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COPPER AGE GOLD DISCS ON THE TERRITORY OF THE LATER PANNONIA PROVINCE*

We find the repeated reappraisal of the topic in the past years (ANGELI 1967 and 1972; KOREK 1960 and 1960a; MAKKAY 1976 and 1984; MOZSO-LICS 1968; PATAY 1958; PAVELČIK 1979) necessary and profitable due to two reasons. One is that the repertoire of these gold discs was enlarged by some significant, so far unknown pieces, data or source definitions, which had been forgotten. The other reason is that this artefact type had stubbornly been accompanied by misunderstandings, errors during one century of research, which are high time to be corrected. As we will see, our own studies (MAKKAY 1976 and 1984) also contained such errors. This is due mainly to the fact that the standpoint and data of researchers of gold discs was taken as reliable and their original sources were not controlled. The discs can be assigned to the Copper Age Lasinja culture, though in the lack of data it cannot be established whether they belonged to a certain phase or are to be dated from the entire span of the culture. As no substantial change has been suggested for in the dating of these gold discs since our discussion of this topic (MAKKAY 1976, 286—289) we shall here disregard chronological and cultural issues.

Miklós Jankovich of Vadas bequeathed his collection, known first of all for its golden objects, to the Hungarian National Museum (in the following HNM) in 1832, but it was not inventorized till 1852. The collection contained three gold discs, too.¹ It had already been noted by Flóris Rómer, that their provenance was not stated either in the Jankovich list, composed in 1852, or by János Érdy (Luczenbacher), keeper of the HNM in 1852, even though it could by no means be Stollhof or Csepin/Čepin (RÓMER 1865, 76). Miklós Jankovich had estates in co. Fejér in Transdanubia (around Rácalmás and Ercsi on the Danube) and also on the territory of present-day Central Slovakia.² The three discs may have come from one of the Transdanubian estates, though in the light of the latest evidence a Slovakian source cannot be excluded either. Another possibility is that he bought the three discs at different occasions, and thus they were not found on his estates. In the lack of available data it is improbable that the exact find place (i.e. places) will easily be identified. It is interesting that the size of the

three discs and the decoration on one of them differ significantly from the others (Fig. 1) especially in case of Cat.No. 2. Only this one has triangle patterns of small repoussé dots beside the pairs of holes for suspension or for mounting (Fig. 1) Cat. No. 2).

The next important event was the discovery of the six Csepin/Čepin — Várhov mound discs between 1861 and 1864. The site itself was probably not on the territory of the village, now Čepin (Csepín in Hungarian), called Csepény at that time, but most probably on the Orlovinyák = Orlovinjak farmstead, in a village called Tényő or Ténye at that time, on the Várhov mound, still the name Csepín/Čepín is so much commonly used that we shall use it in the followings. (For the location of the site see MAKKAY 1984, Map 1!) Considering that the six discs were lost soon after their discovery, and that only two of them could surely be identified until now, as well as that both the fact of the discovery and its details remained hidden even for the specialists, we shall give a thorough description of the details.

The letter by Károly Glembay, an estate engineer in Csepín (probably a late descendant of the well-known family, which is presented in Miroslav Krleža's famous novel, the Glembay-family), in which he mentions "6 small golden dishes [sic!] found on the Orlovinyák farmstead", was read on the session of the Archaeological Committee of the Hungarian Academy of Sciences on January 3, 1865.³ Having been asked for more detailed information, Glembay wrote another letter, which was reviewed for the Committee on March 7, 1865.⁴ Rómer found the news so interesting, that he soon presented it in the only Hungarian archaeological review of the time (RÓMER 1865, 74—76). It should be noted that the quick publication was partly due to the fact that in the meantime Rómer had learnt about the discovery of the two Stollhof gold discs (Cat. Nos. 10—11). The slightly archaic text of the article is given here in a somewhat modernized form (our comments are in square brackets):

"782. Mr. Károly Glembay, engineer, reported from Orlovinyák plain in Verőcze county to the Archaeological Committee on some golden plates, which had been found at the above place. As the

finds seemed interesting, more than that a simple mentioning could be put up with, Mr Glembay was requested to specify the details. He was ready to answer the request and reported the following: on the spring of the year 1861*⁵ (the data given by Mr Glembay are not unanimous, as in his different reports the discovery of the plates is put on years 1861, 1863 and 1864), some village lads from Ténye⁶ were engaged in the hacking of maize and one of them, going to the well to quench his thirst from an old well on the *Várhov* mound, noticed shining objects in its wall, in a hole some two feet below the surface of the earth, from here he pulled out gold plates, which he sold to the local Jew for 40 Forints. This became public, whereby the Jew was forced by Lázár Davidovics, district administrator, on the initiative of the local notary, to hand over the pieces of art, 3 of which were allotted by the county authorities to János Adamovics senior, estate owner, 3 other to the discoverer, [the village lad of Ténye, who was never mentioned by his name in the sources].

The plates were of different size: the two largest discs weighed 18 "golds" each, the middle two 14 1/2 "golds" each, the smallest ones 10 1/2 "golds" each, altogether 86 "golds". [There is no equivalent unit to this "gold" in the English system of weights; however, it best corresponds to the apothecaries' dram of 3.887 grams].

János Adamovics senior, the estate owner gave his three pieces to his wife and his daughter-in-laws, from which Mrs László Adamovics junior allowed one to be drawn by Glembay. The village lad from Ténye immediately sold his share for 400 Forints in Eszék/[Osijek], but he did not reveal the name of the buyer. . . .

. . . On this territory there had been an island, which became dry only after drainage in 1835. According to Mr Glembay the plates had once decorated the clothing, as the Illyrians [i.e. Croatians] wear even in our days long sleeved jerkins with circular plates on their breasts, though they are made of varied felt."

Then Rómer gives a brief summary of an article about the Stollhof discs by Baron E. von Sacken (SACKEN 1865, 113—138), published a short time before. He quotes a sentence by Sacken, saying that three gold discs, similar to the Stollhof ones had been found near Eszék/Osijek [i.e. on the *Várhov* mound]. At that time Rómer thought that Sacken might have been informed about the three discs sold by the finder, the Ténye village lad. Unfortunately, Sacken did not mention his source, but it was perhaps the same Vienna—Budapest antique dealer, called Samu Egger, who acquired and — in 1867 at the latest — sold a gold disc or even three gold discs (without any record concerning the way of acquisition of the disc/s/ or about the find place?) to the 'Museum für Völkerkunde' in Berlin (see below, and a surviving? piece under Cat.No. 12), and

again in 1877 a piece from the *Várhov* mound (i.e. from Csepín/Čepín) to the HNM, Budapest (see Cat. No. 6). It can be taken for granted that Sacken was not informed by Rómer personally (he would have written it), or even from Rómer's article in 1865 (which appeared later than Sacken's). It seems logical to assume that the information was passed on by the Egger family, or more exactly, by Samu Egger, from whom the 'Museum für Völkerkunde', Berlin bought a gold disc (or three gold discs) in 1867 (Cat. No. 12), than from whom the HNM bought its gold disc in 1877, which is definitely one of the Csepín/Čepín *Várhov* hoard (Cat. No. 6 or 7). The two 'younger' Egger brothers, in all probability the sons of Samu Egger dealt with selling gold discs of this type even decades later as the 'Staatliche Museen', Berlin bought the (Kis)Apostag disc (Cat. No. 20, Fig. 4) from them in Vienna in 1909. It seems thus possible that the three gold discs of the Ténye village lad soon got to local antique dealers, then to Samu Egger, and they got known to Sacken.

Von Sacken undoubtedly saw the three discs personally, for he describes them extremely accurately: "Drei sehr ähnliche Scheiben wurden bei Essek in Slavonien gefunden; sie haben fast genau die gleiche Grösse, und zwar die der grösseren der beschriebenen, aber die Buckeln sind höher und schärfer herausgetrieben und zugespitzt, am Rande haben sie ebenfalls drei Perlenreihen, aber die bandartigen Reihen fehlen; sie sind auch jede mit zwei Paaren von Löchern versehen, die so genau an derselben Stelle stehen, dass wenn man eine dieser Platten auf die grössere von der langen Wand legt, man durch alle Löcher durchsehen kann. Man wäre hiernach versucht zu glauben, dass alle von derselben Hand herrühren." (SACKEN 1865, 128). One specific point is evident from his description: there were no short bands of repoussé dots starting from the 'bead' rows running around the border of the discs ("die bandartigen Reihen fehlen"). No such feature can be observed on the two surviving Csepín/Čepín discs either (Cat. Nos. 6 and 7). This would imply that five of the six Csepín/Čepín discs were similar both regarding their execution and their ornamentation, and that the sixth disc must also have been essentially similar. Thus Sacken was correct in noting that the six discs were of the same craftsmanship.

The following remark by Sacken, however, is far from clear: "die drei ähnlichen Scheiben haben fast genau die gleiche Grösse, und zwar die der grösseren der beschriebenen." This can be interpreted to imply that their dimensions are similar to those of the larger Stollhof disc. However, this statement is contradicted by the fact that three pairs of discs, having similar weight and dimensions, were found in Csepín/Čepín, i.e. 2—2 pieces of each dimension. Knowing that the two discs of the middle pair have survived and that they were not taken to Berlin

(nor were they misplaced in Berlin after World War II), only two of the three pieces seen by Sacken could have been similar to each other and to one of the Stollhof pair.

There is some uncertainty about the circumstances and also the time of the acquisition of one or more gold discs by the 'Museum für Völkerkunde' (later 'Staatliche Museen') in Berlin. There are hints, that as early as 1893 three gold discs of this type were in the possession of the 'Museum für Völkerkunde'. In the 2nd edition of his famous book, Matthaeus Much recorded them as follows: "Ein besonderes Interesse erhalten die Stollhofer Funde durch ... acht anderen ganz gleichen Goldscheiben aus Ungarn, von welchen sich drei im Museum für Völkerkunde ... befinden, ... (MUCH 1893², 29). These three discs were later mentioned incidentally by SCHLEMM 1908, 27, and perhaps also by HOERNES 1903, 47. Since then they have been virtually ignored. (It can be a matter of speculation why Much did not mention the three Berlin discs in the first edition of his book in 1885—1886. The easiest interpretation seems to be that he did not know about them.) The year 1893 can be taken as a *terminus ante quem*. There is sure evidence for the acquisition of two gold discs by the 'Museum für Völkerkunde', Berlin in 1867 (Cat.No. 12) and 1909 (Cat. No. 20), from the Egger family in both cases. While the precise find place was not recorded in the first case, the 1909 disc had been sold by the Egger brothers in Vienna, who reported also its find place: Apostag or probably Kisapostag, Co. Fejér, Transdanubia, Hungary. It seems reasonable to conclude that the three discs mentioned by Much were bought and deposited in the Museum für Völkerkunde together in 1867, without the recording of their precise provenance. It also seems reasonable to accept these three discs as part of the Csepin/Čepin — Várhov hoard. (If the contemporary statements that a part of the Stollhof hoard was sold are correct, then these three discs might have been pieces of the Stollhof hoard. However, it should not be forgotten, that there is no direct evidence for such a suggestion. Therefore it is unlikely that the Berlin discs were part of the Stollhof hoard.)

Until recently it was not known if any of these Berlin discs survived. In 1968 A. Mozsolics mentioned one piece (see Cat. No. 12) which must have been one of the three discs that were probably bought in 1867. There is no further record of them (available for us) in the Museum's sources (ZAHN 1932 did not mention them), and neither do we know whether they survived the damages in the years of the 2nd World War and afterwards. Anyway, they cannot be found either in the lists of the damaged or robbed, or of the surviving gold finds of the 'Staatliche Museen' in Berlin (GREIFENHAGEN 1961, 81—130; GREIFENHAGEN 1970—1975, passim; cf. KÜHNEL—KUNZE 1984, 107—108).

To sum up: the three gold discs sold by the Ténye village lad soon passed to a local jeweller of Eszék/Osijek, and then into the ownership of Samu Egger, who subsequently sold them to the 'Museum für Völkerkunde', Berlin. However, nothing sure is known about the further fate of the three other pieces once owned by János Adamovics senior and his family.

Afterwards Rómer gives a detailed description of the three pieces of the former Jankovich Collection in the HNM (Cat. Nos. 1—3, Fig. 1). What is even more important he also gives their size in Viennese inches (indicated ') and in its dozenth, in mark (indicated '''), and their weight in "golds". In the latter case, he uses the indication following the mistaken comprehension of the age $\#$ originating from the old indication of the libra *lb*. Luckily the weights stated by Rómer were written on the Jankovich discs in black china ink in 1852, and of course their weight in the decimal system is also known. From these data it can easily be deduced that in the HNM in the 50—60—s of the last century one Viennese inch (') was 2.540 cm, one mark (''') 0.2117 cm. In case of one piece the inch corresponds to 2.6—2.63 cm. According to the official conversion one inch (') equals one-twelfth of one Viennese foot = 0.316 m, i.e. 2.633 cm. The mark (''') equals one-twelfth of this, i.e. 0.2194 cm. This corresponds to the dimensions of one of the Jankovich discs, and its use is thus substantiated.

As for the weight one $\#$ = one "gold" = 3.4949—3.5013 gr as deduced from the Jankovich discs, i.e. 3.5 gr if rounded. The weights have significance when the possible Csepin/Čepin—Várhov mound origin of the two discs (Cat.Nos. 6—7) will be discussed. It has even larger significance when the possible Csepin/Čepin origin of the other four gold discs, which probably reached various collections of Europe (most probably Karlsruhe, Cat.No. 19, and Berlin, Cat.Nos. 12, and A—B) can be stated in knowledge of the exact dimensions and weights. Of course, the exact diameters and the weights of the lost and hiding pieces should be known.

The two largest (heaviest) Csepin/Čepin discs weighed 18 "golds" each, i.e. 63 gr. Their diameter is not known. The two middle sized pieces were exactly alike in their decoration, size and weight. They weighed 50.75 gr each, the two smallest ones weighed 36.75 gr each. The six pieces together weighed 80 "golds", i.e. 301 gr.

The only one the diameter of which is known, thanks to Glembay, is one of the middle sized pair (Cat. No. 6 or 7). One of the diameters of the not exactly circular piece, taking 2.6 cm for one inch, is 12.29 cm, the other diameter of it is 12.53 cm. As the six discs formed three similar pairs, the other piece of Cat. Nos. 6—7 must have had similar dimensions with possible difference of a few millimetres.

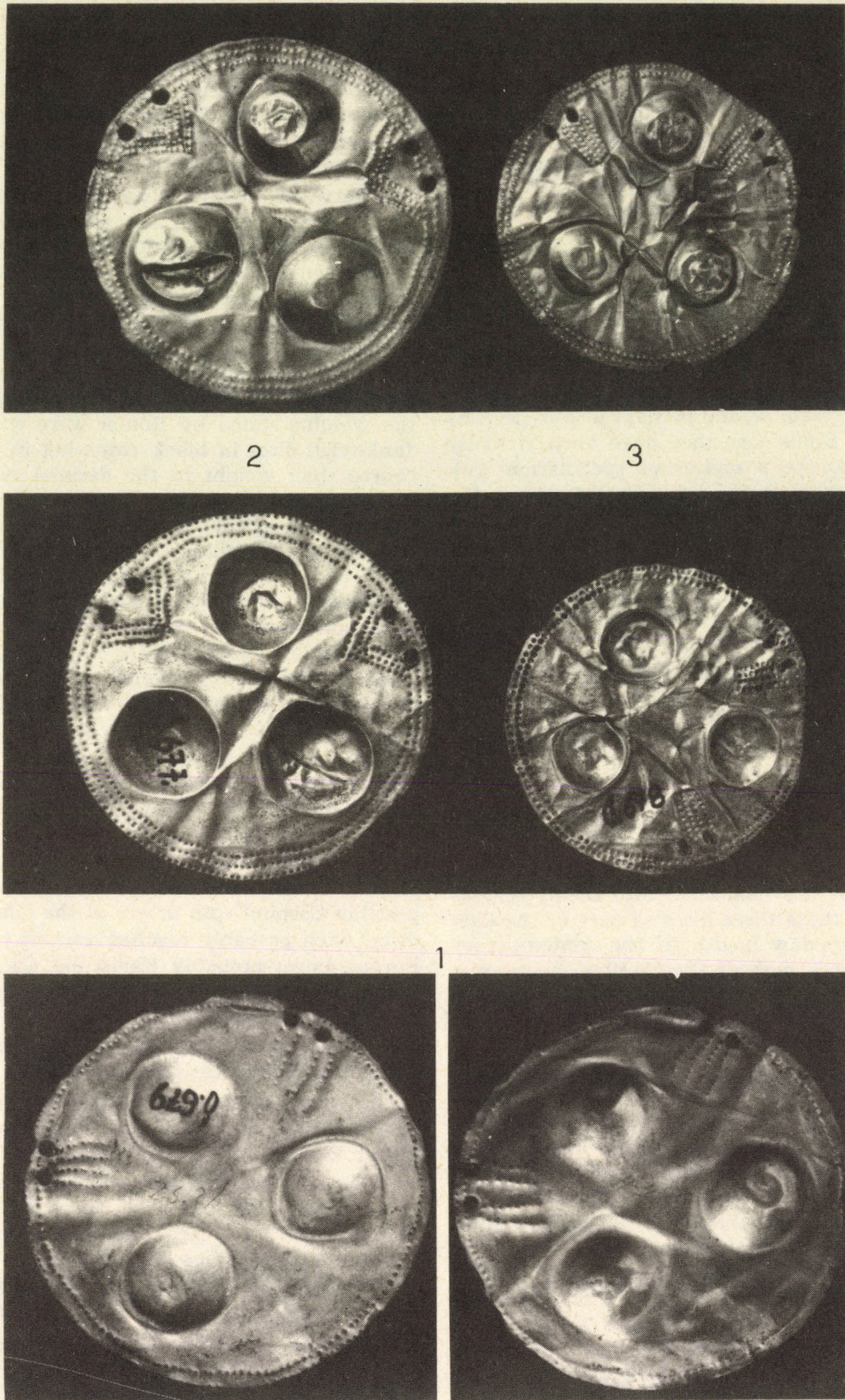


Fig. 1. 1—3. the three *Jankovich discs* in the Hungarian National Museum, Cat. Nos. 1—3. Courtesy of the HNM

The Csepin/Čepin discs soon became known to specialists from Rómer's article, or rather from Sacken's short comment. It seems, however, that nobody paid close attention to Rómer's absolutely clear article, either because only three Csepin/Čepin pieces are discussed (as von Sacken does), or since the authors were uncertain or even mistaken about the further fate of the Csepin/Čepin discs.⁷

The gravest misunderstandings resulted from Hampel's short and incorrect notes. He published the smallest Jankovich disc (Cat.No. 3, Fig. 1) three times with the same picture, but always with a different caption and text.⁸ He made a mistake stating: "Csepin, comté de Verőcze (Slavonie). Trois pièces de ce trésor sont au Musée de Budapest, pl. XLV, 1 MN LVI, 43—45,⁹ deux au Musée de Vienne." (HAMPEL 1886a, 67). That is, he confused the three Jankovich discs (Cat. Nos. 1—3, Fig. 1) with the three Csepin/Čepin discs mentioned by von Sacken, and also the two Stollhof ones (Cat. Nos. 10—11) with further Csepin/Čepin pieces, which were unknown to Hampel, as he only knew of three of them. Of course, von Sacken had never written that Csepin/Čepin pieces had ever been acquired by any museum in Vienna. Hampel repeated his mistakes in his work published in Hungarian: "Csepin (Co. Verőcze). Gold hoard, discs hammered of gold sheet, with dots and circle patterns, three pieces in the HNM, N.M. LVI. 43—45; drawing XLV.1., two in Vienna Emp. Museum." (HAMPEL 1892, 21). Hampel, however, was not exact even in his mistakes as the reality is the following: two of the three discs in the HNM, quoted by Hampel (LVI. 43—45) are two Jankovich discs (Cat. Nos. 1—2), the third one may be Cat. No. 6 or 7, or Cat. No. 13. He did not even assume that Cat. No. 6 or 7 bought by him in 1877 could have come from the Csepin/Čepin hoard. Consequently, Hampel either did not read, or did not take into consideration Rómer's article from 1865, and he was superficial in his reading of Sacken's article also from 1865 on the Stollhof finds, since Sacken had never stated that two (or three) Csepin/Čepin gold discs had reached a museum in Vienna; the sentences of his article are clear from this respect: "Drei sehr ähnliche Scheiben wurden bei Essek in Slawonien gefunden." (SACKEN 1865, 128, paragraph 1, and also p. 132, paragraph 1.) The data given by Pulszky on the five gold discs of the HNM — which he knew about — and on the two Stollhof ones are also absolutely clear from this respect (PULSZKY 1883, 32 and 72, and 1897, 121).¹⁰

After long decades the confusion was further heightened when Patay somehow read from Sacken's article that three discs from Csepin/Čepin were to be found in Vienna (PATAY 1958, 44, notes 81—82).¹¹ Korek, in 1960, also quoted the above mentioned incorrect lines of Hampel accepting that there were three Csepin/Čepin discs in the HNM and two in Vienna (KOREK 1960a, 77, note 20, and

1960, 33, note 21).¹² The mistaken view of Patay and Korek was not refused by Angeli in his two papers on discs (ANGELI 1967, 491—495, and 1972, 27—30). When the author of this article surveyed the available published evidence on the gold discs in 1976 (MAKKAY 1976, 286—287, note 234), he read the articles by Angeli and Sacken carefully, but nonetheless made a mistake by not controlling Korek's and Patay's opinions. Thus he accepted their statement (both were, and are, keepers of the HNM!), that three Csepin/Čepin discs were to be found in the HNM. He even made an effort to select them from the gold discs of the HNM. In the meantime he could not even assume that neither Patay, nor Korek had noticed that the "three discs from Csepin/Čepin", i.e. those of the Jankovich Collection had their original inventory numbers written on them in 1852, well before the discovery of the Csepin/Čepin discs. How could it have been assumed that an article as important as Rómer's remained unknown to both of them? It is another problem, though also misleading, that two of the Jankovich discs, but only two, were given new inventory numbers in the HNM in 1968 (Cat. Nos. 1—2) so that the old inventory numbers can also clearly be seen on them, but the third newly inventorized disc was not the third Jankovich disc, but another disc which had been in the collection of the HNM uninventorized (?) since at least 1883 (Cat. No. 13), or the old inventory number of which had faded and could not be identified. Only one thing was clear during the re-inventorization: the old sources always speak about *three discs* belonging together.

Under such conditions, the authentic data could only be established when all the old, i.e. *six gold discs* of the HNM (Cat. Nos. 1, 2, 3, 6 or 7, 13, 18) were examined together. This was carried out in 1982.¹³ In the meantime we found Rómer's long ignored article from 1865 and one of the problems of the Csepin/Čepin discs, the place and the circumstances of discovery could be solved.

The later fate of the six Csepin/Čepin discs is still a problem. As we have already seen the three discs sold by the discoverer, the Ténye peasant lad, probably came into the possession of the 'Museum für Völkerkunde', Berlin through Samu Egger's mediation. One of the three pieces given to the estate owner was in the ownership of his wife, Mrs János Adamovics senior, another one passed into the hands of one of the daughter-in-laws, Mrs László Adamovics junior while the third one was acquired by the other daughter-in-law, whose name is unknown. Károly Glembay gave the dimensions and weight of Mrs László Adamovics' junior disc to Rómer. Its diameters are 12.29—12.53 cm, it weighed cca 50.75 gr. Accordingly, it must have been one of the middle-sized pair. As it is not a piece of mass production we can suppose the following: if the size and weight of any of the known discs, the find place of which is unknown, is similar

to the above dimensions and weight, it is probable that the other piece of the middle-sized pair of the Csepin/Čepin discs can be identified.

Thus, the following data help the identification of two Csepin/Čepin discs. The weight of the disc bought by the HNM in 1877 or earlier from Samu Egger is 47.84 gr, its diameter is 12.45 cm.¹⁴ Both the decoration, and also the distance between the two pairs of holes correspond exactly to the description given by Rómer. Therefore, in view of the congruences it is certain that this is one of the middle-sized pair found in Csepin/Čepin — Várhov mound (i.e. either Cat. No. 6 or 7) which reached the collections of the HNM (Fig. 2). It may be the one once owned by Mrs László Adamovics junior, since we have seen that the three discs once owned and sold by the Ténye village lad probably went to the 'Museum für Völkerkunde', Berlin. In this case we have to suppose that the six discs were distributed between the estate owner and the discoverer in such a way, that both of them got discs of the same weight, and not one-one piece of all the three pairs, since the two middle-size pieces went into different collections, but not into the possession of the Berlin Museum. It would appear, that the women of the Adamovics family did not give away their discs so soon, as the discoverer did, and thus the middle-sized discs of the Adamovics family started their adventurous ways a decade later, but through the mediation of the same Egger family.

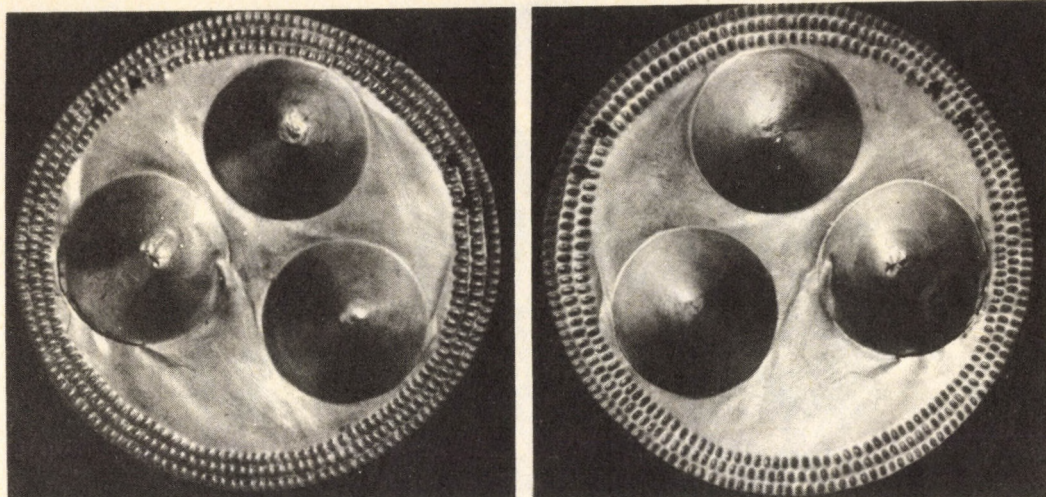
The other middle-sized piece of Csepin/Čepin is surely the piece, which after a long journey through the hands of antique dealers and private collectors arrived in the 'Württembergisches Landesmuseum', Stuttgart, 1974.¹⁶ Its diameter is 12.5 cm, its weight is 51.7 gr (Cat. No. 6 or 7, Fig. 3). Its diameter is totally identical with one of the dimensions given by Glembay (12.51 cm!), and its weight differs from Glembay's measurement only by 1 (!) gr: 50.75 gr. In decoration and proportions the two surviving discs of the middle pair are also very similar, quite identical, and correspond perfectly to the size, weight and decorative system described in Glembay's letter. In view of these similarities it is more than certain that the Stuttgart piece is the second of the surviving Csepin/Čepin discs, one of Cat. Nos. 6—7. This also appears to have been in the ownership of the Adamovics ladies, which got on the international antiquities market only decades after the discovery and sharing, from the hands of the owner, or her inheritor. Unfortunately, we cannot follow its way, since the earliest available source is from the 1930s.

As we have seen, three further pieces of the Csepin/Čepin — Várhov hoard was probably bought by the 'Museum für Völkerkunde', Berlin, from Samu Egger in Budapest, in 1867. Unfortunately, we know nothing about the only (?) surviving disc in Berlin (Cat. No. 12); neither its weight, nor its diameters, not even a drawing of it has been pub-

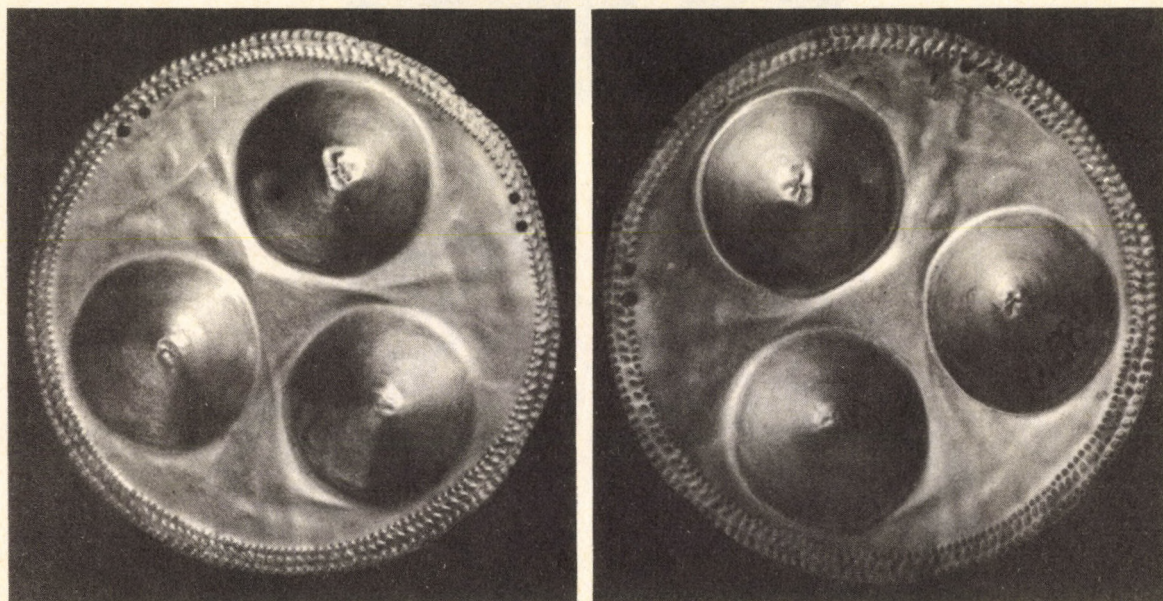
lished. So we can only suppose, that it may be one of the largest or the smallest discs owned and sold by the Ténye village lad. To solve the problem the weight is needed, as the size of the smallest and the largest pairs of the hoard was not recorded by Glembay. As in this case gold objects were traded, the weight of the discs may have been recorded in the pact of the purchase, thus there is still a chance of identification even if the pieces themselves are now lost.

There is still another piece which may originate from Csepin/Čepin, and of which more is known than of the Berlin discs from 1867. It was kept in the *Karlsruhe Rosenberg Collection* in 1905, though nothing is known about how it had got there. Its diameter may be 11 cm, its weight, however, is not known (Cat. No. 19, Fig. 3). Its edge is damaged beside the suspension holes on its published picture from 1905, therefore it cannot be identical with the piece now in Stuttgart (Cat. Nos. 6 or 7). Its decoration, however is highly similar to the two middle sized Csepin/Čepin pieces (Cat. Nos. 6 and 7, Fig. 2, 3), so it may also have belonged to the hoard. It could be argued that in the case of authentic discs found in pairs (Stollhof, Csáford) the pieces of the pairs are slightly different, thus the sole formal or pattern similarity is not enough to suspect identical provenance or even find context in the case of sporadic discs. *E. g.* the largest and heaviest disc of the HNM (Cat. No. 13, Fig. 2) is extremely similar to the middle sized Csepin/Čepin ones, its weight, however (103.82 gr), excludes its being one of even the largest pair of the Csepin/Čepin discs (their weight was only 63 gr each).

On the other hand, the disc, which József Hampel saw in the *Storno Collection in Sopron* at the end of March, 1882, may have also come from Csepin/Čepin (Cat. No. 16, Fig. 4). Unluckily only a very sketchy drawing was made of it, its weight and dimensions were not taken, and Hampel did not inquire about its provenance. No information whatsoever can be gleaned from the catalogue of the Goldsmiths' Exhibition of Budapest in 1884, where the disc was displayed. Still we are bound to suspect, that this piece may have come from Csepin/Čepin. Ferenc Storno, namely, reported on his trip to Slavonia (and presented his drawings of the Orahovicza orthodox monastery and church of *caloyer* monks) at the same session of the Archaeological Committee, March 7, 1865, when Károly Glembay's second letter was read.¹⁷ Orahovicza lies approximately 50 km west of Eszék/Osijek, but at that time one could travel there from Budapest, either by train or by coach, only through Eszék. Consequently Storno was in Eszék/Osijek at the time, when the Csepin/Čepin discs were sold (when the lad sold his three discs), and he may also have been the person who took Glembay's second letter to Budapest. The friendly relations between Storno and Rómer are well known. Storno, accordingly,



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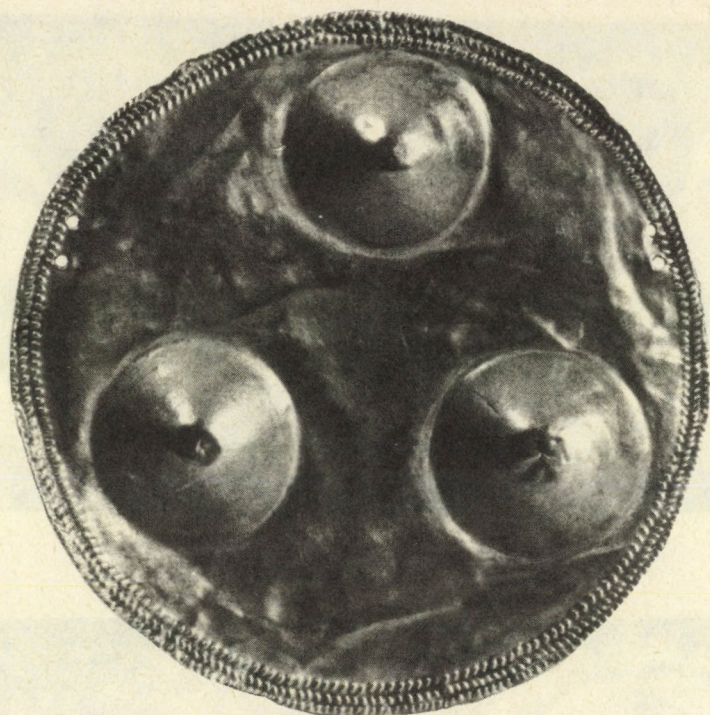


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Fig. 2. 6 or 7. *Csepin/Čepin* — *Várhov mound*, disc in the HNM, Cat. No. 6 or 7; 13. *Unknown provenience*, disc in the HNM, Cat. No. 13. Courtesy of the HNM

may have bought a *Csepin/Čepin* disc from a member of the Adamovics family. His disc, however, could not be identical with the *Csepin/Čepin* piece of the HNM (Cat. Nos. 6 or 7) as it had already been inventorized in 1877, while Hampel saw the Storno disc at Storno's Collection in 1882. If the disc will not be found in the Storno Collection¹⁸ or if no other data concerning its original find place and

later fate will be discovered, it may perhaps be assumed that it was the piece which reached the Rosenberg Collection in Karlsruhe (Cat. No. 19, Fig. 3.), or perhaps later the Koller Collection, and from there in Stuttgart (Cat. Nos. 6 or 7, Fig. 3). For the time being this is all that can be told about the venturesome fate of the six *Csepin/Čepin* — *Várhov* gold discs.



6-7

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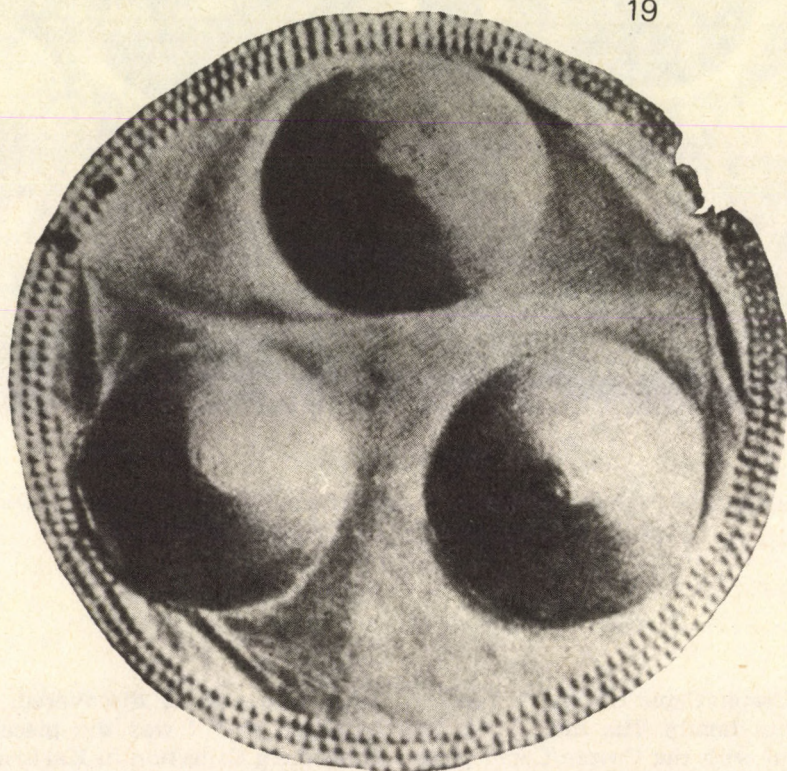


Fig. 3. 6 or 7. *Csepin/Čepin* — *Várhov mound*, disc in the 'Württembergisches Landesmuseum', Stuttgart, Cat. No. 6 or 7. Courtesy of dr. H. Schickler, Stuttgart; 19. *Unknown provenience*, disc former in the Marc Rosenberg Collection, Karlsruhe, Cat. No. 19. After Forrer 1907

We also have to mention *the gold hoard from Csepin/Čepin*, which was bought by the HNM from Miksa Lemberger, another antique dealer, in 1880 or earlier for 775 Forints, and which weighed 388.8 gr. It contained a 45.3–45.7 cm long, 3.4–3.8 cm wide, 45.3 gr weighing belt or diadem band with rounded ends and with five pairs of holes (on one end broken) (Fig. 6).¹⁹ The length of another, narrower band is 49.8 cm, its width is 1.9–2.0 cm, its weight is 24.9 gr. There are two pairs of holes on the straightly cut ends, the longitudinal sides are bordered by small repoussé dots, executed in the same manner as the small bosses on the gold discs. Now it is broken into four pieces, one of the breaking surfaces displays the traces of prehistoric mending (Fig. 6).²⁰ According to the inventory of HNM 18, in reality 19 small rings with sliding ends, made of wires of circular section also belonged to this hoard (Fig. 6). Their diameters range between 2.8–7.4 cm, the total weight is 318.6 gr.²¹ We have already suggested (MAKKAY 1984)²² that we consider this find a part of the same Copper Age gold hoard that contained the six gold discs, so now we will not list the proofs again, or repeat our arguments. We only add, that the great uncertainty Glembay showed in 1865 concerning the date of discovery: 1861, 1863, or 1864, may also be considered as a further argument (RÓMER 1865, 74, note). It is highly improbable, that an engineer in Eszék/Osijek could not have defined the exact date of events, creating such a sensation in 1865, if these had really happened as recounted by the Ténye village lad. In our view the six discs were discovered not when the lad wanted to quench his thirst, and not in the well. Originally the six discs and the hoard from 1880 were found together, then got to different owners, and most of them were later acquired by different antique dealers (i.e. by the Eggers and Miksa Lemberger).

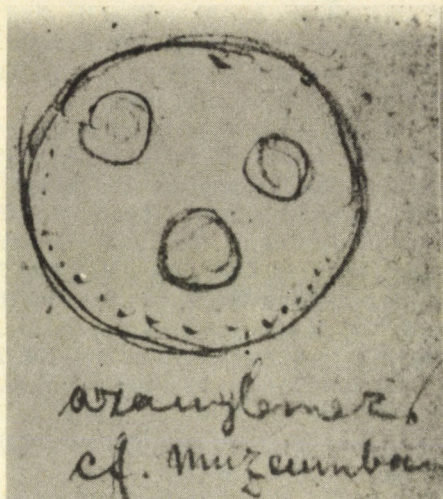
Turning now to other, undeservingly neglected discs, we have somewhat more exact data concerning the piece, which was found *between Kőszegpaty and Vassurány* in county Vas (northeast of Szombathely, Transdanubia, Hungary) in the 1870-es in the Surány-Paty forests under unknown circumstances (Cat. No. 17, Fig. 4). The piece, then considered to have been the pectoral of a priest and dated to the Roman Age was donated by Count Vilmos Pálffy-Daun (probably the owner of the estate) to the collection of the Archaeological Society of co. Vas in 1884, preserving the owner's rights. Now it cannot be found in the Museum of Szombathely. It is possible, that the family took its "deposit" back no later than 1944–1945 according to Gábor Bándi, directeur of the Museum. That would be all to be known about the piece if Hampel had not made a sketch of it during his visit to Szombathely in 1898, April 6. (Fig. 4). Unfortunately he did not specify its decoration, he did not register the weight and the dimensions, and he did not inquire about the exact place of discovery. Anyhow,

the piece is valuable from the respect that this is nearly the only disc, the authentic find place of which can be at least supposed. A search for the later fate of the disc is not too promising, though it is also not totally without prospect.

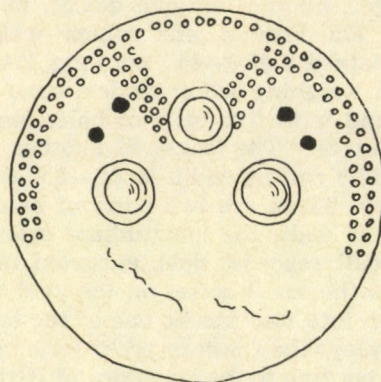
None of the scholars of Copper Age gold finds, including the author of this article, has read the Catalogue of the Goldsmiths' Exhibition in Budapest, 1884, carefully enough. It contained, beside the four exhibited discs of the HNM (Register of the Catalogue Nos. 1–4, Cat. Nos. 1, 2, 3, 6 or 7) and the Storno disc (Register No. 7, our Cat. No. 16) further *two gold discs* of an art collector called Géza Kárász (Register No. 5–6, our Cat. Nos. 14–15). The Catalogue, unfortunately enough, did not include photographs or drawings. The description of the discs, however, mentions that one of them (Cat. No. 14) was similar to disc 1 of the Jankovich Collection (Cat. No. 1, Fig. 1), while the other (Cat. No. 15) resembled piece 3 of the Jankovich Collection (Cat. No. 3, Fig. 1). So at least we have an idea of their decoration. This circumstance may be of importance during a possible later identification. Even though there is not a single piece among the European gold discs without provenience, which is similar to either of the Kárász discs, we are nonetheless convinced that these valuable pieces of art have not disappeared finally nor were they melted down. We are confident that the discs reached some foreign private — or museum — collection from the Kárász collection.

A still unpublished data, concerning *the disc bought by the HNM in 1900* for 120 Hungarian crowns (called Korona) reveals that the piece, found in a slightly damaged state or was created by the finder, was purchased from a person named Antal Kanitz. A small fragment is still missing from it. We know nothing about the place of discovery, only an unintelligible word can be seen in the inventory book in the rubric of comment. It might have been found on the territory of Pannonia province. In view of its weight (20.12–21.24 gr) it cannot even be the smallest Csepin/Čepin type (Cat. No. 18, Fig. 4).

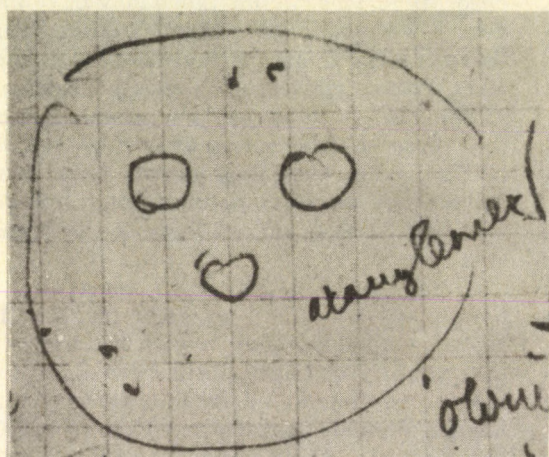
Afterwards the problems of the Copper Age gold discs were totally neglected for about half a century, except for the move back by Ferenc Tompa in 1937, distrusting Pulszky's dating to the Copper Age and assigning the discs to the Late Bronze Age (TOMPA 1937, 53, note 109). Thus the register ends with the *two discs* found on the southern slope of the *Bogota hill*, near Csáford in county Zala in 1952 (we do not know of any other pieces found after 1952). They are the most lavishly ornamented specimens known presently (Cat. Nos. 21–22, Fig. 5), and there is also reliable data concerning their provenience and cultural context, including the fact, that their deposition was connected with some sort of ritual performance as suggested by the burnt lumps of earth found on the place of discovery. The



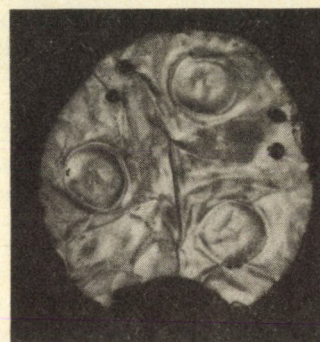
16



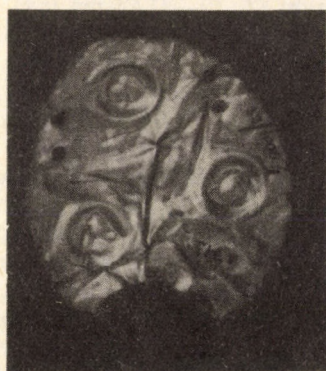
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17



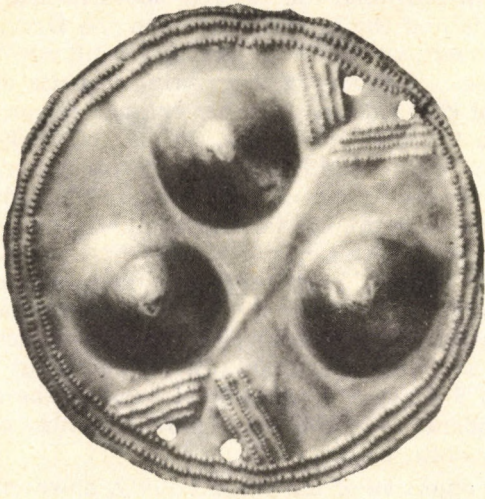
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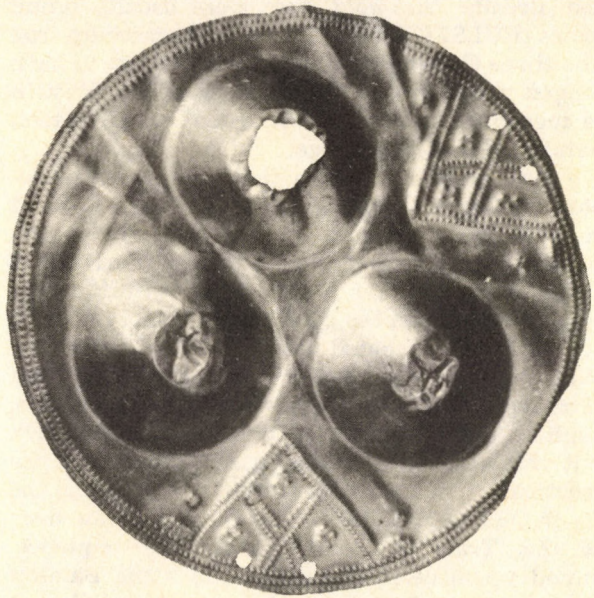
18



Fig. 4. 16. *unknown provenience*, disc former in the Storno Collection, Sopron, Cat. No. 16. After the unpublished drawing of J. Hampel; 17. *Kőszegpaty*, disc former in the collections of the museums of co. Vas, now lost, Cat. No. 17. After the unpublished manuscript of J. Hampel; 18. *unknown provenience*, disc in the HNM, Cat. No. 18. Courtesy of the HNM; 20. *(Kis)Apostag*, Cat. No. 20. After Mozsolics 1968



22



21

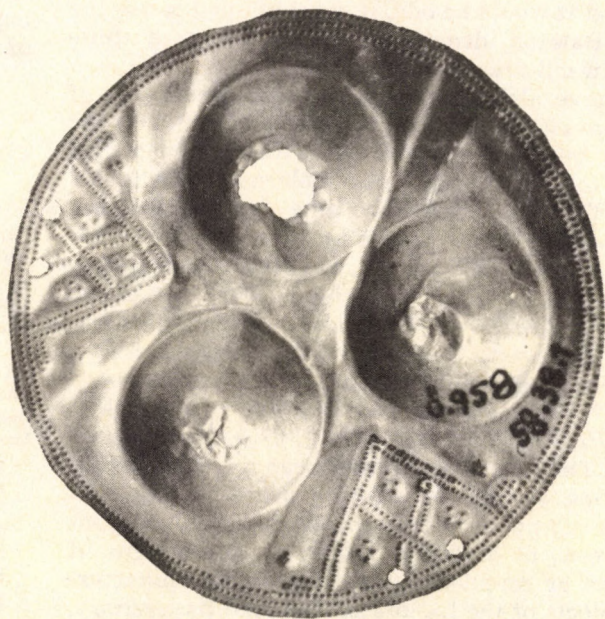
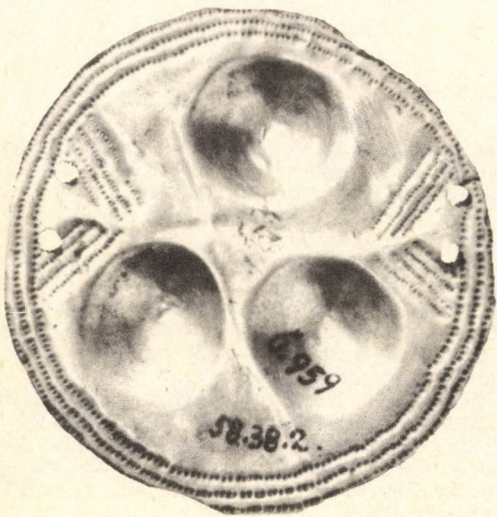


Fig. 5. 21—22. discs from Csáford — Bogota hill, Hungary, in the collections of the HNM, Cat. Nos. 21—22. Courtesy of the HNM

two masterly pieces must have belonged to an important person, a priest or tribal leader. Pulszky noted already, that gold discs were usually found in pairs (PULSZKY 1883, 72). This is especially true of the three Csepin/Čepin pairs, which seem to have belonged rather to the hidden stock of a goldsmith or a merchant, than to the hoard of a rich person or family in the Copper Age.

We also have to mention that the presently accepted dating of the discs, called Stollhof—Csáford type, was first suggested by I. Bóna in 1960, who assigned them to the period between the Lengyel and the Baden cultures, a period not yet differentiated at that time on the basis of the pottery (BÓNA 1960, 86).²³ Korek dated the Csáford discs to the period between the Copper Age and the Early Bronze Age, in 1960 (i.e. to the Zók-Vučedol culture, though he did not use the name (ANGELI 1972, 29), but it was also he, who later used the name of the correct category for the indication of the age of the discs (KOREK 1972, 43). It has since become clear that the Transdanubian Copper Age sequence, summed up misleadingly under the name Balaton group consists of at least three totally different cultures and also three (and sometimes two) successive phases.²⁴ As we do not know into which of these territorial groups and periods the presently known discs can be fitted, it would be better to use the term Lasinja culture for cultural determination which comprises a larger unit. This seems to be more appropriate also considering that Csepin/Čepin lies south of the Drava river in Slavonia (Yugoslavia), and it would be odd, if we continued to use the name 'Balaton' denoting a conglomerate of three different cultures instead of Lasinja.

We have already given a detailed description of the large silver disc with three bosses found on the Kotouč hill at Štramberk, near the Moravian gate at the foot of the Beskids in Moravia (MAKKAY 1976, 287, Fig. 33).²⁵ At that time the piece was important since it provided a link toward the Jordánów (Jordansmühl) culture, not to mention that it was — and is — the first silver object of Central European prehistory. Since then a find of three copper discs with 3—3 large bosses deposited in a small pot together with copper spirals has also been reported from Hlinsko, near Štramberk, also in Moravia (PAVELČIK 1979, Abb. 2, 2—4 and Abb. 10, 1—3).²⁶ They must have either been modelled on the gold discs, or they were rather primitive copies. It also proves not only that the discs with three conical bosses, as parts of dressing or adornments of religious or ceremonial trappings, were characteristic objects of the Lasinja culture and its territory, but also that they were probably used in all the Early Copper Age cultures that evolved on the territory of the Late Neolithic painted potteries as late successors of the 'Notenkopf' pottery. It is interesting that the distribution of the tabbed circular pendants of the Tiszapolgár—Bodrogkeresztúr cultures

in the east and the discs with three circular bosses in the west was consistent in the Great Hungarian Plain and Transdanubia (the latter including also Western Slovakia, the eastern slopes of the Alps, Moravia and the territory between the Drava and Sava rivers, i.e. Great Pannonia). Up till now there has been no report of discovering imports of one type of gold find in the other cultural region. This can be taken to imply that during the Early and Middle Copper Age the two territories persistently preserved their ancient traditions which had already existed at the time of formation of the Linear Pottery cultures. This means no less that the Linear Pottery of the Great Hungarian Plain was an independent cultural group as compared to the 'Notenkopf' pottery. It may lead us to the conclusion that the Copper Age cultures of the Great Hungarian Plain and of Transdanubia were the direct descendants of the given Neolithic groups of the Linear Pottery culture.

The objective of the present study, however, was not to discuss ethnic problems, but to give a complete list as possible of the gold discs with three circular bosses, and to publish some sources which have, up till now, escaped the attention of research, or which could not have been available. As most of this "new" evidence was discovered by chance, there is still hope that a subsequent systematic source research may shed more light on the problem of our gold discs. Perhaps this article also help to locate the original find places of further pieces through the description of data of the pieces surviving in different museums or private collections and of those, which have been lost.

CATALOGUE

1. *Miklós Jankovich of Vadas's disc 1* in the Hungarian National Museum (abbreviated as HNM in the following). Old inventory number: 5. 1852. 18. New inventory number: 68. 24. 127. Gold inventory number: Ö. 679 and Ö. 4397. Diameter: 11.5 cm, or 11.35 cm, or 10.6 cm. Weight: 72.59 or 72.43 gr. The weight was written on to the piece in black china ink in 1852: 20³/₄ ††. Three circular bosses, two rows of dots on the border, two pairs of holes on the inner row of dots. Their edges are hardly frayed. 4—4 short rows of repoussé dots start from the holes inwards (Fig. 1).

RÓMER 1865, 75, No. a; PULSZKY 1883, Fig. 21, 1; PULSZKY 1897, Pl. XXIX, 1; CATALOGUE OF THE APPLIED ARTS 1884, 11, No. 1; PATAY 1958 did not publish either a photo or a drawing of the piece, but merely mentioned it: 44, note 83, No. 1; FETTICH 1958, 124, Pl. III, 1.

2. *Miklós Jankovich of Vadas's disc 2 in the HNM*. Old inventory number: 5. 1852. 20. New inventory number: 68.24.126. Gold inventory number: Ö. 677. Diameter: 10.55 or 10.66 cm. Weight: 54.71 or 54.49 gr, according to Rómer 15⁹/₁₆ ††. Three circular bosses, around the border three rows of small repoussé dots, 2—2 pairs of wide holes with frayed edges can be seen between the two inner rows and on the innermost row of dots. They are surrounded by two open triangles of three-three

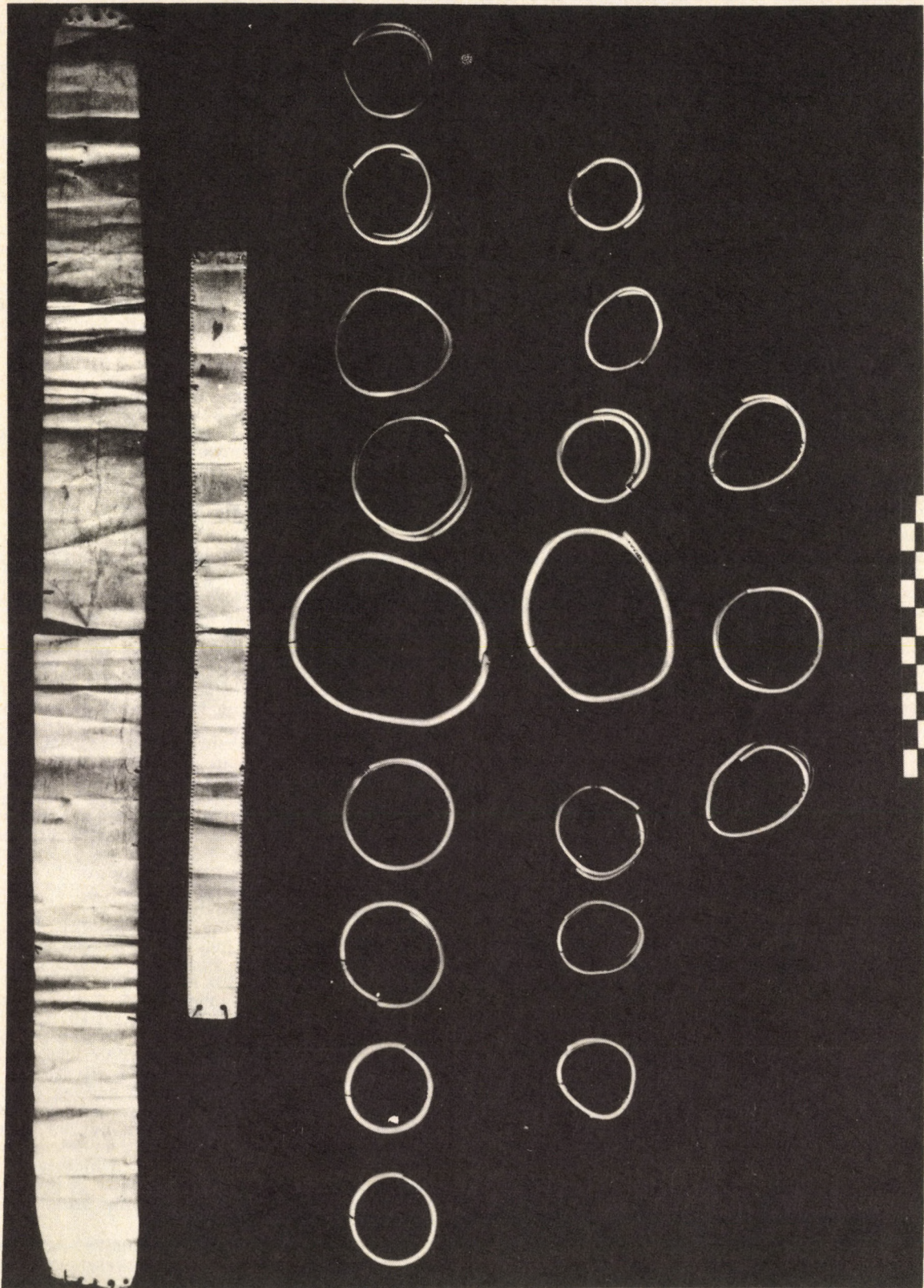


Fig. 6. the 1880 *Csepin/Čepin* gold hoard in the collections of the HNM. Courtesy of the HNM

rows of small repoussé dots. It is slightly creased (Fig. 1).

RÓMER 1865, 75, No. b; PULSZKY 1883, Fig. 21,5; PULSZKY 1897, Pl. XXIX,5; PATAY 1958, Pl. XIX,3; CATALOGUE OF THE APPLIED ARTS 1884, 11, No. 4; FETTICH 1958, 124, Pl. III,2.

3. *Miklós Jankovich of Vadas's disc 3 in the HNM*. Inventory number: 5. 1852. 19. This piece was not inventorized once more. Gold inventory number: Ö. 678. Diameter: 8.95 cm. Weight 24.48 gr. This is the smallest of the Jankovich discs. Three circular bosses, two rows of repoussé dots around the border. The two pairs of holes of irregular form are far inside of even the inner row of bordering dots. The four-four short rows of dots start radially from the two holes closer to each other. It is hardly creased (Fig. 1).

RÓMER 1865, 75, No. c; PULSZKY 1883, Fig. 21,2; PULSZKY 1897, Pl. XXIX,2; HAMPEL 1886, Pl. XLVII,1; HAMPEL 1886a, 67, Pl. XLVII,1; HAMPEL 1887, Pl. XLVII,1; CATALOGUE OF THE APPLIED ARTS 1884, 11, No. 2 or 3; PATAY 1958, Pl. XIX,5; FETTICH 1958, 124, Pl. III,3.

4. *Csepín/Čepín, Orlovinyák farmstead, Várhov hill, disc 1*. One of the two largest pieces of the Csepín/Čepín hoard. Its weight is 18 "golds", i.e. taking 3,5 gr for a "gold", 63 gr. No other measurements are known, it is not known where it is presently to be found, and its fate after 1865 is also unknown. See also A—B at the end of the Catalogue!

RÓMER 1865, 74.

5. *Csepín/Čepín, disc 2*. The other piece of the largest type. Weight 63 gr, i.e. 18 "golds". No other measurements are known, nothing is known about its whereabouts, and its fate after 1865 is also unknown. See also A—B at the end of the Catalogue!

RÓMER 1865, 74.

6—7. *Csepín/Čepín, discs 3 and 4*. The two discs shall be discussed together, because, even though their fate will be recounted separately, we do not know which of the two pieces reached the HNM and which found its way to Stuttgart in 1974.

This is the middle-sized pair of the Csepín/Čepín discs. The weight of both pieces is known: 14 $\frac{1}{2}$ "golds", i.e. 50.75 gr each. We also know the dimensions of one of them, which according to the description given by Károly Glembay was 476/100—467/100 Viennese inches. Taking the measurements of the Jankovich discs of the HNM, given in Viennese inches and written on the discs in 1852, and also Rómer's data as a starting point (see Cat. Nos. 1—3!), where one Viennese inch = " = cca 2.633 cm, the mark = "' = one doventh of the inch = 0.2194 cm, the two diameters of the discs are 12.14—12.51 cm. The diameters of the three circular bosses at their bases are $\frac{142}{100}$ Viennese inches, i.e. cca 3.7 cm. The thickness of the plate is $\frac{5}{1000}$ Viennese inch i.e. cca 1.05 mm. According to Rómer's description "the plate is made of pure gold sheet, it is perfectly round, the tops of the conical bosses form an equilateral triangle. . . Its only decoration is a triple line of short incised stabs, running around along the border. There are two circular holes right and left of one of the bosses, though not of equal distance, standing nearly 3"' [cca 6.5 mm] far from each other. . . The exact drawing by Mr Glembay shows not tiny bosses, but >>> lines".

There are two discs which correspond with reliable correctness to these dimensions and ornamental details. One of them is *the disc in the HNM*. Its inventory number is 80. 1877. 1. Gold inventory number: Ö. 681 (Fig. 2). It was bought from Samu Egger. Diameter: 12.45 cm, weight 47.84 gr. An especially striking similarity is shown by the repoussé work along the border, which really is not a row of small circular repoussé dots, but of short straight repoussé lines or stabs at an angle to each other. The short straight stabs of the three rows

form the same zig-zag pattern, as the one seen on the drawing by Glembay-Rómer. It is known that two discs of nearly identical dimensions and weight, and of similar decoration and technique of manufacture were found in the Csepín/Čepín hoard, and this is the middle type. One of them was owned by Mrs László Adamovics junior, the drawing and dimension and weight of which Glembay gave to Flóris Rómer. The other piece probably also remained in the possession of the Adamovics family. It must have been of similar dimensions, weight and decoration as the previous one, though, considering the technique of measuring of the age, an exactness to grams cannot be supposed.

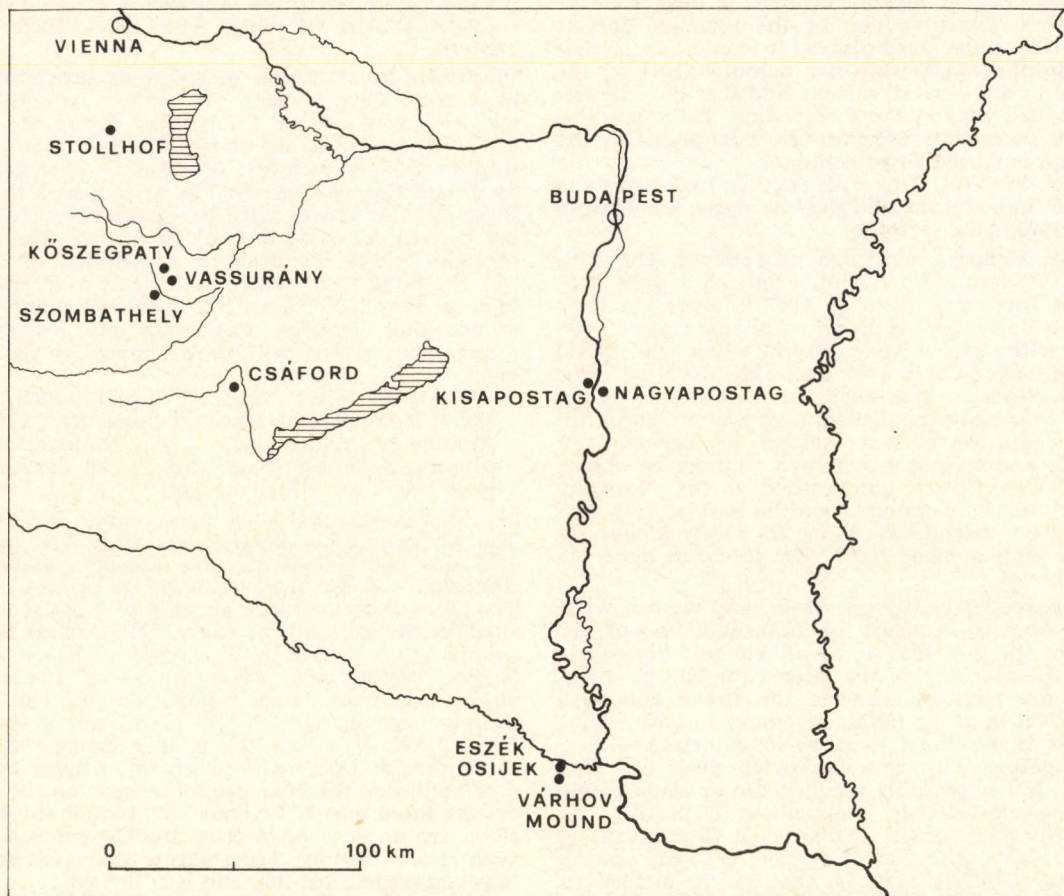
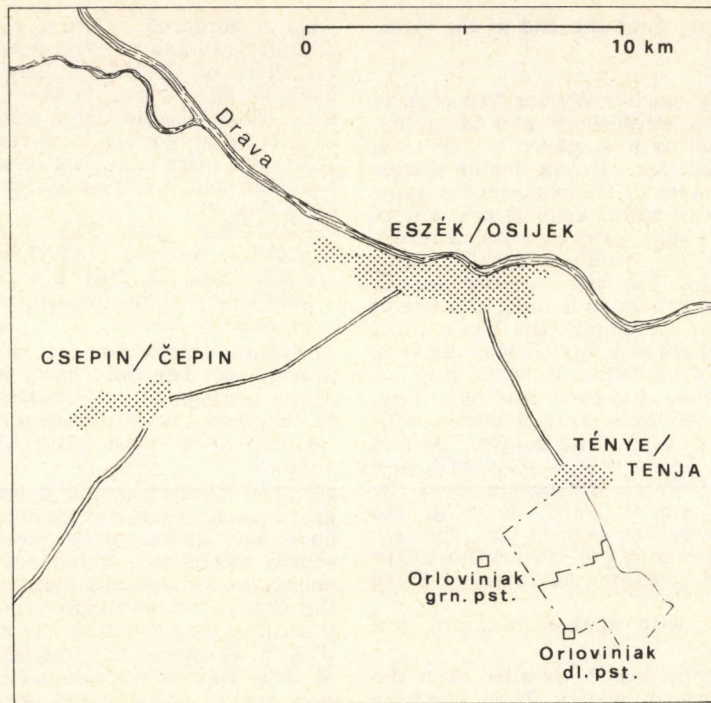
This disc can be identified as *the other piece of the middle-sized Csepín/Čepín pair*, is that of *the 'Württembergisches Landesmuseum', Stuttgart* (Fig. 3). According to the kind information given by Dr. H. Schickler, for which I would here like to express my gratitude, its inventory number is V 74,1 and its find place is provisionally indicated as "Westungarn". Weight: 51.7 gr, diameter: 12.5 cm. The piece has a complicated and long history. In the 1930s it was owned by an antique dealer or private collector unknown to us, who, among others, offered it for sale to the HNM. The HNM did not buy the disc, but its photo was preserved in the Documentation Department of the museum, and this photo was published by PATAY in 1958 (PATAY 1958, Pl. XVII,5). In 1974 it was already in the 'Galerie Koller, Zürich', Switzerland, which again offered it for sale to several European museums (e.g. the Ashmolean Museum, Oxford, and also to the Museum of Fine Arts in Budapest). The latter passed the offer to the HNM, which, however, decided not to buy the disc. It was finally bought by the 'Landesmuseum' in Stuttgart at the end of the year. The edge of the piece with three circular bosses is bordered with three rows of short repoussé stabs meeting in a zig-zag pattern, just like on the piece in the HNM (Cat. No. 6 or 7, Fig. 2). The two pairs of holes are inside the inner row of repoussé work. As both the weight, the dimensions and also the decoration of the disc correspond to the description and dimensions given by Glembay in all respect, it seems to be certain that this disc is identical with one piece of the middle Csepín/Čepín pair. Its relatively late appearance (the first known data go back to the thirties of our century) fits into the theory, according to which the women members of the Adamovics family did not give away their discs as quickly as the young man of Ténye. Accordingly, the Csepín/Čepín disc in the HNM is the other piece of the middle pair, which was also first owned by the Adamovics family.

Csepín/Čepín disc of the HNM: RÓMER 1865, 74—75; PULSZKY 1883, Fig. 21,4; PULSZKY 1897, Pl. XXIX,4; PATAY 1958, Pl. XIX,4; perhaps CATALOGUE OF THE APPLIED ARTS 1884, 11, Nos. 2 or 3. Disc in the 'Württembergisches Landesmuseum', Stuttgart: PATAY 1958, 44, note 85, Pl. XVII,5. On the identity with the disc offered for sale in 1974 see MAKKAÝ 1976, 287, note 244; PATAY 1958, Pl. XVII,5; HARTMANN 1982, pp. 150—151, Pl. 115, Au 4855. Here the film was reversed when making the cliché, thus the mirror view of lateral position can be seen (the right and left sides are mixed, but not the upper and lower parts). The original of the photo, published on our Fig. 3 was sent by Dr. H. Schickler. In some depressions of the object the remains of the original, red-brown soil can still be seen (the letter of Dr. H. Schickler in 1984).

8. *Csepín/Čepín, disc 5*. One of the smallest pair. Weight: 10 $\frac{1}{2}$ "gold", i.e. 36.75 gr. Its whereabouts are not known. See also A—B at the end of the Catalogue!

RÓMER 1865, 74.

9. *Csepín/Čepín, disc 6*. The other piece of the smallest pair, its weight is accordingly 36.75 gr. Its whereabouts



are not known. See also A—B at the end of the Catalogue!

RÓMER 1865, 74.

10. *Stollhof — Hohe Wand* (earlier Wiener Neustadt, in articles in Hungarian also 'Bécsújhely' and 'Németújhely'), *disc 1*. It was found by a shepherd boy in 1864, together with its pair (Cat. No. 11), six double spirals made of copper, two flat axes of Bodrogkeresztúr type, nine small spiral tubes, two spiral armlets and a narrow cooper sheet of boar's tusk form with perforations, and other objects such as four double spectacle spirals, which have since been lost. The site was the boulder stone layer, totally free of humus on a steep hill side at an altitude of 700—800 m. Originally the hoard must have been hidden somewhere else, and it was taken to the boulder probably by a landslide or water running down after thawing of snow. It is certain to have been a buried hoard. The disc has three circular bosses, with three rows of repoussé dots around its border. The two pairs of holes are at the inner row of dots, and 6—6 short lines of dots run towards the centre from the holes. Its diameter is 13.8 cm, its weight is 121 gr. An analysis of its material was also carried out. The two Stollhof discs are now housed in the 'Naturhistorisches Museum' in Vienna, their inventory numbers are 13799 a and b.

ANGELI 1967, 491—492, with further literature, and Pls. 3—4.

11. *Stollhof — Hohe Wand, disc 2*. Smaller than the previous one. Diameter: 10.6 cm, weight: 71 gr. The edge is bordered only by two rows of dots, the outer of which is worn off. The two pairs of holes are within the inner row of dots, and the short ornaments starting inwards from beside them also consist of only five-five rows of dots. The execution of the repoussé dots is rougher than on the other disc, so it would appear that the two Stollhof discs were not manufactured by the same hand in the same workshop, and that the smallest is an unskilled copy of the former one. There are also significant differences between the two pieces in the copper, lead and even silver content.

ANGELI 1967, 491—492, with further literature, and Pls. 5—6. For the metallurgical analysis, see HARTMANN 1982, Abb. 1, No. 30.

12. *Perhaps Hungary, unknown provenance*. The 'Museum für Völkerkunde', Berlin, acquired a gold disc, or perhaps three gold discs, in 1867 in Budapest from an antique dealer called Egger, who may have been identical with Samu Egger, from whom the HNM bought the Csepin/Čepin 3—4. disc (Cat. No. 6 or 7, Fig. 2) in 1876. Findspot and means of acquisition are not known. It was never published, and was probably lost during the 2nd World War; neither its drawing, nor dimensions and weight are known. It may be one of the Csepin/Čepin discs, unidentified so far. Mozsolics (1968, 29, note 181) mentions it on the basis of informations got from Berlin, according to which it was inventorized with number *Journ. Nr. 4010*. For more details see above!

13. *The findspot is totally uncertain*, and we can write Hungary, Austria—Hungary or Transdanubia only on the basis of the fact, that so far all the gold discs were found on the territory of the later Pannonia province, including the territory between the Drava and Sava rivers. Now it is in the HNM, inventory number: 68.24.128. It was inventorized — or re-inventorized — posteriorly together with two Jankovich discs (see Cat. Nos. 1—2); but it probably reached the museum before 1883, as Pulszky already knew about it in 1883. We know nothing else about its discovery. Gold inventory number: Ö. 680 and Ö. 4397. Diameter: 14.05 cm, according to Patay (PATAY 1958, 44, note 83. No. 3) 14.3 cm, weight: 103.82 gr. It is the second heaviest disc after the Cat. No. 10 piece from Stollhof. Three bosses, the

edge is bordered by three rows of repoussé dots, the manufacture and pattern of which is similar to the zig-zag motif of Glembay's drawing, its weight, however, excludes the possibility that it could be even the heaviest (63 gr) Csepin/Čepin disc. There are no short lines of dots running inwards. Its resemblance to the two Csepin/Čepin discs (Cat. Nos. 6—7) is so close as to make probable that it can be associated with the same workshop (Fig. 2).

PULSZKY 1883, Fig. 21,3; PULSZKY 1897, Pl. XXIX,3; perhaps CATALOGUE OF THE APPLIED ARTS 1884, 11, Nos. 2 or 3. PATAY 1958 does not publish its photo, he only mentions the piece itself: 44, note 83, No. 3.

14. *Géza Kárász's disc 1* of unknown — Hungarian? — provenance. The only thing we know about it is, that it was similar to the Jankovich disc 1 (Cat. No. 1., Fig. 1). Its present whereabouts are unknown.

CATALOGUE OF THE APPLIED ARTS 1884, 11, No. 5.

15. *Géza Kárász's disc 2* of unknown — Hungarian? — provenance. What we know about it is that it may have been similar to the pieces Reg. 2—3 of the Goldsmiths' Exhibition, which may have been identical with one of the Jankovich's discs (Cat. No. 3, Fig. 1) or with the Csepin/Čepin middle-size piece now in the HNM (Cat. No. 6 or 7, Fig. 2), or with the piece Cat. No. 13 (Fig. 2). It cannot be established whether the two discs of Géza Kárász were found in pairs at the same site, even though it is highly probable. Their further fate and present whereabouts are unknown; probably they got abroad very early, perhaps already in the last century. This piece can be identical with the Karlsruhe (Cat. No. 19) or with the Stuttgart (Cat. No. 6 or 7) disc.

CATALOGUE OF THE APPLIED ARTS 1884, 11, No. 6.

16. *Ferenc Storno's disc* of unknown provenance (perhaps from Csepin/Čepin — Várhov mound). It also was displayed on the Goldsmiths' Exhibition in 1884, but its findspot was not stated. The catalogue compared it to the 1. Jankovich disc (Cat. No. 1). The sketch made by József Hampel (see on Fig. 4) indicates that it had three circular bosses with two pairs of holes, the border pattern consisted of one row of dots. The notebook contains beside the drawing a comment by Hampel: "Cf. the Bükk find" which is difficult to interpret. Perhaps he may have meant the gold disc found near the village Bük between Vassurány and Kőszegpaty in county Vas, which will be described as Cat. No. 17, below.

CATALOGUE OF THE APPLIED ARTS 1884, 12, No. 7; Notebooks of József Hampel, XXXVIII. 2.T.82. Archive of Manuscripts of the National Széchényi Library, Budapest, Doud. Hung. 54/38, drawing on the recto side, from which our picture on Fig. 4 was made.

17. *Kőszegpaty*, unknown site, county Vas, Hungary. The Archaeological Society of county Vas reported a gold disc found between the villages Vassurány and Kőszegpaty (6 km from each other) in 1884 or before. The piece, described as a *pectoral of a priest* was deposited in the museum of the Archaeological Society of county Vas probably by the owner of the estate, Count Vilmos Pálffy-Daun. More details of the piece are known only from József Hampel's notes, who saw it in Szombathely on April 6, 1898, and made a sketch of it (see on Fig. 4). According to this sketch the disc has three circular bosses and two pairs of holes, the row of dots bordering the edge cannot be seen on the drawing, though there may have been one, two or three rows as there are no gold discs from the Copper Age without such row(s) of dots. According to the inventory of the Museum Society its diameter was 13.5 cm.

A Vas megyei Régészeti Egylet Évi Jelentései (Annual Reports of the Archaeological Society of county

Vas) 9—10, 1884, 63, No. 857, Roman jewels, No. 1. These data were discovered and supplied by Mária Károlyi, and I am most heartily thankful to her. József Hampel's Notebooks (see in note of Cat. No. 16!), Doud. Hung. 54/51, drawing on the 35. recto side of which our picture on Fig. 4. was made).

18. *Hungary, unknown provenance.* HNM inventory number: 30. 1900. 1. Gold inventory number: Ö. 713. Diameter: 7.15 and 8.0 cm, weight: 20.12 or 21.18 gr, according to Patay, 21.24 gr. The inventory book only tells that it was acquired from Antal Kanitz for 120 Crowns. Its form was definitely ovale, being thus different from all the other gold discs, excepting pieces coming from the Early Bronze Age, from the cemeteries of the Pitvaros group in the Banat (BÓNA 1965, 32—33; GIRIĆ 1971, 229—230 and Pl. LXXXIII,13; FOLTINY 1972, 53—54, Pl. II,5 and III,A—B—C). A small portion of the piece is missing, and it is creased (Fig. 4).

PATAY 1958, 44, Pl. XVII,6.

19. *Austria—Hungary, unknown provenance.* The piece was in the Marc Rosenberg Collection in Karlsruhe in 1905, and it is not known how it was acquired. Its diameter is appr. 11 cm, its weight and also its present whereabouts are not known. It has three bosses, the edge was bordered by three rows of punched dots and it is slightly broken at the two pairs of holes. In generally its shape, decoration and manufacture are so similar to the two Csepin/Čepin pieces available (Cat. Nos. 6—7, Fig. 2, 3) that it may be considered as one of the missing four Csepin/Čepin discs, and if this turns out to be the case, it must be one of the smallest pair (as its dimensions are smaller than those of the two surviving pieces). The problem could be solved if the weight of the piece were found somewhere. It would, at the same time, define roughly the dimensions and weight of the smallest Csepin/Čepin pair. For its suggested identity with one of the Kárász discs see Cat. No. 15! (Fig. 3).

Marc Rosenberg, the person who once owned this piece, was a famous antique collector and also the writer of an important work on the history of the goldsmith's crafts and arts (ROSENBERG 1918—1924). Unfortunately he did not mention his Copper Age gold disc in his monumental book. The Rosenberg Collection was sold by auction by Hermann Ball and Paul Graupe and Co. auctioneers in Berlin in 1929. The Catalogue of the auction exhibition does not offer any information about our piece (FALKE 1929, *passim*), therefore it must have been sold on a different occasion, probably before 1929, or else this simple and "barbaric" piece was not considered worthy enough to be exhibited together with the other masterpieces of the collection. Nothing is known about its fate after 1905 or 1907, perhaps this article will arouse attention and someone can tell where it is presently kept (Fig. 3).

FORRER 1905, 5, Fig. 17; FORRER 1907, 292 and 294, Pl. 71,1, with approximative scale; MAKKAY 1976, 287, Fig. 24 on p. 280.

20. *Apostag, probably Kisapostag, county Fejér, Transdanubia, Hungary, unknown provenance.* The 'Staatliche Museen', Berlin acquired the piece from the Egger brothers, probably Samu Egger's sons in Vienna in

1909. Its diameter is 14.8 cm, its weight is unknown for us. It had three circular bosses, the edge was bordered by two rows of repoussé dots. It differs from other discs (insofar as the schematic drawing given to A. Mozsolics was correctly made) in that that the two pairs of holes are far inside of the face of the disc, and that the short ornamental line of three-three rows of repoussé dots are near each other between the holes and they run on one of the bosses. This extremely sketchy drawing (Fig. 4) is the only exact information about this piece which is probably lost.

Data concerning the disc coming from Apostag were published by MOZSOLICS 1968, 29, note 182, Pl. 11,4. In the inventory books of the Berlin Museum it had the number II. 1409. The original record of its acquisition was published in 'Verzeichnis der Erwerbungen im April (1909). Amtliche Berichte aus dem Königlichen Kunstsammlungen', vol. 30:9, 1909, Juni, p. 232: "E. Vorgeschichtliche Abteilung. Ankäufe: Goldscheibe aus Apostag a.d. Donau." For the closer location of the village see MAKKAY 1976, 286.

21. *Csáford — Bogota hill, disc 1.* In the HNM, inventory number 58.38.1. Diameter: 12.5 cm, weight 81.6 gr. It is the most richly ornamented gold disc found so far. It has three circular bosses and three rows of fine repoussé dots on its border. The two pairs of holes are somewhat inside the inner row of dots, and a triangle pattern of two-two rows of dots surround the holes. The triangles are divided into four parts by two crossing diagonal lines of small bosses in relief executed in repoussé, and inside these small fields are ornamented by small lozenges of four-four dots. The feet of the triangles are accompanied on the two sides by two-two short rows of dots and one-one similar dotted lozenges. It is interesting that the case is similar in Csáford to that of Stollhof: the pair of the larger, finely elaborated piece is a smaller and more roughly manufactured one (Fig. 5).

KOREK 1960, Pl. VI,1 and VII,1; KOREK 1960a, Pl. I; KOREK 1972, 43, Pl. 31.

22. *Csáford — Bogota hill, disc 2.* In the HNM, inventory number 58.38.2. Diameter: 10.5 cm, weight 59 gr. Three bosses, three rows of dots around the border, two pairs of wide holes inside the inner row. The triangles of four-four rows of dots include the holes (Fig. 5).

KOREK 1960, Pl. VII,2 and VI,2; KOREK 1960a, Pl. II.

A—B. In the lack of more specific information, we shall list the other two pieces of the three discs hypothetically purchased by the 'Museum für Völkerkunde', Berlin in 1867 as A and B. As we have seen, these could have been part of the Csepin/Čepin hoard together with the piece listed under Cat. No. 12. The available catalogues of the Berlin gold collections (GREIFENHAGEN 1961; 1970 and 1975, and ZAHN 1932) do not mention them, and I was not able to find the possible original report of their purchase (i.e. the Annual Report of Acquisitions of the Museum: 'Amtliche Berichte aus dem Königlichen Kunstsammlungen' for the year 1867). Insofar as our suggestion can be proved, these two pieces could turn out to be identical with Cat. Nos. 4—5 and 8—9.

Notes

* The distribution of the gold discs is geographically not identical with the territory of Transdanubia, as there are some specimens from the Vienna Basin and from Slavonia south of the Drava river as well.

The only historical unit comprising all these three regions is the great Pannonia of the Roman Empire, that is the whole territory of Pannonia Inferior and Superior. In a larger context even this definition

- seems to be inadequate to show the distribution of the discs, as discoveries from Western Slovakia and Eastern Moravia can also be reasonably expected. One silver and three copper discs of similar type from this latter area have already been reported (see notes 25 and 26!).
1. Old inventory numbers: 5. 1852. 18—19—20. They are described in the Catalogue, under numbers 1—2—3. Further investigation into the exact find-spot(s) of these three discs is not without any hope as probably there were data concerning them in the vast material of the Jankovich archives. As a matter of fact, no reliable information is to be found in any of Miklós Jankovich of Vadas's catalogues (*Consignata pretia aureorum subsignatorum collectionis Nicolai Jankowich*. Manuscript in the Archive of Manuscripts of the County Library Vörösmarty in Székesfehérvár, Ms 107, colligatum, No. 8). Until now I have not been able to identify these discs in the Jankovich Catalogue of the HNM: *Ornatus pretiosi aurei et argentei, graeci, romani, et medii aevi, e Collectione Sphlis Dni Nicolai Jankovich Museo Nationali Hungarico resignati, 1838*.
 2. The kind information of D. Jankovich.
 3. Proceedings of Sessions of the Archaeological Committee of the Hungarian Academy of Sciences, I. 1858—1870. Library of the Academy, Budapest, Archive of Manuscripts, K 1580, p. 157, no. 8.
 4. *Ibid.*, 162—165, No. 31. Glembay's letters cannot be found any more, or they are hiding somewhere else. According to an undated manuscript written in the early 1860s, in the Archives of the HNM, now kept in the Department of the Middle Ages, Flóris Rómer may have preserved these letters for a time. The title of his manuscript is „Gold jewels of the Bronze Ages from various parts of the Hungarian Kingdom”, 42—45. items: „Csepin (Verőcze county, Slavonia)”. The manuscript bequest contains no letters. His notes on gold finds consist of collection of material for his article in 1865a (see our abbreviations!).
 5. Here a short comment of Rómer follows in the footnote of the original article.
 6. Tényő or most commonly Ténye was a small village of Hungarian speaking peasants in the vicinity.
 7. See notes 8 and 9! Rómer himself briefly mentioned the discs several times: RÓMER 1866, 41; RÓMER 1868, 158—161. See also GOOS 1877, 67.
 8. HAMPEL 1886, Pl. XLVII,1, provenance: Hungary; HAMPEL 1886a, 67, Pl. XLVII,1. His reference to his own plate is incorrect as he writes Pl. XLV. HAMPEL 1887, Pl. XLVII,1.
 9. As we saw in the previous note instead of Pl. XLV,1 one should read Pl. XLVII,1. MN LVI,43—45 must denote three other gold discs of the HNM according to some inventory or a manuscript (perhaps a tableau of the exhibition or an unpublished drawing). The three discs may be Jankovich's discs 1 and 2 (Cat. Nos. 1—2) and Cat. No. 6 or 7, or Cat. No. 13. Hampel evidently did not think that Cat. No. 6 or 7 bought by him in 1877 came from Csepin/Čepin.
 10. It should be noted that Pulszky never stated the provenance, means of acquisition or any other information regarding the gold discs of the HNM, and similarly to Hampel, he did not mention the Jankovich Collection.
 11. Both PATAY 1958 and KOREK 1960a 44, notes 81—82, and 77, note 17) quote different page numbers from the Sacken 1865 article than the ones where the quoted data concerning the gold discs can actually be found. KOREK 1960a, note 17 also quotes Fettich's study incorrectly, the exact reference is *ActaArchHung* 9, 1958, 124.
 12. There are nine misprints or mistakes in the only sentence quoted: e.g. the "circular pattern" became "nail-pattern", in the German text this was accordingly translated as "Nageleindrücken".
 13. In this work Ilona Stanczik, keeper of the Prehistoric Department of the HNM gave of her time, expertise and laboratory facilities in order to undertake my investigations. I owe special thanks to her. Without her help the identification of the gold discs of the HNM would have been considerably more complicated.
 14. The reason for the small divergences is the lack of precision of the measuring tools of the age, and the difficulties in converting the old system into the modern decimal one, not to mention the problem, that the diameter may vary according to the place of measurement, as the discs are not precisely circular. It can be observed that the data of the old inventory books generally show somewhat larger weights than the modern measurements.
 15. The data of the relative laws are published in detail in MAKKAY 1985, in press.
 16. For information on this piece I am very grateful to Dr. H. Schickler, Stuttgart.
 17. See notes 3—4!
 18. I know from J. Gömöri's (Liszt Ferenc Museum, Sopron) kind communication that the inventory of the collection is presently in progress, and it does not contain as yet the gold disc.
 19. Its inventory number is 1880. 32.1. The hoard was first published by MOZSOLICS 1955, 52, note 70, and Fig. 6, with somewhat different data than in this study, referring also to an earlier simple comment by Hampel. See also MAKKAY 1976, 287, note 238, where the Copper Age dating of the Csepin/Čepin diadem hoard is first suggested. The problem is covered in detail MAKKAY 1984, and it is also discussed in MAKKAY 1982, 21, too.
 20. Inventory number 1880. 32.2.
 21. Inventory number 1880. 32.3.
 22. See a summary by MAKKAY entitled „The Tiszaszőlős hoard”. Search for a Copper Age knight. Budapest 1985.
 23. Bóna uses the term Eszék [Osijek] discs, accepting Patay's view (1958, 44) that there are there Eszék/Osijek (i.e. Csepin/Čepin) discs to be found in the HNM.
 24. It was Kalicz who recently wrote that the two phases of the so-called Balaton group, distinguished by him, should be considered as two independent cultures (1982, 3). The problems of the "historical framework" given by him can hardly be understood since the Tiszapolgár culture is omitted from the maps showing the parallel development of the Great Hungarian Plain and Transdanubia in the Late Neolithic and Copper Ages. This can be ascribed to the stubborn conviction of him that the Tisza culture was entirely synchronous with the Lengyel culture, while "Balaton I", directly succeeding the Lengyel culture was contemporary with the Bodrogkeresztúr culture (Figs. 1—3). The Tiszapolgár culture with a lifespan of at least 200 years, even more in Kalicz's uncalibrated C14 chronology therefore was not fitted into this framework, which is why it cannot be found in the "continuous" sequence. It is clear that this is not a historical framework, but rather a result of a formal and schematic typology. The picture becomes even more confused in knowledge of the fact that the conglomerate, called Balaton II—III occupied, or is assumed to have occupied, the entire area of Transdanubia, including the northeastern corner, where the Luda-nice population had lived. For the right chronolog-

- ical position of the Lengyel culture see MAKKAY 1976, 270; MAKKAY 1982a, chronological map, and also PARZINGER 1984, table 4.
25. The photo of our article shows the face, and the other photo the reverse of the silver disc (MAKKAY 1976, Fig. 33). Kalicz (1982, 12) took them for two different silver discs.
26. There are also some errors in Pavelčík's otherwise excellent article (1979, 327—328). He writes that Hampel 1892 mentions only one disc, while actually he discussed three, or rather five. According to him

the five (actually six) gold discs of the HNM must have been discovered near the Balaton, quoting Fettich as his source, who really does not write anything like that. Pavelčík was misled by the name "Balaton group". It can also be an argument in favour of using the name Lasinja culture. Mozsolics does not mention Csepin/Čepin discs, she mentions only the Eszék/Osijek ones, which, as we have seen, are identical with the Csepin/Čepin pieces (MOZSOLICS 1968, 29). Pavelčík's source probably was PATAY 1958, 44 or BÓNA 1960, 86.

LITERATURE

- ANGELI 1967 W. ANGELI, *Der Depotfund von Stollhof*. Annalen des Naturhistorischen Museums Wien 70 (1967) 491—495.
- ANGELI 1972 W. ANGELI, *Goldamulette*. In: *Idole. Prähistorische Keramiken aus Ungarn*. Veröffentlichungen aus dem Naturhistorischen Museum, Wien, Neue Folge 7 (1972) 27—30.
- BÓNA 1960 I. BÓNA, *Das weibliche Idol von Becsvölgye* (Hungarian, with a summary in German). A Gőcseji Múzeum Jubileumi Évkönyve (The Jubilee Annual of the Local „Gőcsej” Museum at Zalaegerszeg). Zalaegerszeg 1960, 83—94.
- BÓNA 1965 I. BÓNA, *The peoples of Southern origin of the Early Bronze Age in Hungary, I—II*. Alba Regia 4—5 (1965) 17—62.
- CATALOGUE OF THE APPLIED ARTS 1884 *A magyar történelmi ötvösmű-kiállítás lajstroma. Megnyittatott 1884. év február hó 17-én*. Budapest 1884? (The Comprehensive Catalogue of the 1884 Budapest Exhibition of Goldsmiths' Arts)
- FALKE 1929 O. von FALKE, *Sammlung Marc Rosenberg, beschrieben und eingeleitet von Otto von Falke*. Ausstellung i.J. 1929. Berlin 1929.
- FOLTINY 1972 St. FOLTINY, *Early Bronze Age Gold Finds from Mokrin and the Banat Region*. In: *Mokrin II. The Early Bronze Age Necropolis*. Ed. by St. Foltiny. Washington—Kikinda—Beograd 1972, 43—55.
- FORRER 1905 R. FORRER, *Geschichte des Gold- und Silberschmuckes nach originalen der Straßburger historischer Schmuckausstellung von 1904*. Straßburg 1905.
- FORRER 1907 R. FORRER, *Reallexikon der prähistorischen, klassischen und frühchristlichen Altertümer*. Berlin—Stuttgart 1907.
- GIRIĆ 1971 M. GIRIĆ, *Mokrin. Nekropola ranog bronzanog doba*. Beograd 1971.
- GOOS 1877 C. GOOS, *Skizzen zur vorrömischen Culturgeschichte der mittleren Donaugegenden*. Archiv des Vereins für Siebenbürgische Landeskunde 14 (1877) 63—85.
- GREIFENHAGEN 1961 A. GREIFENHAGEN, *Goldschmuck aus dem Berliner Antiquarium. Verluste um Kunstgutlager Schloss Celle (1946—1947)*. AAu 1961, 81—130.
- GREIFENHAGEN 1970—1975 A. GREIFENHAGEN, *Schmuckarbeiten in Edelmetall*. Vol. I: *Fundgruppen*. Berlin 1970; Vol. II: *Einzelstücke*. Berlin 1975.
- HAMPEL 1886 J. HAMPEL, *A bronzkor emlékei Magyarhonban. I. rész: képes atlasz* (The Finds of the Bronze Age in Hungary. Part I: Illustrations with Comments). Budapest 1886.
- HAMPEL 1886a J. HAMPEL, *Trouvailles de l'âge de bronze en Hongrie*. Budapest 1886.
- HAMPEL 1887 J. HAMPEL, *Alterthümer der Bronzezeit in Ungarn*. Budapest 1887.
- HAMPEL 1892 J. HAMPEL, *A bronzkor emlékei Magyarhonban. II. rész: A leletek statisztikája* (The Finds of the Bronze Age in Hungary. Part II: Find Lists and Statistics). Budapest 1892.

- HARTMANN 1982 A. HARTMANN, *Prähistorische Goldfunde aus Europa, II*. Berlin 1982.
- HOERNES 1903 M. HOERNES, *Die älteste Bronzezeit in Niederösterreich*. Jahrbuch der königliche und kaiserliche Zentral-Kommission für Erforschung und Erhaltung der Kunst- und historischen Denkmale, Neue Folge IV/1, Wien (1903) 1—52.
- KALICZ 1982 N. KALICZ, *The Historical Problems of the Balaton-Lasinja Culture and its Metal Finds*. (Hungarian with an English summary). ArchÉrt 109 (1982) 3—17.
- KOLLER 1974 Katalog der Galeri Koller, Zürich. Mai—Juni (1974) (non vidi).
- KOREK 1960 J. KOREK, *Die Goldscheiben von Csáford*. FolArch 12 (1960) 27—33.
- KOREK 1960a J. KOREK, *Adatok Zala megye őskorához* (The Outlines of the Prehistory of Co. Zala). A Göcseji Múzeum Jubileumi Évkönyve (see Bóna 1960!), 67—82.
- KOREK 1972 J. KOREK, *Katalog der ausgestellten Funde*. In: *Idole* (see ANGELI 1972!), 31—44.
- KÜHNEL-KUNZE 1984 I. KÜHNEL-KUNZE, *Bergung — Evakuierung — Rückführung. Die Berliner Museen in den Jahren 1939—1959*. Jahrbuch Preußischer Kulturbesitz, Sonderband 2. Berlin 1984.
- MAKKAY 1976 J. MAKKAY, *Problems concerning Copper Age Chronology in the Carpathian Basin. Copper Age Gold Pendants and Gold Discs in Central and South-East Europe*. ActaArchHung 28 (1976) 251—300.
- MAKKAY 1982 J. MAKKAY, *The Earliest Use of Helmets in South-East Europe*. ActaArchHung 34 (1982) 3—22.
- MAKKAY 1982a J. MAKKAY, *A magyarországi neolitikum kutatásának új eredményei* (Developing Trends in the Neolithic of Hungary). Budapest 1982.
- MAKKAY 1984 J. MAKKAY, *Copper Age Gold Hoards and their Historic Setting*. Symposia Thracica Vols. A—B, Xanthi 1984, in press.
- MOZSOLICS 1955 A. MOZSOLICS, *Neuere hallstattzeitliche Helmfunde aus Ungarn*. ActaArchHung 5 (1955) 35—54.
- MOZSOLICS 1968 A. MOZSOLICS, *Goldfunde des Depotfundhorizontes von Hajdúsámson*. BRGK 46—47 (1965—1966, published 1968) 1—73.
- MUCH 1885—1886 M. MUCH, *Die Kupferzeit in Europa und ihr Verhältnis zur Kultur der Indogermanen*. Wien 1886. Separat aus den Mitteilungen der königlichen und kaiserlichen Central-Commission für Kunst- und historische Denkmale, Neue Folge Jahrgang 1885 und 1886.
- MUCH 1893² M. MUCH, *Die Kupferzeit in Europa und ihr Verhältnis zur Kultur der Indogermanen*. 2. Aufl. Jena 1893.
- PARZINGER 1984 H. PARZINGER, *Die Stellung der Uferansiedlungen bei Ljubljana im äneolithischen und frühbronzezeitlichen Kultursystem der Mittleren Donauländer*. AV 35 (1984) 13—75.
- PATAY 1958 P. PATAY, *Kupferzeitliche Goldfunde* (Hungarian, with a summary in German). ArchÉrt 85 (1958) 37—46.
- PAVELČIK 1979 J. PAVELČIK, *Hortfund des Kupferschmuckes aus Hlinsko bei Lipník A.D. Bečva* (In Czechian, with a summary in German). PA 70 (1979) 319—339.
- PULSZKY 1883 F. PULSZKY, *A rézkor Magyarországon* (The Copper Age in Hungary). Hung. ed. Budapest 1883. German ed.: *Die Kupferzeit in Ungarn*. Budapest 1884.
- PULSZKY 1897 F. PULSZKY, *Magyarország Archaeológiája* (The Handbook of Hungarian Archaeology). Vol. I., Budapest 1897.
- RÓMER 1865 F. RÓMER, *Magyar Régészeti Krónika* (Hungarian Archaeological Chronicle). AK 5, N. S. 3 (1865) 67—86.
- RÓMER 1865a F. RÓMER, *A két hazában talált régi arany műemlékekről, különösen a szarvasszói — Mármaros-megyei — aranykincsről* (Ancient gold jewels from the two parts of the Hungarian Kingdom, especially the gold treasure found at Szarvasszó, Co. Mármaros). AK 5, N.S. 3 (1865) 30—37.

- RÓMER 1866 F. RÓMER, *Műrégészeti Kalauz különös tekintettel Magyarországra* (Guide of Scientific Archaeology with special attention to Hungary). Pest 1866.
- RÓMER 1868 F. RÓMER, V. Egger D. *Párizsban kiállított ezüst lemezei* (Silver belt plates of V.D. Egger, exhibited in Paris recently). AK 7, N.S. 5 (1868), 158—161.
- ROSENBERG 1918—1924 M. ROSENBERG, *Geschichte der Goldschmiedekunst auf technischer Grundlage*. Vol. I: *Granulation*. Frankfurt 1918; Vol. II: *Zellenschmelz*. Frankfurt 1921; Vol. III: *Niello*. Frankfurt 1924.
- SACKEN 1865 Ed. Freih. von SACKEN, *Die Funde an der langen Wand bei Wiener-Neustadt*. Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften, Phil.-Hist. Classe 49:1—3 (1865) 113—138.
- SCHLEMM 1908 J. SCHLEMM, *Wörterbuch zur Vorgeschichte*. Berlin 1908.
- TOMPA 1937 F. von TOMPA, *25 Jahre Urgeschichtsforschung in Ungarn 1912—1936*. 24—25. BRGK (1934—35, published 1937) 27—127.
- ZAHN 1932 R. ZAHN, *Ausstellung von Schmuckarbeiten in Edelmetall aus den Staatlichen Museen zu Berlin*. Berlin 1932.

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