The campaigns of Caesar and Augustus gave Italian merchants an opportunity of establishing relations with the free Germans. Intercourse was maintained after the withdrawal of the legions to the west of the Rhine, and literary references to the trade which grew up, though few in number, testify to its continuance throughout the time here to be considered. The conception of an illimitable forest primeval stretching unbroken from the borders of the empire into the furthest recesses of barbarism is very far from the truth. Great as were the forests, there existed open or lightly-wooded areas suitable for the settlements of primitive man, and communication between such inhabited regions can be traced from very early times. All the great rivers have been guides or highways for migrants and for traders, though streams liable to floods have caused difficulty. The prevalence of marsh is largely responsible for the convergence of traffic upon certain points where not only can the rivers be forded, but where relatively firm ground approaches close to the banks. The Celto-Germanic world knew nothing of elaborate roads of the Roman type, but primitive tracks came early into being, as burials.

1 The period surveyed in this article is, approximately, from the reign of Augustus until A.D. 400, and the term 'Roman' is applied to any goods made within the empire, whether in Italy or the provinces. The distribution-maps are based on lists compiled from works available in England and in the Archaeological Institute at Frankfort. For reasons of space it has not been possible to publish the lists themselves here; furthermore, an exhaustive treatment of the whole subject is being prepared by a German scholar and will be published by the Römisch-Germanische Kommission.

The chief general accounts are: O. Montelius, 'Der Handel in der Vorzeit,' Praehist. Zeitschr. ii, 1910, 249-91; W. Stein, s.v. 'Handel,' Hoops, Reallex. der germ. Altertumskunde, ii, 1913-15, 382-90; E. Wahle, s.v. 'Handel,' Ebert, Reallex. der Vorgeschichte, v, 1926, 77-64. C. F. Wiberg, Der Einfluss der klassischen Völker auf den Norden durch den Handelsverkehr, 1867.

2 Caesar, BG i, 39 (appearance of Germans described by traders); iv, 2, 3; vi, 25 (journeys across Germany taking sixty days); Dio, liv, 18, 2.

3 O. Schliiter, s.v. 'Deutsches Siedlungswesen,' Hoops, Reallex. i, 1911-13 (with map); L. Schmidt, Geschichte der deutschen Säume, 1911, 1934; G. Kostina, 'Die Karte der germanischen Funde in der frühre Kaiserzeit,' Mannus, 1933, 6-40; see also G. Ekholm in CAH xi, 46 ff.

along them show. The importance of the wagon to the German tribes implies the existence, in a forested country, of tracks along which it could be drawn. Traces of German road-building in marshy ground have been observed; the corduroy ways of north-west Germany and Holland may even be neolithic; the East Prussian examples seem to belong to the Roman period. Signs of a primitive bridge have been found at Fulda.

It would appear that goods generally changed hands at the frontier, where strict watch was kept and customs dues were levied, but there seems no reason why some of the sailors of the Lower Rhine, largely Germanic themselves, should not have ventured far along the coast, despite the early rise of German piracy. The discovery of Roman objects across the base of Jutland and in great quantity in the Danish isles, and an early Saxon reference to a trade-route here, support the view that goods destined for Baltic trade were transported by land across the isthmus. If this was the case it seems plausible to guess that Roman traders may have got at least as far as the Elbe. Germans, however, certainly sailed the North Sea from the beginning of our period, and it is worth remark that the Frisians were particularly well placed to act as middlemen in a trade which found custom far along the Norwegian coast as well as in Denmark and up the German rivers. The Baltic had its own ships and sailors very early. A first-century ship has recently been dug up in south Sweden; the well-known Nydam vessel belongs to the period about A.D. 400.

A valuable study of prehistoric routes north-east of the Rhine, based on an examination of geographical factors, medieval records and archaeological finds, especially Roman coins, has been published by Dr. H. Krüger. He shows that the Lippe and the routes

5 Cf. sections on roads in 'Limes-Forschungen,' (ORL), and infra, notes 16, 20, 25. Caesar shows how well provided Gaul was with tracks and even with bridges.
7 J. Vonderau, Denkmäler aus vor- und frühgeschichtlicher Zeit im Fuldaer Lande, 1931, 43; 54.
9 A. Öhman, 'Von den Anfängen der deutschen Schifffahrt,' Praehistoria iv, 47; s. A. Öhman, 'Die ältere Eisenzeit Gotlands,' 1914, ii (with B. Nerman), 138-43, for Baltic trade. G. Ekholm, in 'Die Einführung von Bronzeschüsseln der röm. Zeit nach Skandinavien,' Altschweden, 1934, 252-4, and in op. cit. infra., n. 74, has valuable discussions of trade routes to and from Scandinavia.
10 Strabo, v, 2, 1; supra, n. 9.
11 Tac., Germ. 44 (Suiones); cf. the Bronze Age rock carvings of ships and sailors from Bornholm (W. Vogel, 'Von den Anfängen der Schifffahrt,' Praehistoria iv, 47; 5. Felsenzeichnung,' Ebert, Reallex.); O. Almgren, Die ältere Eisenzeit Gotlands, i, 1914, ii (with B. Nerman), 138-43, for Baltic trade. G. Ekholm, in 'Die Einführung von Bronzeschüsseln der röm. Zeit nach Skandinavien,' Altschweden, 1934, 252-4, and in op. cit. infra., n. 74, has valuable discussions of trade routes to and from Scandinavia.
12 Mannus-Bibl. i, 69.
associated with it are of first importance. Many tracks and their branches led to the Ems and Weser, and several of them converged upon Minden, an important crossing of the Weser. From Minden the journey to the well-populated regions of the Elbe and Saale would be comparatively easy, and an ancient route and the modern railroad both run by Hildesheim to Magdeburg. 17

The Hellweg, running from the mouth of the Ruhr to Paderborn, is well marked by Roman coins. Opposite the mouth of the Ruhr at Asberg, lay a Roman fort, identified with the old German settlement of Asciburgium. 18 It is unfortunately not yet possible to say whether Asciburgium continued to be a trading centre under the Romans, for the finds so far made there indicate no more than the usual life of a military station. At Paderborn roads branch off to the Weser crossings of Minden, Hameln and Höxter, and to another well-marked primitive road-centre at Warburg, once defended by a prehistoric stronghold. 19 Another early track led from opposite Cologne to Düsseldorf along the open 'Heideterrasse,' on which settlements existed from neolithic to Frankish times. Other, medieval, roads known to lead north-east and south-east from Cologne (avoiding the Rothaargebirge) have not yet been assigned to an earlier date.

Passing the Sieg valley, 20 where there is evidence of at least local trade of some magnitude, we enter the highland zone and the Limes country, in which forts are almost invariably situated at points where prehistoric roads cross the frontier. 21 The Lahn valley near Giessen has yielded many Roman finds, which may have come from several directions—by the ridgeway north of the Lahn, 22 or by roads passing Holzhausen or the High Taunus forts 23 or running north from the Wetterau, 24 the fertile gap between the Taunus and Vogelsberg. A prehistoric track, probably followed by Germanicus in his advance on Mattium and the Eder, led past Giessen and Marburg to Cassel. Another, crossing the Limes at Altenstadt and then passing through the Vogelsberg to Fulda, is called in Fulda records the Antsawia—the Way of the Gods—and is mentioned in 743 as the road 'auf
welcher die Kaufleute von Thüringen nach Mainz ziehen," a statement almost equally appropriate to the Roman period.

In the German territory south of the Main finds of Roman and even of German objects have up to the present been few and far between. The valleys of the Main, Tauber, Jagst and Kocher, however, are convenient channels for trade, and in the last were salt deposits which would be nearer at hand for the Main-Rems group of forts than any deposits within the empire. But, though a few Roman coins have turned up in the Kocher valley, and pre-historic tracks lead from the salt area to both Upper Germany and Raetia, proof of the existence of this salt trade has yet to be found. An important discovery has been made recently at Baldesheim, near Aub, in Middle Franconia, where a German settlement with numerous Roman imports ranging from A.D. 180–230 has been unearthed. Baldesheim lies just east of an ancient route running from Augsburg to Miltenberg. Another route running north from Manching crosses the Limes near Denkendorf and is still apparently distinguishable seven kilometres outside the Limes as a Roman causeway. This track would continue north up the Sulz valley to Nuremberg and eventually to Thuringia. It is unfortunate that we cannot yet point out the routes used by the Hermunduri concerning whom Tacitus made his well-known statement. Evidence of the use of the Regen and Naab valleys by traders in the Roman period is strikingly scanty, nor has the important Bronze Age route north from Kelheim any proven Roman counterpart. Raetia, however, was a poor province, with richer neighbours to west and east, and while the Bavarian Hermunduri may have carried on local trade and have acted to some extent as middlemen in trade northward bound to their richer kinsmen in Thuringia, they lay off the

25 Schumacher, loc. cit. Along it are Hallstatt and La Tène burials and at Fulda there are Roman finds. Vonderau (supra p. 196, n. 7), 11 fl.
27 This may be due partly to inadequate exploration, partly to thin settlement of an area largely covered with coniferous forest. See H. Zeiss, Bay. Forschbl. Blätt. xi, 1933, 45; Reincke, Berichte Röm.-germ. Komm. (referred to below as Ber.) xxiii, 1933, 144; ORL St. vii–ix, 13; xiii, 8; xiv, 12.
28 E.g. Münster-am-Stein, Kreuznach, Nauheim; Aubin, op. cit. 20; Schumacher, op. cit. 56, 258.
30 F. Winkelmann, Eichstätt Museums Katalog, 47. Such a trade would help to account for the rapid rise of the flourishing civil settlement at Ohringen; Weller, Fundber. aus Schwaben, xii, 1904, 15–31; E. Norden, Altgermanien, 1934, 49 fl.
31 Germania, xiv, 1930, 40–42; xv, 83–9, 281.
32 Ber. xi, 5, 17–18 (roads from Manching). At Oberstimm near Manching the Romans built a fort, and at Oberstimm there is still held annually a fair which, says Winkelmann, must go back to Roman times at least, and probably to an earlier fair held in the oppidum (E. Norden, Germ. Urgesch. in Tac. Germ. 2nd edn., 505; Eichstätt Kat. 25).
33 Ber. xi, 9, Eichstätt Museums Kat. 25.
34 Germ. 41; H. Zeiss, op. cit., 42, 44; Barthel, Ber. vi, 167.
35 Wagner, Die Römer in Bayern, 4th edn, 1928, 81; cf. however, Schuchhardt’s statement in op. cit., 225, n. 17. 'Die Hermunduren reichen zur Kaiserzeit bis zur Donau, wo sie in Regensburg einen Hauptaustauschort an der Grenze haben, und bei den Weltherren schon vor Vertragen genossen.'
36 A. Götz, P. Höfer and P. Zschiesche, Die vor- und frühgesch. Altertümer Thüringens, 1909, xxxv, draw attention to the La Graufesenque pot at Vippachelhausen and the Oberhof patera-handle as indications of early trade between the Thuringian Hermunduri and the south. The handle was found on a forest route leading to Raetia.
main routes into free Germany. From the archaeological point of view the Hermunduri of Thuringia are by far the more important, having widespread connections which have become increasingly clear in recent years; and throughout our period, despite changes in its inhabitants, Thuringia continued to play an important part in commerce and the diffusion of cultures.37

Reinecke38 has drawn attention to several prehistoric roads entering Bohemia from Raetia. Where most of them leave the Danube a few Roman objects have turned up, but they may only bear witness to local trade. More important was the route to the Budweis from Lauriacum, while from Vienna a route along the Lauschnitz led into the central, heavily-settled part of Bohemia. The easiest ways out from Bohemia to the north ran across the mountains to Dresden, Gorlitz and Glatz. The Marcomannic

37 Schulz, Fürstengrab (infra p. 204, n. 7o), 43-47.
kingdom playing a leading, if brief, role in the development of trade.3 9
The remnant of the Boii provided a sprinkling of Celtic subjects of whose skill the new lords of Bohemia could avail themselves, and Bohemia became a centre for the fusion of elements of Celtic, Germanic and even Roman culture. The Celtic substratum in both Bohemia and Noricum must have facilitated intercourse, and Maroboduus encouraged Roman merchants to settle in his new capital;4 0 after his fall, cynically engineered from Rome, his kingdom was reduced to a clientship maintained well into the second century.4 1 Roman goods are abundant in Bohemian cemeteries of the first century. In the second century there are fewer imports and by the third century German goods have definitely gained the upper hand.

A specially Marcomannic first-century product may be mentioned here, as its distribution and influence shows how widespread must have been the inter-relations between craftsmen throughout free Germany,4 2 namely, drinking-horn ornaments. Rims and tips closely resembling Bohemian specimens are found in Pomerania and in Denmark; identical examples of tips from Bohemia and the lower Neckar are known,4 3 showing that the Marcomanni maintained touch with the Suebi Nicretes, who were themselves in close commercial relationship with the Roman Rhineland before their territory was incorporated in the empire.4 4

We come to a route established beyond all doubt when we reach Carnuntum, with its ancient communications north and south.4 5 The way from Carnuntum to the amber coast is the only one of the northern trade-routes of which we have specific literary information; first the passage in Pliny4 6 referring to the Roman knight of Nero’s time who started north from Carnuntum, and six hundred miles away, after a journey which (Montelius calculated) would have taken two months, reached the Baltic coast where he found a number of trading posts. After his time this route became increasingly important and points along it are indicated with surprising clearness by Ptolemy.4 7 It led through the territory of the Quadi up the Manch valley into Silesia either through the Moravian Gates or the

40 Tacitus, Ann., ii, 62.
41 J. Klose, op. cit. (infra, p. 195, n. 2), 76.
42 O. Almgren, 'Zur Bedeutung des Markomannenreichs in Böhmen für die Entwicklung der germanischen Industrie in der frühen Kaiserzeit,' Manu. v, 1913, 465-66; Schumacher Festschrift, 282 (spur of Marcomannic type in Hungary); Preidel (infra, p. 204, n. 70), 1930, ii, 129 ff. In one or two cases the horn itself has been partially preserved (e.g. Lübów, Schuchhardt, op. cit., 258).
43 Altertiimer uns. heidn. Vorzeit v, 1911, 371. (Cf. also 576, 411, 414).
44 In their grave-furniture much Roman provincial work is found, including Belgic ware, which they were prompt to imitate. Cf. F. Behn, 'Zur ersten germanischen Besiedelung Starkenburgs,' Schum. Fests. 178; Ber. vii, 156, find of Aucissa fibula.
46 NH 373, 45. NIT xxxvii, 45.
47 Geog. II, xi; see discussion by G. Schürte, Ptolomy’s Maps of Northern Europe, 1917. Ptolemy gives a number of settlements along the route and there seems some likelihood that Eburonum=Brunn (placed correctly 1° north of the Danube), Kalisia=Kalisch, and Askanka=Osielsk.
Trade between the Roman Empire and free Germans

Glatz Pass. An examination of the finds of the region
suggests that at first the latter was used, but that before long the more direct
passage of the Moravian Gates came in for a specially heavy share of
the traffic. Nowhere in free Germany are coins more thickly dis-
tributed than in Upper Silesia, and along the whole of the amber
route numerous Roman objects have been found. An alternative
route to Silesia followed the valley of the Waag, crossing the
Carpathians by the Jablunkau Pass. Passage along or across the
Oder valley was complicated by swamps, but at all times there
seems to have been a culture stream along the Oder towards
Denmark. After crossing the river, the amber route bore north-
east to Kalisch, crossing the Warthe near Kolo, passing Lake Goplo
and joining the Vistula near Bromberg. It followed the Vistula
to the head of the delta, then turned off towards Samland. Whether
the settlement of the Roman period found near Elbing can be
regarded as one of Pliny’s commercia must remain an open question
for the present. Towards the end of the third century the route
seems to have become very much less frequented (cf. p. 204 f., figs. 8,
9), but communication with East Prussia never entirely ceased.
The main line of traffic to Pomerania, apart from the Oder water-
way, seems to have branched from the amber route near Kalisch and
run north-westward to Grabow, Regenwalde and the Baltic.
Pomerania, the home of the Rugii, has yielded large numbers of
Roman objects. Those of the first century are almost entirely
Italian; in the second century Rhenish and Gallic goods enter the
market, trade with the empire reaching its peak in the time of
Antoninus Pius. There is a decline during the third century, but in the
fourth there is another flow from the Rhineland, including coins
from western mints, though this trade comes to an end about the
middle of the century as it seems that most of the inhabitants had by
then moved off towards lands which were being vacated by the
Vandals. The fifth-century overlordship of the Rugii in Noricum
encouraged agriculture and trade.

The importance of Transylvanian gold in ancient commerce has
long been recognised. Sufficient data, however, for the discussion
of trade between the Roman province of Dacia and the Germans

48 M. Jahn, ‘Die oberschlesischen Funde aus
der röm. Kaiserzeit,’ PZ x, 1918, 80–149, xiii-xiv,
127 ff.; ‘Herkunft der schl. Wandalen,’ Manus-
Bibl. xxii, 1922, 78–94; S. Bolin, Fynden av
Romerska mynt i det fria Germanien, 1922; Beninger,
‘Quadische und wandalische Kulturbefunde,’
Mitt. der Anthrop. Gesell., Vienna, lxi, 78–100. It
is worth noting that the chief medieval trade route
here avoided the Moravian Gates themselves to
swing across the Jeseniky a few miles to the west
(Vidal de la Blache, Géographie universelle, iv, 2,
1931, 581); isolated finds of coins suggest that the
Jeseniky road was also known and used in Roman
times.

49 Wiberg, op. cit., 45.
50 J. N. von Sadowski, Die Handelsstrassen der
Griechen und Römer, 1877, 9–10. This work pays
special attention to the swamps and crossings of
east German rivers.
51 M. Ebert, Truso, 1926, 35 ff.
52 Ibid., 35 n. 1.
53 Jungklaus, Rom. Funde in Pommern, 1924,
112 f.
54 L. Schmidt, op. cit. i, 2nd edn., 1925.
55 Eugippius, Vit. Severini xxii, 2 (cf. ix, 1).
56 V. Pârvan, Getica, 1926, 757, 794 (French
summary); O. Davies, Roman Mines in Europe,
1935, ch. viii.
north of it, are not yet available, though a few signs of its existence have been noted.57 Roman roads seem to have cut across the plain between Danube and Theiss, and archaeologists are now beginning to pay some attention to this district.58

Danubian trade is referred to in a number of Roman treaties. Those of Marcus Aurelius and Commodus with the Marcomanni, Quadi and Iazyges all contain some reference to trade,59 notably one with the Marcomanni in which Marcus ‘established the places and the days of their trading together (for these had not been previously fixed).’ The restrictions imply that a much freer intercourse between Roman and barbarian had previously existed; the same may be deduced from a treaty of 369 between Valens and the Goths,60 which stipulated that only at two places on the Danube should frontier trade henceforth be lawful.

The migration of the Goths to the Black Sea coasts and the Danube brought a new factor into the history of German trade and cultural relationships,61 which in many ways recalls the Celto-Scythian intercourse of the La Tène period. In their raids they gathered enormous quantities of booty and slaves, but there were intervals after the wars of Aurelian and Constantine in which more peaceful relations with the empire developed.62 The Goths rapidly assimilated the culture of the Black Sea region, and the Roman roads of the old province facilitated movement in Dacia.

The easternmost borderlands of the territory occupied by the Germanic tribes need to be mentioned, if not discussed. Had the great medieval route ‘from the Varengars to the Greeks’ (along

57 A few coins have been found on the approaches to the passes through the Carpathians (Bolin, Fynden av r. mynt, Appendix, 119); the Samian found at Drawsko-Polen is far from other Roman finds and is thought to have come through Dacia (YNAM, infra, p. 216, n. 115); the Iazyges were allowed to trade with the Roxolani across Dacia, Dio lxxii, 19; Sadowski (op. cit., 187-92) describes a route from the Bukowina to the Bug and the Baltic; Rostovtzeff, Iranians and Greeks in S. Russia, 1922, 215.

58 H. Kiepert (Atlas) shows two hypothetical roads based on settlements noted by Ptolemy; at Szeged on the Theiss an inscription with the word ‘mercator’ was found recently, Klose, op. cit. 121 n.: finds in Iazygian-Sarmatian burials in the Alföld show strong Roman influence, and in the third century the German tribes pressing between the rivers must have come within the sphere of this trade (M. Parducz, ‘Römertreitsche Funde des grossen ungarischen Alföld’ (German summary), Dolgozatok (Szeged), vii, 1931).


60 Themistius, Orat. x, 135, Ammian. xxvii, 5, 7. For control of border trade, cf. ILS 775, inscription at Gran of 371: ‘hync bvr gum cvi nomen commodivm ova cavsa et factvs est a fundamentis constrivit et ad symmam manyvm operis... perveneri facit.’

61 B. Salin, Die altgermanische Thierornamentik, 1904; M. Rostovtzeff (op. cit. supra, n. 57), 226; PZ 1, 1909, 74.

62 The rise of Christianity among the Goths and Vandals and the development of runes are important indications of the extent to which those tribes were open to influences from the empire. A number of Gothic cemeteries have been examined in South Russia, Hungary and Roumania, and their contents reveal considerable Graeco-Roman influence, see Schmidt, op. cit. i, 247-8; Ebert, Südrußland im Altertum, 1921; C. C. Diculescu, ‘Die Wandalen und die Goten in Ungarn und Rumäni en,’ Mammus-Bihl. xxiv, 1923; Brenner, Ber., 1912, 262 ff.; Reinecke, Mäinner Zeitschr. i, 1906, 42-50. An even more distant connection is reflected in the hoard from Pietroasa, Transylvania, which includes two vessels of Sassanian workmanship—perhaps presents in the course of diplomatic relationship between Goth and Persian (A. Odobescu, Le trésor de Pietroasa, 1890-1900, Pt. iv, 91). Oszotropataka, north of the Theiss bend, is one of the chief early Vandal sites, and yielded rich Roman goods and a coin of Herennia Etruscilla (249-51).
Dvina and Dnieper) any counterpart in Roman times? The most recent collection of coin-finds of western Russia was made twenty years ago by T. J. Arné.

In the Governments along, and to the west of, the Dnieper below the Pripet Marshes Roman coins are fairly common; north of Kiev they are much rarer. Scattered coins in the Governments of Chernigov, Mohilev, Kaluga and Vitebsk suggest some penetration but hardly a great trade-route. The precision of Ptolemy's knowledge of the routes from the Danube to the Baltic has been contrasted with his ignorance of what lay beyond the middle Dnieper. It would appear that the main body of the Goths migrated along the Vistula basin, but even so some of them may have come into contact with the Pripet Marshes, as Jordanes seems to record. The legends of the brilliant but short-lived empire of Hermanric the Ostrogoth imply that the Goths maintained touch with the Baltic by the eastern route, and some of the migrants may have travelled that way. Hints of the development of the 'Varangian' route towards the end of our period are provided by the finds of certain small enamel ornaments in Esthonia (p. 213, fig. 15) and around Kiev. This eastern route was increasingly used in succeeding centuries, but for our purpose it is not to be compared in importance with the routes which lay further to the west.

II. OBJECTS OF TRADE

A. Roman Exports

Coins (figs. 8 and 9).—The commonest Roman objects in free Germany are coins. Most of the following remarks, together with figs. 8 and 9 are based on the important statistical study of the material...
Based on Dr. S. Bolin's lists (See n. 71)

over Drentsche vondsten,' Nieuwe Drentse Volksalmanak, 1934, 85 ff.
A. Hackman, 'Die ältesten eisenzeitlichen Funde in Finnland,' Mannus v, 1913, 279-299.
E. Jungklaus, Römische Funde in Pommern, 1924.
O. Krone, Vorgesch. des Landes Braunschweig, 1931.
O. Kunkel, Oberbesens vorgest. Altertümer, 1926.
S. Müller, Ordnung af Danmarks Oldsager, (Jernalderen), 1895.
J. L. Pič, Die Urnengräber Böhmens, 1907.
H. Preidel, Germanen in Böhmien im Spiegel der Bodenfunde, 1926.
P. Reinecke, 'Die kaiserzeitlichen Germanenfunde aus dem bayerischen Anteil an der Germania Magna,' Ber. xxiii, 1933, 144-204.
H. Schetelig, Préhistoire de la Norvège, 1926.
Schumacher Festschrift, 1930.
Stieren, Bodenaltertümer Westfalens, 1929.
A. M. Tallgren, Zur Archäologie Estis i, Dorpat, 1922.
J. Vonderau, Denkmäler aus vor- und frühgeschichtlicher Zeit im Fuldaer Lande, 1931.
The principal periodicals used were: Berichte d. röm.-germ. Kommission (Ber.); Formwaffen; Germania; Mannus; Mannus Ergänzungsband; Mannus-Bibliothek; Mainzer Zeitschrift (MZ); Röm.-germ. Korrespondenzblatt; Praxist. Zeitschr. (PZ); Prussia; Zeitschr. j. Ethnologie.
by Dr. Sture Bolin,\textsuperscript{71} which proves the widespread use of Roman coins in Germany long before money payments on a large scale by the Roman State to German tribes became important.

Tacitus writes that the frontier tribes used Roman coins, whereas those in the interior still engaged in barter.\textsuperscript{72} Republican coins,\textsuperscript{73} and coins of the Early Empire are abundant in western Germany, and the frequency of Augusto-Tiberian hoards reflects the stormy history of this region. Old Republican \textit{denarii} still circulated in the empire after Nero had issued his debased coinage, and this is the period when the recorded German preference for the older, heavier coins would have real point. In A.D. 107 the pre-Neronian coins were called in, and Bolin shows that they disappear from Germany as well as from the empire, which must mean that the Germans were

\textsuperscript{71} Sture Bolin, \textit{Fynden av romerska mynt i det fria Germanien}, 1926; r\'esum\'e in \textit{Ber.} xix, 1929, 86-145; addenda in \textit{Germ.}, xv, 267-71, and in the 'Fundchronik' of later volumes and, for E. Prussia, in \textit{Prussia}, 1926, 203-240. Also Reinecke, \textit{Ber.} xxiii; Petsch, \textit{Die vorgesch. Munzfunde Pommerns}, Univ. Greifswald, 1931. The finds shown on figs. 8 and 9 include hoards; numerous grave finds (the coins are occasionally, as at Hassleben, found in the mouths of the deceased, a Mediterranean custom); rarer finds in known German settlements; and scattered surface finds.

\textsuperscript{72} Germ. 5.

\textsuperscript{73} In a hoard of 62 denarii found at Aschendorf 61 were Republican, 1 Augustan, 41 had serrate edges. (Willers, 1901, 193.)
to some extent paying Romans for goods with coin. Thereafter the Germans had to be content with ordinary Roman currency. They kept mainly to silver; bronze coins are not found in quantity before the third century.

Few hoards were buried during the first half of the second century. Numerous hoards mark the widespread unrest of the next decades, and the composition of those buried in Western and Northern Germany resembles that of contemporary Gallic ones, while those in the Danubian sphere resemble Pannonian examples. The troubles of the third century appear to have affected Rhenish trade less than that of other areas, and coins of the Gallic emperors are found up to and beyond the Vistula. In the middle of the century Central Germany was disturbed by the movements of the Burgundians and Vandals, and hoards have been found along the line of their migration from Poland and Silesia to the Main basin. Early in the
fourth century there began the flow of Constantinian *solidi* of which large numbers have been found.

_Bronze Vessels* (figs. 10–12).—A few of the bronzes in German cemeteries are types known to have been in use in Italy in the time of the later Republic, and Willers concludes that these were exported across the eastern Alps as part of that growing commerce which had made of Aquileia an important emporium by the time of Augustus. In the first century A.D. Italian goods, the products in the main of Campanian workshops, dominated the market, and found their way to the north chiefly through the Danube lands, though examples near the Rhine are also known. Willers has dealt at length with the different classes of vessels—paterae (with or without sieves and continued to be produced until the end of the first century B.C. and at the risk of some inconsistency these have been included in the map (see Willers, 1907, t–29). G. Ekholm (*Zur Gesch. des röm.-germ. Handels* 'Acta Arch. vi, 1935, 49–99), records pre-Empire bronze vessels in Scandinavia.

*FIG. 11* (see p. 210)

_Based on maps by Dr. E. Sprockhoff in Mainzer Zeitschrift,' 1928, and by Dr. G. Ekholm in 'Acta Archaeologica' vi_.

74 E.g. vessels in Denmark and Hanover corresponding with forms found at Aylesford and Ornavasso (Willers 1907, 19, *Archaeologia*, lii, 1890, 378); in Bohemia the continuity from late La Tène to Roman times is specially noteworthy (Preidel, Pić); the early pails, which occur most frequently in Bohemia and along the Elbe, are types which
frequently bearing the maker’s stamp), pails, bowls, amphorae, jugs. Only a few examples bear the names of Roman owners; of these the Augustan patera from the Weser may have been lost in a campaign. Normally, bronze vessels were exported as new and not as second-hand goods.

By the second century Gallic wares, as the names on certain

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75 A lamp was found in central Esthonia (Moora, Die Vorzeit Estlands, 35).
76 Schumacher Fest. 316-18; Willers (1907, 94-9) thought that some of these, such as the beautiful situla dedicated to Apollo Grannus found at Fycklinge in Sweden, might represent a trade in outworn temple ornaments.
stamps show, began to have a market, though Italian vessels were still exported. A careful examination of Scandinavian casserolles and buckets has enabled Ekholm to identify some of them as of Gallic make, probably from Lyons. A metal industry has been identified at Eisenberg in the Palatinate, where, near the iron mines, the manufacture of bronze and brass goods also flourished. Certain forms of vessels common in the Palatinate were probably made here, such as a type of patera and sieve which also occurs in Thuringian

77 Willers, 1907, 62 ff.; Germania ix, 39, xvi, 221; Almgren, Gotland, i, 1914, fig. 271. The fine enamelled second-century bowls found at Maltbroek, Denmark, and in the sacred well at Pyrmont near the Weser, are Gallic (F. Henry, 'Emailleurs d’Occident,' Préhistoire ii, 1933, 112, 120). Mid- and late-Empire: P. Steiner, 'Messing-Seiher mit Halbdeckel aus rhein. Werkstätten,' Attischliten v, 1934, 255-66.

78 'Gallisk-Skandinaviska Förbindelser under äldre Kejsartid,' Fornv. xxx, 1935, 193-205.

79 F. Sprater, Die Pfalz unter den Römern, ii,
graves. Another class of goods manufactured near the Rhine are the celebrated Hemmoor pails (fig. 10), so-called from their occurrence in quantity in a certain third-century cemetery near the mouth of the Elbe. They appear in the mid-second century, reaching their peak in the later third century, and some were in use in the early fourth century. They are of brass, not bronze, and it is thought that they were made in the neighbourhood of Gressenich, near Aachen, where zinc occurs. Sprater believes that some pails of this description may have been made in the Palatinate.

The bronze vessels on German sites are probably not all Roman. The Germans were certainly capable of making the rough cauldrons with iron handles, and in this connection the gift made by the Cimbri to Augustus of ‘the most sacred cauldron in their country’ may be remembered. A more elaborate bronze grooved pail appearing about A.D. 200 also deserves some attention (fig. 11). There has been some diversity of opinion about its origin, but the recent work of Dr. Ekholm has shown conclusively that it is Roman, though the great majority of examples has been found outside the empire, in Scandinavia, Denmark, Pomerania and on the lower Vistula. Ekholm believes it to be Italian and points to its rapid degeneration as an example of the economic decay brought about in Italy through the disturbances of the third century. He distinguishes two well-marked types and uses their distribution to show the close trade relationship which subsisted between Norway and the Vistula at that period. Eggers considers that a centre of manufacture further to the south-east of Europe cannot be excluded, noting that the distribution of the ribbed pail corresponds with that of the early fibulae with returned foot (fig. 15, no. 3).

**Bronze Statuettes** (fig. 13).—Over eighty bronze statuettes, or fragments thereof, are recorded. At least a third seem to be of Gallic make and are found in Frisia, in north-west Germany, or in the Baltic islands, most dated examples being of the second century. Most of them are of male deities, especially Mars and Jupiter, thought by some to resemble Thor and Woden. Some may be curiosities taken home by mercenaries, and some, like a base from Marren, Westphalia, with a votive inscription, may be loot.

**Brooches and Small Ornaments** (fig. 14). The Germans were skilful metal workers, and the vast majority of fibulae found on German sites are German. Some northern brooches show Roman influence, and fibulae of Roman manufacture are also found, while other brooches...
of the first two centuries occur frequently both within and without the empire, and, whatever their origin, their provenance can only indicate widespread connections across the border, and this at a time before German mass immigration. The third and fourth centuries show growing German influence, though even in this late period Roman brooches still had some influence on certain northern types. 

Fig. 14 shows the distribution of definitely Roman brooches north of the empire. Small though the total is, they cover the same area as other Roman goods. First-century examples are commonest in Bohemia, though they are found too along the amber route and even in Lithuania. One of the most important is the 'Norican' or 'kräftig-profilierte' fibula (fig. 15, 1); another is the 'Wing' fibula (fig. 15, 4) a local Norican form, of which a few specimens have been found as far afield as East Prussia. These, and other small metal objects (openwork buckles and the like) were exported to, and imitated in, the Marcomannic kingdom, which in turn influenced work in East Prussia, Thuringia and along the route to Scandinavia. Other early exports were the Gallic Thistle and

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89 Supra, p. 200, n. 42. Preidel, 1930, ii, 133.
Aucissa brooches. Schulz has convincingly located the origin of the Eye fibula (fig. 15, 2, 2a) in Hermunduran territory in the Saale basin, under the influence of the Aucissa type. The open-work catchplates of the earliest Eye brooches, on the other hand, recall those of the Norican brooches, indicating a convergence of Gallic and Danubian influences among the Hermunduri. The Eye fibulae spread from the Saale country all over the German world and far into the Roman provinces as well.

A few enamelled fibulae of the type so characteristic on provincial sites (and mainly of Belgic manufacture) are found in free Germany. Disc-brooches similar to those found in Limes forts occur in East Prussia, Gotland and elsewhere on the Baltic coasts and, in the opinion of Dr. H. Moora, brought about the development of an enamel industry in East Prussia by the early third century which spread to the East Baltic and in time to Russia. Some of the Prussian fibulae are horseshoe-shaped (fig. 15, 5) and appear to be derived from the common Roman penannular brooch.

The much-discussed fibula with returned foot (fig. 15, 3) is another important example of international intercourse. It was developed fairly early in south-west Russia in a mixed Graeco-Roman-German environment, and spread west and north-west to become one of the main types of brooch in northern and central Europe in the third and fourth centuries, and even to appear in quantity in the provinces.

Gold and Silver objects. Silver objects of our period are not plentiful, since they must often have been melted down and re-fashioned in later ages. Those which have survived may be relics of a once-flourishing trade, or gifts from the Roman authorities to submissive chiefs, or booty; they show the richness of the treasures which the more fortunate Germans accumulated. The famous Hildesheim treasure of first and second century vessels was found close by an important route near a German settlement (the Galgenberg). Fine silver drinking-cups, sometimes gilt, often in pairs, occasionally turn up. The Hassleben platter, Mecklenburg patra and Sacrau pail deserve attention as being probably Gallic work, and the Hoby beakers as being signed by a Greek silversmith. It seems that the Germans also imitated Roman silver vessels, judging
by cups found at Lübsow.\textsuperscript{99} Imported spoons, mirrors, hairpins and brooches also occur. Gold objects are still rarer,\textsuperscript{100} though rings are not uncommon and show fairly general distribution.

\textbf{Arms and Tools.} Occasional Roman arms or pieces of armour have been found. For a time the Roman short sword influenced the form of the German sword,\textsuperscript{101} though later the German long sword was to become the prevailing type within the empire. Much is made in northern legend of fabulous swords fashioned by trolls, giants or dwarfs who, some have asserted, may be an echo of the Romans, a half-legendary people of high technical skill, and Roman swords, some of fourth-century work, are not unknown in Scandinavia,\textsuperscript{102} despite the fact that in the later empire the export

\textsuperscript{99} Kunkel, \textit{Mannus Ergbds.} v, 1927, 122-3.
\textsuperscript{100} The most remarkable collection is the Petroasa hoard, \textit{supra}, p. 202, n. 62; Jacob-Friesen, 163 (gold objects from Lengerich, Hanove ).
\textsuperscript{101} M. Jahn ‘Die Bewaffnung der Germanen in der älteren Eisenzeit,’ \textit{Mannus-Bibl.} xvi, 1916, 213-4; Preidel, 1930, i, 230 (spurs), 231 (swords); Gaerte (\textit{supra}, p. 204, n. 70), 211. Almgren and Nerman, 596; Germ. xv, 71-75.
of arms to the barbarians was prohibited. Roman ploughshares and tools have been recorded near Cassel and in Thuringia.

Unworked Metals. Bog iron is common all over north Germany, and in Scandinavia and elsewhere there are easily-worked mines, but the Romans probably exported the baser metals to some extent. Copper and tin may have come largely, though not necessarily exclusively, from Bohemian and Thuringian mines; Roman bronze coins appear at times to have been melted down. Silver and gold came from further afield. Montelius points out that very little silver occurs in Scandinavian graves before our era, but that it then becomes common. Gold objects of northern manufacture frequently show Roman influence. Roman gold coins paid out to the barbarians were probably frequently melted down and reused to make ornaments, but statistics as to the relative incidence of gold in northern finds during the Dacian, Roman and Gothic ownership of the Transylvanian gold region would be interesting.

Pottery (fig. 17).—Outside Holland, where it is specially frequent, Terra Sigillata has been found on over one hundred sites, and much of it must have gone overland—the number of examples near Minden, for instance, should be noticed. It might almost be suggested that the demand of the partially Romanised Frisians absorbed all the pottery that went by sea from the Lower Rhine. Augustan pottery is very rare, and the pottery trade did not become important until the second century; the great majority of Samian vessels are Rhenish wares of the second and third centuries. Westphalia has produced considerable quantities of Roman pottery, mainly of the third and fourth century. The Germans of the Sieg valley and around Giessen were steady customers, the latter buying Wetterau pottery among other types. Pottery, chiefly Samian, also reached Fulda and the rich Thuringian settlements, where one example of first-century La Graufesenque has been noted. A few scattered pieces have been found in Bavaria and Franconia, including Samian of the Limes and post-Limes periods, Eifel ware and black-glazed Rhenish wares. In Bohemia,

103 Cod. Iust. 4, 41, 2 (Marcianus).
105 O. Davies, Roman Mines in Europe, 1935, 172; W. Hansen, „Aus der Vorzeit von Hamburg und Umgebung,” 1933, 165; relevant articles in Ebert Realllex., Reinecke, Germania x, 87-95; Tacitus, Germ. 43 (Cotini).
106 Prohibition in later Empire: Digest, 39, 4, 11 (Paulus); Cod. Iust., 4, 41, 2.
107 Davies, op. cit., 1. (He writes, following Undset, of copper coins imported as bullion by the Germans, but the studies of Bolin and others do not agree with this.)
108 Cf. B. Nerman, The Poetic Edda in the Light of Archaeology, 1931, 12 (gold), 16 (silver).
109 Cf. the dagger of Col. Lawrence now at All Souls’ College, Oxford, with gold hilt and sheath made from melted down sovereigns paid out to the Arabs by the British government. Roman coins were also often pierced and used as pendants. Gold export prohibited, Cod. Iust. iv, 63, 2.
110 H. Dragendorff, „Terrasigillatafunde aus Norddeutschland und Skandinavien,” Zeit. f. Eth., xxviii, 1906, 369-77. It is to be noted that very little Terra Nigra occurs because the trade did not get going early enough. But there is also some wheel-decorated Samian, of the late fourth and early fifth centuries, in Western Germany and in Thuringia (e.g. from Gotha, Germania, xx, 1936, 203; from Friesland, Boeles (supra, n. 70), 104).
Heiligenberg, Rheinzabern and south Gallic wares are found; in Silesia and Moravia, pottery imported from the Danubian provinces; in Lower Austria there was obviously much local trade.

An interesting series of finds has been made in East Prussia and Poland (especially in the upper Warthe basin). It includes first-century Banassac, also Lezoux, Heiligenberg and Rheinzabern ware. The latest specimen is a Westerndorf pot of about A.D. 200 found in East Prussia.

The art of the Roman potter had some influence on the

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The wheel was introduced into Thuringia and elsewhere during the third century. In the far south-east Greek influence made itself felt. Of interest also are examples of Vandal pottery imitating Roman glass (fig. 16). Lamps occur only occasionally, and terra-cotta goods are not common. Glass (fig. 18). Roman glass is found in the same regions as Roman metal work and was one of the chief exports of the later empire. Some first-century glass, mostly Italian or Syrian, also reached Germany. The later glass is much more abundant, and

\[\text{References:} \]


113 K. Tackenberg, Die Wandalen in Niederschlesien, 1925, Taf. 23.

114 Lamps: Preidel, 1930, i, 171 (second- and third-century Rhenish, fourth-century Italian); Vonderau (infra, p. 204, n. 70), 22 (candlestick); Dr. Moora has kindly informed me of a Latvian example. Terracotta: Boeles, 1927, 5; van Giffen, Drentsche Volksalmanak, 1934, 94.


116 Almgren, op. cit., 924; Ekholm, infra, n. 119.
The Scandinavian discoveries include some glass vessels, the distribution of which has been mapped by Dr. Ekholm: see note 119.

much, but by no means all of it, is Rhenish.\footnote{Almgren and Nerman, Gotland, 1923, fig. 452; Schetelig, 164; Karpinska, Les Tumulus de la période romaine en Pologne, 1926, 156 (view that glass went to Poland from SW Russia in the third and fourth centuries); Egger, Germania, 1936, 152.} In Bohemia a good deal of late Rhenish glass is found, which may conceivably have travelled from the west via Thuringia.\footnote{Preidel, 1930, 194 ff.; cf. Bolin's theory in regard to the coin-stream of the late second century.} The penetration of the provinces with German fashions was doubtless responsible for the fine glass drinking-horns made at Cologne, which were not only used...
in the empire but were exported to the north. A type of glass of probably oriental origin cut with oval facets, was common for several centuries and the later examples of it seem to have entered Europe from the Euxine; it has been suggested that vessels of this type are the frosty goblets—the Hrimkalkr—of the Eddas.

Roman glass beads are very common in free Germany, and seem to have been widely imported. Records of them are at present rather patchy but, as an example of their frequency, their occurrence on forty sites in Pomerania may be noted.

Wine. The word wine is common to all Teutonic languages—'one of the earliest borrowings from the south'—and the quantity of exported vessels whose primary use was in mixing and drinking wine implies that the wine went too. The scarcity of amphora-fragments in free Germany is irrelevant, because the regular northern wine-container was then, as now, the barrel. It is probable that wine-merchants crossed the Rhine before the time of Augustus, and the great development of the Rhine and Moselle vineyards during the middle and late empire, coupled with the known love of the barbarians for strong drink, helps us to believe that the trade was not suffered to languish. There was an interdict on the export of wine in the late empire.

Miscellaneous. In times of stress the Germans appear to have obtained corn from the empire. Miscellaneous objects of which occasional examples are known, include ivory objects, gaming pieces, a wooden gaming-board, a stylus, weights, semi-precious stones set in Roman rings, harness-ornaments, etc. The Roman type of circular millstone was adopted by the Germans and querns of Andernach basalt-lava have been found.

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120 B. Nerman, Poetic Edda, 23; cf. Kiö i, 206.
121 O. Kunkel, 1930; Jungklaus, 1923, 88 ff.; also Matthes, Ost Prignitz (mostly third century), Preidel, 1930, 316 ff.; H. Moora, Die Vorzeit Estlands, 1932, 35.
122 Hoops, Reallex. ii, 388 (a series of words derived from Latin); the etymology of the Gothic word Kaupon (Kaufmann), from Lat. caupo, innkeeper or petty tradesman, or caupona shop, or tavern, may be remembered for what it is worth.
123 It is true that these vessels may to some extent have been used in consuming native drinks; cf. remains at Juellinge (n. 119, supra).
124 A number of amphorae have been found at Ubbergen, the Batavian oppidum destroyed A.D. 70 (supra, p. 195, n. 2); another first-century find at Recklinghausen (Westphalia), C. Albrecht, Mitt. des Landesmuseums. Westfalen, xvi, 1931; in the Sieckkreis (C. Rademacher, Mannus iv, 1909, 92).
125 Schumacher, Siedl. u. Kult. gesch. der Rhein- lande, i, 169-70; PZ vi, 240, 245. Caes. BG iv, 26 (if the Suebi discouraged the wine trade, it was probably carried on by their neighbours).
126 Schumacher, op. cit., ii, 250; Willers, 1901, 200.
127 Tac., Germ. 23; Dio, writing of the Bastarnae, (li, 24, 2, Loeb), says, 'the whole Scythian race is insatiable in the use of wine and quickly becomes sodden with it.'
128 Cod. Iust. iv, 41, 1.
129 Amm. 27, 5, 7. Among the goods whose exports are forbidden are corn (Dig. xxxix, 4, 11) and oil (Cod. Iust. iv, 41, 1).
130 Schetelig, op. cit., 1926, 141 (also Norwegian system of weights derived from Rome).
131 Hörter, 'Die Basaltlava Industrie bei Mayen,' Mannus vi, 292-94, 1914 (example at Kiel). Examples at Waltrop (Westphalia), Stieren, Bodenaltsurmer, i, 191; at Baldesheim, Germania, xxvi, 88; Paderborn (Koenen, Mannus xii, 1921, 1926 military?); near Troisdorf, Sieckkreis (Mannus i, 91).
B. German Exports

Cattle, etc. Our knowledge of the return traffic from Germany into the empire is meagre. Most of the goods were perishable, and hence have faded out of the archaeological picture. Bearing in mind the large armies and the number of considerable towns along the frontiers, some commerce in cattle becomes highly probable, but of evidence there is naturally little. A wax tablet found near Leeuwarden recording the properly witnessed sale of an ox to a Roman by a Frisian is consequently of great interest. The fish of the North Sea may account in large part for the quantities of Roman imports found in Friesland and Grönningen. Grain is another possible item of trade. Large requisitions were made after successful wars.

Pottery from the Lahn valley reached some of the Taunus forts during the late second and early third centuries; a possible salt trade, and the occurrence of German fibulae within the empire have already been noted. Great hordes of slaves are mentioned after the wars, but there is not very much information to be discovered about peaceful slave trade. One of the Tacitean attacks on Domitian alleges that he bought German slaves to display as captives. This is not true, but it implies the possibility of buying slaves on the frontier. Tacitus has also a good deal to say about slaves among the Germans themselves, and the story of the Usipi is a clear case of traffic on the borders; one or two tombstones of German slaves exist, and occasional references occur in literature. It is significant that the old German word mangon, meaning merchant, is derived from the Latin mango, slavedealer.

132 A group of minor imports from the Rhenish borderland may be mentioned: We cannot be sure whether women's hair, or hair dye, or goose-feathers came from free Germany or from the Germans within the Empire. Pliny describes a certain herb 'Britannica' from the Frisian coast. Hair dye: Pliny, xxviii, 191; Martial, xiv, 26, 176, viii, 33, 20; Suet., Col. 47; Silius, iii, 638; Ovid, Am. i, 14, 45; Tac., Agric. 39; Hoops, Reallex, s.v. 'Gans.' Herb: NH xxv, 26.

133 Germ. 5, 'pecorum fecunda.' Ann. iv, 72, Frisian ox-hide tribute (leather was an important part of the Roman soldier's equipment). Panegyr. Lat. iv, 9, 3 (A.B. 297): 'Arat nunc mihi Chamavus et Frisius... et frequentat nundinas meas pecore venali.' The procuring of wild beasts for the arena was doubtless mainly left to the troops, and many inscriptions have survived showing the importance of hunting along the frontiers (e.g. CIL xiii, 8639, an ursarius leg. at Xanten). The bison was shown in Rome (NH viii, 38). It has been suggested that the procurator of the imperial games who sent his emissary to the Baltic (supra, p. 200) may have instructed him to bring back animals and slaves as well as amber.

134 Boces (supra, p. 204, n. 70); Girard, Textes, 848 f.

135 Cf. the firm in CIL xiii, 8830 (supra, p. 196, n. 9).

136 SHA Vit. Probi, xiv, 3; Ammian, xvii, 10, 4 and 9; cf. supra, p. 218.


138 Supra, p. 198.

139 Supra, p. 211.

140 Agric. 39.

141 Ann. ii, 24; xii, 27; xiii, 56; Germ. 24; Dio, lvi, 22, 4; (ransom of Roman prisoners); lxi, 13.

142 Agric. 28, 'ac fuere quos per commercia venundatos et in nostram usque ripam mutatione eum(entum) adductos indicium tanti casus inlustravit'; cf. Frisian slaves, probably coming into Roman hands, Ann. iv, 72.

143 Carnuntum Flügger, 58, Nat. (i)on) emmvndy; CIL iii, 11301.

144 Barrow, Slavery in the Roman Empire, 1928, 18. Clem. Alex. Paed. 3, 4.

145 Stein, s.v. 'Handel.' Hoops, Reallex, § 29; cf. CIL xiii, 8348, C AELAVIVS P F STEL MANGO (from Cologne).
Amber became very fashionable early in the Imperial period, but, important though the trade undoubtedly was—the bulk of the amber on the market came from Samland—it can account for only a fraction of the Roman goods that reached the Germans. Pliny gives much information about amber, and Tacitus describes the gathering of it on the shores of the Baltic by the Aestiones, who knew it as glaesum, and who were surprised at the price paid for it. Aquileia, which has yielded the largest collection of Roman amber in existence, was the chief emporium for receiving it, and an industry for making up fine carved amber articles seems to have flourished there. Objects of this kind are found from time to time on provincial sites, and probably most of them were made in Italy, largely in Aquileia itself. There are plentiful literary references, particularly among the writers of the first and second centuries, to the vogue for amber, showing how it was prized for its ornamental, medical and magical properties. The most famous haul of amber recorded is that made by Pliny’s knight, who brought such quantities back from the Baltic, including one lump weighing 13 lbs., that the very nets, arms and litters in the amphitheatre were decorated with it. Pausanias mentions a life-size statue of Augustus of amber (presumably a coating), made for Trajan’s Forum, and the high price of carved amber goods receives comment. Elagabalus is said to have lamented that he could not cover the floors of his palace with powdered amber.

Most of the amber objects which are dated, notably those from Aquileian graves, are of the first or second century. After the second century, discoveries of amber and literary references to it become rare, and it is not mentioned in what survives of the Edict of Diocletian. The movements of the Goths killed this trade with the south so that the fashion for amber died out in Italy. But, no longer being sold at high prices to the southerners, it now becomes more frequent in the graves of the barbarians themselves.

146 Blümner, P-W, s.v. ‘Bernstein,’ 295-304, 1897. Discussion of the nature of amber and the possibilities of distinguishing the Baltic from other types by W. La Baume, s.v. ‘Bernstein’ in Ebert, Realllex. and de Navarro, op. cit.
147 Pliny, NH xxxvii, 33. Some Pomeranian amber may also have gone south, thus accounting for the large quantities of Roman goods in Pomerania.
148 Germ. 45.
149 Notes, supra, also NH xxii, 99, Martial, iii, 65, 51; iv, 32, 59; vi, 15; Juv., vi, 573; ix, 30; Clem. Alex., Paed. 3, 2; Strom. 2, 6.
150 xxxvii, 45.
151 NH xxxvii, 49. (As Friedländer, ii, 325—remarks, the necklaces worn as amulets by Lombard peasant women cannot have been particularly costly.)
152 SHA, Vita Elagab. 31.
153 Fine pieces of Roman amber are relatively scarce, but there are small collections in some of the museums (e.g. British Museum, Louvre, Bibl. Nationale, Nimes, Brussels, Leiden, Utrecht, Wallraf-Reichart Museum at Cologne, Bonn, Trier, Worms, Termé Museum at Rome, Vienna, Budapest: Messrs. G. C. Dunning and A. D. Trendall have kindly helped me in collecting records). Brusin notes large quantities of amber objects at Aquileia, Udine and Trieste. Amber beads are not uncommon in collections of Roman and provincial antiquities. Chinese records of trade with Ta-Ts’in (the Roman empire and Syria in particular) in the third century mention amber among its products: this may be re-exported amber (F. Hirth, China and the Roman Orient, 1885, 41, 73, 245).
154 Preidel, 1930, i, 325, states that after 200 it is more common in Bohemian burials.
Fur.—It is often said that the Russian fur trade was flourishing in the time of the Greeks, but Professor Minns, though agreeing that it existed—and the discovery of fur cloaks, one identified as sable, in Scythian graves makes that clear—says that so far as he can discover, the Greeks themselves, apart from those of the Bosporus, were not affected by it. From the Scythian tumuli to our chief Roman authority is a long step, but Jordanes writes in the sixth century of the splendid dark furs, saphirinae pelles, passed from people to people from the north to the Roman world. Caesar, Tacitus and the rest refer to the barbarians wearing skins, but say nothing about Romans wearing fur coats; and the failure of the satirists to attack this luxury is striking. A much-restored Vatican relief shows an individual of northern type, more likely a Gaul than a German, wearing a skin mantle, probably a sheepskin; the standard-bearers on Trajan’s Column wear bearskin ‘busbies,’ but neither of these instances is very helpful. Hides were for a time paid as tribute to Rome by the Frisians; Tacitus refers to trade in skins among the Germans themselves. References to pelliones, dealers in skins, or furriers, occur in the life of Severus Alexander, in the Theodosian Code and the Digest, but again there is no indication that they were engaged in what is meant to-day by the fur trade. Diocletian’s Edict fixes prices for a long list of skins (pelles), but these are not furs, with the exception of beaver and marten which may be a sign of a developing fur-trade consequent upon the introduction of barbarian customs and dress into the empire. On present evidence it is difficult to avoid the conclusion that if a fur trade with the north existed, it was late in developing. Settlements of the Roman period have been found in the north-Russian and Finnish forests, whose inhabitants must have been largely dependent on hunting and trapping. They have been taken for the outposts of the great fur trade Jordanes writes of—but how far afield their wares penetrated can hardly yet be judged.

Military Service and Subsidies

There remains for consideration military service, and this, rendered or implied, was one of the most important means which

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157 E. H. Minns, Scythians and Greeks, 1913, 441; Herodotus is familiar with northern fur-bearing animals; Schrader, Realex. der Indogerm. Altertumsk., s.v. ‘Pelzkleider.’
158 Minns, 210, 248, 430; Rostovtzeff, Iranians and Greeks, 22.
159 Get. iii, 21, ‘alia vero gens ibi [isle of Scanzia] moratur Suethans quae velut Thuringi equis utuntur extimis. Hi quoque sunt qui in usus Romanorum saphirinas pelles, commercio interveniente, per alias innumeris gentes transmittunt, famosi pellium decorae nigredine.’
160 W. Capelle, Das alte Germanien, 1929, Plate, p. 144; K. Schumacher, Germanen-Darstellungen, 1912, 81-82 (fig.).
produced the money circulating so freely in German hands. German mercenaries\textsuperscript{167} entered Roman service in various capacities from very early times, and in increasing numbers as time went on, and it is not necessary to assume that they all cut themselves off entirely from their former homes, and that they never returned bearing with them some of their earnings and other trophies of their sojourn in southern lands.\textsuperscript{168} Still more important were subsidies\textsuperscript{169} paid to client states from the beginning. It is well known how these payments increased during the later empire—how the later \textit{foederati} were paid for refraining from attack rather than for promising services or friendship. From the economic point of view it is perhaps not unfair to represent these payments as acting as international loans for facilitating trade. Many of the Roman objects found in free Germany were thus probably paid for in hard cash, and the invisible export which earned that cash was the variable goodwill of German tribes.

\textsuperscript{167} M. Bang, \textit{Die Germanen im römischen Dienst bis zum Regierungsantritt Constantius I}, 1906.

\textsuperscript{168} E.g., repatriation of the bodyguards of Nero, Caracalla and Pupienus.

\textsuperscript{169} Klose, \textit{op. cit.}, 150 (Geldzahlungen).
1. **AQUILEIA**: AMBER PYXIS NOW IN THE BRITISH MUSEUM (See p. 220)

2. **DITCHLEY, OXON**: BRONZE TERRET ENAMELLED IN RED, FOUND IN A ROMAN HOUSE; NOW IN THE ASHMOLEAN MUSEUM, OXFORD (See p. 258, note)

*By courtesy of the British Museum, the Ashmolean Museum and the 'Victoria County History of Oxfordshire'*