

# Gundestrup and Titelberg

*By Elsebet Sander-Jørgensen Rowlett and Ralph M. Rowlett*

## 1. Introduction

The great silver cauldron found in Gundestrup's Rævemose in Himmerland (1) may originally have been used for Iron Age ritual, but today it has become a pressure cooker for generating hypotheses. There persists a considerable difference of opinion as to the meaning of the pictorial panels (2), with an even wider assortment of suggestions as to its place of manufacture. While only early workers like Sophus Müller (3) believed in Danish provenance, opinions since Drexel (4) have favored a more southerly barbarian origin. Hatt would see the cauldron as Gaulish, but the similarity to Daco-Thracian silver and gold technique is evident (5), thus some like Powell (6) and Allen (7) favor an eastern origin. Severy (8) went so far as to suggest Belgrade, on the Celtic-Illyrian interface zone, as the point of origin, and Finlay (9) hinted at a Bohemian manufacture. Ole Klindt-Jensen himself, after toying with a South Russian origin (10), retained a predilection for east central Gaul (11), but later (12) leaned toward Olmsted's (13) attribution to northwestern Gaul (Loire to the Somme rivers) on the basis of Olmsted's meticulous comparisons with monetary motifs. This study also refines the cauldron's dating to a manufacture time of ca. 80-50 B.C.

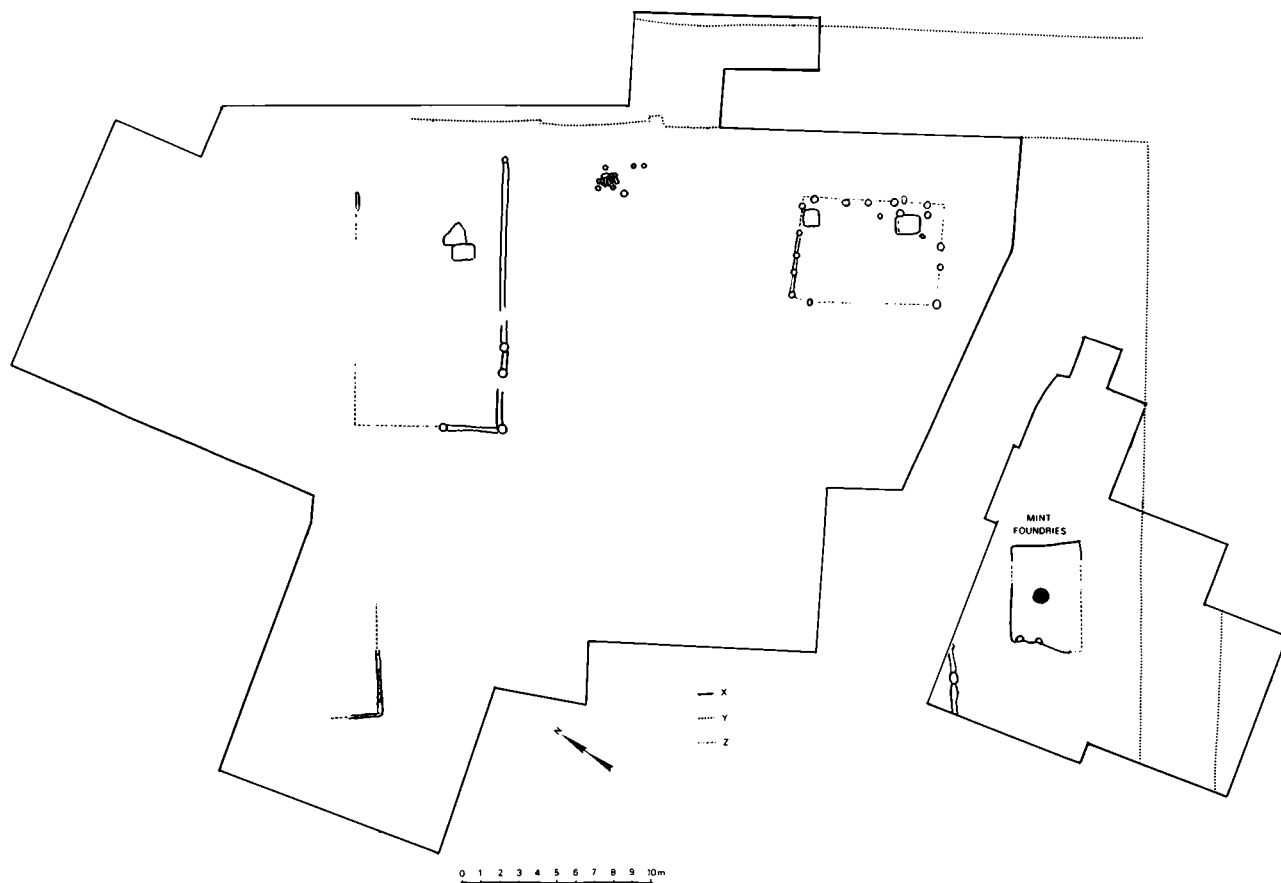
Despite the presence of the Helden phalera from southernmost Netherlands (14) and its proximity rela-

tive to Denmark, northeastern Gaul has not been a serious candidate for the place of origin of the cauldron. Nonetheless, two recent discoveries on the Iron Age and Gallo-Roman hillfort "Titelberg", Pétange/la Madelaine-Rollingen in extreme southwestern Luxembourg are two silvery fibulae, remarkably, reminiscent of some of the motifs on the Gundestrup cauldron. The cauldron helps us understand these finds, which likewise may shed some light on the cauldron.

## 2. Titelberg at the time of the Gundestrup Cauldron

The Titelberg, a hillfort of the Belgic-like Treveri (15) had not been much explored by archaeologists until after World War II, when a continuous program of investigation was initiated by Gerard Thill of the Luxembourg National Museum (16). In 1972 a research team from the University of Missouri at Columbia, U.S.A. was permitted to work near the center of the site area enclosed by the 9 m. high earthen rampart, where a series of stratified mint foundries and earlier Iron Age houses was uncovered (17).

The museum excavation and those of the University of Missouri have established that the Titelberg was occupied not only in pre-Roman times but throughout the Gallo-Roman period until nearly the 5th century A.D. Below the Gallo-Roman levels are



*Fig. 1. Map of Iron Age houses on the Titelberg (partly redrawn from Metzler and Weiller 1977).*

*Line X: Limit of area previously excavated.*

*Line Y: Delimits Iron Age Earth and Timber Houses.*

*Line Z: Delimits main thoroughfare and side "street" of the hillfort.*

Iron Age layers and features which extend back to La Tène II (Fig. 1) if not back to La Tène Ic. Since this is a continuous sequence of occupation, some of the layers on the Titelberg imperatively date to the first

century B.C. and must be contemporary with the time of manufacture and use of the Gundestrup cauldron.

Underneath a great welter of Gallo-Roman features and about 13 houses and ca. 20 wells, the Luxembourg Museum excavations have revealed the traces of three earth-and-timber houses and one smithy (Fig. 1) dating to before 30 B.C. by tree-ring dating (18). The Missouri excavation has added the emplacement for another house site on which 17 different floors,

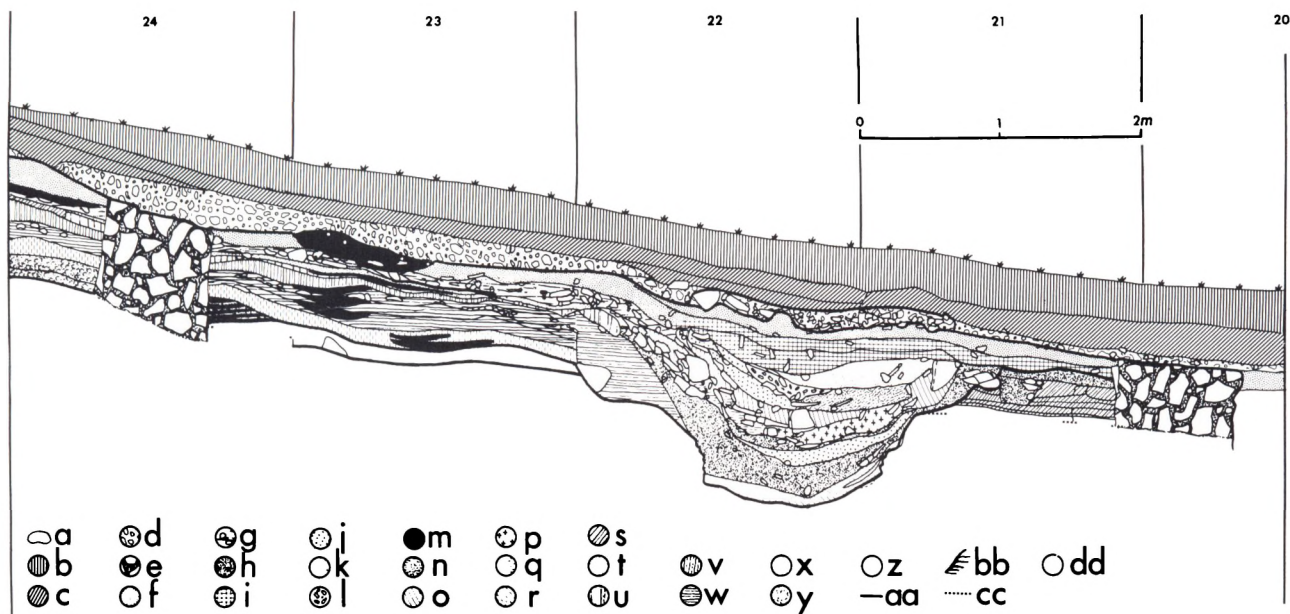


Fig. 2. Floor Profile (50 cm. West of J/I line) of mint foundry emplacement

a - Stone

b - Humus zone

c - Dark brown

d - Rubble

e - Stone wall foundation

f - Light Brown Interior Floor and Light Brown I Exterior

g - Dalles Floor

h - Dalles IIIa Level (green)

j - Dark Gray-Brown

k - Cellar fill Brownish

l - Cellar fill Fossiliferous Deposit

m - House hearths, projected three meters (Dalles floor) or one meter (all other floors) to the east to the profile

n - Cellar Red-spotted

o - Cellar Brown Dalles

p - Cellar Green Clay spotted

q - Cellar Tan

r - Cellar Yellow-Orange layer VII

s - Yellow-Brown Exterior

t - Yellow-Green Clay Floor

u - Orange-Clay Floor

v - Bright Yellow level

w - Pale brown Floors I-III

x - Orange Brown Floors I-III

y - Ash Floors I-IV

z - Orange

aa - Lower Neolithic level

bb - Jurassic outcrop

cc - Bottom of archaeological cut

dd - Yellow

Floors are enclosed in heavy line.

The Upper Neolithic, scraped away in this location, occurs just under the lowest Iron Age levels exterior to the Ash Floors.

each with its own hearth, were built and intermittently renovated. The last nine of these floors housed the operations of a mint foundry producing Treveran coins, predominantly for a chieftain named Arda.

These houses provided the background for understanding the artifacts recalling motifs on the Gundestrup cauldron. Succinctly, the house floors in the stratified mint foundry which date to 80 to 50 B.C. are the Green and the Orange Clay floors and the Pale Brown earth floor series. The Green Clay floor associates with the greenish level with the tree-ring terminus ante quem while the Pale Brown floors contain Campana ware (Fig. 5,e) and La Tene III fibulae (Fig. 3), and the underlying Orange-Brown floors already contain amphorae dated to the 2nd century B.C. (19) by Elizabeth Will.

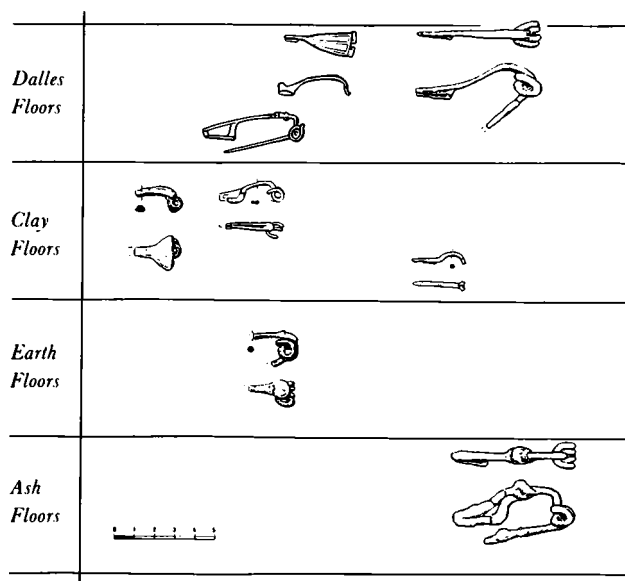


Fig. 3. Fibulae from Clay Floors and Pale Brown Earth floors, shown with those from the immediately adjacent levels above and below.

Fig. 4. Artifacts from the Yellow Green Clay Floor (a-f) and Orange Clay Floor (g-k).

Bone spoon (a), bronze rouelle (b), reddish-tan thin walled beaker (c), bone tool (d), lead bead on iron wire (e), and black-red-black potsherd with incised and pattern burnished decoration (f). Black-red-exfoliated incised potsherd (g), iron tweezers (h), iron piece found at the north wall of the Orange Clay Floor (i), and iron spheroid found in the position indicated here next to it (j), and iron tack (k).

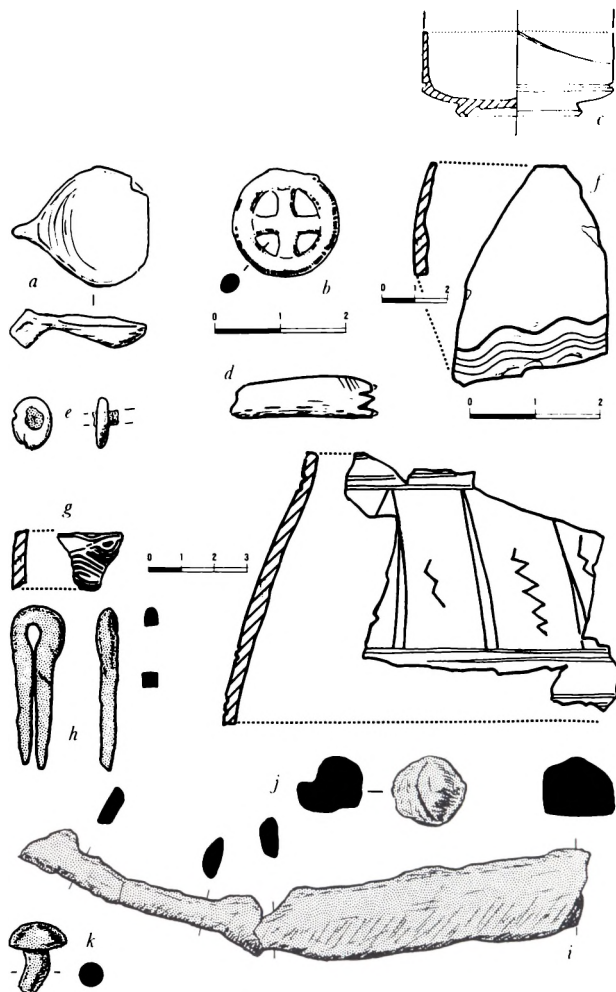
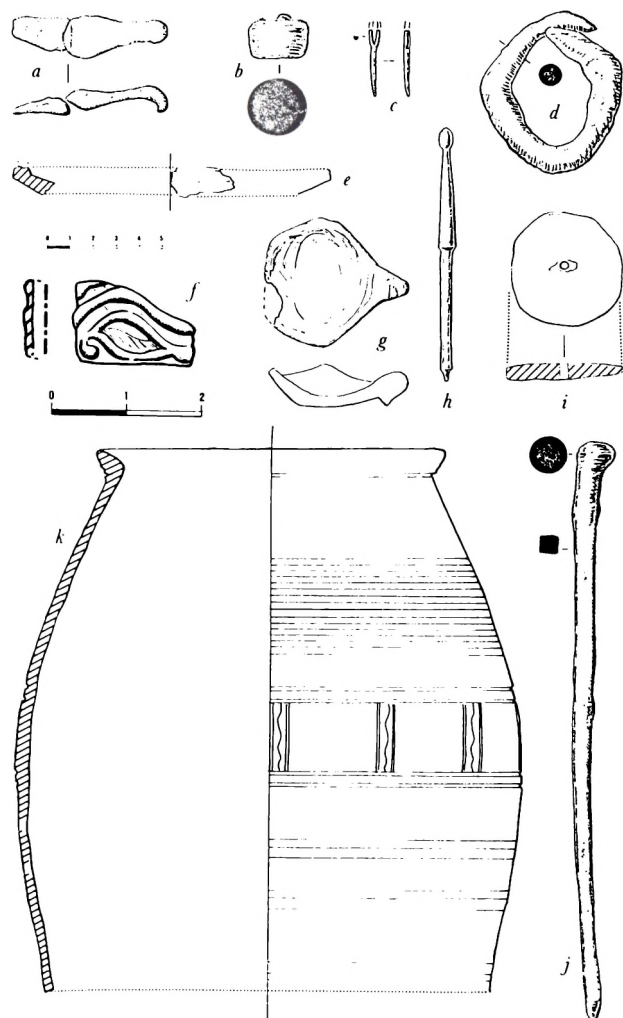


Fig. 5. Artifacts from Pale Brown Floors. Iron belt hook (a), iron "weight" (b), bronze needle (c), iron bracelet (d), Campanian B Ware sherd (e) incised black-red-black potsherd (f), bone spoon (g), stone hair pin (h), spindle whorl (i), iron rod (j), and black-very dark gray-black vase with incised and pattern burnished decoration (k).



The houses to the west of the mint foundry produced mainly bones, potsherds and fine Nauheim fibulae (20), along with imported wine amphorae of the Dressel Type 1a. The mint-foundry floors, along with their exterior levels Yellow Brown I and II, include a more varied inventory of remains (Figs. 3-4-5). Figures 6 and 7 show a choice of materials from these exterior levels contemporary with the time of the Gundestrup cauldron and the Clay and Pale Brown floors.

While this material provides a background for the Gundestrup-like objects, it does not give the specific context, as these two items were surface finds made by local Luxembourgers. The fibula with mask and dol-

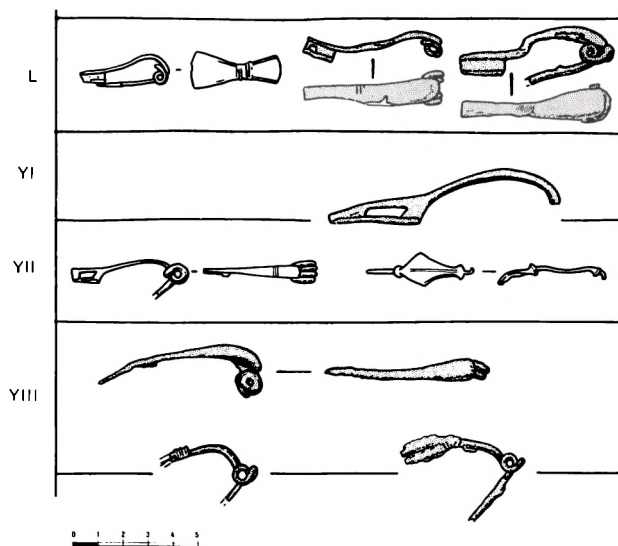


Fig. 6. Fibulae from the Yellow Brown I- and II exterior levels with the immediately adjacent levels above and below. L = Light Brown III, YI = Yellow Brown, I, Y II = Yellow Brown II, Y III = Yellow Brown III.

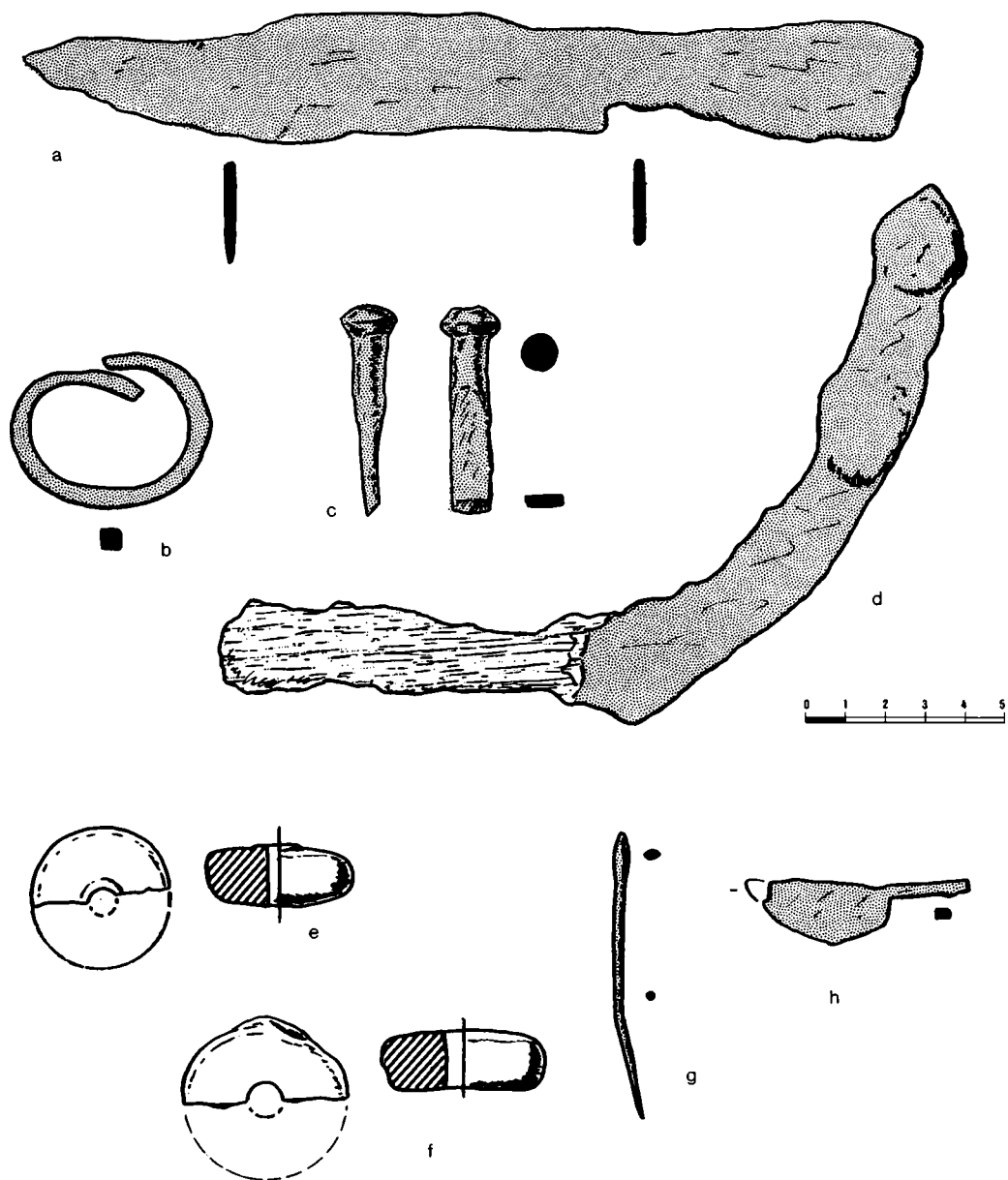


Fig. 7. Titelberg exterior levels Yellow Brown I and II artifacts. Yellow Brown I: Knife (a), iron bracelet (b) iron chisel (c) iron and wooden sickle (d). Yellow Brown II: Ceramic spindle whorls (e and f), iron awl (g), and small iron knife (h).



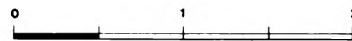
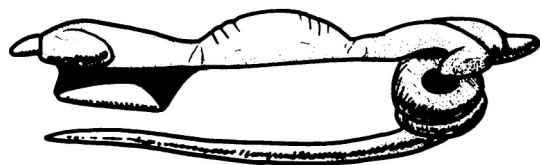
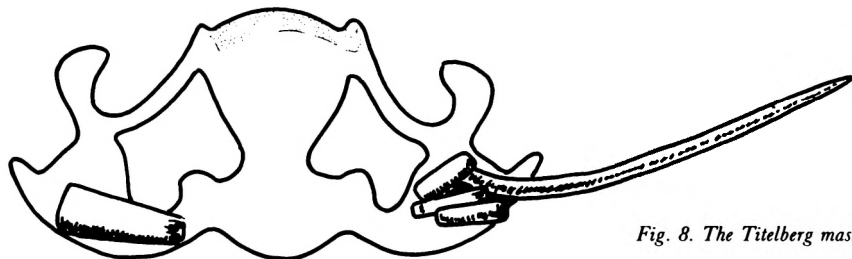


Fig. 8. The Titelberg mask-and-dolphins fibula in three views.



Fig. 9a. Photograph of the Titelberg mask-and-dolphins fibula.

phins was found by Herr Marcel Homans of Pétange while the horseman fibula was found in the field east of the mint foundries by Herr Gilbert Schmitt of Differdange.

### 3. Mask-and-dolphins fibula.

The mask-and-dolphins fibula (Figs. 8 and 9a) displays a beardless face resembling some deity heads on

the exterior plates of the Gundestrup cauldron, while the dolphins recall the boy-mounted and bewhiskered “dolphin” of Gundestrup interior Plate 2, the Cernunnos plate. Cernunnos too, is beardless, but the fibula mask clearly has no antlers.

This fibula is relatively intact, still bearing its pin, and only slightly corroded. The pin is broken loose from the rest of the fibula however, but the fracture appears still silvery in color, so that it must be essentially a silver fibula throughout. Unfortunately, it was not possible to test the metal content of this fibula. It has an almost identical counterpart at Vindonissa, of tinned bronze (21). Ettlinger (22) dates the Vindonissa fibula to the mid-first century A.D. Unfortunately the Vindonissa fibula is from an old excavation and has no recorded associations. As far as Ettlinger and we know, these are the only two examples of this kind of fibula presently published.

Like the Vindonissa fibula, the Titelberg mask-and-dolphins fibula is tiny, measuring only 30 mm in length and 14 mm in height.

The inhirsute face appears feminine to us; its triangular face is archetypically Celtic, with wide forehead, narrow chin and even cheeks, neither hollow nor full. Comparison of the outline of the face with the beardless visages of the Gundestrup cauldron and the Vindonissa fibula was done by measuring the total line deviation. This was accomplished by standardizing the size, as defined by facial length, of all the visages, and then with an electronic planimeter calculating the areal differences between the lines of the superimposed images of the Gundestrup faces, the two fibulae, and some comparative Iron Age metal masks. The areal measurement was made in arbitrary vernier units for the standardized faces, as their scales had to be changed for the standardization. Since these faces are somewhat off symmetry, the measurement was made for both sides of the faces. The goddess with two male busts on Gundestrup Plate E was particularly difficult to measure accurately, given the squashed condition of the image. Of course, the two fibula faces come out the closest, and perhaps would have been even closer if not for the necessity of enlarging a small drawing only 2/3 of its true 30 mm. length. Table I shows that the most similar Gundestrup face is Klindt-Jensen's (23) inner Plate B, the serene "Mistress of the Animals." The association of surrounding exotic mammals in each case reinforces the resemblance, even if the cauldron has terrestrial quadrupeds while the fibula have marine mammals. The simplicity of hair-do in both cases constitutes another rapprochement, although the fibula faces do not even wear headbands. The "Mistress of the Animals" also has the fullest lips of the Gundestrup faces,

matching the cherubic mouth of the Titelberg fibula. The Gundestrup deity also has a very short nose, like the fibulae masks, but the up-turned nose of the fibula has a tip like the long tilted nose of the hair-dressing goddess on panel F (24) which, like the "Mistress of the Animals", was likewise done by Artist 1. Also noteworthy is the resemblance to the older Walldalgesheim mask.

#### 4. *Horseman fibula*

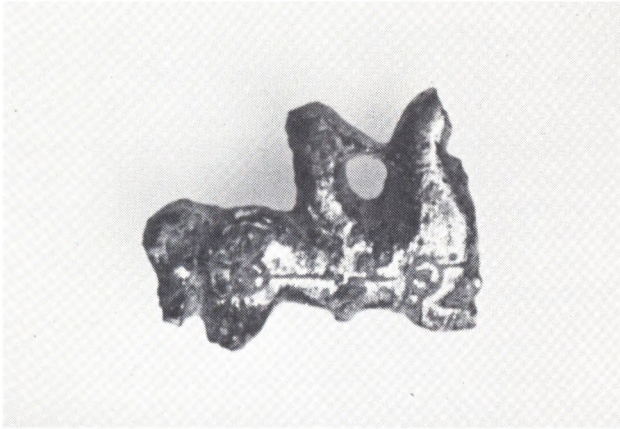
The horseman fibula (Figs. 9b and 10), reported as found in the field east of the Titelberg mint foundries, was recovered in a much more damaged condition than the mask-and-dolphins fibula.

The pin is missing, the rider has lost his head, and the horse its head and feet. This fibula has an even greater resemblance to the Gundestrup cauldron; its similarity to the Plate E forms of the four horsemen riding above the tree carried by spear-wielding infantrymen being obvious (25). The overall configuration also resembles the cattle alongside the "dolphin" on the inner Plate A, as well (26). Both these plates were made by Artist 2.

Table I  
Comparison of Goddess Faces to Titelberg Fibula

Figure	Deviation in Arbitrary Vernier Units
Gundestrup Plate B (with animals)	39
Gundestrup Plate G (with animal wrestler)	42
Gundestrup Plate F (hairdressing scene)	55
Gundestrup Plate E (with two male faces)	64
Silver Mask of Notre-Dame de Alençon	102
Cast Bronze Head, Forêt de Compeigne	114
Walldalgesheim face (La Tène IB)	25
Vindonissa Fibula	19

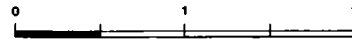
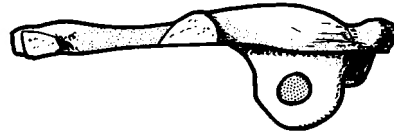
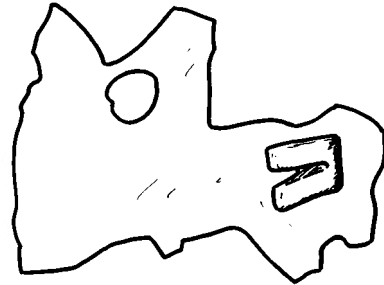
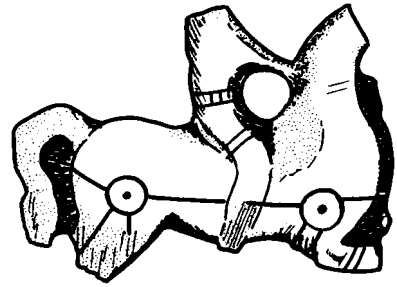




*Fig. 9b. Photograph of the Titelberg horseman fibula.*

This also appears to be a “silver” fibula made of an alloy containing some other material, as a greenish corrosion adhering to the broken ends betrays that it is of silvered or tinned bronze. In this case, too, it was not possible to take metal samples for alloy analysis. The horse measures 23 mm. from chest to tail. The presence of casting flash at the margins of the piece suggests that perhaps it was never finished.

Particularly noteworthy for this Titelberg fibula is the presence of engraved wither and rump circular phalerae as part of the harness, just like the bas-relief caparison on the Gundestrup horse frieze (27). The arrangement of the chest and breech saddle-holding straps are the same as on Gundestrup examples. Since the Titelberg fibula horseman does not carry a spear, the line deviation was measured against the spearless horseman on the cauldron. The chest-to-tail length standardizes the size of the horses. The same measurements were made with regard to the Pictones coin 4461 and Armorican D-45 coin noted by Olmsted



*Fig. 10. The Titelberg horseman fibula in three views.*

(28) as being particularly close to Gundestrup forms and used to help date it. Since it has been noted by Olmsted (29) and others that the Freisen (Saarland) horse (30) counts as a virtual prototype for the Gundestrup horses, a comparison was made of it, too.

These results, set forth in Table II, show clearly that the Gundestrup horses resemble the Titelberg fibula as much as some of the other pieces previously adduced for comparison. The bodies of the Gundestrup and Titelberg horses are especially close, deviation only by 10 vernier units, with the tails alone accounting for the rest of the deviation. Note that the Gundestrup horse and rider are more intermediate to the other forms than the Titelberg one, and that the Gundestrup horse resembles the Freisen one as much as the Titelberg horse, despite the differences in front leg position. Curiously, the two assuredly late La Tène finds from Gundestrup and Titelberg are morphologically close to another supposedly Early La Tène piece from the Hunsrück-Eifel Culture, just as was the case with the masks and the Waldalgesheim face.

### 5. Conclusions

A study of the similarity of the two pictorial Titelberg fibulae to figures on the Gundestrup cauldron reveals quite close resemblances, especially in the case of the horseman fibula. This analysis helps to date the fibulae by the precision of the resemblances to the cauldron, although at this point there is no pressing need to modify the dating of the mask-and-dolphin fibula, as here the affinity is less close. The Titelberg fibulae gives a certain geographic perspective to the problem of the distribution of artifactual analogues for the Gundestrup cauldron. The resemblance of the two fibulae to the Gundestrup cauldron, plus their silvery appearance, lends credence to a relatively western point of origin for the cauldron. At the same time, the finds do not negate Olmsted's Loire-to-Somme hypothetical point of origin for the cauldron, as these rare fibulae could well exhibit sampling error in their presently known distribution. The east-Gaullish

Table II  
Comparison of Horse Figures

Figure	Deviation in Arbitrary Vernier Units		
	Horse	Rider	Both
A. Spearless Gundestrup Horseman, Plate E, to Near Analogues			
Titelberg Horseman Fibula	25	8	33
Pictones coin 4461	41	7	48
Armorican coin D-45	42	—	—
Freisen, Early La Tène	23	—	—
B. Titelberg Horseman Fibula to Near Analogues			
Gundestrup Rider, Plate E.	25	8	33
Pictones coin 4461	46	22	68
Armorican coin D-45	105	—	—
Freisen, Early La Tène	34	—	—

specimens, however, plus their close analogues in the Freisen horse, found not far from Luxembourg, do support a somewhat northeastward expansion of the zone of origin of the Gundestrup cauldron (31).

### Notes

1. Sophus Müller 1892.
2. Hatt 1970 og 1980, Olmstad 1976 og 1979, s. 103-228.
3. Sophus Müller 1898.
4. Drexel 1915.
5. Wenedikow 1979, s. 132-138. — Marasow 1979, s. 39.
6. Powell 1971 s. 198-199.
7. Allen 1968, s. 37-54.

8. Severy 1977, s. 606.
9. Finlay 1973, s. 57-58.
10. Klindt-Jensen 1961, s. 44.
11. Klindt-Jensen 1950, s. 149.
12. Klindt-Jensen personal information 1979.
13. Olmsted 1979, s. 96-99.
14. De Laet 1958, s. 161, pl. 57.
15. Wightman 1970.
16. Thill 1965, 1966 a og b, 1969. – Thill, Metzler og Weiller 1971. – Metzler og Weiller 1977. – Krier 1980, s. 209-212.
17. Rowlett, Thomas og Rowlett 1974, 1978, 1982. – Thomas, Rowlett 1976 og 1978.
18. Hollstein 1980, s. 128.
19. Elizabeth Will personal information 1982.
20. Metzler og Weiller 1977, s. 28-35.
21. Ettlinger personal information 1981.
22. Ettlinger 1973 pl. 13,16.
23. Klindt-Jensen 1961, fig. 14.
24. Klindt-Jensen 1961, fig. 22.
25. Klindt-Jensen 1961, fig. 10.
26. Klindt-Jensen 1961, fig. 4.
27. Klindt-Jensen 1961, frontispiece.
28. Olmsted 1979, pl. 52.
29. Olmsted 1979, s. 89.
30. Jacobsthal 1944 I s. 26, II # 370; Dehn 1936, s. 53.
31. The Missouri excavations were supported by grants from the University of Missouri, Columbia (1972-73 and 1970 and 1982), a NATO postdoctoral Fellowship (1973) and U.S. National Science Foundation Grant No. GS39835 (1973-1975) og BNS 76 00011 (1976-1977) og A01 (1978-1979).  
Arvid Rowlett helped prepare the illustrations and Homer and Winifred Thomas provided helpful comments.

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