The centuries before the year 1000 are meagerly represented in the Metropolitan Museum’s armor collection. This early period—the misnamed Dark Ages that succeeded the civilization of Rome—has yielded comparatively few examples of arms and armor, and many of these have been irretrievably damaged from being buried in the ground. It is true that the objects the Museum exhibits from Frankish graves are of the highest quality, especially the iron shield boss and grip overlaid with plates of gilded silver from the warrior graves at Vermand in northern France and a handsome Merovingian sword. These, like the Museum’s splendid collection of Gallo-Roman, Germanic, and Merovingian jewelry, at least suggest the vital and variegated culture of Europe after the breakdown of the Roman Empire.

The barbarian chieftain’s helmet, or *Spangenhelm*, recently placed on exhibition is of the same high quality as these early grave finds. Only twelve such helmets have been found, all from the Migration Period, when hordes of barbarians were sweeping through Europe—fierce, strong rovers who lived before the days of knighthood and chivalry. If one considers this small number in relation to the thousands of barbarian graves that have been excavated scientifically, one may conclude that these helmets were worn only by men of high rank. From the place our spangenhelm was discovered, St. Bernard, near Trévoux, it is reasonable to assume that it belonged to a Frankish or Burgundian chieftain.

Sidonius, a Gallo-Roman noble born about 431 at Lyons, in one of his letters describes the costume and equipment of a young Frankish prince named Sigismer, on the way to the palace of his Burgundian father-in-law “in flame-red mantle, with much glint of ruddy gold, and gleam of snowy silken tunic. . . . But the chiefs and allies who bore him company were dread of aspect, even thus on peace intent . . . in boots of bristly hide [and] high tight tunics of varied colour hardly descending to their bare knees. . . . Green mantles they had with crimson borders; baldric supported swords hung from their shoulders, and pressed on sides covered with cloaks of skin secured by brooches. . . . In their hands they grasped barbed spears and missile axes; their left sides were guarded by shields, which flashed with tawny golden bosses and snowy silver borders.”

Sidonius does not mention helmets, and according to one theory, based on certain literary assertions, the barbarians wore no headpiece, even in battle. But the helmet was an essential part of a warrior’s equipment, and it is more likely that the barbarians wore them when they could get them. That so few have been found in graves (none of a type that the com-

**Above:** Part of the headband of the helmet illustrated on page 274. The pattern of vine, pecking birds, and fishes is typical of the ornament used on such helmets.
mon soldier might have worn) may be explained by the nomadic belief in the invulnerability of the dead. Armor was considered unnecessary, though weapons were provided for battles in the future life and as symbols of power. The best evidence that helmets were worn is in reliefs on the column of Trajan (illustrated on pp. 278 and 279) of barbarians in the Roman service.

The barbarians fought with and against the Romans. The old military organization of Trajan had begun to fall to pieces in the third century, and during the fourth thousands of warriors from across the frontier—Germans, Sarmatians, Arabs, Armenians, Persians, and Moors—served in the Roman army. The names of the general officers of the Emperor Julian (331-363) show that many barbarian-born men were to be found in even the highest ranks of the Roman service. In 378 the Romans were defeated at Adrianople by the Goths, who were preponderantly cavalrymen (elite troops who would be more apt to wear a helmet than the infantrymen). It was the Goths, not the Romans, who defeated Attila at Châlons in 451. By the time the Ostrogoths subdued Italy (493) the barbarians had overrun the whole civilized world west of the Adriatic. In the time of Justinian (483-565), the regular force of the empire had been reduced to one hundred and fifty thousand; and this number, large as it may seem, was thinly scattered over the sea and land—in Spain and Italy, in Africa and Egypt, on the banks of the Danube, the coast of the Black Sea, and the frontiers of Persia. Because of the constant relations between Eastern and Western soldiers, one may readily understand how the oriental spangenhelm came to be adopted in the West.

The spangenhelms are Eastern in construc-

The drawings on this page show details of similar ornament on helmets in European collections. The numbers refer to illustrations on page 280 and list on page 281.
Barbarian chieftain’s helmet, or spangenhelm, so called from the bands that form its framework. Frankish, vi century A.D. The decoration was embossed on copper sheets and then gilded; much of the gilding still remains. There was probably an ornament on top to which was fastened a panache, or crest of plumes. The helmet is Asiatic in shape and construction and is an example of Eastern influence in the West. Dick Fund, 1942

Persia was the place of development of lamellar armor, in which separate iron plates are fastened to each other. Two early segmented helmets, made of bronze, may be seen in the British Museum, one Assyrian (884 B.C.), the other Sassanian (226 A.D.). The prototypes of the spangenhelm evolved under the influence of oriental and classical traditions, perhaps in the Black
The helmet was found in the bed of the Saône River, not far from Lyons. Above: Front and back views. Below: The top and the inside of the helmet. A mass of river-bed silt and water-smoothed pebbles is attached to the rusted bands on the inside, and a petrified mussel shell still clings to one of the iron segments. The present weight of the helmet is two pounds.

Sea regions and in Byzantium, from a type of helmet made of iron segments laced together with leather thongs. An example of such a helm, from a fifth-century Avarian tomb at Kertsch in the Crimea, is in the State Historical Museum, Moscow. A variation of this type of spangenhelm (Kondu Maruhachi) was used as far east as Japan, as may be seen in extant examples, one of which is in the Museum.

Eastern ornament penetrated to the West chiefly through the intermediary of the Copts, Christianized Egyptians. Many comparisons may be made between the designs that ornament the enriched spangenhelms and those that appear in Coptic art. One of the most popular motives of Christian art in Egypt and Syria was the vine with pecking birds that appears on our spangenhelm and others. A man riding
on a donkey, representing Christ entering Jerusalem, is shown on the St. Vid helmet. A palm branch, deer, fish, a dove with an olive branch, a cross with alpha and omega suspended from it, and other Christian symbols are represented on the Gammertingen spangenhelm. The Giulianova helmet is decorated with crude figures of horses, oxen, birds, fishes, palm-like leaves, and vessels that resemble chalices. Masks, vases between lions or other animals, variations of which appear on the Gammertingen and Hermitage helmets, are also found in Coptic art.

Although no enriched spangenhelm has been found in Egypt, the Copts must have been familiar with the type. There are two plain iron helmets similar in construction (including cheek plates) that came from Egypt (Rijksmuseum van Oudheden in Leyden, and Brooklyn Museum). It is difficult to date them, but they were probably introduced into Egypt by Eastern conquerors. They may have been brought to the Nile Valley by Sarmatian troops at the time of the Roman domination (before 395). Or they may date from the conquest of Egypt by the Persians (616-626) or by the Moslems (629-968).

The conical shape of most spangenhelms was the typical one used by oriental peoples from early antiquity, while the basic form of Greek and Roman helmets was hemispherical. The Pannonian helmet of Budapest, the bisectional helmet of St. Vid, and the Nordic helmet of Wendel in Upland belong to the Greek and Roman category. The Gültlingen and Chalon spangenhelms, though they have the usual construction and the characteristically oriental apical disk, are hemispherical.

The crested helmet of the late Roman period was worn by the Gallic provincials; as early as the time of Caesar the Roman legions were mainly raised in Gaul. When the Franks overran this area they adopted the Gallo-Roman type, having had no headpiece of their own. But the oriental type must soon have become known to them. A number of spangenhelms have been found in the Frankish territory. The one found at Vézéronce on the Rhone is thought to have been lost at the battle there in 524 between the Franks and the Burgundians. Clovis, when he defeated the Visigoths in 507, could well have encountered the spangenhelm. Indeed the Franks were quite capable of producing such a helmet as our enriched spangenhelm. The Merovingian kings were great patrons of gold- and silversmiths.

But we do not know where the spangenhelms were made. It is possible that some of them were produced in the same workshop, perhaps in a monastery. An unusual structural feature like the gabled plaques which appear on the interior of our helmet and on the Gammertingen helmet would indicate a common source. Some of them apparently belonged to chieftains in the service of Justinian or to his barbarian opponents. These may have been made at Ravenna, the center of Byzantine art and industry in the West. Certainly all the extant spangenhelms are similar in construction, ornamentation, quality of workmanship, technique, and materials.

When an object has been lost for almost fifteen centuries it is naturally difficult to place it accurately in its time. We can know little of its actual history and can only approach it in-
directly. In a grave at Gammertingen was found a small gold coin, a barbarian imitation of a triens of Justinus I (518-527). A gold plate from the brow of a spangenhelm (Bargello, Florence) is inscribed with the name of Agilulf, who became king of the Langobards in 590, when he married the famous queen Theodolinda, and who died in 616. Such connections give us a basis for a date.

We do know that the spangenhelm shows barbarian contact with another civilization—one familiar with early Christian art. We also know that it was an important object of personal adornment as well as protective value, in harmony with other rich elements of a chieftain’s clothing. The man who wore such a headpiece was no longer a skin-clad barbarian. He was accustomed to deck himself with finery that glittered with gold and colored stones. The Museum’s spangenhelm belongs to an interesting period in the history of a rapidly developing people. It is an excellent example of the influence of Eastern and Christian art on the barbarians who conquered and divided the Roman Empire.

**DESCRIPTION AND TECHNICAL NOTES**

The main elements of the Museum’s spangenhelm are of iron and comprise the elliptical headband about 1 3/8 inches wide, six bands (Spangen) converging toward a circular disc at the apex, and the six sub-triangular segments between the bands. Each band blends into an elongated base, the ends of which touch the adjacent bases. Only one segment of our helmet is intact, and it is heavily rusted, the rust covering part of the adjacent bands. A careful examination does not reveal any overlay of copper, silver, or any metal on the segments. However, the overlay may have disappeared, for in 6 and 4 (see list, p. 281) the overlay is polisher silver sheet, in 1, 2, and 7 gilded copper sheet. Most of the extant spangenhelms have six segments; 5, 9, and 11 have four segments.

The headband, converging bands, and the disc are covered with thin copper plates which fold under for about 1/8 inch at the edges. This overlap may be seen on the underside of the headband. The converging bands, which have a slightly rounded mid-ridge, are punched with chevrons, and the disc with crescents and small squares, all repeated. The punched impressions were made with the point of a shallow pyramidal tool and are square in shape.

The enriched areas were mercury-gilded, as in all enriched spangenhelms, much of the gild-
Relief from the Column of Trajan showing barbarians and Romans fighting side by side. The barbarians wear a type of spangenhelm, or helmet built up of small plates, and scale armor. Trajan's Column was set up in Rome in 113 A.D. to commemorate victories over the Dacians.
Sarmatian cavalry in flight, a relief from the Column of Trajan. These barbarians also wear a type of spangenhelm and scale armor. The use of armor built up of small segments is characteristic of Asiatic peoples. The Sarmatians preceded the Goths in South Russia.
Spangenhelms in European collections. The numbers refer to the list on the opposite page.

ing being still intact. This was the earliest method of decorating iron with gold. The surface was covered with a thin sheet of copper, which was afterwards coated with the metal. An amalgam of mercury and gold was applied to an immaculately clean surface. Heat was applied, the mercury was volatilized, and the gold adhered to the surface and was burnished. The headband was ornamented by pressing the copper into a mold, a method which had been in common use from Grecian times. The headband mold is 7\(\frac{1}{4}\) inches long, and a slight impression of the mold in the copper indicates that it was 1\(\frac{1}{4}\) inches wide. The ornament is repeated four times. On the left side and directly over the nasal are double impressions indicating that the mold moved while in the process of being struck. At the back, the headband overlaps and is held by two rivets one above the other.

Following the lower border of the headband is a series of holes close together; these were probably first punched in the iron, which was then covered with the copper plate, punched to correspond with the holes in the iron. Six complete rivets that originally secured the leather lining cap are still present; the stems of many of them still fill the holes.

The lower edge of the headband is slightly arched where it fitted above the eyes. Only the upper part of the nasal is present, and the embossed copper which covers it is broken. No spangenhelm has its complete nasal, but several of them retain the vision arches as well as the nasal stub. Cheek plates or remains of them are present in most spangenhelms, but not in ours and numbers 2, 8, and 12.

After the various elements were made they were probably assembled in the following way. The six converging bands and the headband were held together by riveting both elements at their junctures to an interior iron strip with gabled top, three of which are visible. The headband was riveted before the embossed copper gilded plate was applied, since the rivets are concealed, but the rivets are visible on the basal part of the converging bands. The apical disc has six brass rivets, one of which passes through each band. The apical ornament, of solid bronze with a small hole in the top, is extended and constricted at the base, forming a
rivet. This rivet passes through the apical disk and through a hexagonal iron washer under it and is flattened on the inside.

Each of the six segments is riveted on each side to a band by four half-round bronze rivets and to the extended bases of the bands by four similar rivets. Each segment is further secured by a copper rivet which passed through a small copper cleat on the inside at the juncture of the extended bases of the bands. Only one copper cleat is clearly seen, but the rivets are still in place on the upper part of the headband below the juncture of the extended bases of the bands.

Map showing the locations of spangenhelm finds. The numbers refer to the list below.

**LIST OF SPANGENHELMS**

1. (1872) Vézère, Department of Isère. Musée Archéologique de Grenoble.
12. (date and place of excavation unknown). In the Hermitage, Leningrad.