believe that out of love of thee and in the friendly zeal of brotherhood I have depicted this for your own private criticism. Farewell,” &c.^e

From the terms of this inscription Mabillon infers that the person who could thus address Abbot Gozpertus as his son must have been of high dignity, and he supposes that he was no other than the Abbot Eginhardus, who held the office of prefect of the royal buildings under Charlemagne, and was well skilled in architecture^f. This view he confirms by an inscrip-

^d “Principio vero tumbam S. Galli cum reliquis altaribus, et analogio atque confessione ita innovari, maximeque ex parte totum ex integro fecit edificari, sicut hodie videtur et cernitur.”—Ratp., cap. ix. G. p. 29.

^e “Hæc tibi dulcissime fili, Gozperthe de positione officinarum paucis exemplata direxi, quibus sollertiam exerceas tuam, meamque devotionem utcumque cognoscas, qua tuæ bonæ voluntati satis facere me seg-

nem non inveniri confido. Ne susciperis autem me hæc ideo elaborasse, quod vos putemus nostris indigere magisteriis; sed potius, ob amorem tui, tibi soli perscrutanda pinxisse amicabilem fraternitatis intuitu crede, Vale in Christo semper memor nostri, Amen.”—Mab. Ann., tom. ii. p. 571.

^f He married Imma the daughter of Charlemagne, but after the death of his royal master he adopted the monastic life,

tion which was painted on the walls of the abbot's house, (the "abbatia,") which records that the hall was finished by the architects of the palace, "a palatinis magistris," and decorated by painters from Augia^g. Charlemagne himself was so fond of the monastery of St. Gall, and so familiar with its monks, that they used to call him "our Charles," "noster Karolus^h." But if we consider that the inscription shews the plan to have been made in the days of Gozpertus, while the chronicled history tells us that the buildings of the monastery and the internal arrangements of the church, with its altars, confessionary, &c., were not completed until after his death, it must be concluded that the plan was merely a design for a complete monastery, intended to assist the abbot in planning his new buildings; and we need not be surprised to find, by means of various allusions in the chronicles, that the monastery itself, as completed by Hartmotus and Grimaldus, varied in several particulars from the plan itself. It must nevertheless be considered as a most curious document, illustrating not merely the monastic habits, but the general arrangements of the buildings of Charlemagne's period, namely, the beginning of the ninth century.

A copy of this plan was first published by Mabillon, in the second volume of his Annals of the Benedictine Order. But this copy had no pretensions to the character of a facsimile, either in its manner or in respect to the inscriptions with which the original is covered. A very accurate facsimile was published by F. Keller at Zurich in 1844, accompanied by a good, but somewhat prolix, descriptive and historical memoir. I have gladly availed myself of the latter part of his description, but have found it necessary to draw up an entirely new and more concise historical introduction, and a new description of the church, in the explanation of which I have been compelled to differ from Keller in several respects.

and was made abbot of Selgenstat, where he died in 839. The abbacy of Gozpertus began in the next year after the death of Charlemagne.

^g Mabillon. Annales Ben., tom. ii. p. 572. The inscriptions in the hall were as follows:—

In pariete.

Splendida marmoreis ornata est aula columnis

En Grimvvaldus ovans alto fundamine struxit

Ornavit, coluit, HLVDVICI principis almi
Temporibus, multis lætus feliciter annis.

In alio pariete.

Aula palatinis perfecta est ista Magistris,
Insula pictores transmiserat AVGIA
claus.

Canisii. Thes., tom. ii. 3, 228.

^h "Karolus magnus Imperator in tantum dilexit locum S. Galli, et ita familiaris erat fratribus, ut eum non aliter nominarent nisi *noster Karolus*."—Ekkehardus, vit. B. Notkeri, c. 29. G. p. 277.

The original, preserved in the library of St. Gall, is drawn upon a large sheet of parchment. The fac-simile published by Keller was intended to have been exactly of the same size as the original, but an accident that happened to the lithographic stone compelled him to employ one that was not quite so large as his drawing, and therefore to reduce the published copy by one-fifth. The copy now presented to our readers is one-half of Keller's, and therefore bears to the original the proportion of two to five. The walls of the buildings, the furniture, and every detail, are alike made out by thin single red lines, without regard to the proportional thickness of the different objects; and the plan has evidently no pretension to have been laid down to scale, for the church is said in the legends written upon it to be two hundred feet long and eighty feet broad, whereas if we attempt to make a scale by dividing the length into two hundred parts we shall find the breadth only fifty-six of such parts. Similar differences occur when such a scale is applied to the intercolumniations, which are said to be twelve feet in the nave and ten in the atrium. The plan must therefore be considered as a mere diagram. In many parts of it objects are represented in elevation, such as the crosses erected in parts of the church and in the cemetery, the arcades of the cloister, trees, and so on. This license is familiar to all who have been accustomed to ancient drawings, and is indeed employed even in our own time to a certain extent.

In plate 2 I have endeavoured to supply a kind of key to the plan in its original state in plate 1, for as the latter is somewhat confused, and requires considerable study to enable us to distinguish the several parts and buildings, I have in the key-plan drawn the walls with thick black lines, tinted the covered buildings, and supplied English lettering.

The entire establishment resembles a town composed of isolated houses, with streets running between them. This is probably due to their having been erected of wood, with the exception of the church. The church has the cloister attached to its south side, and the latter is surrounded by three large buildings in the usual manner, appropriated respectively to the dormitory, the refectory, and the cellarium or provision department. Also on the east side of the church stands a group of buildings arranged about a couple of courts, and including the infirmary and the convent of the novices. With these

exceptions the monastery is composed of thirty-three separate houses, comprising various offices, as well as the residences of the abbot and physician, a hospitium for distinguished guests, and one for the paupers, and lastly a complete series of farm buildings. Moreover there is a physic garden, a vegetable garden, and a cemetery, each separately enclosed. To judge by the length and breadth of the church, the entire space occupied by the monastery will be about four hundred and thirty feet square.

The draughtsman has not merely given us the disposition of the apartments, but has also delineated the furniture of each room, so that the plan becomes extremely interesting for the elucidation of the domestic habits of the period. Thus, for example, the hospitium for the distinguished guests may be supposed to represent the usual arrangements of a large house for that class of persons. The abbot's house is another variety of the ordinary dwelling-house of the ninth century. The arrangements of the farm buildings, in like manner, must belong as much to the laity as to the ecclesiastical order, so that this curious document is by no means confined to the elucidation of monastic habits.

The only part of the details which are not perfectly intelligible is a certain square which is delineated in the centre of many of the rooms. The larger buildings, such as the two hospitia, the school, and the factory, consist of a series of small apartments, which enclose a large quadrangular space in the middle. This quadrangular space is either left undivided, as in the hospitia, or divided into two, as in the school and factory. But each of these central apartments has a square in the middle. Now in the superior hospitium this square is inscribed "*locus foci*," the fire-hearth. In the paupers' hospitium it bears the inscription "*testudo*," the roof. When this monastery was built, glass windows were rare, and almost confined to churches. The mode of building, therefore, appears to have assimilated itself to the ancient plan of arranging sleeping chambers and private apartments about one large central room, into which they opened. This central room either rose above the roofs of the others, so as to allow of small open windows like clerestory windows, or else the central room was so roofed over as to leave a small square opening in the middle, which admitted light and allowed the smoke of the fire to escape. In warm southerly climates, as at Pom-

peii, the opening had a cistern below to receive rain. But in the north, if a fire-place was below it, the central opening must have been covered with a sort of turret or lantern, with open sides, to prevent the rain from pouring down upon the fire. Comparing the two hospitia, I am inclined to think that this is the interpretation of the central square in most of the examples in which it occurs, namely, that it represents the central opening of a roof, which roof may either slope outwards or inwards, as the case may be, and that in some instances it was covered with a small roofed turret. But the fire-place was not always in the middle; on the contrary, the little oval which is seen in the corners of some of the rooms, for example, in the abbot's house and in the bedchambers of the great hospitium, doubtless marks the stove or charcoal pan. In the kitchen and brewhouse the central square furnace must have had over it an open lantern. In the great kitchen it is inscribed "*fornax super arcus*," a cooking stove upon arches. Three of the rooms in the plan, namely, that under the dormitory, one in the novices' convent, and one in the infirmary, are warmed by a hypocaust, which is shewn by the fire-place being in a different place from the chimney. For the fire-place, "*caminus ad calefaciendum*," is at one end of the room, and the chimney, "*evaporatio fumi*," or "*exitus fumi*," at the other, and both outside the walls. It is clear, therefore, that the fire and smoke must have circulated through flues under the floor of the apartment, as in the ancient "*hypocaust*," and finally found its exit by a chimney at the end of the series of flues, for it is only thus that we can account for the entire separation of the fire-place from the chimney upon the plan. In the great farm buildings at the south-west part of the establishment the small central square may indicate that the central space has an overhanging shed carried round it, leaving the opening in the middle; or if this appears improbable, we must suppose in this case that it means a pond for water, or, as Keller seems to think, a little cabin or sentry-box, which I confess does not appear very likely.

Most of the buildings seem to be in one story only, but in some of them upper stories are indicated by the inscriptions, as in the three great buildings which enclose the cloister, the sacristy and library which are attached to the east end of the church, the abbot's house, and the great stable for horses and cows. The general distribution of the buildings with respect

to the church is as follows: the cloister, with dormitory, bath, refectory, kitchen, and cellar with larder, are attached to its south side; the novices' school and infirmary, with their offices, and with the physician's house and garden, lie to the east; the abbot's house, the school, and the hospitiium for superior guests, are placed on the north, apart from the monastery, the latter two lying nearest the entrance, so that the abbot separates the strangers from the monastic buildings at this angle, and he has himself a private entrance to the church; the paupers' hospitiium is opposite to the other, and the farm buildings and workshops lie in the outward circumference westward and southward; the garden and the cemetery eastward.

THE CHURCH.

The church is cruciform in plan: its nave has nine piers on each side, which are said in the inscription to be twelve feet asunder^l. The width of the central alley is forty feet^k, and of each side aisle twenty feet^l. The transepts project about fifteen feet beyond the side aisle walls, to judge by their proportional size. They have no aisles. A chancel extends eastward about forty feet, and is terminated by an apse: there is also an apse at the west end of the nave. The principal entrances of the church are at the west end. This end has an *atrium* or court, of a semicircular plan, the diameter of which is equal to the entire width of the nave and aisles, and it is concentric to the western apse. A covered *porticus* or cloister lines its wall, and is supported by eight square piers, which are ten feet asunder. Its middle part, between the cloister and the apse, is open to the sky, and termed a field of *Paradise*^m. A long alley leads from without to the door of the cloistered atrium, which is protected by a vestibule; and the western doors of the church terminate the cloister to right and left. Close to these church doors, however, other doors lead from the cloister, one on each side, into vestibules similar to the

^l *Bissenos metire pedes interque columnas;*

Ordine quas isto constituisse decet.

^k *Latitudo interioris templi pedum xl.*

^l *Latitudo utriusque porticus pedum xx.*

^m The following verses are inscribed respectively in the semicircular cloister, between its columns, in the open space in front of it, and in the semicircular eastern

court:—

Hic muro tectum impositum palet, atque columnis

Has interque pedes denos moderare columnas.

Hic paradisiacum sine tecto sternito campum

Hic sine domatibus paradisi plana parantur.

vestibule of entrance, of which the northern one conducts to the hospitium of the distinguished guests and to the school, and the southern to the paupers' hospitium, as well as to the monastery in general". Two circular towers are also appended to this semicircular cloister.

Besides the western doors of the church, by which the public were admitted, the plan shews a door in the south aisle which leads to the chamber occupied by the keeper of the paupers' hospitium, and a corresponding one in the north aisle to the porter's chambers. In the north transept a door opens to the chambers appropriated to ecclesiastical guests, another to the abbot's house, a third leads to the scriptorium, and a fourth to the crypt and to the stairs of the library. In the south transept is a door to the cloister, one to the dormitory, or to the room below it, one to the sacristy, and lastly one to the crypt. The entire plan of the church is divided by screens into various chapels and choirs. In the north aisle there are four altars, each of which is placed on the west side of a small screen, which extends from the side aisle wall to the back of the altar, and the altar has also a little enclosure about it, with a door to the west. But space is left for a passage between this enclosure and the pillar of the nave, over against which the altar stands. There is a similar arrangement in the south aisle. The north altars are dedicated respectively to St. Cecilia, the Holy Innocents, St. Martin, and St. Stephen, reckoning from west to east; and the south altars similarly to St. Agnes, St. Sebastian, St. Mauritius, and St. Lawrence. In the centre line of the nave, opposite to the third pillar from the west, stands the font^o, and opposite to the fourth pillar an isolated enclosure like those of the side aisle protects an altar dedicated to St. John Baptist and St. John the Evangelist, thus placed evidently with respect to the font. A space to the west of the font is enclosed by screens, passing from pillar to pillar of the nave.

Opposite to the sixth pillar, and in the middle of the nave,

ⁿ The long alley has the following verses:—

*"Omnibus ad sacrum turbis patet hæc via templum
Quo sua vota ferant, unde hilares redeant."*

The first, or western vestibule:—

"Adveniens aditum populus hic cunctus habebit."

The northern vestibule:—

"Exiet hic hospes, vel Templi tecta subibit

Discentis scholæ pulchra juventa simul"

The southern vestibule:—

"Tota Monasterio famulantium hic turba subintrat."

^o *"Ecce renascentes suscepat Christus alumnos."*

we find an altar in its small enclosure, dedicated to the Cross^p, and having like the font an outer enclosure formed by screens extending from pillar to pillar on the north, south, and west sides. The western screen has a door. The nave is so completely obstructed by these screens, and by the choirs to be presently described, that the only straight passages from one end to the other are to be found one in each side aisle close to the pillars, and passing between them and the altars already mentioned.

The north transept has an altar of St. Philip and St. James placed against its eastern wall, and upon a platform ascended by three steps in front. This transept is also enclosed so as to form a chapel by means of screens, which leave only a narrow passage to the south in continuation of the above-mentioned passage of the side aisle. Benches are placed on three sides of the chapel thus formed, and in the centre is also a bench inscribed "*formula.*" The entrance to this chapel is in its southern screen. The south transept is similarly enclosed for a chapel of St. Andrew.

We may now examine the arrangements of the principal choir and presbytery. The floor of the presbytery, which extends to the eastern piers of the central space or "crossing," is raised upon a crypt, and is reached by means of a flight of seven steps^q that occupies part of the area of the crossing, and is divided in the middle by the passage to the confessionary, "*accessus ad confessionem,*" or cell under the high altar, which contains the body of St. Gallus. The original plan of this portion of the church is confused by the attempt to delineate the plan of the crypt in combination with that of the presbytery over it. The arched passage marked "*involutio arcuum,*" evidently belongs to the crypt alone. It is entered on each side from the transepts, and passes outside the wall of the chancel, as my key-plan No. 2 will shew^r. These portions of the crypt are joined by a passage which runs north and south under the platform of the presbytery, and thus the central space is embraced and isolated by this crypt. But the central space or

^p Rather, to the crucified Saviour. It bears the inscription "*Altare s'ci salvatoris ad crucem.*" and the line

"*Cruz, via, vita, salus, miserique redemptionis mundi.*"

^q Marked "*septem gradus*" on one side of the passage and "*similiter*" on the other.

^r The north entrance to the crypt is in-

scribed "*In criptam introitus et exitus.*" and the south entrance "*In criptam ingressus et egressus.*" An inscription behind the high altar declares that the holy structures of the saints (altars or tombs) upon the crypt shall shine in glory. "*Sancta super criptam sanctorum structa nitebunt.*"

confessionary has its separate entrance in the middle of the flight of steps which lead up to the presbytery. This is in fact a very common arrangement in the early churches. The confessionary of St. Peter at Rome, for example^s, was so circumscribed by a passage. Possibly also the crypt of the church of St. Gall extended under the apse.

The high altar was dedicated to St. Mary and St. Gall, as the inscription shews. The sarcophagus of St. Gall marked in the plan would be, in accordance with the above explanation, really placed in the crypt below it.

In the monastic chronicles it is well known that every removal or change of position, "translation," or "elevation," of the body of a saint was most carefully recorded, and usually the days upon which such translations occurred were observed as festivals. Now, as I have already stated, we possess a complete series of chronicles for the monastery of St. Gall, extending without interruption to the first part of the thirteenth century, besides the biographies of St. Gall and St. Othmar; and the earliest writer of these chronicles lived in the ninth century. Nevertheless the latest mention of the body of St. Gall is the history of his re-interment by Bishop Boso in 686, and no translation or disturbance is alluded to in the rebuilding of the basilica by Gozpertus. On the other hand, the second founder, Othmar, was translated four times, and each translation is carefully recorded.

This abbot died at Stein, (A.D. 758,) and was translated to his own monastery, (A.D. 768,) and buried in a sarcophagus between the altar of St. John Baptist and the wall, on the right hand side of the altar^t. The sarcophagus rose above the level of the pavement, and the body was deposited therein, and not beneath the surface of the ground. When the basilica or church of St. Gall was taken down by Gozpertus, upon the occasion of the rebuilding, the walls were prostrated by means of battering rams, and the workmen imagined the body of the saint to be safe beneath the ground, but in their operations they shattered the tomb, and then discovered it to be above. They then translated him into the church of St. Peter, (A.D. 829,) behind the altar, where he was suffered to remain for some years. He was then (A.D. 864) brought back to the church of St. Gall, and placed on the right hand of the altar of

^s Architectural History of Canterbury Cathedral, chap. iii.

^t Wal. Strab. vit. Othm., cap. ix. cap. xiii.; *Iso de Mir.*, c. v. G. 281, 283, 288.

St. Gall^a, and three years after removed to a basilica erected on purpose for him, and placed under the altar in a stone ark. We may infer from all this that the body of St. Gall was never disturbed, even during the rebuilding of the church, for if it had, the fact would have been recorded as well as these numerous removals of St. Othmar. It follows that the first founder was so placed that his tomb did not interfere with the reconstruction; and the builders seem to have imagined that the second founder might also have remained undisturbed. But this shews that St. Gall must have been placed below, within the crypt and not above it, and therefore the "*sarcophagus sancti corporis*," which in the plan is shewn behind the high altar, must really have been in the crypt below. Amongst the miracles of St. Gall there is a tale of a cripple who was brought by his friends to the *memoriam B. Galli*, (that is, the tomb or altar of St. Gall,) and daily laid close to the sepulchre in the crypt^v. But on the other hand there is another tale concerning a lamp which burnt nightly before the *upper altar and tomb*, and which gave a small light to the *altar within the crypt*, through a small window or opening^x.

It is not impossible that although the real sepulchre of the saint was in the confessionary or crypt below, a monument to his honour may have been erected above, behind the high altar^v.

^a *Iso de Mirac.*, cap. iv.; (but in cap. vii. *post aram S. J. Baptistæ*.) lib. ii. cap. 2. G. pp. 287, 289, 294.

^v Cap. xxxii. G. p. 271. "*Cottidie juxta sepulchrum in crypta collocatus.*"

^x "*Lumen quod ante superius altare et tumbam ardebat per quamdam fenestram radios suos ad altare infra cryptam positum dirigebat.*"—cap. xxv. G. p. 268.

^v I have already stated that there are discrepancies between the plan and some of the arrangements mentioned in the chronicles. Thus the altar of St. John Baptist, near which St. Othmar was deposited, does not appear in the plan. The crypt is called the crypt of the twelve Apostles and of St. Columbanus, in cap. xxvi. of the life of Notker (G. p. 374;) and the altar of St. Columbanus in the crypt is mentioned; (G. p. 130;) but the writer belongs to the twelfth century. However, in the plan the altar of St. Columbanus is on the steps of the presbytery. In 1225 (G. p. 137) two crypts are mentioned, namely, of the Apostles and of all saints: "*duas cryptas nostras xii. videlicet Apostolorum et omnium sanctorum.*" They were

dedicated in that year. The church suffered by a fire in 937. Abbot Vodalricus, or *Ulricus*, (A.D. 990—996,) made a chapel, in which was placed the sepulchre of the Lord, constructed with great care, and decorated with gold and colours. There were four altars in the chapel, one in honour of the Holy Trinity and another of the Holy Cross. On the right hand was painted the assumption of the Virgin, and an altar was there dedicated to St. Mary. On the left an altar of St. John, with a picture of his death. In the crypt below he arranged a fifth altar to Vodalricus the bishop. G. p. 112. In the days of Abbot Ulric the Sixth (1204—1219) considerable changes were made in the buildings, and a great tower erected for the church. I find no particulars relating to the history of the church after this period. Murray's Hand-book informs us that the abbey church is now a cathedral, and was so modernized in the last century that it possesses little to interest the stranger. The buildings of the deserted monastery date from the seventeenth and eighteenth centuries, and are partly employed for govern-

There was a second altar to the east of the high altar, and this was dedicated to St. Paul. The sides of the presbytery and the apse were lined with benches². On the steps of the presbytery, to the north and south, are placed altars of St. Benedict and St. Columbanus, each altar having a small enclosure or rail like those of the side aisles^a. To the west of the steps the choir of the singers, "*chorus psallentium*," is enclosed by screens that occupy the space of the crossing. This choir has lateral doors, which open into the long passages or gangways that lead, as already described, along the inner sides of the aisles, and terminate in the doors leading to the crypt. Possibly this arrangement was made to facilitate processions, which would thus pass completely round the church, visiting in turn all the altars of the side aisles and circumscribing the confessionary. It is besides probable that some altars were placed in the crypt which do not appear in the plan.

The choir has also a door in the western screen, and four seats or desks, "*formulæ*," which are placed so that the singers would turn either to the east or to the west, but it does not appear which.

Westward of the choir another set of screens extends from pillar to pillar, so as to enclose a space which has two doors to the west^b. In the western part of this enclosure, and in the central line of the nave, is placed the pulpit, "*ambo*," of a circular form; and against the eastern or choir screen, on each side of the choir door, is an *analogium*, or reading desk. These are inscribed "*analogia ad legendum*."

At the west end of the church there is an altar to St. Peter, in the middle of the apse, and a seat runs round the concavity^c. But neither in this apse or in the eastern one is the usual patriarchal throne indicated. The platform of this apse is raised

ment offices and for the preservation of the convent library. A complete list of the abbots to A.D. 1530, by J. Vadianus, is given in G. p. 150.

² The altar of St. Paul is distinguished by the following line—"*Hic Pauli dignos magni celebramus honores*."

^a Charlemagne obtained from Pope Adrian two teachers of the Gregorian chant, one of whom, named Romanus, was detained at St. Gall on his road to Metz by sickness, and remained there teaching the monks. At Rome it seems that they had a certain desk fixed in the church, upon which the genuine antiphonarium was deposited for the inspection of all per-

sons. Accordingly a similar desk or "*cantarium*," as it was called, was set up in the church of St. Gall, under the direction of Romanus, about the altar of the Apostles, and upon this was deposited the authentic copy of the antiphonarium which he had brought with him from Rome.—Ekkehardi minimi de Vit. B. Notheri, cap. ix. G. 359.

^b This enclosed space has the inscription "*Hic evangelicæ recitatur lectio pacis*" in the midst between the *analogia* and the *ambo*.

^c This altar has the line "*Hic Petrus ecclesie pastor sortitur honorem*," and the apse is inscribed "*exedra*."

three steps only. The step is interrupted in the middle, as if a passage was there to a "confessionary" or crypt beneath the altar, but no such place is indicated by writing. In front of the platform an enclosure is screened off for a choir, "*chorus*," but no seats or desks are drawn. It has one door towards the west and two towards the east. The eastern screen is near the font, and a bench placed between the two doors may serve for the convenience of those who assisted at the baptismal service. On the whole, seventeen altars are marked in the plan.

THE SACRISTY^d.

The sacristy, which is exactly of the same size as the south transept, consists of a building of two stories, erected on one side in contact with the east wall of the southern transept, and on the other against the presbytery. The lower story or sacristy proper, "*subtus sacratorium*," contains presses, chests, and benches: there is a large table in the middle for setting out the sacred vessels, "*mensa sanctorum vasorum*." In the south-east corner there is a stove, as the priests have to remain here a long time in winter for putting on their habiliments. In the upper story are kept the ecclesiastical vestments, "*supra vestium ecclesie repositio*." From the sacristy below a long passage leads to a small house, where the sacramental bread is baked for the use of the church, and oil is prepared for lighting the church, "*domus ad præparandum panem sanctum et oleum exprimendum*." Here are delineated a fire-place, oven, table, and benches.

LIBRARY AND SCRIPTORIUM.

On the north side of the presbytery is a building which in its plan and dimensions corresponds exactly with the sacristy, and abuts on the eastern side of the north transept in the same manner as the latter does against the south transept. It also consists of two stories. The lower story is arranged for a *scriptorium*, or writing room, "*infra sedes scribentium*." It is furnished with a large table in the centre, and seven writing desks placed against the walls, which are lighted by six windows^e. The upper story serves as a depository for the

^d This and the following articles are freely translated from Keller, with the few exceptions which I have marked as they occur, and with the addition of the notes.

^e The glass windows, *fenestræ vitræ*, of the Scriptorium, are mentioned by Ekkehardus, cap. iii. G. p. 53.

books, "*supra bibliotheca*†." The library is reached by means of a staircase from the passage which leads to the crypt, "*introitus in bibliothecam super criptam superius*."

TOWERS.

On the two sides of the eastern semicircular atrium of the minster stand two towers, which, like those of most of the ancient basilicas of Italy, are not connected with the principal building. The access to them is by short passages from the atrium. They are probably divided into stories, and, what is seldom the case with belfries, are of a round form. Their height is not given. It is not said whether they were to receive bells, which doubtless was their principal destination. It is merely remarked that the ascent to the summit of the tower and to their chapels was (as is also shewn in the drawing) by a winding staircase, and that the whole building could be overlooked from them, "*ascensus per cocleam, ad universa super inspicienda*." Above, in the northern tower, there is an altar in a chapel dedicated to the archangel Michael, "*altare sancti Michaelis in summitate*;" and at the summit of the southern tower a similar altar is raised to the archangel Gabriel, "*altare sancti Gabrielis in summitate*." Campaniles or bell-towers, as is known, had not been brought into frequent use in the construction of churches very long before this plan was made; perhaps first under the reign of Charlemagne. Then followed the various, and in part unsuccessful, efforts to bring them into harmonious connection with the rest of the building, to which, by their nature, they were not suited. The floral ornament in the plan, which is also often seen in manuscripts of the ninth century, has no precise signification‡.

THE CLOISTER^h.

The cloister court is placed on the south side of the church. It is a large area bounded on the north by the church and on the other sides by three principal buildings of the monastery. It is surrounded in the usual manner by a covered walk or

† The library of the old St. Peter's church at Rome was constructed on the other side of the transept, in the angle formed between it and the nave, and indeed in the place where on our plan the dwelling for visiting brothers, "*susceptio fratrum supervenientium*," is indicated.

‡ It probably indicates the conical roof of the building or its ornamental finial.

^h I have re-written the description of the cloister, which seems not to have been understood by Keller in the sense in which I view it.

porticus, and in the centre the open space was probably laid out with grass or shrubs. The arches of the *porticus* are represented in the plan in a sort of rude perspective or horizontal projection familiar to those who are in the habit of examining ancient drawings of this kind; and comparing it with the known forms of Romanesque cloisters, it appears that there was an open arch in the centre of each side, which gave access to the central space known as the *Pratellum*, *Preau*, or *Cloister-garth*, in the respective languages of the above terms.

On either side of this central open arch was a group of four arches, the pillars of which of course rested on a low basement wall, being intended to admit light and air in the manner of open windows, but not to give access to the cloister-garth. Four foot-paths, "*quatuor semitæ per transversum claustrî*," extend one from each of the central arches, and abut against a path surrounded by a small square enclosure, in the centre of which is a "*savina*," or tub, either for water or for plants.

The north walk or *ambulacrum* of the cloister, extends along the church. "*porticus ante ecclesiam*." It is considerably broader than the other three, and is provided with benches on the long sides, apparently because it serves also as a chapter-house, for an inscription informs us that this is the place where the pious multitude may hold their wholesome deliberations. "*Hic pia concilium pertractet turba salubre*." At one end of this chapter-house a door leads us into the south transept of the minster, and through it into the habitations and dormitories of the brethren; at the opposite end a door opens into the parlourⁱ. The eastern walk of the cloister which leads towards the refectory is constructed alongside of the habitation of the brethren, "*porticus ante domum stet hæc fornace calentem*." (The *porticus* stands before the house, which is warmed by a stove.) The habitation consists of two stories. Below is a sitting room or common room for the brethren, "*subtus calefactoria domus*^k." It is provided with a large arched fire-place, "*cami-*

ⁱ A door into the church near the *auditorium* or parlour occurs in Ekkehardus (c. 10. G. p. 83.) *Et cum ad introitum ecclesiæ ubi locus auditorii est, venissent*, &c. This door may have been at the north-west angle of the cloister, as usual, or it may be the door which opens to the

almoner's chamber.

^k This lower room was also termed *pisalis*, for the south door of it is inscribed "*egressus de pisale*." Under *Pisalis* in Ducange, I find amongst other definitions, "*Conclave vaporario vel fornacula calefactum unde Gall. Poêle* (Guerardo in glos-

nus ad calefaciendum," the chimney of which, "*evaporatio fumi,*" as in the inner school and the infirmary, is represented, probably for the sake of symmetry¹, at a distance from the fire-place, and also in horizontal projection. The sitting room has two outlets, one leads by a short passage, "*egressus de pisale,*" to a detached small building, in which, under one roof, are united the washing-house, "*lavatorium,*" or "*lavandi locus,*" furnished all round with benches, and in the centre with a large fire-place; and a bath-house, "*balneatorium,*" with a stove or fire-place, and two boilers. Here probably was carried on the washing of the feet and cleansing of the linen prescribed by the rule of St. Benedict, occupations to which every monk was subjected in turn. Within the monastery there are several bath establishments, which were doubtless constructed on account of the leprosy which at that time prevailed amongst the upper as well as the lower classes. The other outlet from the pisalis, "*exitus ad necessarium,*" leads to the necessarium, in the corner of which a light, "*lucerna,*" is kept burning.

The sleeping apartment occupies the upper story, "*subtus calefactoria domus, supra dormitorium.*" in which are represented the bedsteads and benches, "*lecti.*" It is not possible to say whether from this story the above-named light, which by the rules of the order must burn throughout the night in the sleeping room, could be reached, and also the necessarium, which is almost always connected with the sleeping chambers on the same level^m.

A building of two stories abuts against the south side of the cloisterⁿ, which contains in the lower story the refectory,

sar Polypt.") "*Ccepit nde vir venerabilis Reginboldus cellam ordinare et construere ædificavitque primum dormitorium, subtus autem Pisalem,*" &c. (*Acta Murensis Monasterii*, p. 9.)

In our monastery the *Pisalis* plainly coincides with the above definitions and quotations. It is a room warmed with a stove, and it is under the dormitory.

In the abbey chronicles this chamber is termed the *Pyrale*, and it appears that the arrangement of the buildings differed here from the plan, for the *scriptorium*, the *pyrale* and the *lavatorium* were contiguous to each other. "*Veniunt in pyrale et in eo lavatorium necnon et proximum pyrali scriptorium, et has tres regularissimas præ omnibus quas unquam viderint asse-*

rebant esse officinas." (*G. p. 92. Ekkehardi Hist. S. Galli*, cap. xi. See also cap. iii. of the same chronicle, *G. p. 53.*)

¹ I have explained the disconnection of the chimney and the fire-place in my introductory chapter, as proving the existence of a hypocaust.

^m The staircases which led to the upper floors are omitted throughout the plan. In the usual monastic arrangements one leads from the dormitory to the transept, to enable the monks to attend the nocturnal services with ease: and another leads from the dormitory to the cloister or elsewhere. The ascent to the dormitory, "*e parte ecclesie,*" is mentioned by Ekkehardus, cap. x. *G. p. 83.*

ⁿ The south walk of the cloister is in-

and the upper story of which is destined for a vestiarium, "*infra refectorium, supra vestiarium.*"

In the refectory are represented six tables of different lengths and shapes. The abbot takes his seat at the largest of these, the "*mensa abbatis,*" which is of the shape of a Greek *Π*, with a bench, "*scamnum,*" on each side. The other benches run partly round the walls of the apartment, "*sedes in circuitu,*" and stand partly between the tables. In the centre of the hall is a smaller table of honour for the guests, "*ad sedendum cum hospitibus.*" Opposite to this and placed against the wall the reading-desk, or "*analogium,*" is erected, from which a brother who possesses a good delivery reads during the meal, according to the monastic rule. From the refectory a passage through an arched door leads to the kitchen, "*egressus ad coquinam,*" which is separated from the main building, and in which we observe tables and benches, and in the centre a large fire-place standing upon arches; by the above-named door is a large square press "*to-regma,*" intended probably for keeping the plates, &c. By the old Benedictine rule every monk must take his turn to do duty in the kitchen, with the exception of the cellerer when he happened to be much engaged. Connected with the kitchen by a long passage is a building which comprises the bakehouse and brewhouse of the convent, "*hic victus fratrum cura tractetur honesta.*" This building has a small vestibule, from which to the right and the left we go to the sleeping rooms of the servants, "*repausationes vernarum.*" In the bakehouse, "*pistrinum fratrum,*" are benches and tables, an oblong trough, "*alveolus,*" a baking oven, "*caminus,*" and a locker for meal, "*repositio farinae.*" From the bakehouse we enter the brewhouse, "*hic fratribus conficiatur cervisa,*" in which are represented benches, a boiler and furnace, and where, in a separate space marked "*hic coletur celia* °," the beer cooler appears, under the same form or mark by which the cooling apparatus, "*ad refrigerandum cervisam,*" is represented in the brewhouses of the hospitium and of the pilgrims.

The upper story of this building is, as already stated, the *vestiarium*, or place where the clothes are kept, (that is, the ordinary clothes of the brethren, whereas in the vestiarium above the sacristy the ecclesiastical vestments were deposited.)

scribed "*Hæc domui adssistit cunctis qua porgitur æsca.*"

° Whether by *celia* we are to understand *ale* or *wort*, does not appear.

The west walk of the cloister is bounded by another two-storied building. The ground-floor consists of the cellar, "*infra cellarium*," into which we enter from the cloister on the side of the refectory, "*huic porticus potus quoque cella coheret*," with a great number of large and small barrels, "*majores tunnæ et minores*." These barrels were probably destined for keeping both beer and wine. Although the enjoyment of the latter was originally denied to the monks, yet as early as the eighth century wine was drunk in all wealthy monasteries. In the upper story is the larder and store room for other kinds of provisions, "*supra lardarium et aliorum necessarium repositio*."

THE PARLOUR.

In a line with the apartment of the almoner and adjoining to it is the long parlour, furnished all round with benches, which serves as a vestibule to the cloisters, and in which conversation is carried on with visitors, and orders are given to the servants, "*exitus et introitus ante claustrum ad conloquendum cum hospitibus et ad mandatum faciendum*"^p."

THE CONVENT OF THE NOVICES, OR INNER SCHOOL.

At the east end of the church stands a group of buildings which form two complete monasteries as it were, each of which consists of a cloister with its covered arcade, surrounded by the usual suite of *refectory*, *dormitory*, &c., and having a church or chapel on one side. Each of these little convents has also a detached building in its neighbourhood, which contains the bath and kitchen. The two are ingeniously arranged with perfect symmetry of plan with respect to the central building, which contains the chapels. The chapels are placed end to end, and thus form one continuous building when viewed from without, but within are completely separated from each other. The apse of one being at the east end, and of the other at the west, the entire double chapel has an apse at each end.

One of these little convents, or cloisters as they are termed, (for the word "*claustrum*" is taken to mean the whole establishment,) is appropriated to the novices and the other to the

^p See the articles *Parlatorium*, *Locutorium*, *Auditorium*, *Salutatorium*, *Prolocutorium*, in the Glossary of Ducange.

sick, and I will now proceed to describe their arrangements separately⁴.

The novices' convent bears an inscription which informs us that in this cloister are associated those who are offered up by their parents and those who are upon probation, "*hoc claustro oblati pulsantibus adsociantur.*"

The *oblati* are those youths or boys who were devoted by their parents to a monastic life. In the history of the monastery of St. Gall mention is frequently made of such solemn ceremonies. Thus for example the learned monk Iso, A.D. 871, was from his birth vowed to the monastic life by his parents. The expression *oblati* occurs in the commencement of the fifty-ninth chapter of the rules of St. Benedict, where the subject is the reception of the sons of nobles and of poor persons. By *pulsantes*^r are to be understood those who are received into the novitiate; literally, those who knocked at the door of the monastery, seeking admission therein^s. He who wished to be received into a monastery, or to enter into holy orders, must, according to the capitulare of Charlemagne of the year 789, be first examined or tried, and give an account of his morals and course of life. He therefore entered first into the so called "pulsatorium monasticum," where he was examined and prepared.

The walks of their cloister have arcades on the sides, disposed on the same principle as those of the great cloister already described, and might serve in bad weather as a place for recreation for the scholars. The principal building, which encloses three sides of the square, is divided into six large rooms. On the west side is the refectory and a chamber, "*camera.*" The south side comprises the apartment of the master, "*mansio magistri eorum,*" and the infirmary, "*infirmorum domus,*" both of which are provided with a stove and other necessary appendages. On the east side are the dormitory and the common room, "*pisalis*,"^t with a fire-place, "*caminus,*" and a chimney, "*exitus fumi.*" These six chambers are not connected with each other, but each has a door which opens upon the cloister.

In the centre of the space enclosed by the cloister is indi-

⁴ I have added the above observations to Keller's article on the Novitæ convent.

^r Vide the articles *Oblati*, *Pulsare*, *Pulsatorium*, in Ducange.

^s Another interpretation is given in Mabillon's *Annales Ord. S. Benedicti*.

^t *Pisalis* has been already shewn to mean a room warmed by a stove.

cated a square with a small circle in the middle, by which, as in the cloisters, we may understand a quadrangular parterre, with a tree or a well, (or as Von Arx thinks, a small house.)

On the north side the cloister is bounded by the chapel of the sick monks and that of the novices, which, as already explained, is under the same roof as the former, but completely separated from it. It is arranged as follows: a vestibule or ante-chapel at the west end is surrounded on three sides by a long bench against the walls, and entered by a door from the cloisters. The fourth or eastern side is a screen, with a door in the middle that admits to the choir, which has two benches or little forms, "*formulae*," in it, and lastly two steps ascend from the choir to the platform of the apse, in the centre of which stands an isolated altar.

To the west of this convent of the novices, but separated from it by a road, stands the kitchen which is appropriated to them, "*coquina eorundem*," in the middle of which the fire-hearth is introduced. Adjoining to it and under the same roof is a bath-room, "*balneatorium*," with four cauldrons, two benches, and a fire-place (?) in the middle of the room.

THE OUTER SCHOOL.

The school-house is near the abbot's dwelling, and is surrounded by a fence^u. It is a building about seventy feet by fifty-three. This consists of a large apartment in the middle, divided by a screen or partition into two, about twenty-five feet square each. Round these are placed a series of fourteen small rooms, which open into the larger ones, two of them also having outer doors, and thus serving as vestibules. The rest of these little rooms are termed the dwellings of the scholars, "*hic mansiunculae scolasticorum*." The inscription which runs across the central rooms marks them as the common-room of the school and place of recreation, "*domus communis scholae idem vacationis*." A small square in the centre of each is inscribed "*testudo*." I have already endeavoured to shew that this probably indicates the fire-place, with an open lantern over it. Each of the scholar's rooms has a square, but this is probably a table. No furniture of any other kind is indicated in this house^v.

^u The fences bear the inscription "*Hæc quoque septa premunt discentis vota juvenentæ*."

^v I have substituted the above article as the school in place of one by Keller, which describes the building as having a

Opposite to the school-house, and built against the side-wall of the church, is the residence of the head-master of the school, "*mansio capitæ scolæ*," containing a chamber, provided with a stove in the corner, and with benches, beds, or other furniture; also a private room adjoining, "*ejusdem secretum*," furnished with side-benches, tables, &c.

AULA.

The residence of the abbot, also called the *palatium* and the *abbatia*, stands outside the monastery, is surrounded by a fence, and consists of two buildings, one of which is inhabited by the abbot himself and the other by his servants. The first building consists of two stories, of which the under one has an open portico on the east and west sides, "*porticus^x arcubus lucida*." The inner space of this story is divided into two chambers. One is the sitting room of the abbot, "*mansio abbatis*," with benches, a stove or fire-place, two presses ornamented with carved work, "*toregmata*," one on each side of the door, and a covered way to the church, "*ad ecclesiam ingressus*." It has also a door to the western portico and another to the eastern portico. The second chamber, "*dormitorium*," contains eight places for sleeping, "*lecti hic*," a bench, a stove or fire-place, and other conveniences. The upper story contains a large upper chamber, and some smaller chambers, "*supra cameræ et solarium*."

According to the rule of the order of St. Benedict there shall be a kitchen as well in the house of the abbot as in the hospitium, in order that the brethren may not be disturbed in their arrangements by the unexpected entrance of strangers into the cloisters. Accordingly, the servants' house contains the kitchen of the abbot, and adjoining to it his cellar and provision store, "*cellarium*," and also a bath room, "*balneatorium*." Behind these rooms three chambers are introduced for the domestics, "*cubilia famulantium*."

court in the centre, divided by a wall. The central square *testudo* he interprets as a garden-house, and the rooms around as lecture-rooms or apartments of the teachers.

* Each portico has twelve openings, of

which two are down to the ground and the remainder form groups of arches resting on a basement-wall, similarly to the cloisters: so at least I interpret the drawing, by comparison with Romanesque buildings.

THE HOSPITIUM FOR THE RECEPTION OF DISTINGUISHED
STRANGERS.

“Hæc domus hospitibus parta est quoque suscipiendis.”

This building, which is entered on the south side through a vestibule, *“ingressus,”* comprises the sitting and sleeping apartments of the guests of higher rank, chambers for their servants, and stables for their horses. These rooms occupy the circumference of the building. In the centre of the whole is a large refectory, *“domus hospitum ad prandendum.”* There are also indicated in the same, a large central fire-hearth, *“locus foci,”* and along the walls tables, *“mensæ,”* and benches, and one of the four doors is flanked by a pair of presses, *“toremata.”* From the refectory we enter into the four sleeping rooms, *“caminatæ cum lectis,”* lying at the two opposite sides of the house, and well furnished with stoves, beds, &c. Two other doors, situated opposite to each other, lead from the refectory into ante-rooms, one of which, the entrance hall of the whole, *“ingressus,”* is also connected with the chambers of the servants, *“cubilia servitorum :”* the second leads to the stables, *“stabula caballorum.”* (in which the mangers, *“præsepia,”* are indicated,) and other useful offices.

At a short distance from the hospitium is a building which contains under one roof, first, the kitchen for the guests, *“culina hospitum,”* with the fire-place in the middle of the room ; secondly, the store-room, *“promptuarium :”* thirdly, the bake-house, *“pistrinum,”* with an oven, *“fornax.”* side-benches and troughs. Also in an adjoining room, *“interendæ pastæ locus.”* a table and vessels for wetting and leavening the meal. Lastly we arrive at the brewhouse, *“domus conficiendæ celiæ,”* with fires, and coppers for wetting and malting the grain in the same room, and the cooling apparatus in a separate place, inscribed *“hic refrigeratur cervisa.”*

THE DWELLING OF THE PORTER.

Opposite to the hospitium, and erected against the wall of the church, are the apartments of the porter, *portarius*, also called the *ostiarius*, one of the first officials of the monastery, who receives the guests, and therefore his dwelling is placed without the monastery. It consists of two rooms, namely, his sitting-room, warmed by means of a stove, *“caminata por-*

tarii," having one door into the court and another into the church; and his sleeping room, "*cubile ejus*," with beds, side benches, &c.

To this building is appended a vestibule already mentioned, through which the guests and the scholars can pass in and out through the semicircular cloister of the atrium, or enter into the church itself, "*exiet hic hospes vel templi tecta subibit; discentis scolæ pulchra juventa simul.*"

HOSPITIUM FOR POOR TRAVELLERS AND PILGRIMS^γ.

"Domus peregrinorum et pauperum."

This building is very little smaller than the nobler hospitium, and like it is composed of a circumference of chambers enclosing a common room. The chambers consist of a vestibule to the east, flanked by two rooms for the servants who waited upon the pilgrims, "*servientium mansiones.*" On the north and south sides is a "*dormitorium*," and on the west a chamber, "*camera*," and a "*cellarium*," between which is a vestibule which leads to a detached building containing under one roof a bakehouse and brewhouse, the arrangement and furniture of which are as nearly as possible identical with those of the larger hospitium. The central space of the paupers' hospitium is surrounded with seats, and in the middle the usual square which is marked in this case "*testudo.*" (It appears probable, as I have already stated, that this space is roofed over, and that the square is the opening in the roof through which light is admitted.) But it is remarkable that this establishment is destitute of a kitchen, and has neither refectory or furniture of any kind indicated in its plan; it is also wanting in the other convenient offices that are attached in such profusion to every other part of the monastic buildings. It may therefore be doubtful whether even a fire was afforded in the central space^z.

Opposite to the hospitium, just described, for poor travellers and pilgrims, there is a vestibule, (mentioned above,) exactly like the northern one, with two entrances through

^γ This establishment is inscribed "*Hic peregrinorum lætetur turba recepta.*"

^z Keller, indeed, from whose description I have departed in this section, interprets the drawing as if the central square apartment was a court open to the sky, with a

bench running round its walls, and the little square in the middle he supposes to be a little roof or pavilion. But as it would be only about nine feet square, I think this conjecture erroneous.

which the whole of the servants belonging to the monastery find their entrance into the establishment, "*Tota monasterio famulantum, hic turba subintret.*"

RESIDENCE OF THE ALMONER.

"*Pausatio procuratoris pauperum.*"

The apartment of the almoner (also called the *hospitarius*) abuts on the south wall of the church, is furnished with a stove, has a door leading outwards and another opening into the church, and corresponds with the apartment of the *portarius* on the north side of the church.

HOSPITIUM FOR MONKS VISITING THE MONASTERY.

"*Susceptio fratrum supervenientium.*"

The hospitium for stranger monks, provided in accordance with the regulations in the 61st chapter of the rules of the order of St. Benedict, is opposite to the outer school, and abuts on the north wall of the church. It consists of two apartments, one of which has an outlet into the north transept of the church, and is furnished with a stove and side benches; the other room is a dormitory with stove, beds, benches, &c.

THE DWELLING OF THE PHYSICIANS.

"*Domus medicorum.*"

The residence of the physicians is situated, together with the botanical garden, in the north-east corner of the monastery. It is separated from the blood-letting-house by a wall or fence, and has no direct communication with the infirmary opposite. On the east side is the physician's private room, "*mansio medici ipsius*^a," with a stove, &c. Adjoining to this is the repository for his drugs and medicaments, "*armarium pigmentorum.*" On the west side of the building is the apartment of those who are dangerously ill, "*cubiculum valde infirmorum,*" arranged in a manner similar to the physician's private room. It is probable that this house was used for the reception of patients attacked by infectious disorders. The situation of

^a In the paupers' bakehouse, which is exactly like this, the same room is inscribed "*locus conspergendi.*"

this building in the angle of the monastery, and its complete isolation from the surrounding dwellings, appears explained by this conjecture^b.

PHYSIC GARDEN.

Immediately behind the residence of the physicians, in the north-eastern angle of the monastery, is the physic garden, "*herbularius*." This is laid out with sixteen beds, each of which has the name of some herb inscribed upon it, according to the following list, to which I have added the English names: *Menta*, Peppermint; *Rosmarino*, Rosemary; *Lilium*, White Lily; *Salvia*, Sage; *Ruta*, Rue; *Gladiola*, Cornflag; *Pulegium*, Pennyroyal; *Fenugræca*, Fenugreek; *Rosas*, Rose; *Sisimbria*, Watercress (or Radish?); *Cumino*, Cummin; *Lubestico*, Lovage; *Feniculum*, Fennel; *Costo*, Tansy; *Fasiolo*, Kidney Bean; *Sataregia*, Savory.

THE INFIRMARY.

On the north side of the novices' convent, and separated from it by the double church, stands the infirmary, which in its arrangement and extent corresponds exactly with that convent, as I have already mentioned, and as the inscription tells us: "*Fratribus infirmis pariter locus iste paretur*."

The chamber, the refectory, the master's house, the dormitory and the *pisalis*, respectively occupy places that correspond exactly to those of the same apartments in the novices' convent, and the two churches and the cloister are also similar. The only difference is that the room which in the novices' convent is given to their sick, and marked "*infirmorum domus*," is in the infirmary assigned to those who are very ill, "*locus valde infirmorum*." However it must be remembered that the infirmary was a residence for infirm and superannuated monks as well as for sick monks. Their kitchen, "*coquina eorundem et sanguinem minuentium*," is removed several steps from the infirmary and to the west of the refectory. It contains also a place for those who are to be bled. The kitchen, as well as the bath-room adjoining it, "*balnearum domus*."

^b Keller here observes, that the middle space, and the quadrangle in the centre of it, may either indicate a chamber with a large table or a fireplace, or on the other hand an inner open space enclosed by a

hall, or lastly a court with a little house in the midst. Compare the similar quadrants in the hospitiium, the outer school, the gardener's house, &c.

are arranged like the spaces similarly indicated in the novices' convent. Baths, as it is known, were at an earlier period amongst the most ordinary medicinal remedies. The old Benedictine rule expresses itself upon the use of baths, in the chapter *de infirmis fratribus*, in the following manner: *Balnearum usus infirmis quotiens expedit offeratur, senibus autem et maxime juvenibus tardius concedatur.*

THE HOUSE FOR LETTING BLOOD.

“Fleotomatis hic gustandum vel potionariis.”

This building, the entrance to which is on the south side, comprises one large quadrangular space, in which patients can be bled and purged. It is furnished with six tables, “*mensæ*,” and the same number of benches, and is heated by four stoves placed at the corners. As in similar cases it does not appear to be easily determined whether a large table or a fire-place is indicated by the great square in the centre of the space.

THE FACTORY.

“Hæc sub se teneat fratrum qui tegmina curat.”

This place bears in front of it the above line, which implies that it is devoted to the making and repairing the clothes of the brethren, but this is not the sole business which is carried on within it.

The building must be intended to comply with that article of the Benedictine rule which enjoins that the monastery if possible should be so constituted as to contain within itself every necessary of life, as water for the mill, the bakehouse, the garden; and all mechanical arts should be carried on therein, so as to avoid the necessity of the monks going out of its bounds. The factory consists of two parts of unequal size, but connected with each other. The larger building is provided with a vestibule and chambers, which enclose two quadrangular courts or apartments, in the middle of which are two small ambiguous squares delineated, which Keller thinks are houses or cabins for the masters or overseers. The inscription “*domus et officina camerarii*,” may apply to the whole apartment or merely to the squares in the middle. Around these courts are the workshops of the shoe-

makers, "*sutores*," saddlers (or stool makers), "*sellarii*," sword-cutlers, (or rather knife-cutlers,) and grinders, *emundatores et politores gladiatorum*, shield-makers, (or trencher makers^c?) "*scutarii*," carvers in wood, statuariers, or turners, "*tornatores*," curriers, "*coriarii*." In the smaller building, which is separated from the former by an open space, are three workshops, one of which is appropriated to the goldsmiths, "*aurifices*," who have to make in monasteries altar-pieces of silver and gold foil, reliquaries, costly bindings for books, frequently set with precious stones, book-clasps, &c. The other workshops are for smiths, "*fabri ferramentorum*," and fullers, "*fullones*." Their dwellings, "*corundem mansiunculæ*," are behind the workshops.

THE WORKING-HOUSE, GRANARY, PLACE FOR DRYING
FRUIT, MILLS, &c.

"*Hic habeat fratrum semper sua vota minister.*"

This long house comprises the workshops of the coopers, "*tunnariorum domus*," and of other workers in wood comprised under the general phrase "*tornariorum*," for this word appears to have included *joiners* and *carvers*, as well as those which are now called *turners*. The dormitories of the workmen, "*famulorum cubilia*," are behind the workshops. Under the same roof are the granaries and the thrashing-floors, for the grain intended and prepared for brewing beer, "*granarium ubi mundatum frumentum servetur et quod ad cervisam præparatur*." The thrashing-floor is a cruciform space in the centre of the building, in the angles whereof are bins for the grain, "*repositoria earundem rerum*."

Opposite to the convent bakehouse and brewhouse, and standing side by side, are three houses or sheds, of equal extent and similar arrangements. In one of these is the place for drying grain or fruit, (probably a malt-house,) "*locus ad torrendas annonas*." In a second are two large mortars, "*pilæ*:" and in a third the hand-mills, "*molæ*." In each of these three buildings there is an inner room, which serves as a dormitory for the workmen.

THE LARGE GRANARY.

"*Horreum vel repositio fructuum annalium*."

This is a barn of large extent, with entrances (probably

^c *Scutella* is a trencher, and *scutellarius* a trencher maker.

folding-doors, as in our modern barns) on the side towards the workshops. It bears the inscription "*Frugibus hic instat cunctis labor executiendis.*"

In the centre, as in the malt granary, there is a space in the form of a cross, destined for thrashing the grain, "*area in qua triturantur grana et paleæ.*"

THE KITCHEN GARDEN.

"*Hortus.*"

The kitchen garden extends between the orchard and the poultry yard in an oblong square, and is divided into eighteen beds, "*hic plantata holerum pulchre nascentia vernant*" As the monks, according to ancient rule, were bound to live upon pulse, vegetables, and fruit from trees, and to gather the same themselves, the garden and the cultivation of it were points of special importance in a monastery. The beds are occupied in the following manner:—1. *Cepas*, Onions; 2. *Alias*, Garlick; 3. *Porros*, Leeks; 4. *Ascolonias*, Shallots; 5. *Apium*, Celery; 6. *Petrosilium*, Parsley; 7. *Coliandrum*, Coriander; 8. *Cerefolium*, Chervil; 9. *Anetum*, Dill; 10. *Lactuca*, Lettuce; 11. *Papaver*, Poppy; 12. *Sataregia*, Savory; 13. *Radices*, Radishes; 14. *Pestinachus*, Parsnep; 15. *Magones*, Carrots; 16. *Caulas*, Cabbages; 17. *Betas*, Beet; 18. *Gitto*, Corncockle. With the exception of the carrots, "*magones*," all the above-mentioned plants are introduced into Charlemagne's Capitulare de Villis^d.

THE GARDENER'S HOUSE.

This stands close to the kitchen garden, encloses a court in the middle of which is a small building, "*ipsa domus*," and contains the residence of the gardener, "*mansio hortolani*," which can be warmed by means of a stove; also two sleeping apartments for the servants, "*cubilia famulorum*;" lastly a place for keeping all implements shod with iron, as spades, hoes, mattocks, &c., and the vegetable seeds, "*hic ferramenta reservantur, et seminaria holerum.*" Vestibules are introduced into almost all the buildings in this plan, and the eastern entrance to the present court is through one. Compare the above account moreover with what is said respecting the central space in the dwelling of the physician.

^d This is printed in the "*Capitularia Regum Francorum*" of Baluzius, t. i. p. 331. Art. 70.

STALLS FOR THE DOMESTIC CATTLE.

These all lie, with the exception of the poultry-yard, in the south-western angle of the monastery. The stalls for the horned cattle and horses, "*ista bubus conservandis domus atque caballis*," form a longish quadrangular building, with a spacious court or large room in the centre, as a residence for the herds-men and grooms, "*domus bubulcorum et equos servantium*." One side of the building is occupied by stalls for the mares, over which is a wooden partition for keeping the hay, "*stabulum equarum infra, supra tabulatum*." The mangers, "*præsepia*," are indicated, and the chamber of the grooms, "*ad hoc servitium mansio*," is opposite to the stalls.

The building on the opposite side is arranged in exactly the same manner. The stable for the oxen, over which there is likewise a floor for the hay, "*boum stabulum infra supra tabulatum*," contains eleven separate cribs, "*præsepia boum*," and the residence of the herdsmen, "*conclave assecularum*." The figure in the middle of the court is probably intended to represent a small house or a shed.

We now arrive at a group of six similar buildings which include the stalls for the cows, mares, and foals, as also the stalls for the pigs, goats, sheep, and servants, and are respectively surrounded by a hedge or wall. Each of these six buildings encloses a court, in which stands a small house, perhaps inhabited by the overseer, or destined for the dwelling of the servants. The stalls for the cows are superscribed with the hexameter

"Hic armenta tibi fetus lac atque ministrant,"

and therein are represented the dwelling of the herdsmen, "*domus armentariorum*," and their dormitories.

The stables, "*domus equaritiæ*," for brood mares and foals, bear the inscription "*Hic fetus servabis equas tenerosque caballos*," and contain the stalls, "*stabula*," the dwelling of the grooms and their dormitories, "*cubilia custodum*."

The last-named buildings, which resemble each other, are much larger, but have smaller dormitories, than the four others. On the south side they do not extend so far as the other buildings on this side. The reason of this variation is simply the fact that the parchment at this spot was partly too short and partly too rough for the artist.

The goat stables, "*ista domus cunctas nutrit servatque capellas,*" have roomy cribs, and two dormitories for the goatherds, "*cubilia pastorum.*"

The piggeries, "*iste sues locus enutrit custodit adullas*" with the styes, "*stabula,*" the dormitories, and a small house for the swineherd in the middle of the court, which is indicated as "*domus porcariorum.*"

The sheepfold, "*hic caulas ovium caute dispone tuarum,*" has in the middle of the court a small house, "*ipsa domus.*" The folds, "*caulae,*" and the two dormitories of the shepherds, "*cubilia opilionum,*" surround the court.

The servants' house, "*hic requiem inveniat famulantum turba vicissim,*" is in all its parts similar to the three last-named buildings, and it appears as though the architect did not very well know how to appropriate this building, which was so formed for the sake of symmetry. It was intended according to the inscription, "*domus familiæ quæ cum servitio advenerit,*" for the reception of the bond servants and workmen dwelling on the estates of the monastery, "*familia foris,*" as they were termed, who might come with the servants belonging to the monastery, and require shelter. We observe dormitories for the keepers of the place, "*cubilia custodientium*" but no precise indications of the use of the remaining spaces, which resemble those in the other five buildings.

THE POULTRY-HOUSE AND DWELLING FOR THE KEEPERS.

In the south-eastern corner of the monastery, and as far removed as possible from the church and the infirmaries, is the hen-house and that of the geese, "*Pullorum hic cura et perpes nutritio constat.*" "*Anseribus locus hic pariter manet aptus alendis.*" They are circular yards of considerable extent, both exactly alike. Between them is a dwelling for the servants. One division is occupied by the keepers of the hen-house, "*mansio pullorum custodis*" the other by those for the geese, "*item custodis aucarum.*" The central space is inscribed "*domus communis.*" and presents the usual ambiguity of a small square in the middle. It is not easy to determine whether by this square is meant to be indicated a small house, but the size of which could not be more than about twenty square feet, and which perhaps might serve for keeping the food for the fowls.

THE BURIAL GROUND.

The burial ground is a square field enclosed by walls and hedges, having only one entrance on the side of the cloisters, with a large cross in the middle.

For the reception of the bodies five rows of enclosures or beds are provided, containing fourteen in all, each of which is apparently about seven feet wide and twenty or more in length. The intermediate spaces are planted with fruit trees and ornamental shrubs, so that the whole resembles rather the laying out of a pleasure shrubbery than of such cemeteries as we see in our own days.

The names of the trees inscribed here are as follows: *Mal.* . . . (*Malaria*?) Apple-tree; *Perarius*, Pear-tree; *Prunarius*, Plum-tree; . . . *n. pinu . s?* Pine; *Sorbarius*, Service; *Mispolararius*, Medlar; *Laurus*, Laurel; *Castenarius*, Chesnut; *Ficus*, Fig; *Guduniarius*, Quince; *Persicus*, Peach; *Avellenarius*, Hazel-Nut; *Amendelarius*, Almond; *Murarius*, Mulberry; *Nugarius*, Walnut^e.

All these trees are in the *Capitulare de Villis*. The first however is called in the *Capitulare pomarius* instead of the word which we have rendered *malaria*. But there remain only a few traces of this word and of the *pinus*, a tree which also occurs in the *Capitulare*.

EXPLANATION OF THE PLATES.

No. 1 is a fac-simile of the original plan, copied from that which was published by Keller at Zurich in 1844, but reduced to one-half the linear dimensions; and as the size of Keller's plan is four-fifths of the original, the copy now presented to our readers is two-fifths of the original. On account of the small scale some of the inscriptions will probably be found illegible, but as they are all given at length in the printed explanations, this is of less consequence.

No. 2 is drawn on the same scale as the fac-simile and intended as a key to it, for which purpose the walls of the buildings are drawn in black lines

^e I follow in this list, as in the other botanical lists, the interpretations which Keller has given. The following lines are inscribed about the cross, and around its enclosure:—

"*Inter ligna soli hæc semper sanctissima*

crux est
In qua perpetuæ poma salutis olent
Hanc circum jaceant defuncta cadavera
fratrum
Qua radiante iterum regna poli acci-
piant."

in order to separate them from the furniture and other details or walls of inclosure, and the masses of building are also tinted, the distribution of the respective colours is explained in the right hand corner of the plan. Concise English explanatory words are added, but for the full explanation of the uses of the several apartments and their furniture the foregoing pages must be consulted. The inscriptions upon the original are written in every possible direction, and sometimes whimsically placed with the letters vertically in columns or distributed fancifully over the different rooms. The plan (as explained above) is not drawn to scale. The church is said to be 200 ft. long, and the central and side aisles to be 40 ft. and 20 ft. broad respectively, dimensions which are to be taken from centre to centre of the piers and within the walls. The piers are said to be 12 ft. apart. That this measure is from centre to centre upon the plan is shewn by comparing it with the total length of the building. For as there are nine interspaces, we thus obtain 108 ft. for the body of the church, and allowing in rough measures 30 ft. for the width of the transept, and about 37 ft. for the length of the presbytery including the apse, there will remain 25 ft. for the length of the western apse, and the total 200 ft. will be obtained. This church, so laid down to scale, is of a very probable proportion. The total transverse measure of the transept must be about equal to the length of the nave, namely 108 ft.

For want of space I have in plan No. 2 employed some figures of reference in the church and in the Physic Garden, which are to be interpreted as follows :

For the Church :

- | | |
|--|---|
| 1. Altar of S. Cecilia. | 12. Reading-desk, (<i>Analogium</i> .) |
| 2. ——— S. . . ? and S. Agnes. | 13. ditto. ditto. |
| 3. ——— Holy Innocents. | 14. Altar of S. Philip and S. James. |
| 4. ——— S. John Evangelist and S. John Baptist. | 15. North passage to the crypt. |
| 5. ——— S. Sebastian. | 16. Altar of S. Benedict upon the steps of the presbytery. |
| 6. ——— S. Martin. | 17. Passage to the confessionary or central crypt under high altar. |
| 7. ——— The crucified Saviour. | 18. Altar of S. Columbanus upon the steps of the presbytery. |
| 8. ——— S. Mauritius. | 19. South passage to the crypt. |
| 9. ——— S. Stephen. | 20. Altar of S. Andrew. |
| 10. Pulpit, (<i>Ambo</i> .) | |
| 11. Altar of S. Laurence. | |

In the Physic Garden :

- | | |
|-----------------------------------|------------------------------------|
| 1. <i>Fasiolo</i> , Kidney Bean. | 9. <i>Lilium</i> , White Lily. |
| 2. <i>Sataregia</i> , Savory. | 10. <i>Salvia</i> , Sage. |
| 3. <i>Rosas</i> , Rose. | 11. <i>Ruta</i> , Rue. |
| 4. <i>Sisimbria</i> , Watercress. | 12. <i>Gladiola</i> , Cornflag. |
| 5. <i>Cumino</i> , Cummin. | 13. <i>Pulegium</i> , Penny Royal. |
| 6. <i>Lubestico</i> , Lovage. | 14. <i>Fenugræca</i> , Fenugreek. |
| 7. <i>Feniculum</i> , Fennel. | 15. <i>Menta</i> , Peppermint. |
| 8. <i>Costo</i> , Tansy. | 16. <i>Rosmarino</i> , Rosemary. |

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