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*Főszerkesztő*  
SZENTHE GERGELY

*Szerkesztők*  
FÜZESI ANDRÁS, TARBAY JÁNOS GÁBOR

*Olvásószerkesztő*  
BÖRÖCZKI TAMÁS

*A szerkesztőbizottság tagjai*  
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## OTTOMAN SEALS AT THE HUNGARIAN NATIONAL MUSEUM: CONNECTIONS BETWEEN SHAPES, INSCRIPTIONS, AND MATERIALS

Ibolya GERELYES\* 

*In her study, the author conveys the findings of chemical composition investigations performed on Ottoman seals in the collection of the Hungarian National Museum. The examinations conducted draw attention to connectedness between chemical composition, shape, and inscription type; this can assist with dating. In the material reviewed, one group stands out in particular: seals with bell-shaped bodies which can in all likelihood be dated to the 16th–17th centuries and which in most cases feature an inscription with the formula ‘Trusting in the King...’. At the same time, some pieces bearing just the name of their owner differ from the other examples in the collection in terms of shape and chemical composition. These were certainly made after the period of Ottoman sway in Hungary.*

*A tanulmányban a Magyar Nemzeti Múzeum török pecsétnyomóin végzett anyagvizsgálatok eredményét szeretném ismertetni. Az elvégzett vizsgálatok arra hívják fel a figyelmet, hogy az anyagösszetétel, a forma és a felirat összefüggéseket mutat, és korhatározó lehet. A megvizsgált anyagban kimutatható egy meghatározott csoport, a tölcséres testű pecsétlők, melyek nagy biztonsággal keltezhetőek a 16–17. századra, és amelyek többségén azonos felirat, a ‘Királyban bizakodó...’ formula olvasható. Ugyanakkor egyes, csak a tulajdonos nevét tartalmazó darabok formailag és anyagösszetételüket tekintve is eltérnek a gyűjtemény többi példányától, és egyértelműen a magyarországi török hódoltság koránál későbbi időszakban készültek.*

Keywords: Ottoman seals, chemical composition, types of inscriptions, similarities and differences in shape

Kulcsszavak: török pecsétnyomók, anyagösszetétel, felirat típusok, formai azonosságok és eltérések

Over the last decade, archaeological researches – especially those using metal detectors (Bíró et al. 2018) – have unearthed, and continue to unearth, growing numbers of small metal objects of the kind that earlier on evaded discovery or else came to light only rarely and by chance before passing into public or private collections. It is to this category, namely that of small metal objects, that Ottoman seals, rings, and coins belong. In the present study, the author would like to present the findings of material composition analyses performed on the Ottoman seals owned by the Hungarian National Museum. She hopes that these results will assist the dating of recently discovered examples and similar ones coming to light in the future, and also the identification of workshops in which these pieces were made.<sup>1</sup> Additionally, the author attempts to group already-known pieces on the basis of the following: inscriptions, similarities with regard to shape, and alloy composition.

Following the publication of Magda Bárányné Obershall’s now-classic 1944 study (Bárányné 1944, 367–368, Pl. LXXXVI, 3, 11, 18–23),<sup>2</sup> and subsequently that of Géza Fehér’s summary presenting the Ottoman seals held by the Hungarian National Museum (Fehér 1959, 187–191, Pl. XXIV), Ottoman seals ‘disappeared from view’, temporarily. Decades later, new examples came to light, during excavations conducted at various locations in Hungary (Tóth 2003, 99, 106, Fig. 3; Tóth 2005, 157–158; Gaál 2014, 382–383, 385–386, Pls. 2–3; Kovács et al. 2014, 163; Kovács 2019, 225). As recent researches in Tolna County have shown, such artefacts are appearing in increasing numbers as surface finds (Gaál 2014, 379), and as a result of searches performed using metal detectors (Sudár, K. Németh 2020, 113–115).<sup>3</sup>

In earlier times also, researchers drew attention to the contradiction between the number of seals in collections and the selection of seal impresses fea-

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*Fig. 1. Ottoman seal, copper alloy (16th–17th century). 1: the matrix surface; 2: mirror-image of the matrix surface; 3: the seal upright (Hungarian National Museum, inv. no. 1857.34.2.; Photo: Judit Kardos)*

*1. kép. Oszmán pecsétnyomó, rézötvözet (16–17. század). 1: pecsételőlap; 2: a pecsételőlap tükrözött képe; 3: a pecsétnyomó teste (Magyar Nemzeti Múzeum, ltsz. 1857.34.2.; fotó: Kardos Judit)*



*Fig. 2. Ottoman seal, brass (16th–17th century). 1: the matrix surface; 2: mirror-image of the matrix surface; 3: the seal upright (Hungarian National Museum, inv. no. 1860.28.V.4.a.; Photo: Judit Kardos)*

*2. kép. Oszmán pecsétnyomó, sárgaréz (16–17. század). 1: pecsételőlap; 2: a pecsételőlap tükrözött képe; 3: a pecsétnyomó teste (Magyar Nemzeti Múzeum, ltsz. 1860.28.V.4.a.; fotó: Kardos Judit)*



Fig. 3. Ottoman seal, copper alloy (16th–17th century). 1: the matrix surface; 2: mirror-image of the matrix surface; 3: the seal upright (Hungarian National Museum, inv. no. 1860.28. V. 4.b.; Photo: Judit Kardos)  
 3. kép. Oszmán pecsétnyomó, rézötvözet (16–17. század). 1: pecsételőlap; 2: a pecsételőlap tükrözött képe; 3: a pecsétnyomó teste (Magyar Nemzeti Múzeum, ltsz. 1860.28. V. 4.b.; fotó: Kardos Judit)

turing on documents surviving from the Ottoman period (Sudár, K. Németh 2020, 116). In contrast to the substantially larger number of seal impressions extant (this can be put at several hundred), the number of seals known to be housed in Hungarian collections is strikingly small: it can be no more than twenty to twenty-five pieces. Presumably, many Ottoman seals are going unnoticed, not just on or below the surface of the ground, but also in the storerooms of museums, in local historical collections, and among excavation finds that remain unprocessed. Likewise, there are pieces known to have existed earlier but which are now lost; the hope is that these 'latent' artefacts may yet come to light. Examples of the last mentioned are the Ottoman rings and seals loaned by Eger's Roman Catholic *gymnasium* – and those lent by Gábor Planzer, a teacher in Nagykanizsa, from his private collection – for a historical exhibition staged in 1886 (Majláth 1886, 397–399).<sup>4</sup> The fact that scarcely any seals are known from archaeological finds at smaller castles and palisaded strongholds once in Ottoman hands is remarkable, although one seal has come to light at Barcs, Törökkoppány, and Szekszárd-Újpalánk respectively. At the same time, we know that garrison officers of the rank of *aga* used their own seals,<sup>5</sup>

on petitions they submitted for example (Römer 1995, 103–116).

The author would like to express her thanks to László Költő for investigating the alloys used to make the seals featuring in the collection. This consists of thirteen seals in all, two of which are of silver. László Költő explained his methodology in a study earlier on in which he gave a detailed analysis of his findings (Költő 2002, 255–256).<sup>6</sup> Analysis of the chemical composition of a number of silver artefacts used in this study for purposes of comparison was performed using the x-ray fluorescence method. This work took place under the direction of Dr. Miklós Kis-Varga, at the Institute for Atomic Research (of the Hungarian Academy of Sciences) in Debrecen (Gerelyes 2017, 241).

Leaving aside the two re-inventoried seals whose provenance is currently unknown (inv. nos. 59.1.C and 59.2.C), it may be said that the Ottoman seal collection at the Hungarian National Museum came together in the second half of the 19th century and in the early years of the 20th – more specifically in the period from 1857 to 1903. According to the inventory-book entries, some acquisitions may be linked to a respective archaeological site – when their place of discovery was known or through reports by those



Table 1. Alloy compositions of the seals  
1. táblázat. A pecséték ötvözetösszetétele

Seals	Concentration (percentages by mass)									
	Fe	Ni	Cu	Zn	As	Ag	Sn	Sb	Pb	Bi
1. Inv. no. 1857.34.2.	1.68	0.00	77.95	7.33	0.27	0.11	6.89	1.72	4.05	0.00
2. Inv. no. 1860. 28.V.4.a.	0.14	0.00	80.38	11.21	0.30	0.03	3.23	0.75	3.97	0.00
3. Inv. no. 1860.28.V.4.b.	0.22	0.24	72.55	12.97	0.00	0.05	4.96	1.09	7.91	0.00
4. Inv. no. 1860.28.V.4.c.	0.11	0.00	77.52	17.31	0.00	0.07	0.87	0.70	3.41	0.00
5. Inv. no. 1873.141.19.	0.10	0.08	18.27	0.00	0.27	79.98	0.00	0.19	0.87	0.24
6. Inv. no.1877.119.191.1.	0.49	0.00	63.45	27.41	0.37	0.15	4.29	0.90	2.92	0.00
7. Inv. no. 1877.119.191.2.	0.004	0.29	93.01	2.14	0.25	0.80	1.74	0.63	1.10	0.00
8. Inv. no. 1890.16.	0.68	0.00	5.95	0.06	0.02	92.38	0.00	0.10	0.6	0.00
9. Inv. no. 1898.77.6.	0.20	0.00	63.70	17.24	0.03	0.06	3.25	0.81	14.71	0.00
10. Inv. no. 1903.38.48.	0.55	0.09	71.74	8.16	0.70	0.17	3.15	1.19	14.25	0.00
11. Inv. no. 1903.65.3.	0.38	0.00	84.37	7.84	0.17	0.11	1.90	0.88	4.35	0.00
12. Inv. no. 59.1.C.	0.15	0.00	82.59	11.71	0.18	0.05	1.44	0.93	2.96	0.00
13. Inv. no. 59.2.C.	0.00	0.48	77.15	0.00	0.44	0.15	0.77	3.11	17.91	0.00

selling them or handing them in – while others, those with no indication of origin, passed to the Museum from an earlier collection or collections. The Hungarian National Museum collection contains no seal from a properly documented archaeological excavation. With the exception of the above-mentioned two silver seals, all the artefacts in question are made from copper alloy (Table 1–2).

#### *Chemical composition and shape*

Owing to the limited number of the pieces in the collection, our sample is small. Despite this, it has been possible to establish clearly delimitable groups among the pieces, on the basis of the materials from which they are made. In some cases, it has also been possible to point out connections between the composition of a seal's material and the shape of that seal.

#### *Seals made of silver*

The relative proportions of silver and copper in the silver-and-copper alloy used in the making of Silver seal no. 5 (inv. no. 1873.141.19.) place that artefact

among the poorer-quality pieces. On the basis of its chemical composition, it echoes the Balkan silver bowls and Balkan silver jewellery groups which are low in silver and high in copper (Gerelyes 2017, 244, 247). On the other hand, the seal is finely shaped and its inscription is a prayer expressed in verse (Fig. 5).

The relative proportions of silver and copper in Silver seal no. 8 (inv. no 1890.16), from Simontornya (in Tolna County) and probably linkable to the Ottoman era (1545–1686) in the history of the castle there, are closer to those measured in a better-quality group of Ottoman-Balkan silver bowls at the Hungarian National Museum's collection that have been dated to the first half or middle of the 16th century. The last mentioned, however, fall short of the Museum's silver pen case (inv. no. 1926. 32.) stamped with the *tughra* of Sultan Mahmud I (r. 1730–1754) in terms of the quality of the alloy used (Gerelyes 2017, 247) (Table 3).<sup>7</sup> Similarly to that on Silver seal no. 5, the inscription on this seal is a prayer in verse (Fig. 8).

The two seals differ somewhat in shape, as regards their matrix surfaces primarily but also their grips. From the standpoint of the alloy used to make it, Silver seal no. 8 is of much better quality and be-



Fig. 4. Ottoman seal, brass (16th–17th century). 1: the matrix surface; 2: mirror-image of the matrix surface; 3: the seal upright (Hungarian National Museum, inv. no. 1860.28. V.4.c.; Photo: Judit Kardos)

4. kép. Oszmán pecsétnyomó, sárgaréz (16–17. század). 1: pecsételőlap; 2: a pecsételőlap tükrözött képe; 3: a pecsétnyomó teste (Magyar Nemzeti Múzeum, ltsz. 1860.28. V.4.c.; fotó: Kardos Judit)



Fig. 5. Ottoman seal, silver (16th–17th century). 1: the matrix surface; 2: mirror-image of the matrix surface; 3: the seal upright (Hungarian National Museum, inv. no. 1873.141.19.; Photo: Judit Kardos)

5. kép. Oszmán pecsétnyomó, ezüst (16–17. század). 1: pecsételőlap; 2: a pecsételőlap tükrözött képe; 3: a pecsétnyomó teste (Magyar Nemzeti Múzeum, ltsz. 1873.141.19.; fotó: Kardos Judit)

Table 2. Alloy compositions of those artefacts of lower silver content analysed for purposes of comparison  
2. táblázat. Összehasonlító anyagként felhasznált alacsonyabb ezüst tartalmú tárgyak ötvözetösszetétele

Artefact	Concentration (percentages by mass)							
	Fe	Cu	Ag	Au	Hg	Pb	Bi	As
Seal Inv. no. 1873.141.19.	0.10	18.27	79.98	–	–	0.87	0.24	0.27
Headdress decoration: chain Inv. no. 1864.111. (Ö/1. 94.5.)	0.49	8.98	88.5	1.39	–	0.51	–	0.09
Headdress decoration: pin with a spherical head Inv. no. 1864.111. (Ö/1. 94.5.)	0.59	13.9	84.1	0.26	–	0.51	–	0.55
Silver drinking bowl Inv. no. 1913.13.	0.75	30.2	64.3	0.98	1.52	0.25	–	1.9
Silver drinking bowl Inv. no. 1920.16.	0.55	9.85	88.3	0.3	–	0.73	–	0.16

longs to the group of seals characteristic of Ottoman Hungary. As near parallels, two examples, likewise from Tolna County, may be mentioned here (Gaál 2014, 382, Pl. 2, 13, Pl. 3, 14). The feature common to all three pieces is their three-part design: the body, broadening outwards in the shape of a bell, connects to an inverted drop-shaped grip (which can also be used to hang it up) by way of a small, slightly flattened sphere. The impress-giving matrix surface is mandorla-shaped. As will be shown later on, seals of this design constitute a separate group among the Museum's copper-alloy seals also.

#### *Seals made of copper alloy*

With regard to its chemical composition, Seal no. 6 (inv. no. 1877.119.191.1.) differs markedly from all the other seals in the collection: its zinc content (at 27.41 per cent) is the highest in the collection and its copper content (at 63.45 per cent) the lowest. At 4.29 per cent, the proportion of tin in the alloy used in its making is substantially higher than the average in our sample. The seal counts as brass. Its height is 5.5 cm, making it our tallest piece. As regards its shape, though, it in no way accords with those seals which can be dated to the time of the Ottoman presence in

Table 3. Alloy compositions of those artefacts of higher silver content analysed for purposes of comparison  
3. táblázat. Összehasonlító anyagként felhasznált magasabb ezüst tartalmú tárgyak ötvözetösszetétele

Artefact	Concentration (percentages by mass)							
	Fe	Cu	Ag	Au	Hg	Pb	Bi	As
Silver seal Inv. no. 1890.16.	0.68	5.95	92.38	–	–	0.6	0.00	0.02
Silver drinking bowl Inv. no. App. Jank.178.	0.37	5.19	93	0.16	0.36	0.04	0.51	–
Silver drinking bowl Inv. no. 55.447.C.	0.5	5.53	93.7	–	–	0.2	–	–
Silver drinking bowl Inv. no. 1891.56.6.	0.39	5.9	93.2	0.1	–	0.12	0.26	–
Silver drinking bowl Inv. no. 1887.36.1.	0.7	7.8	91.2	–	–	0.24	–	–
Silver drinking bowl Inv. no. 1887.36.2.	0.62	6.5	92.3	0.26	–	0.22	–	–
2/a. Writing set Inv. no. 1926.32. (inkwell)	0.39	4.21	94.2	0.22	–	0.93	–	–
2/b. Writing set Inv. no. 1926.32. (pen case)	0.28	4.88	93.5	0.24	–	1.08	–	–





Fig. 6. Ottoman seal, brass (18th–19th century). 1: the matrix surface; 2: mirror-image of the matrix surface; 3: the seal upright (Hungarian National Museum, inv. no. 1877.119.191.1.; Photo: Judit Kardos)

6. kép. Oszmán pecsétnyomó, sárgaréz (18–19. század). 1: pecsételőlap; 2: a pecsételőlap tükrözött képe; 3: a pecsétnyomó teste (Magyar Nemzeti Múzeum, ltsz. 1877.119.191.1.; fotó: Kardos Judit)



Fig. 7. Ottoman seal, copper alloy (16th–17th century). 1: the matrix surface; 2: mirror-image of the matrix surface; 3: the seal upright (Hungarian National Museum, inv. no. 1877.119.191.2.; Photo: Judit Kardos)

7. kép. Oszmán pecsétnyomó, rézötvényzet (16–17. század). 1: pecsételőlap; 2: a pecsételőlap tükrözött képe; 3: a pecsétnyomó teste (Magyar Nemzeti Múzeum, ltsz. 1877.119.191.2.; fotó: Kardos Judit)



Fig. 8. Ottoman seal, silver (16th–17th century). 1: the matrix surface; 2: mirror-image of the matrix surface; 3: the seal upright (Hungarian National Museum, inv. no. 1890.16.; Photo: Judit Kardos)

8. kép. Oszmán pecsétnyomó, ezüst (16–17. század). 1: pecsételőlap; 2: a pecsételőlap tükrözött képe; 3: a pecsétnyomó teste (Magyar Nemzeti Múzeum, ltsz. 1890.16.; fotó: Kardos Judit)



Fig. 9. Ottoman seal, brass (19th century). 1: the matrix surface; 2: mirror-image of the matrix surface; 3: the seal upright (Hungarian National Museum, inv. no. 1898.77.6.; Photo: Judit Kardos)

9. kép. Oszmán pecsétnyomó, sárgaréz (19. század). 1: pecsételőlap; 2: a pecsételőlap tükrözött képe; 3: a pecsétnyomó teste (Magyar Nemzeti Múzeum, ltsz. 1898.77.6.; fotó: Kardos Judit)



Fig. 10. Ottoman seal, copper alloy (18th–19th century). 1: the matrix surface; 2: mirror-image of the matrix surface; 3: the seal upright (Hungarian National Museum, inv. no. 1903.38.48.; Photo: Judit Kardos)  
 10. kép. Oszmán pecsétnyomó, rézötvözet (18–19. század). 1: pecsételőlap; 2: a pecsételőlap tükrözött képe; 3: a pecsétnyomó teste (Magyar Nemzeti Múzeum, ltsz. 1903.38.48.; fotó: Kardos Judit)

Hungary on the basis of parallels. Neither among any of the seals brought to light so far, nor among any of the 16th–17th-century seal impresses known to us is there anything akin to the impress of this seal: its matrix surface is a rectangle extending into an ogee arch at each of its shorter ends. The shaping of its grip exhibits similarities with the grips found on 19th-century Ottoman seals (Dursun 2019, 597). Its inscription, which contains the name of its owner merely, belongs in the category of the simplest (Fig. 6).

As regards both shape and chemical composition, the closest to the last-mentioned example is Seal no. 9 (1898.77.6.). Its copper content, at 63.7 per cent, is similarly low, while its zinc content, at 17.24 per cent, and its tin content, at 3.25 per cent, are high. Its lead content is 14.71 per cent. When the artefact was first published, the date featuring on it, 1283 (15 May 1866–4 May 1867), was found to be problematic by Géza Fehér, who queried its reading (Fehér 1959, 189).<sup>8</sup> The findings of chemical analysis and its shape, in which it differs conspicuously from the other seals in the collection, support its original, 19th-century, dating. Aside from the date, only the name of the seal's owner (İsmā'il) features in the inscription (Fig. 9).

Our sample contains another two seals with a very high lead content: Seal no. 10 (inv. no. 1903.38.38.),

in which it is 14.25 per cent, and Seal no. 13 (inv. no. 59.2.C.), in which it is 17.91 per cent. Interesting features of Seal no. 10 are the unique shape of its matrix surface and the very simple shaping of its body and grip. Its inscription contains only the name of the owner (Yūsuf) (Fig. 10).

Of all the pieces in the collection, Seal no. 13 is, perhaps, the one which deserves the most attention (Fig. 13).<sup>9</sup> The alloy from which it is made is remarkable not only for its above-mentioned high lead content, but also for its high nickel content (0.48 per cent), and for its complete lack of zinc. In both size and shape, this seal differs significantly from those known up until now in Hungarian collections. At the same time, it is clear that the quality of its execution and its inscription in verse place it above these pieces. Earlier on already, researchers (Hammer-Purgstall 1850, 24–25, Taf. I, 12–13, 52; Uzunçarşılı 1940, 507; Fehér 1959, 191) called attention to the symbol visible on the matrix surface: the Zülfikâr, the double-bladed sword of the Prophet Mohammed and later of Ali, the Prophet Mohammed's son-in-law, pointing out that this appeared on the seals of high-ranking persons only. On the basis of seal impresses that have come down to us, a number of beylerbeys of Buda may be mentioned as personages





Fig. 11. Ottoman seal, brass (16th–17th century). 1: the matrix surface; 2: mirror-image of the matrix surface; 3: the seal upright (Hungarian National Museum, inv. no. 1903.65.3.; Photo: Judit Kardos)

11. kép. Oszmán pecsétnyomó, sárgaréz (16–17. század). 1: pecsételőlap; 2: a pecsételőlap tükrözött képe; 3: a pecsétnyomó teste (Magyar Nemzeti Múzeum, ltsz. 1903.65.3.; fotó: Kardos Judit)



Fig. 12. Ottoman seal, copper alloy (16th–17th century). 1: the matrix surface; 2: mirror-image of the matrix surface; 3: the seal upright (Hungarian National Museum, inv. no. 59.1.C.; Photo: Judit Kardos)

12. kép. Oszmán pecsétnyomó, rézötözet (16–17. század). 1: pecsételőlap; 2: a pecsételőlap tükrözött képe; 3: a pecsétnyomó teste (Magyar Nemzeti Múzeum, ltsz. 59.1.C.; fotó: Kardos Judit)

whose seals featured the Zülfikâr motif: Murteza Pasha (on a letter of his from 1627), Hasan Pasha (on a document from 1630), and Mustafa Pasha (on a document from 1631). Another such example is Ibrahim, beylerbey of Eger (on a document from 1631) (Fekete 1932, 48, 55, 119, 80 respectively).

As noted above, among the copper-alloy seals as among the silver ones a distinctive group can be identified whose pieces feature a bell-like matrix (die) joined to a drop-like grip by a slightly flattened sphere placed either halfway up the artefact or in the bottom part of its top third. To this group belong Seals nos. 3 and 4, and also Seal no. 12, which is shaped somewhat differently. In this last case, the die narrows towards the grip much more rapidly, constituting a shape somewhere between a bell-shaped die and a flat one. As regards chemical composition, no great differences can be detected between these artefacts. Worthy of remark is the high lead content of Seal no. 3: it is 7.91 per cent.

This shape is known from other collections as well. It is exhibited by almost every example from Tolna County known so far (Gaál 2014, 386, Pl. 3, 14; Sudár, K. Németh 2020, 114, Fig. 2a–c, 115, Fig. 3a–c),<sup>10</sup> and likewise by both seals recovered from a site in Budapest's Csónak utca (Tóth 2003, 106, Fig. 3).

The die of Seal no. 4 is decorated with perpendicular fluting while the seal's middle, spherical, part is decorated with perpendicular grooves. In terms of its shape, the seal is exactly analogous to a piece in Gyula Zavaros's collection (Gaál 2014, 385, Pl. 2, 13).

According to the opinion of the present author, the seals in this group can safely be dated to the time of the Ottoman presence in Hungary. The two examples from Buda each suggest a 17th-century dating.<sup>11</sup> This is corroborated by a seal of exactly the same type recovered from a 17th-century Ottoman layer in Belgrade's Lower Castle (Popović, Bikić 2004, 156, Fig. 101, 428, 206).

#### *Types of inscriptions*

Based on their inscriptions, the seals in the collection may be divided into three groups.<sup>12</sup>

#### *Group 1*

To the first group belong those seals whose inscriptions feature the owner's name and, in some cases, a year. Examples are Seal no. 9 (inv. no. 1898.77.6., inscription: *İsmâ'il 1283*) and Seal no. 10 (inv. no. 1903.38.48., inscription: *Yūsuf*). Also assignable



Fig. 13. Ottoman seal, copper alloy (17th century). 1: the matrix surface; 2: mirror-image of the matrix surface; 3: the seal upright (Hungarian National Museum, inv. no. 59.2.C.; Photo: Judit Kardos)  
 13. kép. Oszmán pecsétnyomó, rézötözet (17. század).  
 1: pecsételő lap; 2: a pecsételőlap tükrözött képe;  
 3: a pecsétnyomó teste (Magyar Nemzeti Múzeum, ltsz. 59.2.C.; fotó: Kardos Judit)

to this group is Seal no. 7 (inv. no. 1877.119191.2., inscription: *el-ḥācc 'Alī*).<sup>13</sup> As pointed out above, all three of these artefacts differ from the other seals in the collection as regards shape and chemical composition.

### Group 2

One of the most commonly found inscriptions on the Museum's seals (and signet rings) is *bende-i Ḥudā* ('servant of God') followed by the name of the owner. Supplemented with an owner's name, this phrase can be read on Seal no. 1 and on Seal no. 3 in our collection: *bende-i Ḥudā Süleymān* (inv. no. 1857.34.2.) and *bende-i Ḥudā Ḥasan* (inv. no. 1860.V.4.b.) respectively.<sup>14</sup>

At the present time, three such artefacts recovered during archaeological excavations may be assigned to this category. One came to light during an excavation on the site of Szekszárd-Újpalánk castle in Tolna County; this stronghold was built, and used, by the Ottomans in the 17th century. The inscription on this piece is as follows: 'Alī [bin] Süleymān *bende-i Ḥudā* (Gaál 2014, 381, 384, Pl. 1, 8; Sudár, K. Németh 2020, 121). A seal with a similar inscription is known from the village of Fadd (Fadd-Jeges-hegy II), in Tolna County; the inscription reads: *bende-i Ḥudā Ḥızır* (Sudár, K. Németh 2020, 113–114, 121, Fig. 1a–c).

A comparable inscription may be seen on the third piece, brought to light at the palisaded castle of Barcs: *bende-i ... Ömer bin 'Abdallāh* (Kovács 2019, 225, Fig. 4).<sup>15</sup>

### Group 3

A) Some of the inscriptions are religious formulae or prayers in verse form. A relatively simple one somewhat widely used during the time of the Ottoman presence in Hungary was the rhyming couplet 'Trusting in the [adjective] King [i.e. in Allah], the poor [here the owner's name]', written in such a way that the adjective describing the King rhymed with the name of the owner (Römer 1995, 112). This formula was used by high-ranking and low-ranking personages alike. For example, it features on the seal of Derviş Bey, who was among the signatories of the Peace of Gyarmat (Hidasgyarmat) concluded in 1625; he served as Sanjakbey of Novigrad earlier on (Gévay 1837, VI). Additionally, it was used by many *agas* serving in Ottoman-held fortifications in Hungary (Römer 1995, 112–115). From Tolna County, two silver seals with this type of inscription are known, suggesting ownership by high-ranking or

better-off personages (Sudár, K. Németh 2020, 121).

With regard to the Hungarian National Museum's collection, the following pieces belong to this group:

Seal no. 2 (inv. no. 1860.28.V.4.a.), inscription: *el-vāsiq bi'l-meliki'l-qadīr el-faqīr Maḥmūd bin Ebū Bekir* ('Trusting in the all-powerful King, the poor Mahmud, son of Ebu Bekir');

Seal no. 4 (inv. no. 1860.28.V.4.c.), inscription: *el-vāsiq bi'l-meliki'l-ṣafā [?] el-faqīr Ḥüseyn bin Muṣtafā* ('Trusting in the joy-bringing [?] King, the poor Husein, son of Mustafa');

Seal no. 11 (inv. no. 1903.65.3.), inscription: *el-vāsiq bi'l-meliki'l-berr el-faqīr Bekir bin İskender* ('Trusting in the faithful King, the poor Bekir, son of Iskender');

The very same type of inscription is also found on pieces in other collections. From Tolna County, three such pieces are currently known (Sudár, K. Németh 2020, 121):

1. Pálfa-Itató dűlő ('Pálfa, Itató pathway'): *el-faqīr [Sárpilis] Mehmed bin Ḥüseyn el-vāsiq bi'l-meliki'l-mu'īn* ('Trusting in the helpful king [i.e. Allah], Mehmed, son of Husein');
2. Sárpilis-Sár ('Sárpilis, bank of the River Sár'): *el-faqīr Ḥüseyn [bin] 'Abdallāh el-vāsiq bi'l-meliki'llāh* ('Trusting in the divine King [i.e. Allah], the poor Husein [bin] Abdallah');
3. From a site unknown, from the private collection of Gyula Zavaros: *el-faqīr Maḥmūd bin Aḥmed el-vāsiq bi'l-meliki's-samed* ('Trusting in the King whom everyone needs but who needs no-one [i.e. Allah], the poor Mahmud bin Ahmed').

Two Ottoman seals brought to light in a cemetery (in Csónak utca), to the west of Buda Castle's Golden Bastion, likewise each feature an inscription of this kind (Tóth 2001, 106, Fig. 3).

As pointed out above, among the silver seals and the copper-alloy seals alike a particular shape is discernible, one characterised by a bell-shaped matrix (die), a slightly flattened sphere above this in the seal's middle part (or in the lower reaches of its top third part), and a drop-like grip. On the pieces belonging to this group, the above-mentioned formula typically appears, in most cases even – e.g. on Seal no. 4 in the Hungarian National Museum's collection, on Tolna County pieces from Gyula Zavaros's collection, on pieces collected from surfaces during fieldwalking, and on both seals recovered from the cemetery in Buda's Csónak utca. In these cases, type of shape and type of inscription show a connectedness. Ten seals can be assigned to this formal group; on six of these the inscription 'Trusting in the King...' features.



B) To this group may be assigned those seals on which a longer inscription can be read: a verse inscription or pious supplication in a number of lines, i.e. an inscription whose text is more complex than the simple phrase mentioned in Group 3/A. From among the pieces in the collection, only Seal no. 13 belongs to this group.

#### Evaluation

The investigations performed call attention to the connections that exist between shapes, types of inscriptions, and materials; these correlations can be useful when dating artefacts.

As regards inscriptions, by way of summary it may be said that in many cases not only on the seals but also on the signet rings, engravings are encountered that are often the same: inscriptions in verse form and prayers. As a general rule, use of longer, more complex verses – and, together with these, larger matrix surfaces and finer working – are characteristic of seals belonging to higher-ranking personages (Gévay 1837, V; Fekete 1932, 48, 55; Römer 1995, 116). With reference to the Hungarian National Museum's collection, this is true for Seal no. 13 (exceptional on account of its shape and chemical composition), and also for the two silver seals, namely Seal no. 5 and Seal no. 8.

As regards use of the 'Trusting in the King...' formula, on many of the seals the only differences are in the adjective describing the King (Allah) and in the owner's name. In the pieces investigated, a particular group may be pointed out: bell-like seals whose base is the matrix surface. These are, on account of parallels (most of which feature this formula), in all likelihood datable to the time of the Ottoman presence in Hungary.

In terms of their shape and their chemical composition, seals nos. 6, 9, and 10 differ significantly from the others in the collection, and can safely be dated to a time substantially later than the Ottoman era in Hungary. Their inscriptions are the simplest of those in our sample: they contain the owner's name merely.

It is worth remembering that – through the use of metal detectors and other means – more and more artefacts of Ottoman origin are passing into private hands, and are, in some cases, ending up in museum collections afterwards. The ages of these artefacts do not, however, necessarily coincide with the period of the Ottoman presence in Hungary. The above study wishes to point out that in the dating

of Ottoman seals, assistance can be offered by complex analyses of shape, chemical composition, and inscribed text.

#### Catalogue

Seal no. 1, inv. no. 1857.34.2. (Fig. 1, 1–3)

Ottoman seal, 16th–17th centuries.

Copper alloy

Height: 2.1 cm; length of the matrix surface: 1.5 cm

Place found: Borosjenő (today: Ineu, Arad County, Romania)

Its matrix surface is octagonal in shape. The matrix (die) takes the form of an eight-sided pyramid surmounted by a shank which thickens slightly in the middle and which ends in a pierced grip resembling an inverted teardrop. The alloy used for the seal contains high amounts of iron and antimony.

Inscription: *bende-i Hudā Süleymān* ('Süleymān, servant of God')

Seal no. 2, inv. no. 1860.28.V.4.a. (Fig. 2, 1–3)

Ottoman seal, 16th–17th centuries.

Brass

Height: 2.2 cm; dimensions of the matrix surface: 1.8 × 1.6 cm

Provenance: from a bequest by Ferenc Kiss

The seal can be seen as comprising three parts. The bell-shaped bottom part, the die, continues by way of a slightly flattened sphere to a stalk with flat surfaces at obtuse angles to one another. The grip is incomplete. The die's matrix surface is almost circular in shape.

Inscription: *el-vāšiq bi'l-meliki'l-qadīr el-faqīr Maḥmūd bin Ebū Bekir* ('Trusting in the all-powerful King, the poor Mahmud, son of Ebu Bekir')

Seal no. 3, inv. no. 1860.28.V.4.b. (Fig. 3, 1–3)

Ottoman seal, 16th–17th centuries.

Copper

Height: 2.4 cm; diameter of the matrix surface: 1.6 cm

Provenance: from a bequest by Ferenc Kiss

The seal can be seen as comprising three parts. Narrowing at its upper part, the bell-shaped die continues by way of a slightly flattened sphere to a grip in the shape of an inverted drop; the grip is pierced. The matrix surface is almost circular in shape.

Inscription: *bende-i Hudā Hasan* ('Hasan, servant of God')



Seal no. 4, inv. no. 1860.28.V.4.c. (Fig. 4, 1–3)  
Ottoman seal, 16th–17th centuries.

Brass

Height: 2.5 cm; length of the matrix surface: 1.8 cm

Provenance: from a bequest by Ferenc Kiss

The seal can be seen as comprising three parts. The bell-like lower part (the die) is decorated with perpendicular fluting. The middle part, a sphere, is decorated with perpendicular grooves. The upper part, in the shape of an inverted teardrop, consists of drawn metal (wire). The seal's matrix surface is mandorla-shaped.

Inscription: *el-vāsiq bi'l-meliki'l-şafā* [?] *el-faqīr Ḥüseyn bin Muştafā* ('Trusting in the joy-bringing [?] King, the poor Husein, son of Mustafa')<sup>16</sup>

Seal no. 5, inv. no. 1873.141.19. (Fig. 5, 1–3)

Ottoman seal, 16th–17th centuries.

Silver

Height: 2.4 cm; length of the matrix surface: 1.5 cm

Provenance: donated by László Verebélyi

The seal can be seen as comprising three main parts. The bell-shaped lower part (die) extending to the edges of the heptagonal matrix surface is ribbed and is topped by a coarsely-formed sphere shape. The outer edge of the pierced grip with two flat sides is decorated with two triangles and features a sphere-like 'protuberance' at the top.

Inscription: *ilāhī be-ḥaqq-i nabī-yi Velī be-raḥmet 'afv kūn günāh-i 'Alī* ('O my God, for the sake of the Holy Prophet mercifully pardon the sins of Ali')

Seal no. 6, inv. no. 1877.119.191.1. (Fig. 6, 1–3)

Ottoman seal, 18th–19th centuries.

Brass

Height: 5.5 cm; dimensions of the matrix surface:  
3 × 0.9 cm

Provenance: donated by Ágoston Szalay

The seal can be seen as comprising three main parts. The oblong-shaped matrix surface, whose two narrower ends are pointed as in an ogee arch, is surmounted by a straight shank which is separated from the drop-shaped, pierced grip by a flat, circular element.

Inscription: *Hāccī 'Alī el-Mağrebi*<sup>17</sup>

Seal no. 7, inv. no. 1877.119.191.2. (Fig. 7, 1–3)

Ottoman seal, 16th–17th centuries.

Copper alloy

Height: 2 cm; dimensions of the matrix surface:  
1.9 × 1.4 cm

Provenance: purchased from Ágoston Szalay's collection

The seal can be seen as comprising three parts. The flat, oval-shaped die is surmounted by a short shank with flat sides at obtuse angles to one another which ends in a pierced, almost circular grip.

Inscription: *El-ḥācc 'Alī* ('The Hajji Ali')

Seal no. 8, inv. no. 1890.16. (Fig. 8, 1–3)

Ottoman seal, 16th–17th centuries.

Silver

Height: 2,5 cm; length of the matrix surface: 1.7 cm

Provenance: donated by István Kiss, a physician in Simontornya

The seal can be seen as comprising three main parts.

The bell-shaped lower part is joined to an angular grip resembling an inverted drop by an element in the shape of a slightly flattened sphere. The matrix surface is mandorla-shaped. The inscribed matrix surface is divided in two by the name Mohammed, written twice and tracing the shape of the Zülfikâr.

Inscription: *bende-i Aḥmed muḥibb-i 'Alī muḥibb-i ḥānedānem be-ḥaqq Velī* ('The servant of Ahmed, the friend of Ali, I am truly a friend of the dynasty, Veli.')18

Seal no. 9, inv. no. 1898.77.6. (Fig. 9, 1–3)

Ottoman seal, 19th century.

Brass

Height: 2.1 cm; diameter of the matrix surface: 1.5 cm

Provenance: purchased from József Fejér

The almost-circular die is surmounted by a straight shank, the angular head of which connects to a flattened, likewise circular, grip.

At 14.71 per cent, the seal's lead content is substantially higher than the average for our group.

Inscription: *Īsmā'īl 1283* (i.e. 15 May 1866–4 May 1867)

Seal no. 10, inv. no. 1903.38.48. (Fig. 10, 1–3)

Ottoman seal, 18th–19th centuries.

Copper alloy

Height: 1.9 cm; length of the matrix surface: 1.7 cm

Provenance: purchased from László Pokorný

The seal can be seen as having three main parts. Out of the die rises a squat shank (which thickens somewhat at the top) surmounted by teardrop-like grip. The shape of the matrix surface is unique among the seal finds known to us. Its lower edge,

which is semi-circular, connects to an upper edge featuring semi-circular indentations.

The seal's lead content is high: 14.25 per cent

Inscription: *Yūsuf*

Seal no. 11, inv. no. 1903.65.3. (Fig. 11, 1–3)

Ottoman seal, 16th–17th centuries.

Brass

Height: 2 cm; length of the matrix surface: 1.8 cm

Place found: Székesfehérvár

The seal can be seen as possessing four parts. Its flat, mandorla-shaped, matrix surface, which is thicker at its edges, supports a shank consisting of three elements. Two bands, a thicker one and a thinner one, sandwich a slightly flattened, sphere-like form. The outer, upper edge of the grip, supplied with a circular aperture, is milled.

Inscription: *el-vāṣiq bi'l-meliki'l-berr el-faqīr Bekir bin İskender* ('Trusting in the faithful King, the poor Bekir, son of Iskender')

Seal no. 12, inv. no. 59.1.C. (Fig. 12, 1–3)

Ottoman seal, 16th–17th centuries.

Copper alloy

Height: 1.6 cm; length of the matrix surface: 1.6 cm

Origin: unknown

The seal can be seen as having three parts. The bell-like lower part connects to the now-incomplete grip by way of a middle element in the shape of a somewhat flattened sphere-like form. The matrix surface is mandorla-shaped.

Inscription: *Qurd bin İskender el-faqīr az'afu'l-ibādi'l-ilāh* [sic] ('Qurd, son of Iskender the poor, the weakest of God's servants')

Seal no. 13, inv. no. 59.2.C. (Fig. 13, 1–3)

Ottoman seal, 17th century.

Copper alloy

Height: 2.7 cm; length of the matrix surface: 4.7 cm

Origin: unknown

The circular matrix surface connects to a squat grip featuring three parts. The upper part of the grip surmounts an egg-shaped, faceted middle element supplied with a band. The top of the grip is flat.

Inscription: *Bilürem 'amelüm yoq saña läyiq ilāhi ḥāṣā / 'ināyet ile girsün bihište Qul Mehmed Paşa / sene 1076* ('None of my work is worthy of You. Help me, O God! / With mercy may the servant Mehmed Pasha enter Paradise! / 1076 [14 July 1665–3 July 1666]')

## Notes

- As regards Ottoman seals, the main references in the specialised literature to those found in Hungary have been summed on two occasions: by Géza Fehér first of all (Fehér 1959, 187–196) and by Balázs Sudár more recently (Sudár, K. Németh 2020, 116–117).
- Among others, Bárányné's (Mrs. Bárány's) study continues to be important because it publishes a significant number of artefacts destroyed towards the end of the Second World War or lost since that time. As to our topic, the Museum for the History of the Capital City (today the Budapest History Museum) used to own Ottoman seal rings recovered in Buda that are not to be found today (Bárányné 1944, 367, Pl. LXXXVI, 1–2, 4–7). The present author is grateful to Eszter Kovács, an archaeologist at the Budapest History Museum now deceased, for information on these rings.
- Ottoman seal rings similar to examples from Hungary, or identical to them, are known from the southern areas of historical Hungary and from Serbia (see e.g. Popović, Bikić 2004, 156, Fig. 101, 405, 406, 408; Radić 2009, 131).
- Probably partly on account of searches using metal detectors, Ottoman seals and seal rings from the 16th and 17th centuries have begun to crop up in increasing numbers in the private art trade also.
- Commanders of troops in certain branches of military service serving in garrisons held the rank of *aga* (Hegyi 2007, 360).
- The measurements were performed at the Museums Directorate in Kaposvár (Somogy County) where a NZ-854 X-Ray Emissions Analyser operated. The iodine-125 isotope was used for excitation, while a Si/Li detector was employed to measure the x-ray radiation excited (Költő 2002, 255).
- For purposes of comparison, it is worth remarking that in terms of their silver content they lag behind a silver bowl made in an Istanbul workshop that is marked with the *tughra* of Sultan Bayezid II (r. 1481–1512); this artefact is at the Smithsonian Institution's Freer Gallery of Art in Washington DC. The composition of the last mentioned has been given as Ag: 95.7 per cent and Cu: 3.7 per cent (Petsopoulos 1982, 44, 217; Kürkman 1996, 122).

- 8 Géza Fehér was unable to accept that the Hungarian National Museum would ever have purchased in 1898 an artefact made just 30 years earlier. Yet the practice of purchasing recent artefacts was not unusual there. By way of example, a copper-alloy weight marked with the *tughra* of Sultan Mahmud II (r. 1808–1839) was just sixty to seventy years old when it was purchased by the Museum.
- 9 Unfortunately, at present we have no information regarding its origin. When it was inventoried in 1959, it was given the number Sz.N. 363.
- 10 The matrices of the seals recovered during archaeological excavations at Medina-Sziget ('Medina Island') and Pálfa-Itató-dűlő ('Pálfa, Itató pathway') respectively differ in shape.
- 11 The archaeologist who excavated the cemetery dated it to the first half of the 17th century; the latest date on the coins brought to light with the seals, in Burial no. 37, was 1600 (Tóth 2001, 99).
- 12 When giving readings of the inscriptions on the Ottoman seals in the Hungarian National Museum's collection, the present author has been guided by suggestions made by Prof. Dr. Claudia Römer, of the University of Vienna. The author warmly thanks Professor Römer for her advice.
- 13 The category is the same: inscriptions featuring simply owner's names can be identified on artefacts assignable to the different types of signet rings also. To this category belong the following pieces from the HNM's collection of Ottoman signet rings: Cim.Sec. II. X.12. (inscription: *Mehmed* 87) and 1877.119.II.C.257.p.1. (inscription: *Osmān*); also belonging to it are three Budapest History Museum pieces that went missing during the Second World War with the inscriptions *Hasan bin 'Alī*, *Ramāzān 1078*, and *Süleymān bin Selīm* respectively (Bárányné 1944, 367, Pl. LXXXVI, 1–2, 4).
- 14 The same formula can be read on signet rings with the following inventory numbers: App.Jank 183. (*bende-i Ḥudā Muṣṭafā*), App.Jank. 185. (*bende-i Ḥudā İbrāhīm*), Ann.Jank. 187. (*bende-i Ḥudā...Aḥmed bin İbrāhīm*), 1909.145.21. (*bende-i Ḥudā Mehmed*), and 1910.127. (*bende-i Ḥudā Mehmed bin...*) (Fehér 1959, 190, Fig. 36); it can likewise be read on one of the lost Buda pieces: *bende-i Ḥüseyn bin Ḥasan* (Bárányné 1944, 367, Pl. LXXXVI, 5). Based on Ludvik Kalus's apportionment, the Ottoman signet rings belonging to the Hungarian National Museum may be assigned to the post-classical period, to groups 1.2.2. and 1.2.3. (Kalus 1986, 18–40). Interpretations of their inscriptions are based on those offered by Lajos Fekete (Bárányné 1944, 367–368) and Géza Fehér (Fehér 1959, 188); corrections have been made in some cases by the present author.
- 15 On the payroll for the Ottoman palisaded castle at Barcs for the year 1619, Kurd Ömer Aga appears as the *aga* of the *mustahfiz* (an elite infantry unit) and Ömer Aga as the *aga* of the mounted troops (Hegyi 2007, 1591).
- 16 Prof. Römer writes: 'It could be that originally the word meant was *el-ṣafī*, which would be written in the same way, but then it would not form a rhyme with the name.' The inscription on the matrix is the same as the one on the octagonal matrix of *Ḥüseyn bin Muṣṭafā*, an *aga* in Kaposvár (Römer 1995, 114, 22/b). Husein, an *aga* commanding cavalry, appears twice on the payrolls for the castle's defenders, in 1557–58 and in 1569–1570 (Hegyi 2007, II, 1280, 1283).
- 17 Those who had made the pilgrimage to Mecca placed the signifier 'Hajji' in front of their names; in this way, it then became a part of each such pilgrim's name.
- 18 Prof. Römer writes: 'Aḥmed is another name of the Prophet.'

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A MAGYAR NEMZETI MÚZEUM TÖRÖK PECSÉTNYOMÓI:  
A FORMA, A FELIRAT ÉS AZ ANYAGÖSSZETÉTEL ÖSSZEFÜGGÉSEI

Összefoglalás

A tanulmány a Magyar Nemzeti Múzeum török pecsétnyomóin végzett anyagvizsgálatok eredményét ismerteti. Célja, hogy az adatok közlésével és a munka során tett megfigyelésekkel segítse az újabban napvilágra került, illetve a jövőben előkerülő hasonló tárgyak korának és műhelyének meghatározását. A gyűjtemény darabjainak korlátozott száma miatt a mintavétel kicsiny volt, azonban így is sikerült határozottan elkülöníthető csoportokat kialakítani mind az anyagösszetétel, mind a formai kialakítás, mind pedig a feliratok alapján. A csoportosításhoz és a keltezéshez párhuzamként nemcsak az MNM anyagát, hanem – elsősorban a magyarországi, illetve szerbiai – régészeti leletanyagból, valamint más magyar gyűjteményekből származó darabokat is felhasználtam.

A 13. sz. – darab csoportba nem sorolható – azonban a gyűjtemény leginkább figyelemre méltó tárgya. (Eredetéről sajnos pillanatnyilag nincsen információnk, az 1959-ben beletárolt darab régi jelzete: Sz.N. 363.) (13. kép). Magas ólomtartalma mellett anyagösszetételének különlegessége, hogy nikkeltartalma is magas (0,48%), valamint, hogy anyagában cinket nem lehetett kimutatni. Mind mérete, mind formája jelentősen eltér a magyarországi gyűjteményekben eddig ismert példányokétól, ugyanakkor az is egyértelmű, hogy kivitelének minősége és feliratának verses szövege egyaránt e darabok fölé helyezi. Már a korábbi kutatás (Hammer-Purgstall 1850, 24–25, Taf. I, 12, 13, 52; Uzunçarşılı 1940, 507; Fehér 1959, 191) is felhívta a figyelmet arra, hogy a pecsétnyomón látható szimbólum, a Zülfikâr – Mohammed prófétának, majd őt követően vejének, Alinak kétpengéjű kardja – csak magas rangú személyek pecsétjén jelenik meg. A lenyomatok alapján példaként több budai beglerbég nevét megemlíthetjük, akiknek pecsétjén a Zülfikâr motívum megjelenik; így Murtezâ pasa (levél dátuma 1627), Haszan pasa (1630) Musztafa pasa (1631), de szerepel a sorban Ibrahim egri beglerbég is (1631) (Fekete 1932, 48, 55. 119, 80).

I. Az ezüsből, illetve a bronzötvtözetből készült pecsétnyomók között egyaránt kirajzolódik egy jellegzetes csoport, melynek darabjaira a tölcésesen kiszélesedő pecsételőtest, a tárgy közepén vagy felső harmadának alján elhelyezett lapított gömböcske,

illetve csepp formában kialakított fogó jellemző. Ebbe a csoportba tartozik a gyűjtemény 3. és 4. számú darabja, valamint csekély formai eltéréssel a 12. sz. pecsétnyomó. A bronzötvtözetből készült tárgyak anyagösszetételében nagy kiugrás nem figyelhető meg. Annyit érdemes megjegyeznünk, hogy a 3. sz. pecsétnyomó ólom komponense magas (7,91%).

Ez a forma más gyűjteményekből is ismert. Ide sorolható szinte mindegyik ma ismert Tolna megyei példány (Gaál 2014, 386, 3. t. 14. sz.; Sudár, K. Németh 2020, 144, 2a–c, 115, 3a–c; a Medina-Sziget, illetve Pálfa-Itató-dűlő lelőhelyű darabok pecsételőfejének formája eltérést mutat), valamint a Budapest-Csónak utca lelőhely mindkét pecsétje (Tóth 2001, 106, 3. kép).

A 4. sz. pecsétlő, melynek középső gömbjét függőleges rovátkolás, pecsételőtestét pedig függőleges kannelúrák díszítik, formailag pontosan megegyezik Zavaros Gyula Tolna megyei gyűjteményének egyik darabjával (Gaál 2014, 385. 2. t. 13. sz.).

Véleményem szerint e csoport darabjait biztonnával keltezhetjük a török hódoltság korára. 17. századi keltezésre utal a két budai darab (az ásató régész a temetőt a 17. század első felére keltezi, a 37. sírban a pecsétlőkkel együtt előkerült éremlelet záró évszáma 1600: Tóth 2001, 99). Ezt erősíti meg, hogy egy pontosan ilyen példány ismert a belgrádi alsó vár 17. századi török rétegéből (Popović, Bikić 2004, 156, 101. kép, 428, 206).

A pecsétnyomók feliratainak egy része versben megfogalmazott vallásos formula vagy fohász. Ennek egyik viszonylag egyszerű, a hódoltság időszakában meglehetősen elterjedt változata a „...[jelző] *Királyban (Allahban) bizakodó szegény* ...[a tulajdonos neve]” rimpár, melyet úgy alakítottak, hogy a királyra vonatkozó jelző rímeljen a tulajdonos nevével (Römer 1995, 112). Ezt a formulát magasabb és alacsonyabb rangban álló személyek egyaránt használták.

A fent elemzett formai csoportba jelen ismereteink szerint tíz darabot tudunk sorolni, ebből hat pecsétlőn a „*Királyban bizakodó...*” felirat szerepel.

II. A 6., 9. és 10. számú darab formailag és anyagösszetételét tekintve is jelentősen eltér a gyűjtemény többi példányától, és biztosan keltezhető a magyar-

országi török hódoltság koránál lényegesen későbbi időszakra. Feliratuk a legegyszerűbb; csak a tulajdonos nevét tartalmazó formula. A 6. sz. pecsétnyomó anyagösszetételét tekintve jelentősen különbözik a gyűjtemény összes többi darabjától. Cinktartalma a legmagasabb: 27,41%, réztartalma pedig a legalacsonyabb: 63,45%. Összetételében az ón aránya (4,29%) az átlagosnál lényegesen magasabb. Magasságát tekintve (5,5 cm) a legnagyobb darabunk, formáját illetően pedig semmiképpen nem illeszthető be azon pecsétnyomók körébe, amelyek a párhuzamok alapján a magyarországi török hódoltság korára keltezhetőek. Sem az eddig előkerült pecsétnyomók, sem pedig az ismert, 16–17. századi pecsétlenyomatok körében nem ismerünk e példány lenyomatával megegyező: téglalap alakú, két keskenyebb végén csúcsívesen záródó formát. Fogójának kialakítása a 19. századi oszmán pecsétlőkkel mutat hasonlóságot (Dursun 2019, 597) (6. kép).

A fenti tárgyhoz mind formáját, mind anyagösszetételét tekintve a 9. sz. pecsétnyomó áll a legközelebb. Réztartalma ennek is hasonlóan alacsony (63,70%), cink- (17,24%) és óntartalma (3,25%) viszont lényegesen magasabb az átlagosnál. Jelentős különbség viszont ez előbbihez viszonyítva, hogy ólom tartalma igen magas (14,71,%). A tárgy első közlésekor a rajta szereplő évszámot (1283: 1866. május 15. –1867. május 4.) Fehér Géza problematikusnak találta (Fehér 1959, 189), olvasatát megkérdőjelezte. Fehér Géza nem tudta elfogadni, hogy 1898-ban egy kb. 30 évvel korábban készült, recens tárgyat vásárolt volna meg a múzeum. Ez azonban nem volt szokatlan. Példaként megemlíthetjük a II. Mahmud (1808–1839) beütött tugarjával jelzett bronzsúlyt (Itsz. 1903.57.2.), amely a vásárlás idején 60–70 éves lehetett. A darab anyagvizsgálatának eredménye és a többi pecsétlőtől való feltűnő formai

eltérés azonban a késői, 19. századi kelteztést erősíti meg. Az évszámon kívül a feliraton csak a tulajdonos neve (Ismail) szerepel (9. kép).

A 10. sz. pecsétnyomó esetében is magas ólomtartalmat figyelhettünk meg (14,25%). A darab érdekessége pecsételőlapijának egyedülálló formája, testének és fogójának nagyon egyszerű kialakítása (10. kép).

III. A pecsétnyomókon is megjelenik, azonban az oszmán pecsétgyűrűkre sokkal inkább jellemző felirat a *bende-i Hudā...*: „Isten szolgája ... [a tulajdonos személyneve]” formula. Gyűjteményünk példányai közül az 1. és a 3. számú darabokon olvasható ez a kifejezés a tulajdonos nevével kiegészítve; *bende-i Hudā Süleymān* (1857.34.2.), *bende-i Hudā Hüseyin* (1860.V.4.b.). Ugyanez a formula olvasható az App. Jank 183. (*bende-i Hudā Muştafā*), az App. Jank. 185. (*bende-i Hudā İbrāhīm*), Ann. Jank. 187. (*bende-i Hudā...Ahmed bin İbrāhīm*), 1909.145.21. (*bende-i Hudā Mehmed*), 1910.127. (*bende-i Hudā Mehmed bin...*) leltári számú pecsétgyűrűkön (Fehér 1959 190, Fig. 36), valamint az elveszett budai darabok egyikén: *bende-i Hüseyin bin Hasan* (Bárányné 1944, 367, LXXXVI, 5). A két pecsételő anyagösszetételét és formáját tekintve is különböző. Ebben a két esetben a formula időtől és tértől független általános elterjedtségére gondolhatunk.

Végezetül óvatosságra kell hogy intsen bennünket az a tény, hogy bár a fémdetektoros kutatások révén, illetve egyéb más módokon is egyre több oszmán eredetű tárgy kerül magántulajdonba, majd később esetleg múzeumi gyűjteménybe, ezek kora azonban – mint azt a MNM korábban egységesnek gondolt gyűjteménye esetében a fentiekben bizonyítani tudtuk – nem feltétlenül azonos a magyarországi török hódoltság idejével.

