Excavations in the Ancient Centre of Antwerp*

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Excavations on the site of ancient Antwerp have in recent years brought to light much material that is of fundamental importance for the history of this trading centre and for elucidating the archaeology of western Europe in medieval times.

Three excavating campaigns have been carried out (FIG. 34). The first, in 1952-53, took place under, and in the immediate neighbourhood of, the buildings of the Steen, now the National Navigation Museum. The second, in 1955-57, took place under shed no. 22 at the quays, especially on the site of the former Besaenhuis to the east of the Mattestraat. The third, which still continues, began in 1957 under the same shed to test ground formerly under or near the church of St. Walpurgis.¹

The earliest textual reference to Antwerp belongs to the years between 641 and 645, and is to be found in the *Vita Eligii*. This was written in the beginning of the eighth century, but its author seems to have used older reliable sources. At that time Antwerp seems to have been sufficiently important to attract the attention of St. Amandus, although he did not succeed in implanting Christianity.

Next comes a text which indicates that later on St. Amandus had a church built in Antwerp, consecrated to St. Peter and St. Paul, perhaps between 650 and 660. Antwerp at that time would have had the aspect of a harbour with a castrum, which was probably a fortified centre. There may also have been a mint operating for the Merovingian kings. As the Annales Fuldenses attest, the Northmen burnt Antwerp in 836, thus destroying the prosperity of this original settlement.

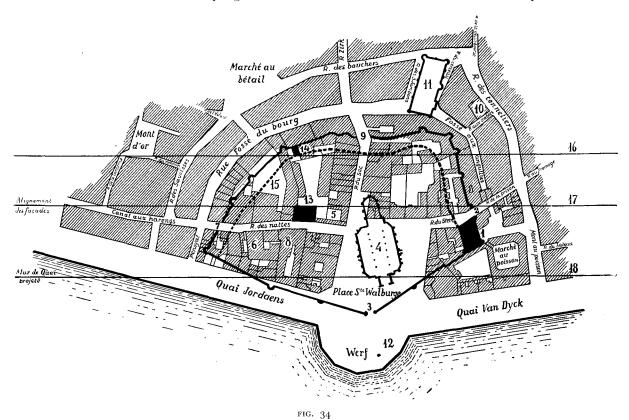
This destruction, however, did not prevent Antwerp from being mentioned as a vicus, or 'trading place', in the tenth-century Liber Traditionum of St. Peter's abbey at Ghent. Thus it is probable that Antwerp appears in our national history before the year 1000, even if the oldest direct references only go back to 1008. It was then the centre of a marquisate, that is a German military territory, probably established at the same time as those at Eename and Valenciennes in the

^{*} The Editorial Committee is grateful to the Burgomaster and Aldermen of Antwerp for the loan of all the blocks except that of PL. XVII and for permission to republish in English this article by Dr. Van de Walle, which first appeared in Flemish in their publication *Antwerpen*, VI, no. 2 (July, 1960), 48-61, under the title 'De archeologische opgravingen in het oud stadscentrum te Antwerpen'.

¹ I am glad to pay a tribute of gratitude to the authorities and the institutions which made these excavations possible, especially to Prof. F. Blockmans, archivist of the town of Antwerp, without whose effective support the three campaigns could not have been completed; to the National Fund for Scientific Research; and to the Town Council and staff, more particularly Prof. K. C. Peeters, the Town Clerk, and Mr. Schepens, Chief Engineer and Director of the Office of Harbour Works.

south, to secure the frontier of the empire at the Scheldt. Thereafter, as numerous historical sources indicate, trade and navigation became increasingly prosperous.

It is not till the beginning of the twelfth century that we again have mention of a church within the walls of Antwerp. This was a chapel without parish rights, consecrated to St. Walpurgis. About 1280 we hear of the existence of a platea



GROUND PLAN OF PART OF ANTWERP (BELGIUM) IN 1877 SHOWING LINE OF EARLY MEDIEVAL WALLS (pp. 123-5)

1. The Steen (now National Navigation Museum); 2. Steen gate; 3. Wharf gate; 4. St. Walpurgis's church; 5. Law court; 6. The Giant's house; 7. Guldenberg gate; 8. Place of asylum of Afflighem abbey; 9. Vleeshuis gate; 10. The old Vleeshuis; 11. The new Vleeshuis; 12. Crane; 13. The Besaenhuis site and former Mattestraat; 14. Site of section, in 1887, which revealed enclosure-walls of earth and wood, and of stone, as found again at Steen in 1952-3; 15. Probable line of enclosure-wall of earth and wood; 16-18. Present alignment of houses on the quays (16), sheds (17) and embankments (18).

templi, or church square within the town. The presence of the Mattestraat about the same period can be deduced from written documents.

These are the most important documentary references we possess, and on the basis of such written sources, two great periods appear: (1) the urban centre before the Northmen came; (2) the period after their arrival. During the first

period the establishment was near the church of St. Peter and St. Paul. During the second the centre became of increasing economic importance. It was certainly fortified before the beginning of the eleventh century. At the beginning of the twelfth century a church dedicated to St. Walpurgis was built, and by the end of the thirteenth century, at latest, there was a church square with a few streets built around it.

The topography of the old city centre (FIG. 34) in the neighbourhood of the fortifications has undergone important changes since 1860 because of the big public works undertaken to straighten the Scheldt and to build thoroughfares such as the J. Jordaens Quay and A. Van Dyck Quay, as well as new sheds.

In the western part of the site the ground level adjoining the town walls was lowered three to four metres, and during this operation numerous ancient stone foundations were removed with picks or explosives. However, there was not, then, much to be seen of the building that was once the spiritual centre of the town, because the church of St. Walpurgis, which had been rebuilt in 1249, enlarged in 1499, and transformed into a warehouse in 1797 (under the influence of the French revolution), was demolished in 1817, except the choir, and even that disappeared in the fire of 1866.

Before excavation began in 1952 the only other monumental traces that existed were some portions of the walls of the Steen, and fragments of the enclosure wall, some of which were revealed by demolition near the Vleeshuis, and which in general belong to about the year 1225.

THE EXCAVATIONS

THE FIRST CAMPAIGN, 1952-53

The Steen still incorporates a remarkable amount of the masonry of the old enclosure-wall of the early town. Indeed, the lower part of its outside walls on the Scheldt side and on that facing Steen Square, built in deep blue-grey Tournai stone, reveals, on careful study, several details that indicate a defence system similar to those of the castles of the Counts at Ghent and Rupelmonde (E. Flanders), and of the castles at Bornhem (E. Flanders) and Ath (Hainaut) and of the city of Arras (Pas-de-Calais, France). We can conclude from the more developed forms found here that this building is later than the castle of the Counts at Ghent. It is, however, earlier than that of Rupelmonde, and thus, probably, about 1200-1225. Before the big modern harbour and town-planning work took place this enclosure-wall, consisting of semi-circular towers, open at the back and based on rectangular abutments, stretched beyond the Steen in this part of old Antwerp, as can be clearly seen on old illustrations kept in the town archives.

This enclosure-wall (FIG. 34) went from the Steen towards the Vleeshuis, where some fragments of the Vleeshuis Alley are still visible, and then passed along the Burchtstraat, fanwise, to the Scheldt. Along the bank of the Scheldt there was a similar wall with a gate in the middle leading to the famous wharf, or advanced landing stage.

During this first campaign digging took place at five points outside the Steen, and three points inside it.

Under the floor of the cellar at the south corner of the Steen the foundations of a rectangular room were discovered, contiguous with the town wall and built at the same time, about 1200-1225. The building was habitable, since a drain for waste water was found in the thickness of the wall. This building was known in the sixteenth century as 'The house of the giant Antigone', but was originally probably a kind of sentry-post, and represents the first step towards a system where an enclosure-wall is completely bordered by buildings, as at Boulogne from about 1235.

The most important result, however, during the first season was the discovery of a much older enclosure-wall of earth and wood situated on about the same line as the thirteenth-century stone structure. Its base lay about $4\cdot 50$ m. below present street level and it was about 11 m. broad, and, originally, 6 m. high. This fortification was probably completed in three stages.

The first stage belongs to about the second half of the ninth century, judging from the associated pottery, especially relief-moulded wares and early Pingsdorf.

The two later stages took place before about 1225, when the stone wall surrounding the town was built. The early earthen wall was strengthened on the outside by a wooden palisade, showing traces of different types of construction. It also had a wide ditch reaching to about the middle of the present Steen, and the excavations showed that it was, at least in part, a natural watercourse. Unlike the stone fortifications, this enclosure of earth and wood seems—to judge from some of the evidence—to have been open all along the Scheldt. The archaeological facts about this earthen enclosure agree fairly well with the sparse historical information we have of Antwerp at this time.

We know, too, that at about the same time St. Omer (French Flanders) was also fortified against the Northmen by an earthen enclosure. This tradition of earthen fortification came down from prehistoric times and continued long after, since in the eleventh century the chronicles attest the existence of such constructions in these regions, thus confirming the archaeological evidence from the site of the Steen at Antwerp.

Another fact also makes us think of the Northmen, though it brings no firmer proof that they were concerned with this Antwerp fortification. That is that fanshaped fortifications, open along their river or sea frontages, exist at places like Haithabu (Germany), Birka (Sweden), and Novgorod (U.S.S.R.), and elsewhere all of which were Scandinavian settlements. Yet we must remember that similar ground-plans of fortifications appeared in our neighbourhood long before the invasions of the Northmen. At Urmitz (Kr. Koblenz), for example, a similar construction belongs to the Michelsberg Culture of c. 2250-2000 B.C.

THE SECOND CAMPAIGN, 1955-57

The results of this campaign were even more unexpected. When digging took place under shed no. 22 for one of the numerous shelters against atom bombs that had to be built in Antwerp in 1955 in connexion with the Atlantic

Pact, distinct traces of regularly-built wooden constructions appeared. The town council immediately stopped the work in order that systematic archaeological excavation could be undertaken to avoid losing this important scientific evidence.

Since the whole plot of land between the quays of the Scheldt and the present Van Dyck and Jordaens quays was lowered 3 to 4 m., on average, at the end of the nineteenth century, older constructions than normally could be expected appeared in 1955 immediately under the pavements of the sheds. All these medieval discoveries are to be dated before 1225 and after the period of the oldest finds under the Steen, this is, after 850. There were three principal medieval habitation-levels and under them a fourth, which contained Gallo-Roman pottery only. Between the fourth and third levels there was a complete gap in the pottery-sequence.

During this campaign it was possible to study systematically three houses which lay close together, a narrow street or passage, and a part of the Mattestraat. The three principal medieval levels of habitation all possessed interesting wooden buildings, yielding a number of thin, regularly-formed occupation-layers, containing an oak-wood scoop (PL. XVIII, B), leather shoes (PL. XVIII, C), bits of wood, kitchen-refuse (including mussel-shells and bones), manure, plant-debris, etc. Some of these layers were scarcely a few millimetres thick.

The pavements of the Mattestraat and of the small street running at right-angles to it showed six to eight construction-levels. They were composed of closely-packed wood-blocks laid in lines across the street and fixed by grooves on their under sides to tree-trunks, sometimes 4 to 5 m. long, lying lengthwise in the street.

The latest buildings and layers belong to before c. 1225, for these, lying immediately under the street level, produced pottery of late Pingsdorf types. The second level was marked by sherds of the oldest Pingsdorf pottery, and by glazed ware decorated with relief mouldings, the only chronological parallel to which is the similar pottery found during the excavations at the castle at Eename (E. Flanders), the date of which is fixed between c. 976 and 1063 by contemporary historical documents. The lowest medieval occupation-level must be dated after c. 850, since it yielded the same kind of pottery as came from below the earthen enclosure-wall of the settlement.

Remarkable remains of three adjoining houses of the latest level, including parts of the walls as well as of the foundations, lay at an average depth of c. I · 50 m. below street level.

In plan the middle house of these three was a rectangle measuring c. 6.50 m. on the street frontage and c. 13 m. on each side. In essence the structure was built as a heavy wooden skeleton. Piles, which at their base were as thick as a complete tree trunk, formed the supporting elements of the sides, but such supports were not used for the front or back walls, each of which had an opening for a door in the middle. The piles were joined together by heavy cross-pieces, the top surfaces of which were grooved to carry wooden boarding. On the street frontage this boarding, composed of planks of radially-split wood, was preserved up to a height

of 1 m. This building was subdivided internally into a large front room 10.50 m. long, with an open hearth in the middle, and, at the back, two small rooms.

The house that was situated to the north had originally the same dimensions and a similar internal plan. In the façade, however, there was a heavy support post. The side bays were about the same breadth as those of the middle house.

The house situated south of the small side street (PL. XVII) was different in

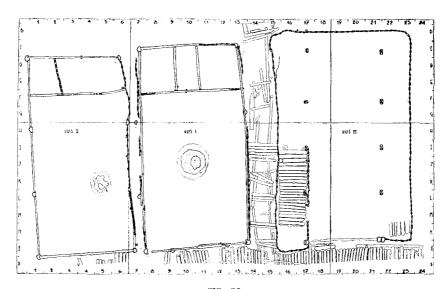
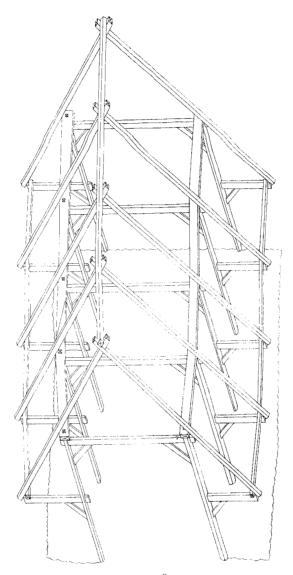


FIG. 35 ANTWERP, BELGIUM

Partly completed ground plans of houses of middle level, Besaenhuis site. The one on the right is aisled, the others have simple, large rooms in front, with fireplaces, and small rooms behind. c. 11th century (p. 128 f.)

aspect. The sides were about as long as those of the two other houses, but its street façade was about 8 m. wide, and this façade, like that of the northern house, had a heavy support in the middle; there was also a door on this side. But internally it was an aisled hall, as will be more clearly seen in the lower levels. The walls were less carefully constructed than those of the other two houses and were often repaired. Some parts of the wall were simply driven into the ground.

The middle house of the second occupation-level also lay, on average, 1.50 m. below street level. It had the same breadth as the house above it, but was $c.\ 0.50$ m. shorter and its entire construction was lighter. At the sides there were only four heavy supports, but there was also one each in the middle of the front and back gable ends. These supports were round in section at the bottom gradually thinning out to a triangular section at the top. The walls were composed of wattle work, set in the grooves of the cross-pieces. The internal arrangement was very like that of the middle houses of the uppermost occupation-level. A front room, $c.\ 9.50$ m. long, had a door opening on the Mattestraat. At



 $$^{\rm FIG.}$$ 36 ANTWERP, BELGIUM

Reconstruction of wooden frame of earliest aisled house on Besaenhuis site, based on ground plan and extant portions of walls. Note strong resemblance to traditional rural architecture in western Europe (p. 130)

the back of the building were two small rooms separated by a passage leading to a back door (FIG. 35).

The house on the north side of this one had, to judge from those parts that were uncovered, about the same dimensions and the same type of construction. The southern house was entirely different. The side walls were composed of wattle

without supports that could bear the frame-work of the roof. Inside the buildings, 1.50 m. from each side wall, was a row of six heavy supports, and a nave c. 5 m. wide, could be recognized in the excavated part of this house, along the Mattestraat, showing that it was a typical aisled building (FIG. 36).

The middle house of the lowest occupation-level lay $3\cdot 10$ m., on average, below street level, and was much smaller than its successors in the upper levels. On the street front it was c. $4\cdot 50$ m. wide and its sides were c. 9 m. long. In the middle of the façade was a doorway. Inside the building on its long axis were two supporting posts for the roof. The base of each of the four walls of this house consisted of a single timber beam. The corners were constructed in the so-called block-building fashion. The upper surfaces of the cross-pieces had grooves to carry wall boarding. This building was rather carelessly constructed, with the use of all kinds of second-hand material, including surprising things such as planks from the hull of a ship and pieces of the roof-framing of a house. It was clear that this house had been destroyed by fire.

During this period, the narrow street between this house and its southern neighbour did not yet exist. This southern building in this level showed an almost identical aisled plan to that of its successors, though its length was c. I m. less. A portion of this aisled house is shown in PL. XVIII, A.

THE EXCAVATION ON THE SITE OF THE CHURCH OF ST. WALPURGIS, 1957 AND LATER

Under shed no. 22 at the quays, where the church of St. Walpurgis formerly stood, six successive archaeological cuttings have been made since 1957.

The first was at the western end of the Gothic choir and nos. 2 and 4 were in the western extension of the first and in the eastern end of the nave of the Gothic church, no. 3 lay north of no. 2, in the northern aisle of the Gothic building, and no. 6 was in the eastern part of the Romanesque nave. So the digging, beginning in the east, moved systematically westwards.

The stone foundations of the Romanesque church (FIG. 37).

In the eastern part of cutting no. 2 a foundation in Tournai schist was laid bare, oriented north-south, and partly situated below the Gothic brick foundations. In cutting no. 4 other portions, which completed the plan, were found, namely two foundations oriented east-west and another oriented north-south, all constructed in the same way and of the same materials as the portion in cutting no. 2. These foundations in Tournai stone, taken together, form a large rectangle c. 16 m. long and 8 m. wide, oriented east-west. After further study it became clear that this rectangle belongs to the same building as a group of foundations noted by the architect Truyman in 1882.

All this information reveals the plan of a church with a long rectangular choir and probably a nave with two aisles. Since the choir had a flat eastern end and there were no buttresses connected with these Tournai stone foundations, the building should be considered pre-Gothic. The type of construction and some architectural elements, such as the foundation-courses on the inside of the N. wall

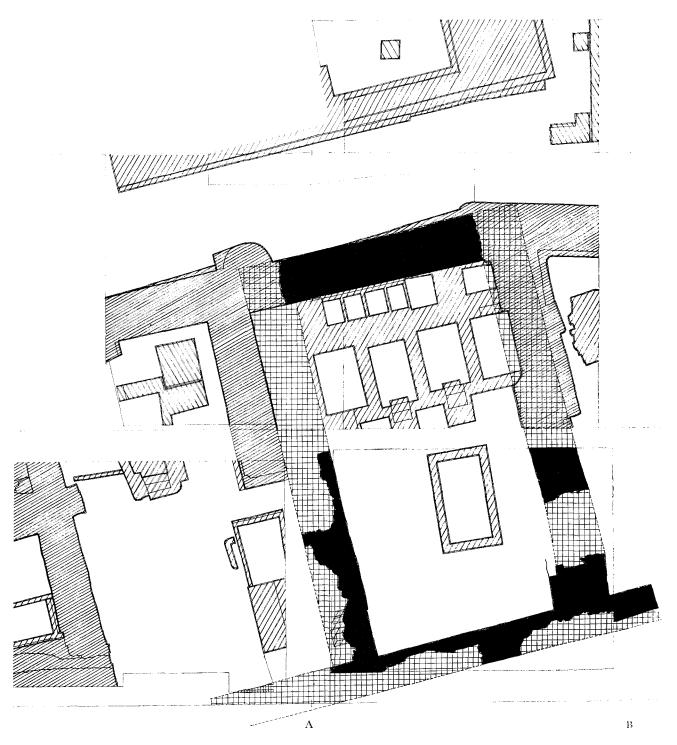


FIG. 37

GROUND PLAN OF E. PART OF STONE FOUNDATIONS, SITE OF ST. WALPURGIS'S CHURCH, ANTWERP, BELGIUM (p. 130)

Above, in oblique hatching, W. end of lower Gothic crypt. Middle and bottom right, in black, fragmentary stone foundations of Romanesque choir, the probable ground plan of which, with rectangular E. end, is cross-hatched. The other foundations marked belong to nave of church, and to Gothic and later burial vaults. Note passage or street between crypt and later structure of church. Sc. A-B=12m.

of the choir, suggest that this building was erected not later than the twelfth century.

Remains of early wooden houses (PL. XIX; FIGS. 38-9).

Four successive levels of wooden buildings that existed on this site belong in general to between c. 850 and the end of the twelfth century, judging from the pottery and the fact that they are cut through by the earlier stone foundations of the Romanesque church. Underneath the fourth level of wooden houses was a stratum between 20 and 30 cm. thick containing Gallo-Roman pottery only.

The uppermost level of these wooden buildings lay c. 1·10 m. below street level, and was much disturbed at different times by building activities in connexion with the stone churches and by numerous burials that had taken place there. Yet it does show that earlier wooden buildings existed on the site of the stone church.

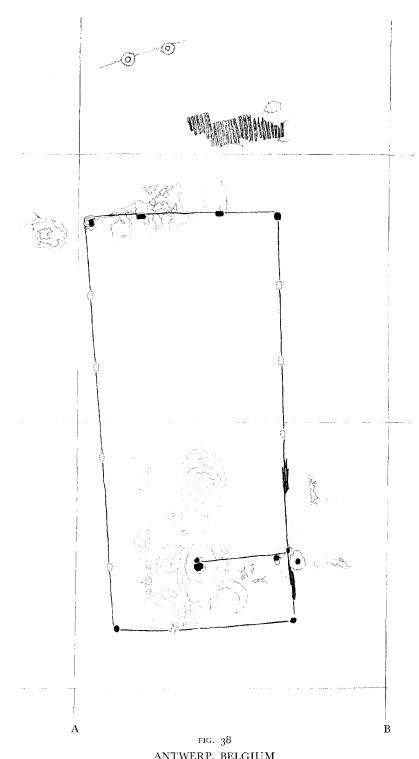
By linking together the traces of wooden constructions of the second level found at an average depth of c. 2 m. below street level we get a clear and significant result which shows that there was a big rectangular wooden building, c. 7 m. wide and 16 m. long, on the site of the Romanesque stone choir. It is older than this stone building, since the stone foundations sometimes cut through the remains of the wooden ones. The presence of a hearth shows that it was used as a dwelling (FIG. 38).

The building technique of this house is similar to that of the houses of about the eleventh century which were found in the neighbourhood of Besaenhuis on the Mattestraat. There, too, there were ground plans of small houses, c. 6 · 50 m. wide and c. 13 m. long, with a similar inside plan.

A fragment of a wooden street pavement was found at this level on the spot where, later, there was a passage between the crypt and the nave. Further on, north of the first rectangular wooden building, there were traces of another regular, rectangular wooden building, and west of this, below the eastern part of the nave of the Romanesque church, a certain number of fragments of yet another rectangular building, also with a hearth, were found.

About 2.60 m. below the present floor level there were numerous traces of a third level of wooden buildings with wattle walls. In contrast to those of level two, the fairly large remains of ground-plans found here probably reveal repeated reconstructions. They extend over an area of c. 20 m. square. The walls are mostly more or less at right angles to each other. A few smaller spaces formed by inner partitions, c. 3.50-3.75 m. wide and c. 6-7 m. long, could be clearly seen. West of this construction, oriented in about the same direction, there were traces of another rectangular wooden building, which also possessed a fireplace.

The fourth level of wooden buildings lay c. 2.90 m. below street level, and is characterized by walls of wattle showing a similar general design to those of the third level (FIG. 39).



ANTWERP, BELGIUM

Partly completed ground plan of wooden house of second level, 7 m. wide and 16 m. long, lying mostly under stone foundations of Romanesque choir of St. Walpurgis's church. Note similarity with plans of Besaenhuis houses. c. 11th century (p. 132.) Sc. A-B=12 m.

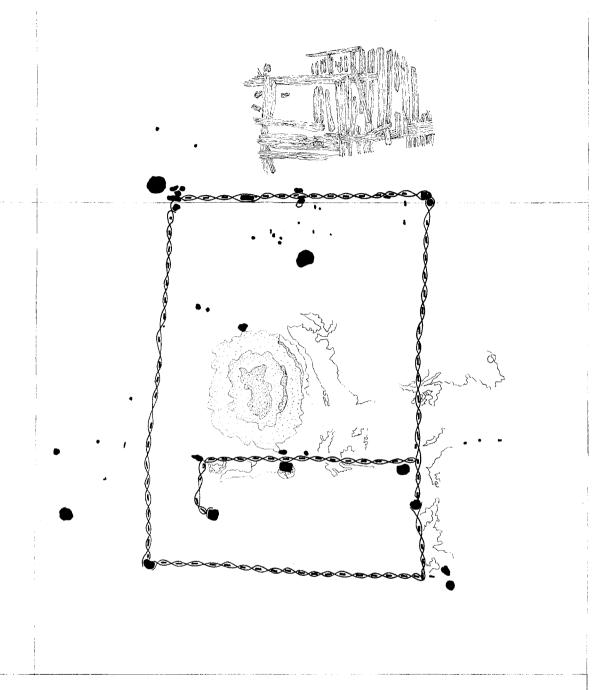


FIG. 39

A

ANTWERP, BELGIUM

Partly completed ground plan of wooden house of fourth (lowest) level, with hearth in front room, found under NE. of nave of St. Walpurgis's church, c. 2·90 m. below street level. c. 10th century (p. 132). Sc. A-B=12 m.

SUMMARY AND CONCLUSIONS

During the first season, while excavating under and in the neighbourhood of the Steen, the walls of the old castle were investigated. The stone walls proved to belong to the beginning of the thirteenth century and not to the eleventh century as had previously been generally accepted. This stone construction in the form of a semi-circle was preceded by another, made of earth and wood, built slightly after 850.

The results of the second season's work threw new light on the internal topography of the settlement. The discovery of the wooden street pavement of the Mattestraat shows that this road goes back to the ninth century. The layout of the building-lots remained fairly constant during the centuries, to judge, on the one hand, from the ground-plans of the houses found during the excavations, and on the other by surveys dating from before the great town-planning and sanitation works of the nineteenth century.

The most spectacular results of this series of campaigns at Antwerp are, without doubt, the fragments of Carolingian, Romanesque and early Gothic houses found along the Mattestraat. Not only the main lines of the ground plans, but also the details of the construction of these buildings were unknown before these excavations took place and formed a gap in the history of west European architecture. That all these houses were about the same size can possibly be explained by the similar social standing of its inhabitants. Their conception does not deviate much from contemporary rural architecture, and this probably means that the owners or the builders were natives of the countryside, where this technique was in general use. To judge by the open fireplace in the middle of the front room, from which smoke would drift away through an opening in the roof, these houses did not have any upper story.

These buildings stood in rows joined to each other, with a gable end facing the street. This characteristic became one of the most picturesque elements of our west European urban architecture. Even later on, when, owing to lack of space, upper stories were introduced, the wooden houses in rows with gable-ends continued to exist long after the middle ages.

The third excavating campaign, on the site of St. Walpurgis's church, was certainly the most surprising in its results, since, in spite of the removal of 3-4 m. of ground at the end of the last century, it was still possible to discover the foundations of Gothic and Romanesque churches of stone. The choir of the Romanesque church of the twelfth century was one of the most remarkable finds. The large space occupied by the choir is not normal for an ordinary parish church, but more proper for a sanctuary where divine service was celebrated with more splendour or by a larger number of officiating priests, as, for instance, in a collegiate church.

The remains of wooden buildings found under the Romanesque stone foundations are difficult to think of as belonging to earlier church buildings. The striking presence of large amounts of cooking debris, potsherds, bones of animals, etc., are not very compatible with this, nor is the existence of fireplaces in these buildings.

Several ground-plans of these buildings, which can be easily completed, have striking analogies with those of the houses on the Mattestraat. The long rectangle with a fireplace in the front room and one or two smaller spaces behind are their typical components. Probably the Mattestraat originally ran further in a southerly direction, to the place which we know as the Steen gate. The traces of wooden buildings behind these houses in the direction of the Scheldt can be identified as annexes—perhaps workshops—that belong to the same properties; or else as houses that had access to the road that possibly ran parallel to the continuation of the Mattestraat.

Two important negative conclusions resulted from the excavations.

First, no pre-Romanesque church was found. Of course the digging was necessarily limited to the area that still existed, where the eastern part of the Romanesque church lay, the western part having been completely demolished when the nineteenth-century quays were built; as we know, not only from historical records but also from excavation-cuttings which showed recognizable evidence of how the ground had been cleared for these works.

It is, indeed, improbable that the earlier church, which historical sources ascribe to St. Amandus, was built at the spot where the Romanesque church of St. Walpurgis was erected. If so, the pre-Romanesque church and the urban settlement that preceded the arrival of the Northmen, with its fortifications and everything that belonged to it, must be sought elsewhere than on that part of the ninth-century fortified enclosure that has been excavated up to now.

This view is strengthened by a second gap in the evidence yielded by these excavations—namely the almost complete lack of Merovingian material, including pottery, which is in sharp contrast to the mass of Carolingian and Gallo-Roman pottery unearthed during the digging. Gallo-Roman sherds were rare under and near the Steen, very numerous on the Besaenhuis site and less numerous at that of St. Walpurgis.

The lack of Merovingian finds perhaps indicates that occupation was interrupted, at least in those parts of the site where excavation took place. It follows that if we are to believe the documentary evidence for Antwerp of this period, the settlement must have lain elsewhere. Yet it is striking that the Carolingian settlement was established near or on the site of the Gallo-Roman one.

The discovery that there was a settlement at Antwerp in Roman times is also of great significance for the history of this trading centre. Hitherto historians have thought that this was almost impossible: now it is indisputable, and provides great expectations of further archaeological discoveries at Antwerp. A soil where not only wooden constructions were preserved in a remarkable way but also more delicate objects such as a precious piece of purple- and gold-coloured woven silk of c. 1000 cannot disappoint our strongest hopes.