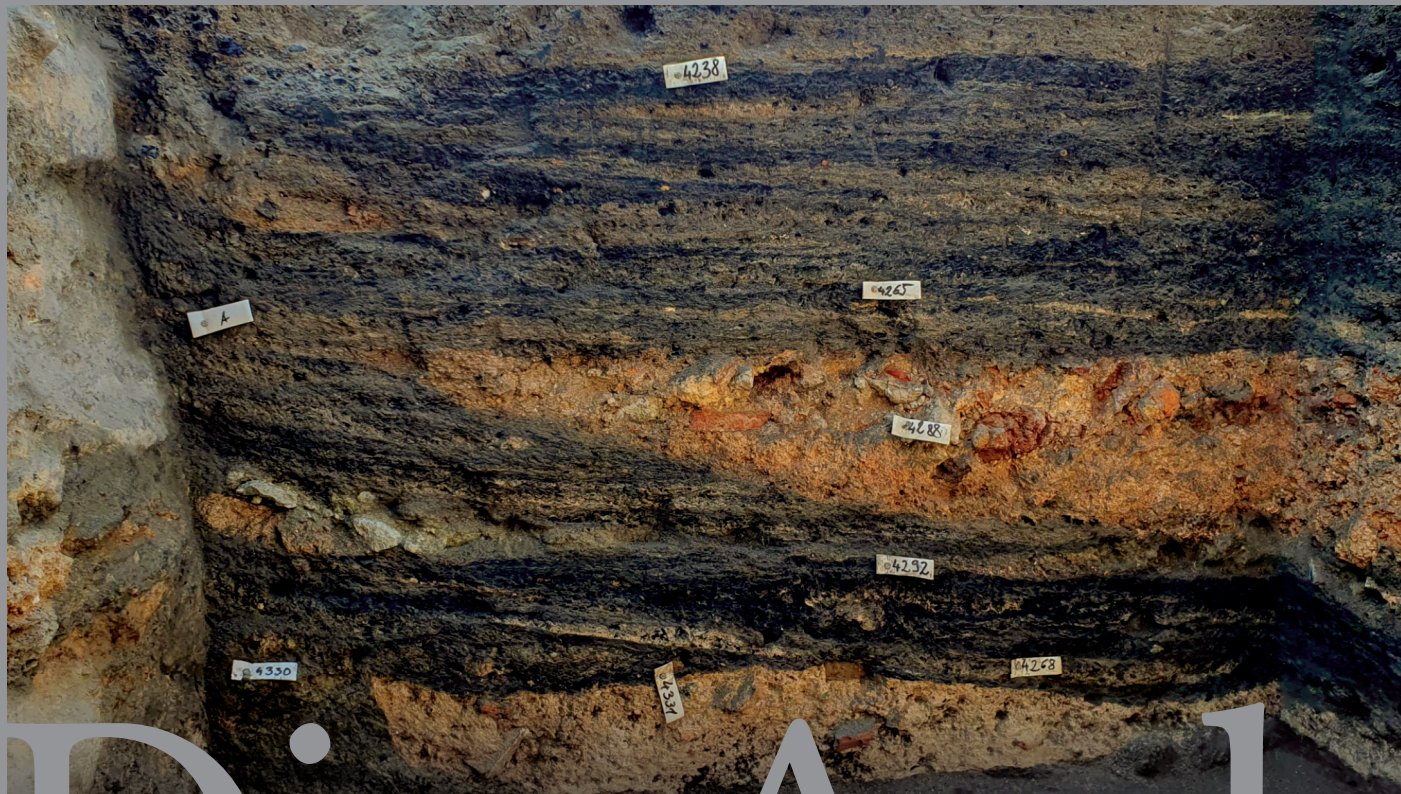


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ex Instituto Archaeologico

Universitatis de Rolando Eötvös nominatae



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CONTENTS

ARTICLES

Marie SEGUEDY – Stéphane PÉAN – Marylène PATOU-MATHIS – Zsolt MESTER	5
Des vides et des pleins : Les occupations humaines dans le Bassin des Carpates entre 130 et 10 ka BP	
Attila PÉNTEK – Krisztián ZANDLER – Szilvia GUBA – Nicklas LARSSON	41
Upper Palaeolithic site complex at Csécse-Szőlős-domb (Cserhátalja, Nógrád County, Northern Hungary): Preliminary results	
Gizella Kovács	71
Interpretation possibilities of Middle Neolithic cave usage patterns: The Neolithic finds from the 2019 excavation in the Baradla Cave in Aggtelek	
Filip ONDRKÁL	149
Hrádok nad Váhom: Bronzeworking equipment from an Urnfield Culture site in the Carpathians	
János Gábor TARBAY	167
Kartal: A fragmented hoard under a broken pot	
Gábor ILON	223
New specimen of an Early Iron Age brooch type from Western Transdanubia: A stray find from Simaság	
Attila MRENKA	231
An Early Iron Age cup with unique decoration from Fertőrákos (NW Hungary)	
Umut M. DOĞAN	243
In Turkish Thrace: The Early Iron Age cultural environment of the Tundza and Maritsa valleys	
Linda DOBOSI – Tamás SZABADVÁRY	267
Roman stamped bricks from the Tussla-collection in the Hungarian National Museum	
Ingrid PETCU-LEVEI – Radu PETCU	333
An ivory statuette depicting the god Thanatos discovered near Tomis (Moesia Inferior)	
Bence GULYÁS – Péter SOMOGYI – Gergely SZENTHE	343
New data to the Avar Period chronology of the Körös–Tisza–Maros Interfluve: Some radiocarbon dates from the cemeteries of Szarvas-Grexa-téglagyár and Székkutas-Kápolnadűlő	

Box-shaped cloak clasps in the Late Avar Period

Some remarks on the absolute chronology of heraldic belt fittings

Connection and disconnection: Reconstructing routes through and beyond
the Rania Plain in Iraqi Kurdistan

FIELD REPORTS

Preliminary report on the excavations of the legionary bath of Brigetio in 2024

Pilisszentiván-Hárs-erdő 2024: Newly excavated remains of an Early Roman village
in the northwestern hinterland of Aquincum

THESIS REVIEW ARTICLES

The concept of the ancient homeland of the Fenno-Ugric-speaking peoples
in light of complex research

Roman stamped bricks from the Tussla-collection in the Hungarian National Museum

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Abstract: The so-called Tussla-collection of the Hungarian National Museum is a substantial collection of Roman artefacts collected by Mr. and Mrs. Tivadar Tussla during the early 1880s in the northern half of the legionary fortress in Brigetio. The original material consisted of about 2.500 objects that were partly donated to the Museum during the 1880s or formed the private collection of Mrs. Tussla and entered the Museum after her death in 1961. Both the Tussla couple and the collection had a troubled and eventful fate which led to the loss of some of the material. In this paper, the extant pieces of the ceramic building material are discussed. From the original almost 400 objects 100 could be found in the brick collection of the Hungarian National Museum, most of them stamped. The material is very diverse, both in terms of brick types and stamp types. The different kinds of ceramic building material catalogued include two antefixes, five terracotta water pipes, four *tubuli*, 21 round *suspensura* bricks, 32 rectangular *lateres*, 30 *tegulae* and 5 *imbrices*. Almost half of the objects are whole, and their original size could be measured, showing a larger than expected variety. Stamps occurred on *tegulae*, *imbrices*, *lateres*, round bricks and even on a *tubulus*. About two thirds of the brick stamps (59 out of 86) were those of the *legio I Adiutrix*, the garrison of Brigetio for three centuries. The other 27 stamps belonged to 10 other manufacturers: the *legio XI Claudia* (4), *legio XXX Ulpia Victrix* (2), *cohors VII Breucorum* (6), *classis Flavia Histrica* (1), *Quadriburgium* (3), *Frigeridus dux* (1), *Terentius dux* (1), *Lupicinus tribunus* (6), *Terentianus tribunus* (1) and *Corta Vicen* (2). The Tussla-collection enhances greatly our knowledge about the legionary fortress of Brigetio and forms a solid supplement to the ongoing excavations.

Keywords: Roman ceramic building material, Roman brick and tile, Roman brick stamps, Brigetio

Introduction

The artefacts of the so-called Tussla-collection in the Hungarian National Museum (HNM) were collected by Mr. and Mrs. Tussla between 1880–1885 in Komárom-Szőny on their own estate which contained the northern half of the legionary fortress of Brigetio. The artefacts were partly donated by them as a gift to the Museum in the 1880s and partly got into the Museum from the private collection of Mrs. Tussla after her death. The former part of the collection consisted of 1658 artefacts that were catalogued under the inventory number RT-RO 65/1885, and some more under inventory

numbers RT-RO 204/1880, RT-RO 100/1885 and RT-RO 101/1885, while 846 artefacts belonging to the private collection of the couple were listed and photographed by P. Gerecze in the early 1910s.¹ Although some of the artefacts are by now lost, the Tussla-collection of the HNM is still substantial and contributes enormously to our knowledge of Roman Brigetio.

The Tussla couple

We only have a handful of reliable data about the life of Mr. and Mrs. Tussla, but what we know sheds light on an adventurous life, worthy of a detective novel.

Tivadar Tussla was the first lieutenant of the 8th Regiment of Hussars in the Austro-Hungarian Army² and a wealthy landowner, who is now mostly known for his archaeological and collecting activity in Komárom, for a short period of time between 1880 and 1885.³ He was born on February 27, 1854, in Paskau, Austria–Hungary (today Paskov, Czech Republic), son of Tivadar Feige and Janka Tuschla (his original full name was Tivadar János Alajos Feige). After the death of his father,⁴ he changed his surname from Feige to Tussla in 1881.⁵ The family bought great parcels in Puszta-Füzítő (today: Almás-füzítő) in the 1860s⁶ which were mostly used as meadows. Part of their estate lay over the ruins of the northern half of the Brigetio legionary *castra* in Komárom-Őszőny (Fig. 1).⁷ His wife, Mrs. Tivadar Tussla, née Ilona Ida Lakatos Csikszentsimonyi was born around 1855. Her father was Lajos Lakatos Csikszentsimonyi (1820–1878) and her mother Amália Lukács (c. 1837–1915) who were landowners in Sződemeter (today: Săuca, Romania).⁸ We do not know when the couple was married and later divorced, but in the first half of the 1880s they seem to have lived together in Komárom-Őszőny.

Tivadar Tussla had an obvious interest in antiquities, that were abundant in the territory of Roman Brigetio. As everybody in the neighbourhood, he looted the site during the winter months and gathered every artefact he could.⁹ The section of the Vienna–Budapest railway line, which went

1 PAULOVICS 1942, 216–217.

2 He was appointed first lieutenant of the 8th regiment in 1882 (*Budapesti Közlöny*, November 12, 1882, alias Tódor Tussla). He was moved to the 6th Regiment of Hussars in 1883 (*Budapesti Közlöny*, December 25, 1883) and eventually left the Army in February 1886 (*Honvédségi Közlöny*, February 17, 1886).

3 In recent years, Péter Prohászka made a notable attempt to sketch the activity of 19th century ‘amateur’ archaeologists working in the territory of Komárom.

4 He committed suicide (hanged himself) in the baths of Gräfenberg in 1880 (*Pesti Hírlap*, March 10, 1901). Tivadar Feige was the director of a sugar factory in Kunzendorf (today: Kunčina Ves, Czech Republic) where he had a technological innovation patented in 1870 (*Budapesti Közlöny*, July 8, 1870).

5 Decree of the Ministry of Home Affairs 1881, no. 4306 (*Budapesti Közlöny*, January 30, 1881; *Ellenőr*, January 31, 1881; *Pesti Hírlap*, January 31, 1881; *Magyar Jogász*, February 2, 1881). The name Tussla appears in several variants: for example, Tusla, Tuschla, Tuzsla, Tuzla.

6 BOROVSKY 1907, 114.

7 The southern half of the *castra* was owned by Vilmos Löwinger at the time. See BOROVSKY 1907, 113 and the map in BERKOVICS-BOROTA 1886, 395.

8 Until 1901 Ilona Ida Lakatos still owned the house in Sződemeter where Ferenc Kölcsey Hungarian poet was born on August 8, 1790 (SERDÜLT BENKE 2024, 37). She sold the estate in 1901 to Sándor Szőke engineer who accused her of several criminal offences. Apparently, she was growing tobacco on her 1500-acre estate in Sződemeter and was fined several times for tobacco smuggling (*Pesti Hírlap*, March 10, 1901). Apart from this she was accused of meaning to poison his husband and cheating him out of his fortune, and she also played a part in a cheque fraud which featured in the press recurrently between 1887–1893 (the so-called Vásonkeőy–Brunkaláné lawsuit, *Budapesti Hírlap*, July 6, 1893).

9 PAULOVICS 1942, 217. These lootings were known as “régálás” in Komárom and included the large-scale removal of stone material from the Roman walls for ongoing construction works. Also described here: BERKOVICS-BOROTA 1886, 394.

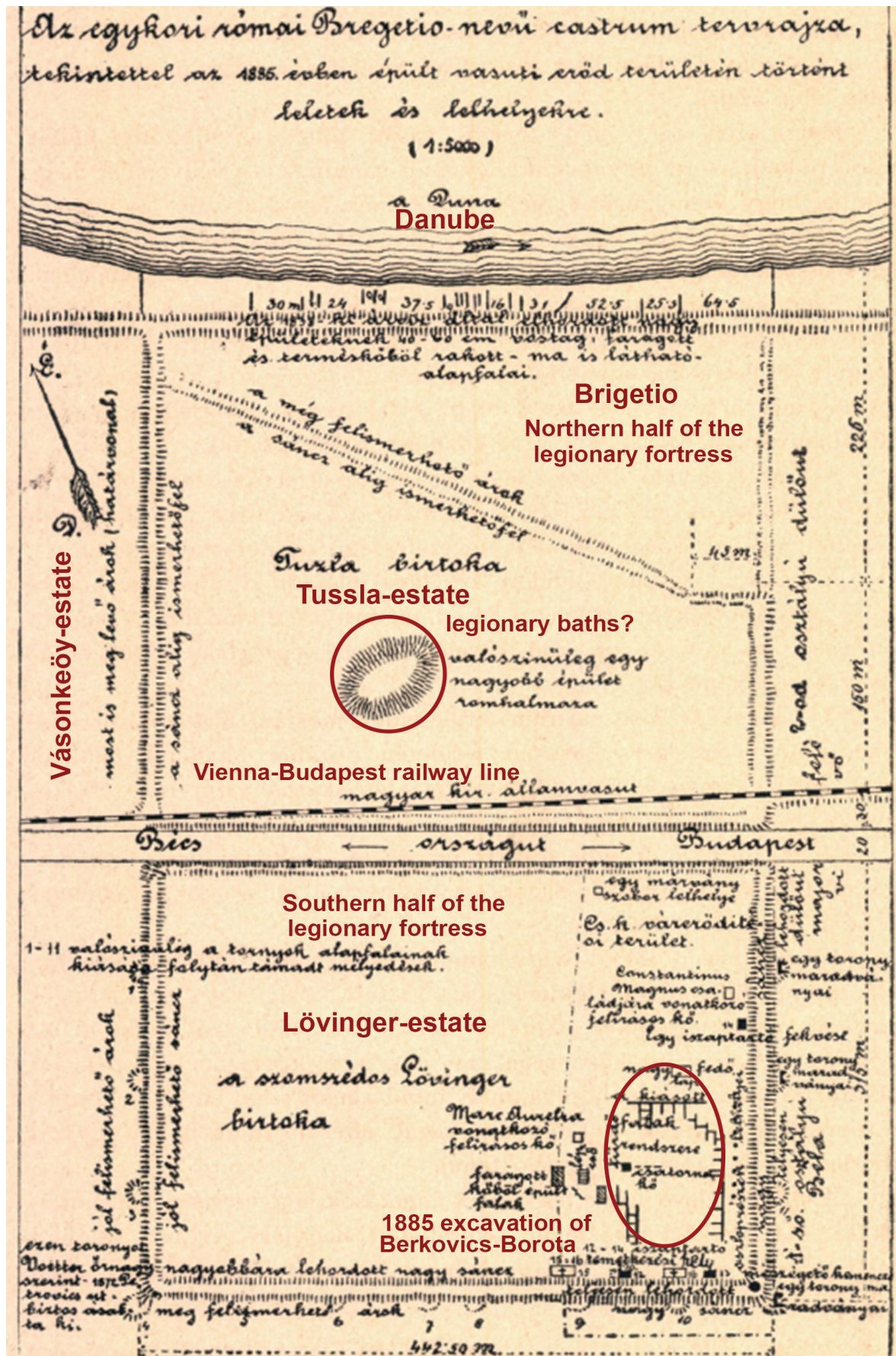


Fig. 1. The Tussla-estate on the drawing of M. Berkovics-Borota (BERKOVICS-BOROTA 1886, 395).

through the Tussla estate, was being built in the first half of the 1880s, and T. Tussla led “rewarding and extensive” excavations along this railway line.¹⁰

The first archaeological record concerning Tussla’s “research”, is an excavation carried out by himself in 1880 near the shore of the Danube. The precise location within the site is now unknown, but it concerned an area of about one acre. He found the northern wall of the fortress, and south of the wall he even used an earth driller to be able to reach deeper. That was when he found a special anthropological find, a skull with artificial cranial deformation. The rare object was already published next year by József Lenhossék (1818–1888), one of the 19th-century pioneers of archaeological anthropology in Hungary.¹¹ T. Tussla exercised exceptional care in collecting different types of finds, and donated some of them to the Hungarian National Museum Cabinet of Coins and Antiquities (HNM-CCA) in December 1880 (now: HNM Public Collection Centre, National Archaeological Institute, Department of Archaeology), including the aforementioned skull. It seems, that the following years were also representing an unbroken enthusiasm in collecting antiquities and supporting HNM interests in the territory.¹² József Hampel visited the Tussla estate several times, for example in late 1880.¹³ In the autumn of 1882, he travelled to Almásfüzitő, to study a limestone *miliarium*, which had been saved by T. Tussla from other collectors.¹⁴ In March 1883, the Tusslas reported the unsuccessful acquisition of an inscribed stone monument, which was bought by a certain ‘captain’, probably the famous collector and numismatist, Otto Voetter (1841–1926) who was an officer of the 19th Regiment of Infantry and an influential rival of HNM pursuits in Komárom from the 1870s onward.¹⁵ T. Tussla mentioned new Roman finds, including a copper-alloy weight with silver inlay shaping ‘X R’ measure signs and attached red wax imprints of two *solidi* of Theodosius II, also originated from their parcel.¹⁶ It is worth noting that important coin finds were abundant in this period, the famous coin hoard of golden *multipla*, *aurei* and *denarii* dated to the Tetrarchy came to light in 1885.¹⁷ Due to the extended construction of the Vienna–Budapest railway line in Komárom, László Réthy made a short excavation in July 1883, during which he was a guest of the Tusslas. Among the finds, a unique item had been revealed: a cast copper-alloy figural apotropaic *tintinnabulum* depicting a ‘grotesque black slave’.¹⁸

It remains a question if the Tusslas built any connections with other collectors and amateur excavators in Komárom. Milos Berkovics-Borota (1838–1893), also an officer of the Austro-Hungarian Army and engineer of Croatian or Serbian origin, carried out large-scale research in the south-

10 [BERKOVICS-BOROTA 1886](#), 394.

11 [LENHOSSÉK 1882](#), 107–118, Fig. 5. About the excavation of T. Tussla: [LENHOSSÉK 1882](#), 136.

12 T. Tussla entered the National Society of Archaeology and Anthropology in 1881 and paid dues up to 1883/1884, later, due to the absent of payments, his membership was deleted: [SZENDREI 1889](#), 75. He donated several objects to the Museum in January 1881 (*Budapesti Közlöny*, January 12, 1881).

13 [HAMPEL 1881](#), 166.

14 HNM-Central Database Archive / Cabinet of Coins and Antiquities 195/1883.

15 Károly Kosztka (1814–1887) engineer and military inventor had been appointed as an official HNM commissioner in Komárom by Flóris Rómer in summer 1874 until the spring of 1877. In his reports, K. Kosztka illustrates the personality of O. Voetter, who was almost the sole scholar collecting Roman antiquities and coins in the mid-1870s. HNM director Ferenc Pulszky also tried to find a way in ministry circles to deal with the Austrian officer, however, these acts were politically risky few years after the Austro-Hungarian Compromise of 1867. HNM-Central Database Archive / Cabinet of Coins and Antiquities 232/1874. See further: [FEHÉR 2011](#), 64–65; [PROHÁSZKA 2017](#), 106–109; [PROHÁSZKA 2024](#), 118–122.

16 An estimated price of 35 Austro-Hungarian forints suggested by L. Réthy in letter: HNM-Central Database Archive / Cabinet of Coins and Antiquities 111/1883. (March 27, 1883). The copper-alloy weight is probably identical with the piece under inv. no. RT-RO 63.22.239. See also: [FEHÉR 2017](#), 173, 20.

17 [HAMPEL 1891](#), 350–352.

18 Inv. nr. HNM RT-RO 79/1883.1 (August 6, 1883).

eastern corner of the legionary *castra* in 1885 when a small fortification connected to the Vienna–Budapest railway line was built. The material entered the HNM via purchase the next year, and M. Berkovics-Borota published his archaeological observations in Hungarian and German as well.¹⁹ Recently, Péter Prohászka discovered the original documents and drawings of Berkovics-Borota in the National Archives of Austria, War Archives (Österreichisches Staatsarchiv, Kriegsarchiv, Vienna).²⁰ Berkovics-Borota made a careful list of finds, in which he also included other pieces of information, e.g. the identification of coins and estimated prices. It seems that he was not interested deeper in numismatics, so he asked for help. Mostly, he relied on O. Voetter and János Cseley (1828–1905), the head physician of Komárom, a collector, and supporter of the local museum, who was later strongly associated with the Brigetio bone forgery scandal.²¹ Unfortunately, the name of T. Tussla is entirely absent from the text, thus we are now unable to sketch any exact connections, although, M. Berkovics-Borota in his publication, precisely located the lands owned by the Tusslas in 1885.²²

The career of T. Tussla in Komárom-Ószőny ended in a fast and tragic decline. The couple had considerable debts and they fell into default on a loan because of which the creditor foreclosed the estate in Brigetio in 1884. The property was put up for auction first in February 1885²³ and again in December 1886.²⁴ It was sold to Mihály Kálmán then went into the possession of Gyula Világhy in 1895.²⁵ It was probably for this reason that Mrs. Tivadar Tussla made an exceptionally huge donation of Roman finds to the Hungarian National Museum in 1885.²⁶ Among epigraphical monuments, carved stone and small finds, an immense number of Roman tiles (343 pieces, appr. 90% were stamped) entered the museum. According to the HNM-CCA inventory book (Antiquities Diary), the finds had been originated from the ‘meadows of Mrs. Tussla’. It is a reasonable assumption, that these finds were the result of a bigger collecting period until 1885 and were donated as a whole, probably because they had to move out of their house in Komárom-Ószőny.

By August 1886 T. Tussla moved to Budapest and worked first as a real estate agent²⁷ and later as an insurance agent. As far as we know, Mr. and Mrs. Tussla did not have children and must have divorced during the 1890s at the latest.²⁸ On September 20, 1900 T. Tussla married Antónia Vojnits Zelicsi (born in 1873) in Budapest²⁹ and had a son on October 5, 1905, named Tivadar Miksa László Tussla.³⁰

19 Inv. nr. HNM RT-RO 152/1885.1–537 (BERKOVICS-BOROTA 1886; BERKOVICS-BOROTA 1887).

20 PROHÁSZKA 2024.

21 In his letter of 1896, János Cseley had shown a virtuosic association with a forged bone carving inscribed ‘O SIS / T CON’ indicating a close connection with late Roman mintmarks of Siscia and Constantino-polis: HNM-Central Database Archive / Cabinet of Coins and Antiquities 13/1896. See also: BORHY 1996, 311–321; BORHY 2001, 58–66.

22 BERKOVICS-BOROTA 1886, 395. See also: BERKOVICS-BOROTA 1885, 177–205.

23 *Budapesti Közlöny*, January 28, 1885.

24 *Budapesti Közlöny*, November 19, 1886.

25 BOROVSKY 1907, 114.

26 Under inventory numbers RT-RO 65/1885.1–338 (June 28, 1885), RT-RO 100/1885.1–34 (September 4, 1885) and RT-RO 101/1885.1–4 (September 4, 1885). They were also mentioned in the papers: *Budapesti Közlöny*, July 9, 1885; *Budapesti Közlöny*, September 10, 1885.

27 *Budapesti Hírlap*, August 22, 1886. There are several of his advertisements in the papers, for example: *Pesti Hírlap*, March 14, 1886; *Budapest Hírlap*, September 3, 1899; *Budapest Hírlap*, September 24, 1899; *Budapesti Hírlap*, October 4, 1900; *Budapest Hírlap*, March 16, 1901, etc.

28 In 1890, they are listed in the same address: Budapest-V, Harminczad utca 6 (*Budapesti Czim- és Lakjegyzék*).

29 *Magyar Nemzet*, September 2, 1900; *Pest Napló*, September 2, 1900; Certificate of marriage: <https://www.familysearch.org/ark:/61903/3:1:S3HT-D43S-DFZ?i=84>

30 Birth certificate: <https://www.familysearch.org/ark:/61903/3:1:S3HT-D4XS-5P3?i=127&cc=1452460>

T. Tussla eventually committed suicide in the railway tavern of Losonc (today: Lučenec, Slovakia) on June 24, 1913.³¹

The former Mrs. Tussla, alias Ida Ilona Lakatos led a more troublesome life. According to a judiciary report in 1901, during the divorce she wanted illegal gain on his husband's properties and revenues and attempted to murder him by poisoning. She was sued for this and other things by Sándor Szőke engineer who bought her family's estate in Sződemeter in 1901. At this purchase, the former Mrs. Tussla misled him and caused financial damage, which led Szőke to take legal action. According to him, she was growing tobacco on her 1500-acre estate in Sződemeter and was fined several times for tobacco smuggling because of which the estate was foreclosed, a fact she concealed when selling the estate. Apart from this, she also played a part in a cheque fraud³² which featured in the press recurringly between 1887-1895.³³ This was the so-called Vásonkeőy–Brunkaláné lawsuit, a very famous lawsuit at the time. Imre Vásonkeőy was the illegitimate son of count József Zichy and was the neighbour of the Tussla couple in Komárom-Ószőny. Vásonkeőy led a lavish life and worked up a large debt. To solve his financial problems, he married Amália Éberling, but her money was not enough to pay all the money he owed, so he committed suicide few days after their wedding on January 2, 1887.³⁴ Apparently, Mrs. Tussla had other foes who sued her as well.³⁵ It was probably for this reason that she used her name in different versions: Mrs. Tivadar Tussla, later widowed Mrs. Tivadar Tussla, Ilona Lakatos, Ida Lakatos, Ida Simonyi, etc.

In any case, the private collection of Roman artefacts accumulated by the couple until 1885 went into the possession of Mrs. Tivadar Tussla, but further acquisitions completely ceased. In the early 1910s a strikingly detailed scientific processing had started. Péter Gerecze (1856–1914) art historian and archaeologist (working as high-school teacher in Budapest) made a special catalogue with photographic documentation, numbering 218 tables. The material was never published, due to the early death of the author, but Ilona Ida Lakatos kept the documentation and after her death it eventually found its way to the HNM Central Database.³⁶ It has been suggested, that the former Mrs. Tussla planned to sell the whole collection, preferably abroad. A new piece of information emerged from a letter found in an antiquarian bookshop in October 2024: the letter was written by Ödön Gohl (1859–1927) numismatist in the HNM-CCA to director Elemér Varju (1873–1945) during his sick-leave in January 1914. The letter mentions an 'elderly lady' called Simonyi, who owns a significant collection of Roman artefacts in Budapest-XI, Budafoki Street, especially concerning 'bronze statuettes'. Gohl also mentions that the lady complained about the low prices on antiquities trade in Hungary and that the best solution would be to sell it abroad.³⁷ I. Lakatos also went by the name Dusi Simonyi or Lakatos-Simonyi, using her adapted noble affiliation as real surname (Csíkszentsimonyi) at this time.³⁸ This document clearly indicates the purpose of making the catalogue of P. Gerecze. There is no evidence that the Tussla-collection ever had any connection with the so-called Szent-György-Czéh, the first Hungarian auction society specialized to support

31 He took veronal in the tavern and died in hospital. *Pesti Hírlap*, June 24, 1913; *Friss Ujság*, June 24, 1913; *Az Ujság*, June 25, 1913;

32 The papers were fascinated by the lawsuit initiated by Sándor Szőke engineer: *Pesti Hírlap*, March 10, 1901; *Budapesti Hírlap*, April 5, 1901; *Pesti Hírlap*, April 6, 1901; *Szabadság*, April 6, 1901; *Magyar Szó*, April 6, 1901; *Magyarország*, April 6, 1901.

33 *Budapesti Hírlap*, November 3, 1892; *Pesti Hírlap* July 12, 1893; *Budapesti Hírlap*, July 5 and 14, 1893; *Pesti Napló*, March 8, 1895; *Büntető Jog Tára*, March 14, 1895; etc.

34 *Pesti Hírlap*, January 5, 6, 7, 1887, etc.

35 *Budapesti Hírlap*, May 24, 1903.

36 HNM-Central Database / Archaeological Database IX.124/1969.

37 HNM-Central Database / Elemér Varju bequest, uninventorized.

38 NAGY 1930, 111.

national collecting tendencies (and detaining the serious efflux of items) from 1910 onwards, nor was the collection represented in the 1912 exhibition of small statuary, although a famous Brigetio-collector, Ármin Milch also sent items.³⁹ The outbreak of World War I obviously had a negative effect on trading antiquities and disrupted the access to many potential western countries as well. During the 1920s, I. Lakatos desperately tried to sell the collection first to the HNM then to anyone who was interested, including several foreign museums from Stockholm to the British Museum and American museums. Elemér Varjú, the director of HNM-CCA between 1913–1934 told her that the collection does not contain enough rare pieces to be valuable. In one letter, the collection was valued to worth an estimated 5,000–10,000 dollars, but also informed I. Lakatos, that the Americans were only interested in Byzantine, and the English in Egyptian objects.⁴⁰ Mrs. Tussla even found a contact with the Italian consulate via the Hungarian Ministry of Religion and Education, and L. Nagy and I. Paulovics from the HNM made a documentation of the collection, which was stored in the owner's home in Budapest.⁴¹ During this time she lived with a lady companion called Anna Zoltán under 13 Budafoki Street Budapest,⁴² but they were unable to sell the collection. From 1928, the Ranolder Institution also helped them find contacts and circulated the list of the artefacts compiled for this purpose in several languages.

Mrs. Tussla died on October 26, 1930⁴³ which started a last scandal about her person. It just so happens that her death record was filled with false data in the Ranolder Institution where she died: her name was written as “Tusslai Tivadarné Lakatos Ida”, and her age as 57 years (instead of 75). The name was corrected later to “Tussla” and “Ida Ilona” in 1931, after fervent actions from her relatives and heirs. According to several papers, in February 1931 seventeen relatives of the late Mrs. Tussla started to look for their supposed inheritance which was hid from them—in their opinion. The papers covered the case extensively: the relatives were looking for a large inheritance of antiques worth half a million dollars (or one and a half million dollars, depending on paper), including 8,000 (!) golden tablets with undeciphered inscriptions, several thousand coins, etc. that were stolen by the lady companion or the nuns of the Ranolder Institution—according to them.⁴⁴ Of course, the late Mrs. Tussla never had such a fantastic fortune, so Anna Zoltán told the relatives that there was no money left and the antiques were sent to the Hungarian National Museum. The heirs found the whole thing most suspicious, even more so because of the false data in the death certificate, so they reported the case to the police. The investigation probably ended without any apparent result in 1931. Thirty years later, in December 1960, the principal of the Klára Leővey High School contacted the HNM and the Ministry of Culture because they had found three wooden crates of Roman antiquities and a documentation (the never published tables of P. Gerecze) while cleaning the attic. The high school was a new institution in the building of the former Ranolder Institution after the secularization in 1948 and they had no information of former activities. According to the short report of László Barkóczi, the Ranolder sisters had already registered the Tussla-collection as a private collection in 1949 located in the Institution's building which was fortunately not affected by the bombings during the Siege of Budapest, on January 3, 1945. It is also clear, that the material

39 LÁNG 1912, 120–121.

40 In the [HNM Irattár] There is a notebook full of the copies of letters she sent to different people, Hungarian and foreign alike: 98/2737/1998. She even tried to contact the British Museum and several American museums.

41 NAGY 1930, 111–123; PAULOVICS 1942, 217, Note 14, Pl. 27.4–6, Pl. 28.1–3, Pl. 29.4–6, Pl. 30.2–5, Pl. 32.1–9.

42 She also appears under different names: Anna Zoltán, Anna Zoltán Simonyi, Anna Zoltán Csepi.

43 Death record: <https://www.familysearch.org/ark:/61903/3:1:S3HY-6SK9-QTR?view=index&personArk=%2Fark%3A%2F61903%2F1%3A1%3AD6RB-5TN2&action=view&cc=1452460>

44 *Az Est*, February 27, 1931; *Prágai Magyar Hírlap*, February 28, 1931; *Temesvári Hírlap*, March 7, 1931; *Kis Újság*, February 27, 1931.

was a special deposit made by Mrs. Tussla to the Ranolder Institution in 1930, in exchange for which the institute granted a lifetime attendance for the old lady.⁴⁵ In late January 1961, L. Barkóczi and Gizella Erdélyi documented and transferred the collection to the HNM.⁴⁶ Compared to the photographs of P. Gerecze, almost the whole collection must have entered the museum,⁴⁷ however, we are now facing an unsolved anomaly: the coins officially got into the HNM Coins Cabinet confirmed by a release signed by Katalin Bíró-Sey in 1963, which indicates that the coins had to be registered in the HNM, but during our research, we were unable to find the items.⁴⁸

The ceramic building material in the Tussla-collection

The Tussla-collection in the Hungarian National Museum numbers several hundred pieces that got into the Museum in several waves partly between 1880–1885 and partly after 1930. As far as we know, all artefacts of the collection were found on the estate of the Tusslas in the northern half of the legionary fortress of Brigetio. The couple was on friendly terms with the archaeologists of the HNM in the 1880s, received and hosted them when they visited, for example L. Réthy or J. Hampel, and gave them Roman artefacts as a present during their visits. József Hampel wrote in a letter to the Tusslas in 1883: “In return for these favours, our institution expresses grateful appreciation to you and assures you that your name will be immortalized with golden letters in the history of research in Brigetio.”⁴⁹

There are altogether 100 pieces of ceramic building material in the Tussla-collection of the Hungarian National Museum at present, which accounts for an estimated 5% of the present stamped brick collection of the Museum. This is a little more than one fourth of the original material that was partly given to the Museum as a gift from Mr. and Mrs. Tivadar Tussla between 1880 and 1885 and partly got into the Museum from their private collection after their deaths. This was the largest group of stamped bricks and tiles ever to enter the HNM as a donation. Would the collection be intact, it would take up about 15–20% of the stamped bricks in the HNM. The large loss of the material is mostly due to World War II, when the Hungarian National Museum was hit by bombing several times between September 13, 1944, and February 13, 1945. Numerous items of the collection were physically destroyed, but others simply lost their inventory numbers and were later re-inventoried with the note: “unknown find location”. For this reason, there is some hope that further pieces of the collection can be “re-identified” beside the 100 pieces already identified as part of the Tussla-collection.⁵⁰

Most of the ceramic building material (367 pieces) was donated to the museum by Mrs. Tivadar Tussla in 1885 and was inventoried under the number RT-RO 65/1885.⁵¹ In the private collection of Mrs. Tussla that was catalogued and photographed by P. Gerecze in the early 1910s⁵² only one artefact can be found today. This collection contained 846 artefacts, mostly small metal, bone, and glass

45 HNM-Central Database / Department of Archaeology 863-14-8-1960.

46 HNM-Central Database / Department of Archaeology 863-14-2-1961.

47 Inv. Nr. 63.4.1–63.22.241.

48 P. Gerecze also did pencil tracings of some coins, so we made an attempt to find the rarer pieces in the Coins Cabinet collection, e. g. an antoninian of Florianus (rev.: AETERNITAS AVG), but we were unsuccessful. We would like to extend our gratitude to Enikő Kovács and István Vida for their help.

49 Letter of J. Hampel to T. Tussla in July 1883. Archives of the Hungarian National Museum inv. nr. 195/883. In the original Hungarian: “Viszonzásul mindezekért a szivességekéért intézetünk hálás elismerését fejezi ki Nagyságtoknak, biztosítván önöket, hogy nevök a bregetioi kutatások történetében aranybetűkkel léssen majd megörökítve.”

50 <https://ujkor.hu/content/a-magyar-nemzeti-muzeum-foepulete-budapest-ostromanak-poklaban>

51 From the inventory book the following numbers: RT-RO 65/1885.30–31, 61–74, 97–138, 140–152, 154–155, 157–168, 170–201, 203–215, 218–225, 227, 229–246, 248–257, 260–271, 273–284, 287–330.

52 The catalogue remained unpublished. IX/124/1969.

objects, but also five pieces of ceramic building material: an antefix, two floor tiles and two spacers, from which the antefix can be identified.

One of the great strengths of the remnants of the Tussla-collection (apart from its sheer size) is the wide array of different brick and tile types covering most forms of Roman ceramic building material used in Pannonia (Fig. 2). Most pieces of the collection belong to widespread types like *tegulae*, *imbrices* or *lateres* of different sizes, however, less frequent types appear as well, such as terracotta water pipes, antefixes, spacers and dog bone shaped floor tiles. As almost half of the artefacts are whole or almost whole, relevant information could be gained about their original size which shows a large variety instead of a few standard sizes. Eighty-nine pieces carry brick stamps supplying evidence for the large-scale stamping of round and rectangular *lateres* and the occasional stamping of *tubuli* beside the standard stamping of *tegulae* and *imbrices*. A statistical analysis of the frequency of stamping per type cannot be given, because mostly only the stamped specimens made their way into the Museum's collection.

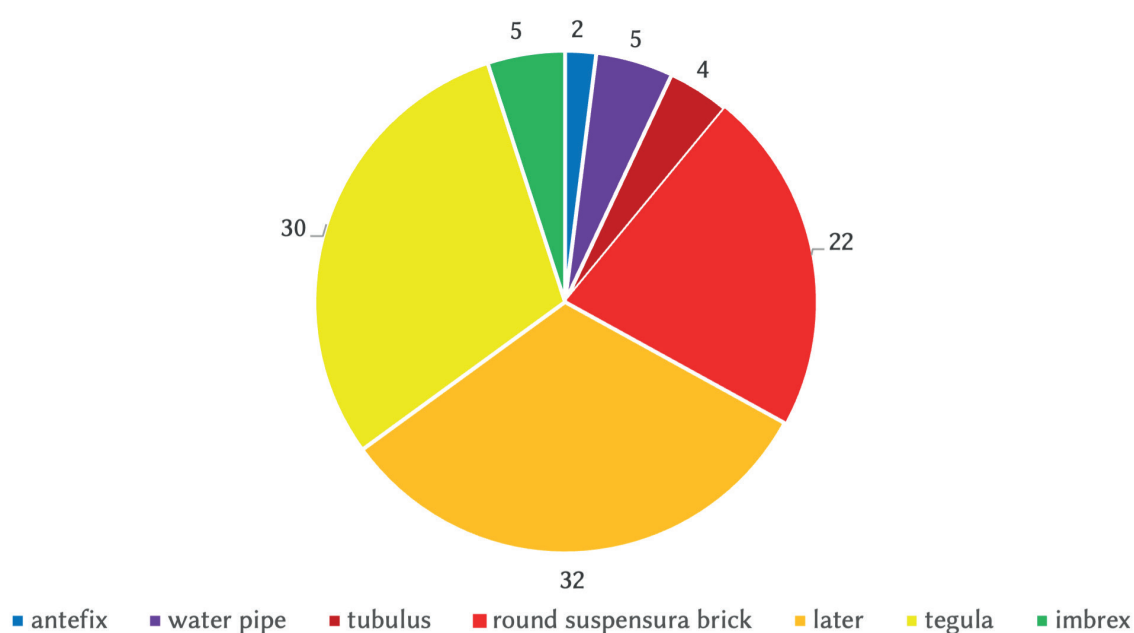


Fig. 2. Brick and tile types in the Tussla-collection.

A note on the inventory numbers on the artefacts

Some of the pieces have three numbers on their surfaces: the original inventory number starting with 65/1885 or 65/885, a three-digit number written with blue ink, and a new inventory number starting mostly either with 67.47. or with 55.23. The original inventory number was written on the bricks and tiles with black ink but has worn off in most cases making the identification as part of the Tussla-collection very hard. The surface of the pieces was scrutinized for the identification number (sometimes using a UV lamp), contrasted with the inventory book and the brick stamp corpus of J. Szilágyi published in 1933. When a piece was identified beyond doubt, the original inventory number was written on its surface. There are uncertainties concerning the blue number which were probably written on the bricks and tiles before 1900. We do not know who and why wrote them on some of the bricks and why it is missing from others, but these numbers appear in the corpus of János Szilágyi when he sites brick stamps from the Tussla-collection.⁵³ The third inventory number was

53 SZILÁGYI 1933.

written on the bricks and tiles after World War II when the Museum re-inventoried its collections. When this happened, the objects were listed with the note “unknown provenance”. It seems that the ceramic building material of the Tussla-collection was mostly re-inventoried in two waves, in 1955 and 1967. The bricks and tiles can have any combination of the three numbers on their surfaces.

A note on the Tussla estate in Puszta-Füzítő (Komárom/Szőny)

The location of the Tussla estate is shown on the map of M. Berkovics-Borota army officer and engineer published in 1886 (Fig. 1).⁵⁴ The map was drawn in 1885 when he supervised the construction works of a small fort connected to the Vienna–Budapest railway line in the southeastern corner of the Roman legionary *castra*. During the construction, he removed 700 m³ from this area and documented the Roman remains he found. He stated that the area of the legionary fortress stood out several meters higher from its environment and was therefore clearly visible. The southern half was the estate of dr. Vilmos Löwinger (or Löwinger), a lawyer in Pozsony (present-day Bratislava, Slovakia) who had a distillery on his estate in Bélapuszta.⁵⁵ The northern half was the Tuzla (Tussla) estate. Just north of the railway line, in the middle of the estate there is a large, oval form in the map with the following words of Berkovics-Borota: “probably the ruins of a larger building”. Based on its size and location, this must be the legionary baths of Brigetio where modern excavations started in 2021. West of the legionary fortress lay the estate of Imre Vásonkeöy, the illegitimate son of count József Zichy.

Antefixes

There are two antefixes in the Tussla-collection, both made from dark red clay in the form of male tragic masks. An intact antefix (Cat. 1, Fig. 4), the best-looking we know from Brigetio, was part of the Tussla couple’s private collection and features in the catalogue of Péter Gerecze.⁵⁶ It depicts a male head with an open mouth and a desperate expression on his face. His wavy, chin-length hair is parted in the middle, and he has a topknot on his forehead.

The other specimen (Cat. 2, Fig. 4) is a highly weathered and damaged piece that was given to the Museum in 1885.⁵⁷ This antefix also depicted a male tragic mask similar to the former one. However, the mouth of the male head had been disfigured already during the manufacturing process, when the clay was still soft. The scarred piece was not discarded but fired and used anyway. The original back side of the antefix can only be seen in the first piece, because the second piece was subject to restoration during the 1960s or 1970s and the original details were covered with modern plaster. On the first piece we can see the rudimentary execution of the back side of the antefix. The back of the plaque was not smoothed after the clay was pressed into the mould but left bumpy, and the imbrex-like projection of the antefix was added to the back using pinch technique.

Terracotta water pipes

From the legionary *castra* of Brigetio, both lead and terracotta water pipes were collected by the Tusslas.⁵⁸ From the original 40 pieces and fragments of terracotta pipes, five can be found in the

54 BERKOVICS-BOROTA 1886, 395.

55 BOROVSKY 1907, 114.

56 HNM inv. no. 63.16.1 (DOBOSI – SZABADVÁRY 2024a, Cat. 2, Fig. 12).

57 HNM inv. no. 65/1885.170a (DOBOSI – SZABADVÁRY 2024a, Cat. 6, Fig. 16). According to the inventory book of the Museum there were two antefixes under the inv. no. RT-RO 65/1885.170, but only one can be found at present.

58 Both the lead and terracotta water pipes were published by Anita Benes in detail in her paper on the Roman aqueduct of Brigetio (BENES 2018, 429–433).

Museum (Cat. 3–7, Fig. 4).⁵⁹ All five are slightly different in size and shape, although all of them is characterised by a full-length taper. The pieces could be joint by slipping the narrow end of one pipe into the broader end of the other pipe without the use of a spigot.⁶⁰ The two almost intact pipes, Cat. 3 and Cat. 5 are 48.6 cm and 42.5 cm long, their larger diameter is 11.7 cm and 12.5 cm, while their smaller diameter is 8.2 cm and 8.2 cm, respectively. All the water pipes were wheel-thrown and not made of a slab.

The terracotta pipes from Brigetio differ from the ones known from Aquincum. The wheel-thrown pipes found in Aquincum do not taper, but they have a tongue on one end and a groove on the other, so the pipes can be married with a rabbet joint.⁶¹ The same is true for the terracotta water pipes of Carnuntum.⁶²

Apart from lead and terracotta water pipes, wood pipes were also used in Pannonia, for example in Carnuntum.⁶³

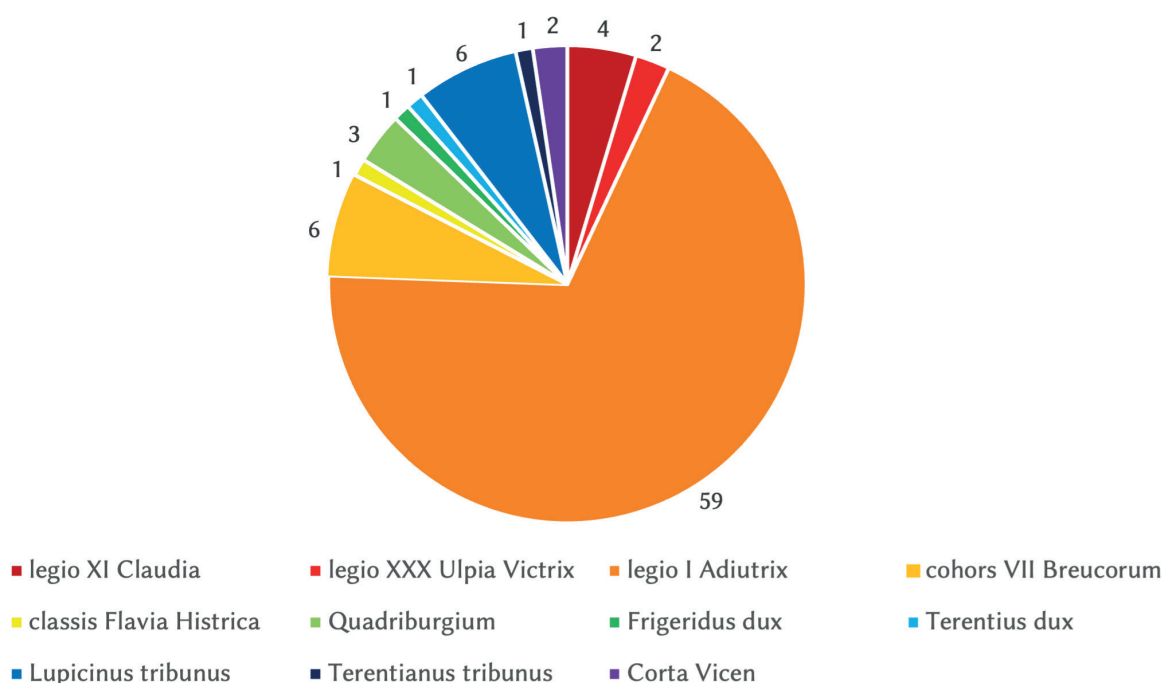


Fig. 3. Brick stamps in the Tussla-collection.

Tubuli

There are four *tubuli* in the collection, all of which are intact (Cat. 8–11, Figs 5–6). These hollow box-flue tiles were used to convey hot air from the hypocaust heating system. They were fixed to the walls in vertical columns either covering the full surface of the wall or only select areas. *Tubuli*

59 The inventory book lists the following pieces: HNM inv. no. 65/1885.120, one terracotta waterpipe with LEG(io) I AD(iutrix) stamp, now lost; 65/1885.224, ten fragments of terracotta water pipes, from these five can be found; 65/1885.284, twenty-nine terracotta water pipes, length: 37 cm, diameter: 15 cm, no stamp.

60 A Colchester example of this type is described by BRODRIBB 1987, 86.

61 Examples for this type were published from several excavations: FÉNYES 2022, 124, Fig. 18.1–3; ZSIDI *et al.* 2009, 115, Cat. 342; PÓCZY 1980, 42, Fig. 22.

62 Examples in the Landessammlungen Niederösterreich, Archäologischer Park Carnuntum: https://www.online.landessammlungen-noe.at/groups/ra_bauwesen_wasserversorgung/results

63 KONECNY 2012.

often had vent holes on two opposing sides enabling a flow of air between the columns. The surfaces of the other two sides were frequently combed, so the plaster could adhere more easily to the sides of the *tubuli*. Box-flue tiles were usually made from a clay slab wrapped around a rectangular frame: the seam of the joint edges is almost always clearly visible. *Tubuli* could also be wheel-thrown and later shaped to a rectangular form by hand, but this method was exceptionally rare and confined to the southern *Limes Arabicus*.⁶⁴

All four Brigetio *tubuli* are different in shape and size. The Cat. 8 piece (Fig. 5) is the smallest with a length of 16.3 cm. Its cross section is not precisely rectangular, only one side is flat, the other three are arched. The top and bottom brims of the *tubulus* are also uneven. On the two narrower sides two pairs of finger impressions can be seen as the maker grabbed the still soft clay of the *tubulus*.

The Cat. 9 piece (Fig. 5) is also very rudimentary with a creased surface. It is 27.5 cm long and has a circular vent hole near the middle of two opposite sides. The joining edges of the *tubulus* are bevelled to c. 75 degrees cuts to achieve a 9 cm wide overlap for joining and thereby make a stronger join.

The Cat. 10 *tubulus* (Fig. 5) was less rustic in appearance: it is 35 cm long and its cross section is almost square. It has two triangular vent holes in the shape of an hourglass on two opposing sides, while the other two sides were combed with parallel vertical lines. More interestingly, the inside of the *tubulus* was blocked up to half its length with tile fragments and mortar, which indicate an alternative function. An unconventional use for *tubuli* could be to employ them as *suspensura pilae* in hypocaust heating systems. An example for that can be seen in the nearby civil town of Brigetio where the pillars of the hypocaust in a domestic building were made of mortar filled *tubuli*.⁶⁵ Even *tubuli* built in the wall as box-flue tiles could be blocked up with mortar for a reason. Some of the *tubuli* columns in the wall were used as chimneys to provide the necessary ventilation for the proper working of the hypocaust heating. Finding the best position and quantity of the smoke vents was paramount for the flawless working of the heating system and for achieving a more or less even heat output in a room. This was not an easy problem to solve, and Roman builders seem to have achieved it by trial and error. The strength of the air flow within the chimney is influenced by the height and the size of the cross section of the smoke vents. The builders installed several columns of *tubuli* for this purpose in different positions in the room, and after starting up the heating system and using it for a while, they blocked up the *tubuli* columns which turned out to be unnecessary.⁶⁶ In the case of a wall fully covered with *tubuli*, most columns would have been blocked up by mortar at the top so as not to create too large a draught in the system.

The last *tubulus*, Cat. 11 (Fig. 6) was 36.5 cm long and was slightly curved along its longitudinal axis. This was probably only due to faulty manufacturing, but the *tubulus* could also have been used in a vault. The box-flue tile had a triangular vent hole on two sides and was combed by parallel longitudinal lines on the other two sides. This is the only *tubulus* in the Tussla-collection with a brick stamp: retrograde *leg(io) I Ad(iutrix)* stamp near the lower brim.

Floor tiles

The two dog bone shaped floor tiles were in the private collection of the Tusslas but are now lost (Fig. 6).⁶⁷ They were most probably made in the legionary tiler of Brigetio where I. Paulovics col-

64 HARVEY – REEVES 2023, 1228–1229.

65 So-called ‘House IV’ at 13 Vásártér, Komárom-Szőny (DOBOSI – BORHY 2015, 192, Fig. 5).

66 LEHAR 2012, 117.

67 They were numbers 605–606 in the list of Péter Gerecze.

lected three similar pieces during his excavation at Kurucdomb in 1934–1935.⁶⁸ During the excavation in the civil town of Brigetio at Komárom/Szöny-Vásártér further 19 dog bone shaped floor tiles came to light. They were of a uniform shape and size: 68–78 mm long, 44–49 mm wide and 30–34 mm thick, made in a maximum of two moulds.⁶⁹

Custom made floor tiles in various geometrical shapes and sizes were frequently used in Roman Pannonia as a cheaper substitute of mosaic floors. According to G. Brodribb, they were more common in Northern Italy and the Danube provinces than in other parts of the Empire.⁷⁰ A wide variety of floor tiles are known from Aquincum: different sizes of squares, hexagons, octagons, dog bone shapes, and elongated rectangles that were laid in herringbone pattern (*opus spicatum*).⁷¹ During the excavation of the Roman villa at Zsennye near Savaria, small rhomboid floor tiles were collected.⁷² In Northern Italy, fitted hexagonal floor tiles were used most frequently, but other forms also appeared.⁷³

Spacers

The two spacers in the private collection of the Tussla couple are now lost (Fig. 6).⁷⁴ These bobbin-shaped objects were used in wall structures: in a room heated with a hypocaust, instead of *tubuli*, spacers could also be used to form a cavity in the wall. By this method, the cylindrical spacers were fixed between the wall and the wall tiles, so the hot air could circulate between the wall and the wall tiles. *In situ* examples of spacers were found in Canterbury and at Garden Hill, Britannia.⁷⁵ The spacers in the Tussla-collection were 12.5 cm high and their diameter in the middle was 4.5 cm, according to the catalogue compiled by P. Gerecze in the 1910s.

Round *suspensura* bricks

Circular bricks were mostly used in *suspensura pilae* for hypocaust heating. There are 22 round bricks in the Tussla-collection (Cat. 12–33, Figs 6–9) in slightly varying sizes: the largest is 24.5 cm, while the smallest is 18.7 cm in diameter, but two thirds of the bricks have a diameter between 22.1–22.8 cm. Their thickness ranges between 6.0–11.3 cm, but most of them were around 7–8 cm thick. The thickness can be very uneven within the same brick, it can vary as much as 1.6 cm (15%) from one end of the brick to the other. The top surface was usually smoothed, but the surface can be uneven and scarred anyway. The bottom surface is typically uneven, and very rough, occasionally with signs of partly been cut with a string from the surface it was made on. The side of the bricks is also rough and uneven, frequently with sand grains stuck to the surface, from the sand used on the mould for an easier release of the clay. From the 22 bricks, 2 were not stamped, one stamp was only a cartouche without letters, and the remaining 19 bricks were stamped by the *legio I Adiutrix* (twice, in the case of Cat. 24). Six different stamp types of the legion can be detected on the round bricks.

One piece of the round bricks is of particular interest: apart from the canine footprint on its surface, Cat. 33 shows traces of secondary use. The middle part of its bottom surface was carved away in an

68 DOBOSI – BORHY 2022, 140, Fig. 23 and end of Catalogue.

69 DOBOSI – BORHY 2015, 190; DOBOSI 2020, 174–175, Cat. 44–62; DOBOSI 2021, 321.

70 BRODRIBB 1987, 53–54.

71 KUZSINSZKY 1892, 103, Figs 23–24.

72 BUÓCZ 2006, 48.

73 GEORGE 1997, 24.

74 They were numbers 603–604 in the list of Péter Gerecze.

75 BRODRIBB 1987, 67–68.

approximately 15 cm diameter circle, in a depth of about 3 cm (Fig. 8). It might have been used as the capital of a small column. Another noteworthy piece is Cat. no. 26 which has a fingerprint of both the right and left side of the brick.

Lateres

There are 32 rectangular *lateres* in the material from which 16 are whole (Cat. 34–65, Figs 9–15) or almost whole. These fall into seven different size categories. One fourth of them (8 piece) can be identified as *bessales*. The sides of a *later bessalis* were two thirds of a Roman foot (*pes Monetalis* = 29.6 cm), that is around 20 cm. The eight bricks from the Tussla collection range from 19.4–20.7 cm square in size and were all stamped by the *legio I Adiutrix*. Only one of the bricks can be classified as a *later pedalis*, a brick that is one foot square: Cat. 45 was 29.3 × 29.6 cm large and also bore the stamp of the *legio I Adiutrix*. Two of the bricks (Cat. 50–51) were probably intended to be *sesquipedales*, the sides of which were one and a half feet long, in our case around 42.5 cm. There is one half of a *later bipedalis*, an originally two feet square brick, but the Cat. 60 piece is broken and is 58.5 × 35.0 cm large. There are five bricks that cannot be given latin names. The Cat. 44. brick is a 26.1 × 27.1 cm large square shaped brick with a *legio I Adiutrix* stamp. Four others are rectangular: three bricks made by the *cohors VII Breucorum* dated to after 203 by the Antoniniana epithet⁷⁶ were about 25.5–26.6 × 35.5–36.5 cm in size. Another 26.3 × 38.4 cm large brick bore a QVADRIIB stamp, dated to the 4th century. The thickness of the bricks was somewhere between 4.0–8.5 cm. The top surface of the bricks was usually smoothed, whereas the bottom surface was rough and uneven.

Tegulae

The most common type of Roman ceramic building material is the *tegula*, a large flat roof tile with flanges along the long sides (Cat. 66–95, Figs 15–20).⁷⁷ Only one of the *tegulae* in the Tussla-collection is whole (Cat. 82). With a size of 54.1 × 40.2 cm, this is one of the largest *tegulae* known from Brigetio. Another *tegula* (Cat. 89) was broken in half, and only the original length of it could be measured: it was 45.3 cm long (its original width is unknown). This corresponds to the smaller *tegula* type documented during the excavation at the civil town of Brigetio (Komárom/Szőny-Vásártér site), where two *tegula* sizes were observed. The larger *tegulae* in the civil town were 50–52.5 × 39–40.5 cm, while the smaller ones were 45.2–47 × 32.5–34 cm in size.⁷⁸ In the late Roman Cemetery 4 of Brigetio, a *tegula* of 50.5 × 38.9 cm was found, while slightly larger *tegulae* were collected in the likewise late Roman Cemetery 1 of Brigetio, where two *tegulae* were 56–59 × 44 cm large.⁷⁹ As all *tegulae* in Pannonia, the *tegulae* of the Tussla-collection were of the *incasso* type spread by the military in the northwestern provinces.⁸⁰

In general, brick stamps are found most often on *tegulae* and *lateres*.⁸¹ In the Tussla-collection we find the largest variety of producers on *tegulae*: *legio I Adiutrix*, *legio XXX Ulpia Victrix*, *cohors VII Breucorum*, C F H, *Quadriburgium*, *Corta Vicen*, *Lupicinus tribunus*, *Terentianus tribunus* and *Terentius dux*.

76 LŐRINCZ 2001, 239.

77 BRODRIBB 1987, 5–27; WARRY 2006.

78 DOBOSI 2021, 321.

79 DOBOSI – SZABADVÁRY 2024b, 262 and Cat. 60.

80 For the difference between the two main *tegula* types, *risea* and *incasso* and their distribution see: SHEPHERD 2015; SHEPHERD 2023.

81 BRODRIBB 1987, 124–125; BRANDL – FEDERHOFER 2010, 51.

Imbrices

The other type of roof tile, the *imbrex*, was a curved tile used to cover the gap between the *tegulae*. They usually had a semi-circular cross section.⁸² All *imbrices* in the Tussla-collection were fragments, so we do not know their original size (Cat. 96–100, Fig. 20). The *imbrices* found during the excavation in the civil town of Brigetio were 44–45 cm long and their smaller diameter at one end was around 16 cm, while their larger diameter at the other end was about 20 cm.⁸³

Imbrices were sometimes stamped, but not as often as *tegulae*. In the Tussla-collection, they bore the stamp of the *legio I Adiutrix*, *Lupicinus tribunus*, or *Frigeridus dux*.

Most interesting is the Cat. 97 *imbrex* (Fig. 20), which has two superimposed canine footprints in its middle. It is highly unusual to have footprints on an *imbrex*, because if an animal stepped on it during the drying process, the *imbrex* typically broke. In this case, a dog stepped onto the middle of the *imbrex* with two feet which caused an indentation, but did not destroy the *imbrex* completely. Apparently, the makers were not fazed by this turn of events and the piece was not discarded. They fired and used the *imbrex* anyway.

The brick stamps in the Tussla-collection

From the 100 pieces of ceramic building material 88 are stamped: 1 *tubulus*, 5 *imbrices*, 20 round *suspensura* bricks, 30 *tegulae* and 32 *lateres*. In general, *tegulae* were the most likely to be stamped of all brick and tile types,⁸⁴ but here *tegulae* made up only the 35% of the stamped material, which consisted of 40% roof tiles and 60% bricks. Any type of ceramic building material could be stamped, even small floor tiles, as attested by a series of stamped dog bone shaped tiles found in Germany.⁸⁵

From the 88 stamps of the Tussla-collection, two were illegible, the other 86 belong to eleven different manufacturers (Fig. 3), including three legions (*legio XI Claudia*, *legio XXX Ulpia Victrix*, *legio I Adiutrix*), one *cohors* (*cohors VII Breucorum*), one fleet (*classis Flavia Histrica*), and an array of late Roman stamps: a stamp with a place name (*Quadriburgium*) and the stamps of five different army officers (*Frigeridus dux*, *Terentius dux*, *Lupicinus tribunus*, *Terentianus tribunus* and *Corta Vicen*). Naturally, 69% of the stamps belong to the *legio I Adiutrix*, the legion of Brigetio for three centuries.

Legio XI Claudia

The four stamps of the *legio XI Claudia* were all stamped on *lateres* of different sizes: Cat. 51, 53, 54 and 55 (Fig. 21). The only whole *later* was a *sesquipedalis*: 42.5 × 42.2 cm large and 7.2–7.8 cm thick.

The legion already existed by BC 41 and was stationed in Illyricum for several decades. In the first half of the 1st century AD it was the garrison of Burnum, Dalmatia (near present-day Kistanje, Croatia) from where it was dispatched to Vindonissa, Germania Superior (today Windisch, Switzerland) around AD 69–70. The unit left Vindonissa in AD 100 or early 101 at the latest and arrived at Brigetio later in 101.⁸⁶ From this point on, the opinion of the Hungarian and the international research differs: according to Hungarian scholars, the legion stayed in Brigetio until 105 or 106,⁸⁷ whereas international scholars argue that the legion already left Brigetio by the end of AD 101 to

82 BRODRIBB 1987, 22–27.

83 DOBOSI 2021, 321.

84 BRODRIBB 1987, 124–125; BRANDL – FEDERHOFER 2010, 50–51.

85 BRANDL – FEDERHOFER 2010, 45, Abb. 46. The floor tiles were found in Miedering and are now in the Archäologische Staatssammlung München.

86 BRANDL 1999, 138–139; TRUMM 2008, 18–19; BORHY 2012a, 23; TRUMM 2023, 732–735.

87 SZILÁGYI 1933, 62; BARKÓCZI 1949, 70; BARKÓCZI 1951, 19–20; LŐRINCZ 1975, 343; LŐRINCZ 1980, 266; BORHY 2012a, 24.

take part in Trajan's Dacian War.⁸⁸ The unit eventually reached its final destination in Durostorum, Moesia Inferior (today Silistra, Bulgaria) in 106–107. Along the way, the legion left its stamped bricks in a number of places where it took part in various construction works, including Aquincum,⁸⁹ Slăveni, Buridava, Voinești, Târgșorul Vechi, Drajna de Sus, Pietroasele, etc.⁹⁰

The Pannonian brick stamps of the legion are confined to a handful of sites: apart from Brigetio, they are only known from Scarbantia (Sopron, Hungary),⁹¹ Iža (Slovakia), the counter fortress of Brigetio⁹² and Tokod (Hungary).⁹³ The stamped brick of Ad Flexum was most probably found in Brigetio,⁹⁴ and those from Aquincum listed by the CIL are missing.⁹⁵

Only one or two stamps were found at each of these sites except for Brigetio where large quantities have come to light in the legionary fortress. The legion produced bricks and tiles for the construction of the *castra* that were used for example in the legionary baths and bread ovens.⁹⁶ No brick stamp of the legion came to light during the Paulovics-excavation in the legionary tilerly at Kurucdomb in Brigetio, but that might be only a coincidence.⁹⁷

Four brick stamp types of the *legio XI Claudia* are known from Pannonia,⁹⁸ which seems a large number considering that the legion only stayed in Pannonia for 4–5 years at the most, and only half a year in the opinion of international scholarship.

Legio XXX Ulpia Victrix

In the Tussla-collection two *tegulae* bear the stamp of the *legio XXX Ulpia Victrix*, Cat. 79–80. The legion only spent a short time, about 10–15 years in Pannonia, where it was stationed in Brigetio. The unit was first raised by emperor Trajan (AD 98–117) between the two Dacian Wars (AD 101–102 and 105–106) and arrived at its first base camp, Brigetio between 103–105. It was relocated to Noviomagus in Germania Inferior (today Nijmegen, Netherlands) between 114–118, only to be dispatched to Vetera II also in Germania Inferior (present-day Xanten, Germany) by AD 120 where it stayed until late antiquity.⁹⁹

Despite the legion's short stay in Pannonia, its brick stamps are known not only from Brigetio, but also from Vindobona,¹⁰⁰ Carnuntum,¹⁰¹ as well as the Roman *villae* of Bruckneudorf-Parndorf¹⁰² and

88 STROBEL 1988, 214–215; BRANDL 1999, 139; WILKES 2000; TRUMM 2008, 19; TRUMM 2023, 736.

89 The *legio XI Claudia* brick stamps from Aquincum are listed in CIL III 11351, but already J. Szilágyi could not find them when compiling his corpus of Pannonian brick stamps in the early 1930s (SZILÁGYI 1933, 63).

90 STĂICUȚ 2010, 212.

91 SZILÁGYI 1933, 62.

92 KUZMOVÁ – RAJTÁR 1986, 201, Abb. 10.

93 LŐRINCZ 1981, 121, Abb. 3.

94 LŐRINCZ 1980, 266.

95 SZILÁGYI 1933, 63.

96 SZILÁGYI 1933, 62–63; PAULOVICS 1941, 157–158; BARKÓCZI 1949, 70; BARKÓCZI 1951, 20; BARTUS *et al.* 2022, 362–365; BARTUS *et al.* 2023, 630, 636; DOBOSI – SZABADVÁRY 2024b, 265–267.

97 DOBOSI – BORHY 2022, 144–145.

98 DOBOSI – SZABADVÁRY 2024b, 267–269 and Fig. 15.

99 BARKÓCZI 1951, 20; LŐRINCZ 1975, 351; BRANDL 1999, 233–234; GUGL – KASTLER 2007, 264–265; REUTER 2012, 5–11; DOBOSI – BORHY 2022, 143–144. For a timetable of the garrisons of Brigetio summarizing the opinion of different researchers see DOBOSI – BORHY 2022, 143, Tab. 3.

100 BRANDL 1999, 233–239.

101 SZILÁGYI 1933, 83; BRANDL 1999, 233–239; GUGL – KASTLER 2007, 311–312.

102 SARIA 1966, 256; LŐRINCZ 1989a, 246.

Apetlon.¹⁰³ In the Carnuntum legionary fortress six different types of brick stamps were found,¹⁰⁴ one of them most probably made in Carnuntum and another in Vindobona based on petrographic analysis.¹⁰⁵ One brick stamp of the legion was even found in the legionary tiler of Vindobona in Vienna-Hernals.¹⁰⁶ While stationed in Brigetio, vexillations of the legion were probably sent to Carnuntum and Vindobona to help with the construction works of the legionary fortress.¹⁰⁷

Stamped *tegulae* of the *legio XXX Ulpia Victrix* are known from all parts of Brigetio, albeit in small numbers. One came to light during the 1934–1935 excavations of I. Paulovics in the legionary tiler at Kurucdomb,¹⁰⁸ and L. Barkóczy found some more during his excavation at the site in 1941.¹⁰⁹ Several were collected during the old and new excavations in the legionary fortress¹¹⁰ and two were retrieved at the civil town excavations at Komárom/Szőny-Vásártér.¹¹¹

The two stamps of the legion from the Tussla-collection were stamped with two different dies and were not identical with the stamps from the civil town.

Legio I Adiutrix

Fifty-nine of the 86 brick stamps belonged to the *legio I Adiutrix* (Figs 21–28), the garrison of Brigetio for three centuries. The legion was raised by emperor Galba (AD 68–69) from *classarii* stationed in Misenum (today Miseno, Italy) in AD 68. The legion was first sent to Hispania, then to Mogontiacum in Germania Superior (present-day Mainz, Germany). It left Mogontiacum around AD 85–86 and probably spent a few years in Sirmium, Pannonia (today Sremska Mitrovica, Serbia). The unit first arrived to Brigetio between 89–97 and stayed until AD 100. During this time, it took part in the construction works of the legionary *castra* of Brigetio and maybe Carnuntum. After fighting in Trajan's Dacian Wars (100–101 and 105–106) and in his Parthian War (115–117), the legion came back to Brigetio in AD 118 and stayed until the early 5th century.¹¹²

During its long stay in Pannonia, the *legio I Adiutrix* was very productive in terms of manufacturing ceramic building material. The stamped bricks and tiles of the legion are extremely numerous and widespread in Pannonia, especially along the Danube.

It is natural that two thirds of the brick stamps from the Tussla-collection belong to the *legio I Adiutrix*, which had its tiler only 1.2 km east of the legionary fortress, on the shore of the Danube.¹¹³ There is a great variety in the brick stamps of the legion: the 59 stamps were made with 34 different dies.

103 LŐRINCZ 1989a, 245.

104 GUGL – KASTLER 2007, 264, Taf. 12.330–335.

105 GUGL – KASTLER 2007, 265. The Cat. no. 332 piece had a fabric type characteristic for Carnuntum (Scherbentyp 8) and the Cat. no. 335 was made of a fabric type that occurs in both Carnuntum and Vindobona (Scherbentyp 17).

106 MOSSER 2015, 76, 84. The tile in question was found in 1748 and there is no drawing or photo published of it.

107 MOSSER 2015, 76.

108 DOBOSI – BORHY 2022, 142–144, Cat. 418.

109 BARKÓCZI 1951, 20.

110 BARKÓCZI 1949, 173–174; BARKÓCZI 1951, 20; LŐRINCZ 1975, 347; BARTUS *et al.* 2023, 636.

111 DOBOSI 2020, 322–324, Kat. 103–104.

112 BARKÓCZI 1951, 19–20; LŐRINCZ 1975, 343; KANDLER 1989; BRANDL 1999; LŐRINCZ 2000, 152–156; MOSSER 2014.

113 PAULOVICS 1934; DOBOSI – BORHY 2022.

Classis Flavia Histrica

There is one *tegula* in the Tussla-collection with a CFH stamp (Cat. 81, Fig. 29). CFH stamps are known in large numbers from Brigetio and Cirpi (Dunabogdány, Hungary), but the meaning of this abbreviation is still doubtful. Apart from the one in the Tussla-collection and a mention in the CIL,¹¹⁴ twenty-four CFH stamps are known from Brigetio: 23 from the civil town¹¹⁵ and one from the area of the *principia* in the legionary fortress.¹¹⁶ None were found in the legionary tiler of Brigetio during the excavation of I. Paulovics between 1934–1935, although he recovered c. 400 stamped bricks and tiles from the site.¹¹⁷ Almost all CFH stamps from Brigetio were found on *imbrices* (21), only three on *tegulae*. The stamps cannot be dated later than the middle of the 3rd century AD, because the civil town of Brigetio was abandoned somewhere around the 260s–270s.¹¹⁸ In the *castellum* of Cirpi, the numerous roof tiles with CFH stamps were most probably used for third-century construction works.¹¹⁹ Apart from the finds from Brigetio and Cirpi, only a stray find from Ad Statuas (Ács-Vaspuszta, Hungary) is known. It was found on the shore of the Danube and Barnabás Lőrincz identified it incorrectly as a stamp of the *cohors I Hispanorum* (CIH).¹²⁰

The CFH stamps are very characteristic looking stamps with incuse letters (the letters are sunk into the surface of the tile) as opposed to the vast majority of Roman brick stamps where the letters are in relief on a recessed field. The whole appearance of the stamps is very ‘unprofessional’. The height of the individual letters is different, they are a bit tilted, and only small traces of a *tabula ansata*-like frame can be seen. In Brigetio two distinct types can be observed: in the first type the C is the smallest, the F is somewhat taller, and the H is the tallest, while in the second type the F is smaller than the C, and again the H is the tallest. The stamp from the Tussla-collection belongs to the first type.

For the meaning of the CFH abbreviation, István Paulovics suggested two versions: *C(ohors) F(lavia) H(ispanorum)* and *C(lassis) F(lavia) H(istriaca)*.¹²¹ J. Szilágyi opted for the second suggestion in the form of *C(lassis) F(lavia) H(istrica)*, and stated that the base of the fleet must have been in Brigetio.¹²² Sándor Soproni agreed that the second version was more likely,¹²³ and L. Barkóczi and L. Borhy also accepted it.¹²⁴ Although it is our best guess yet, there are some discrepancies concerning the interpretation of the stamp. The Danube fleet called *classis Pannonica* that existed already during the reign of Augustus (27 BC–14 AD) was reorganized under the Flavian dynasty under the name *classis Flavia Pannonica*.¹²⁵ The *classis Histrica* was only mentioned in the *Notitia Dignitatum* with several bases of the fleet, but neither Brigetio nor Cirpi (or Ad Statuas) was part of the list.¹²⁶ It is rightly supposed that Brigetio must have had a harbour and probably a fleet base, but neither has been archaeologically attested yet. Based on the *Notitia Dignitatum*, it is presumed that the *Classis Flavia*

114 CIL III 11415.

115 DOBOSI 2020, 326–328, Cat. 161–183.

116 BARNA 2023, 15–16; Cat. 50.

117 DOBOSI – BORHY 2022.

118 DOBOSI 2022, 169.

119 SZALAY 1933, 16; DINNYÉS *et al.* 1986, 87.

120 LŐRINCZ 1981, 34, Taf. 10.4; LŐRINCZ 1989b, 138, 422, Fig. 66.4. Correctly identified as a CFH stamp by László Borhy: see BORHY 2012b, 44, note 35.

121 PAULOVICS 1938, 10.

122 SZILÁGYI 1952, 196, 203.

123 SOPRONI 1978, note 291.

124 BARKÓCZI 1951, 20; BORHY 2012b, 44.

125 BORHY 2012b, 42.

126 BORHY 2012b, 42. It has to be pointed out that the *Notitia Dignitatum* does not mention any *classes* between Carnuntum and Florentia, a 400 km stretch of the Danube limes! See also: MCANDREW 2015.

Pannonica was divided into smaller units in the 4th century AD and one of these was the *classis Histrica* which operated between Vindobona (Pannonia, today Vienna, Austria) and Viminacium (Moesia, today Kostolac, Serbia).¹²⁷ If the CFH stamps were indeed produced by the *classis Flavia Histrica*, then the unit must have existed with this name by the beginning of the 3rd century.

Cohors VII Breucorum

There are six stamped bricks and tiles of the *cohors VII Breucorum* in the Tussla-collection: four on *lateres* (Cat. 46–48 and 65, Fig. 29) and two on *tegulae* (Cat. 82–83, Fig. 29). The *lateres* stamped by the *cohors* are of a unique size category: 35.5–36.5 × 25.5–26.6 cm with a thickness of 4.8–5.5 cm. The size of the one whole *tegula* is also unparalleled in Brigetio: it was 54.1 × 40.2 cm large. The dating of the stamps is made possible by the imperial epithets appearing on the stamps: five of the six shows an Antoniniana (dated to the reign of Caracalla between 211–217 or Elagabal between 218–222) and one a Gordiana epithet (dated to the reign of Gordian III between 238–244).¹²⁸

The stamped bricks and tiles of the *cohors VII Breucorum* are extremely widespread in Pannonia. Along the Danube, they appear at numerous sites between Brigetio and Burgenae (Novi Banovci, Serbia). Because of this, Barnabás Lőrincz assumed that the *cohors* must have been specialized in brick production.¹²⁹

The *cohors* was first recruited from the Breuci tribe in the Illyrian-Pannonian area after the Pannonian uprising between AD 6–9. The unit was transferred to Germania superior before AD 65 from where it was dispatched to Pannonia before AD 85. It probably took part in the Dacian war of Domitian and the Parthian war of Trajan: it was stationed in the area of Viminacium (Kostolac, Serbia) in Moesia Superior from 96 at the latest to at least 100, then was sent to Anatolia. The *cohors* came back to Pannonia Inferior by 143, where it stationed in Lugio (Dunaszekcső, Hungary) until the middle of the 3rd century AD. The latest imperial epithet appearing on its brick stamps read Philippiana and can be dated to the reign of Philip I (AD 244–249). After that time there is no mention of the unit, so its fate remains unknown.¹³⁰

The tilery of the *cohors* was recently found in Lugio (Dunaszekcső-Halena) through geophysical mapping and field surveys and one of the kilns was partly excavated in 2012. The *cohors* probably started the production of ceramic building material in the second half of the 2nd century and continued until the middle of the 3rd century.¹³¹ A stamped *tegula* with an Antoniniana epithet was found in Kiln II at the legionary tilery in Brigetio indicating that the unit might have produced its bricks and tiles in other locations as well.¹³²

Terentius *dux*

At present, one *tegula* can be found in the Tussla-collection with the stamp of Terentius *dux* (Cat. 88, Fig. 30).¹³³ The text of the stamp reads: *Tere(ntius) v(ir) p(erfectissimus) d(ux)*. This stamp appears

127 MÓCSY – FITZ 1990, 82–83.

128 Other imperial epithets known from other sites are: the Sev(eriana), the Ale(xandriana or Alex(andriana)) and the Max(iminiana) epithets (see KOVÁCS 2005; HAVAS 2008).

129 LŐRINCZ 2001, 31; KOVÁCS 2005, 245.

130 LŐRINCZ 2001, 31; GOLDMAN 2010, 138–142; FARKAS 2013, 111–113; MATEI-POPESCU – ȚENȚEU 2018, 37–39.

131 GÁBOR 2020.

132 DOBOSI – BORHY 2022, 146, Cat. 31.

133 Szilágyi lists this tile, but with wrong number: he cites the blue inv. number as 283 instead of 284 (SZILÁGYI 1933, 99.43f). It is an obvious typo, because he lists a tile with blue number 283 also at SZILÁGYI 1933, 99.41d.

in large quantities in Solva.¹³⁴ There are other versions of his brick stamps found in Aquincum, Tokod and Solva that read: *Terentius v(ir) p(erfectissimus) dux*,¹³⁵ and *Teren(tius) v(ir) p(erfectissimus) d(ux)* in Tokod.¹³⁶ From Brigetio, further examples of his stamped tiles came to light during the recent excavations in the legionary fortress, in the late Roman “apsidal building”.¹³⁷ Terentius was *dux Valeriae* between 368–371.¹³⁸

Frigeridus *dux*

There is one *imbrex* in the collection with the stamp Frigeridus *dux* (Cat. 100, Fig. 30). For some reason, Szilágyi left out this stamp from his corpus when he recited the known stamped tiles of Frigeridus.¹³⁹ Because this tile remained unpublished, Brigetio is not mentioned as a find spot of Frigeridus’ tiles in the extensive list made by P. Kovács either.¹⁴⁰ Recent excavations conducted in the legionary fortress of Brigetio revealed other tiles stamped by Frigeridus *dux*, in the late Roman “apsidal building”.¹⁴¹

According to B. Lőrincz, Frigeridus was of Germanic origin.¹⁴² His brick stamps were dated to AD 374–375 by András Alföldi,¹⁴³ to AD 367–368 by András Mócsy¹⁴⁴ and to between 369/370–373/374 by Barnabás Lőrincz.¹⁴⁵ Later B. Lőrincz narrowed the time span to between 371–373/374,¹⁴⁶ which was also accepted by P. Kovács and M. Kelemen.¹⁴⁷ As a *dux Valeriae*, he followed Terentius *dux* and preceded Marcellianus *dux*, and during 374–375 he was *dux* of Moesia II.¹⁴⁸

A. Mócsy stated that in the Nógrádverőce fort all stamps of Frigeridus *dux* were found on *tegulae*, while each and every stamp of Lupicinus *tribunus* were found on *imbrices*.¹⁴⁹ This, however, must have been a coincidence and does not mean that one produced only *tegulae* and the other only *imbrices*. In the Tussla-collection, for example, the stamp of Frigeridus was found on an *imbrex*, and the stamps of Lupicinus on both *tegulae* and *imbrices*.

Lupicinus *tribunus*

There are six brick stamps of Lupicinus *tribunus* in the Tussla-collection, all on *tegulae* (Cat. 90–94, Figs 30–31). He was apparently *tribunus* between 368–374¹⁵⁰ or 369–376.¹⁵¹ His brick stamps are nu-

134 They were found in the cemetery of the *castellum* (KELEMEN – MERCZI 2019, 154).

135 SZILÁGYI 1933, 99.44–45, Tab. 27.44–45; LŐRINCZ 1981, 133.

136 LŐRINCZ 1981, 134.

137 BARTUS *et al.* 2018, 543.

138 LŐRINCZ 2006, 104; KOVÁCS 2018, 92; KELEMEN – MERCZI 2019, 154. For the relative chronology of late Roman stamps in Valeria provincia see SOPRONI 1958.

139 SZILÁGYI 1933, 100.

140 KOVÁCS 2018, 90.

141 BARTUS *et al.* 2018, 543.

142 LŐRINCZ 2006, 104; LŐRINCZ 2008, 482.

143 ALFÖLDI 1924, 82–83.

144 MÓCSY 1958, 103–104.

145 LŐRINCZ 1981, 122.

146 LŐRINCZ 2006, 105.

147 KOVÁCS 2018, 92; KELEMEN – MERCZI 2019, 154.

148 LŐRINCZ 2006, 105.

149 MÓCSY 1958, 100.

150 KOVÁCS 2018, 92.

151 LŐRINCZ 2006, 108–109.

merous and well known from Brigetio, where they were not only found in the legionary fortress,¹⁵² but also in the legionary tilerie.¹⁵³ Apart from Brigetio, his stamped tiles were collected at several sites along the Danube in Valeria.¹⁵⁴

Terentianus *tribunus*

There is one possible stamp of Terentianus *tribunus* in the Tussla-collection (Cat. 89, Fig. 31). Terentianus was a contemporary of Lupicinus, he was also *tribunus* in Valeria probably between 368–374¹⁵⁵ or 369–373.¹⁵⁶ His tiles were produced in several tileries: in the legionary tilerie of Brigetio,¹⁵⁷ in the late Roman tilerie in Solva (Esztergom-Szentgyörgypuszta, Hungary),¹⁵⁸ and possibly also in Lugio.¹⁵⁹ Apart from the legionary tilerie, his stamps came to light from the legionary fortress as well.¹⁶⁰

Quadriburgium

From the three Quadriburgium stamps of the collection two appeared on *tegulae* (Cat. 84 and 87, Fig. 31) and one on a *later* (Cat. 49, Fig. 31). These stamps are interpreted as brick stamps with location names and can be dated to the 4th century. Several versions are known, including Quadrib, Quadribu, Quadribur, Quadriburasa and Quadriburg, which were discussed extensively by M. Kelemen recently. Some or all of them were manufactured in the tilerie of Solva at Esztergom-Szentgyörgypuszta where two stamped bricks were found in the brick kiln. These stamps are extremely widespread in Valeria: M. Kelemen assembled a catalogue of 85 stamps from 17 settlements.¹⁶¹

In Brigetio, three Quadriburgium stamps were recovered during the excavations of I. Paulovics in the legionary fortress,¹⁶² but none were registered during his excavations in the legionary tilerie.¹⁶³

Corta Vicen

Both Corta Vicen stamps of the collection occur on *tegulae* (Cat. 85–86, Fig. 32). This stamp is categorized as an army officer's stamp and its text was interpreted as *Co(ho)rt(is) A(pparatu) Vi(n)cen(tii)* by B. Lőrincz.¹⁶⁴ In contrast, J. Szilágyi in the 1950s thought it to be the stamp of the *cohors I Alpinorum: Co(ho)r(s) I A(lpinorum) Vi(n)cen(tiae)*.¹⁶⁵ M. Kelemen accepted B. Lőrincz's hypothesis and added that the tiles with this stamp were produced from the reign of Constantius II (337–361).¹⁶⁶

From Brigetio, these stamps are known from both the legionary *castra* and the late Roman Cemetery 4 outside the fortress.¹⁶⁷

152 BARTUS *et al.* 2023, 636; DOBOSI – SZABADVÁRY 2024b.

153 DOBOSI – BORHY 2022, 147, Cat. nos 19, 25, 39–43, 69, 193, 206, 216.

154 LŐRINCZ 2006, 108; LŐRINCZ 2008, 497–498; KOVÁCS 2018, 90.

155 KOVÁCS 2018, 92.

156 LŐRINCZ 2006, 109; LŐRINCZ 2008, 486; KELEMEN 2011, 148.

157 DOBOSI – BORHY 2022, 147, Cat. no. 9.

158 KELEMEN 2011, 143, 148.

159 FARKAS 2013, 104, 117, 127. His tile was found in Dunaszekcső, but the exact find spot is unknown.

160 BARTUS *et al.* 2023, 636; DOBOSI – SZABADVÁRY 2024b.

161 KELEMEN 2011, 143–160.

162 DOBOSI – SZABADVÁRY 2024b.

163 DOBOSI – BORHY 2022.

164 LŐRINCZ 2008, 488.

165 SZILÁGYI 1950, 520–521; SZILÁGYI 1952, 199.

166 KELEMEN – MERCZI 2019, 153–154.

167 DOBOSI – SZABADVÁRY 2024b.

Summary

The originally ca. 2500 artefacts of the Tussla-collection were accumulated by Mr. and Mrs. Tussla who owned the land with the northern half of the legionary fortress of Brigetio in the early 1880s. They conducted amateur excavations on their estate and cultivated a good relationship with the archaeologists of the Hungarian National Museum. Between 1880–1885 they donated a huge number of Roman objects to the Museum, among others about 400 pieces of ceramic building material, mostly stamped bricks and tiles. They also had a private collection of smaller artefacts that entered the Museum after the death of Mrs. Tussla in 1961. The eventful life of the Tussla couple and the troubled fate of the collection is truly illuminating concerning collectors and the lootings of archaeological sites in the late 19th and early 20th century.

Part of the original collection is by now lost, but the remaining material is still substantial. The identification of the objects as part of the Tussla-collection is not straightforward, because the original inventory numbers written on the bricks or tiles are by now faded to invisibility. To recognize the pieces of the collection, the surface of the objects was scrutinized for identification numbers (sometimes using a UV lamp), and the stamps were contrasted with the inventory book and the brick stamp corpus of J. Szilágyi published in 1933. The ‘re-identification’ process resulted in the cataloguing of 100 bricks and tiles from the original almost 400. The material shows a great diversity, both in terms of brick types and stamp types. The different kinds of ceramic building material catalogued include two antefixes, five terracotta water pipes, four *tubuli*, 21 round *suspensura* bricks, 32 rectangular *lateres*, 30 *tegulae* and 5 *imbrices*. Almost half of the objects are whole, and their original size could be measured, showing a larger than expected variety. Stamps occurred on *tegulae*, *imbrices*, *lateres*, round bricks and even on a *tubulus*. About two thirds of the brick stamps (59 out of 86, 34 different die types) were those of the *legio I Adiutrix*, the garrison of Brigetio for three centuries. The other 27 stamps belonged to 10 other manufacturers: the *legio XI Claudia* (4), *legio XXX Ulpia Victrix* (2), *cohors VII Breucorum* (6), *classis Flavia Histrica* (1), *Quadriburgium* (3), *Frigeridus dux* (1), *Terentius dux* (1), *Lupicinus tribunus* (6), *Terentianus tribunus* (1) and *Corta Vicen* (2).

This research proves that re-examining old collections in museum stores is not only important but also rewarding: 100 objects inventoried after the destructions of World War II as pieces with unknown provenance were re-identified as parts of the Tussla-collection originating from the legionary fortress of Brigetio. The information thus gained about the Roman ceramic building material of Brigetio can be used as a supplementary material for the ongoing research.

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Catalogue

Cat. no.	Inv. no. ¹⁶⁸	Type	Size of brick or tile (cm)	Thickness of brick or tile (cm)	Stamp	Text of stamp	Size of stamp (mm)	Notes	Reference
1	63.16.1	antefix	H: 18.7 W: 16.8					In form of male tragical mask (Fig. 4)	
2	65/1885.170a	antefix	H: 14.5 W: 13.2					In form of male tragical mask (Fig. 4)	
3	65/1885.224.A	water pipe	L: 48.6 D ₁ : 8.2 D ₂ : 11.7	1.5				Terracotta pipe with circular cross section (Fig. 4)	
4	65/1885.224.B	water pipe	L: 47.3 D ₂ : 11.9	2.3–2.5				Terracotta pipe with circular cross section (Fig. 4)	
5	65/1885.224.C	water pipe	L: 42.5 D ₁ : 8.2 D ₂ : 12.5	1.5				Terracotta pipe with circular cross section (Fig. 4)	
6	65/1885.224.D	water pipe	L: 34.2 D ₁ : 7.8	1.8				Terracotta pipe with circular cross section (Fig. 4)	
7	65/1885.224.E	water pipe	L: 33.0	1.7–2.0				Terracotta pipe with circular cross section (Fig. 4)	
8	65/1885.F	tubulus	L: 16.3 W ₁ : 13.7 W ₂ : 11.0	1.8–2.1				no vent hole; 2-2 finger-prints on the sides (Fig. 5)	
9	65/1885.G 501	tubulus	L: 27.5 W ₁ : 14.5 W ₂ : 12.8	1.5–2.5				circular vent holes in the middle of two sides (Fig. 5)	
10	65/1885	tubulus	L: 35.0 W ₁ : 13.0 W ₂ : 11.5	1.5–2.0				two triangle shaped holes on two sides; both ends blocked with mortar; two other sides combed with parallel lines (Fig. 5)	

168 Any brick or tile in the Tussla-collection has a maximum of three inventory numbers on their surfaces all listed in the catalogue: the first is the original inventory number (usually 65/1885), the second is the new inventory number given after WWII (typically 67.47. x x or 55.23. x x) and the third is a three-digit inventory number written with blue ink. The pieces can have any combination of these numbers written on their surfaces (for more information see section: *A note on the inventory numbers on the artefacts*).

11	65/1885 67.47.66 502	<i>tubulus</i>	L: 36.5 W ₁ : 12.5 W ₂ : 15.5	1.8	LE I AD	Łe[g(io)] I Ad(iutrix)	109 × 25	one triangular vent hole; retrograde stamp in rectangular frame (Fig. 6, Fig. 21)	SZILÁGYI 1933, 8/31f, Tab. 1.31
12	65/1885	round <i>suspensura</i> brick	D: 24.5	8.5–9.0				(Fig. 6)	
13	65/1885	round <i>suspensura</i> brick	D: 24.0	6.0				(Fig. 6)	
14	65/1885.H 481	round <i>suspensura</i> brick	D: 22.3	7.0–8.8	LEG I AD	Leg(io) I Ad(iutrix)	69 × 13	in <i>tabula ansata</i> (Fig. 7, Fig. 21)	SZILÁGYI 1933, 7/13, Tab. 1.13
15	65/1885 67.47.20 480	round <i>suspensura</i> brick	D: 22.1	7.6–8.1	LEG I AD PI F	Leg(io) I Ad(iutrix) Pi(a) F(idelis)	151 × 19	retrograde; in rectangular frame (Fig. 7, Fig. 22)	SZILÁGYI 1933, 14/63k, Tab. 3.63
16	65/1885 67.47.21 476	round <i>suspensura</i> brick	D: 22.1	7.1	LEG I AD	Leg(io) I Ad(iutrix)	72 × 15	in <i>tabula ansata</i> (Fig. 7, Fig. 22)	
17	65/1885 67.47.22 475	round <i>suspensura</i> brick	D: 22.1	7.6–8.0	LEG I AD P	Leg(io) I Ad(iutrix) Pi(a) Fidelis	111 × 22	in <i>tabula ansata</i> ; retro- grade D; upside down P and F in ligature (Fig. 7, Fig. 22)	SZILÁGYI 1933, 7/24b, Tab. 1.2
18	65/1885 67.47.24 486	round <i>suspensura</i> brick	D: 22.2	6.8–8.2	L G I AD PI F	L[e]g(io) I Ad(iutrix) Pi(a) F(idelis)	154 × 18	retrograde; in rectangular frame; the bottom half of most letters missing (Fig. 7, Fig. 22)	SZILÁGYI 1933, 14/63j, Tab. 3.63
19	65/1885 67.47.25 482	round <i>suspensura</i> brick	D: 21.8	6.9–7.9	LEG I AD PI F	Leg(io) I Ad(iutrix) Pi(a) F(idelis)	149 × 18	retrograde; in rectangular frame (Fig. 7, Fig. 22)	SZILÁGYI 1933, 14/63i, Tab. 3.63
20	65/1885 67.47.26 470	round <i>suspensura</i> brick	D: 23.7	6.1	LEG T A P F	Leg(io) ◦ I ◦ A(diutrix) ◦ P(ia) ◦ F(idelis)	162 × 39	in <i>tabula ansata</i> ; (Fig. 7, Fig. 23)	

21	65/1885 67.47.27 474	round <i>suspensura</i> brick	D: 22.4	6.9–7.5	LEG I AD P F	Leg(io) I Ad(iutrix) Pi(a) Fidelis	114 × 24	in <i>tabula ansata</i> ; retrograde D; upside down P and F in ligature (Fig. 7, Fig. 22)	
22	65/1885 67.47.29 492	round <i>suspensura</i> brick	D: 22.4	7.0–7.8	LEG I AD	Leg(io) I Ad(iutrix)	69 × 15	in <i>tabula ansata</i> (Fig. 8, Fig. 22)	
23	65/1885.279.2 67.47.30 469	round <i>suspensura</i> brick	D: 22.2	7.0–7.8	LEG I AD PI F	Leg(io) I Ad(iutrix) Pi(a) F(idelis)	149 × 20	retrograde; in rectangular frame (Fig. 8, Fig. 22)	SZILÁGYI 1933, 14/63f, Tab. 3.63.
24	65/1885 67.47.31	round <i>suspensura</i> brick	D: 22.8	7.1–7.8	a, LEG I AD PI F b, L I AD	a, Leg(io) I Ad(iutrix) Pi(a) F(idelis) b, L[eg(io)] I Ad(iutrix) [Pi(a) F(idelis)]	148 × 19	two stamps; retrograde; in rectangular frame (Fig. 8, Fig. 22)	
25	65/1885 67.47.33 488	round <i>suspensura</i> brick	D: 22.3	7.0–7.8	illegible		108 × 30	in rectangular frame (Fig. 8)	
26	65/1885 67.47.34 473	round <i>suspensura</i> brick	D: 22.6	7.2–8.5	LEG I AD	Leg(io) I Ad(iutrix)	69 × 15	in <i>tabula ansata</i> ; two fingerprints on either side of the brick (Fig. 8, Fig. 22)	SZILÁGYI 1933, 7/13, Tab. 1.13.
27	65/1885 67.47.35 478	round <i>suspensura</i> brick	D: 22.2	7.8	LEG I AD PI F	Leg(io) I Ad(iutrix) Pi(a) F(idelis)	145 × 19	retrograde; in rectangular frame (Fig. 8, Fig. 23)	SZILÁGYI 1933, 14/63g, Tab. 3.63
28	65/1885 67.47.36 483	round <i>suspensura</i> brick	D: 22.2	7.7–8.2	LEG I AD PI F	Leg(io) I Ad(iutrix) Pi(a) F(idelis)	152 × 19	retrograde; in rectangular frame; the bottom half of most letters are missing (Fig. 8, Fig. 23)	SZILÁGYI 1933, 14/63h, Tab. 3.63
29	65/1885 67.47.37 477	round <i>suspensura</i> brick	D: 22.3	7.4–7.8	LEG I AD PI F	Leg(io) I Ad(iutrix) Pi(a) F(idelis)	149 × 19	retrograde; in rectangular frame (Fig. 8, Fig. 23)	SZILÁGYI 1933, 14/63e, Tab. 3.63

30	65/1885 67.47.38 457	round <i>suspensura</i> brick	D: 18.7	7.6–8.2	LEC T AD	Leg(io) Ī Ad(iutrix)	129 × 19	in rectangular frame (Fig. 9, Fig. 23)	
31	65/1885.279.1 67.47.39 468	round <i>suspensura</i> brick	D: 21.7	7.8–8.2	LE I AD PI F	Le[g](io) I Ad(iutrix) Pi(a) F(idelis)	147 × 19	retrograde; in rectangular frame; (Fig. 9, Fig. 23)	SZILÁGYI 1933, 14/63d, Tab. 3.63
32	65/1885 67.47.40 466	round <i>suspensura</i> brick	D: 21.3	9.7–11.3	LEC T AD	Leg(io) Ī Ad(iutrix)	119 × 21	in rectangular frame (Fig. 9, Fig. 23)	
33	65/1885 67.47.79	round <i>suspensura</i> brick	D: 23.7	6.5–7.5	LEC T AD P F	Leg(io) Ī Ad(iutrix) P̂(ia) F(idelis)	92 × 29	in <i>tabula ansata</i> ; PF lig- ature; the middle part of the underside is carved away in 15 cm diameter circle in a depth of 3 cm (Fig. 9, Fig. 23)	
34	65/1885 67.47.42 314	<i>later bessalis</i>	19.8 × 19.4	7.0	L G I AD	L[e]g(io) Ī Ad(iutrix)	146 × 24	in <i>tabula ansata</i> (Fig. 9, Fig. 24)	
35	65/1885 67.47.45 305	<i>later bessalis</i>	20.3 × 19.4	6.5–7.2	LEG I ADI E	Leg(io) I Adi(utrix) E	157 × 20	retrograde; in rounded rectangular frame (Fig. 9, Fig. 24)	
36	65/1885.309 67.47.46 313	<i>later bessalis</i>	20.1 × 20.0	6.0–7.0	LEG I ADI E	Leg(io) I Adi(utrix) E	160 × 23	retrograde; in rounded rectangular frame (Fig. 9, Fig. 24)	SZILÁGYI 1933, 13/60i, Tab. 3.60
37	65/1885 67.47.47 298	<i>later bessalis</i>	20.3 × 19.7	6.1–6.7	LEG I AD	Leg(io) Ī Ad(iutrix)	145 × 24	in <i>tabula ansata</i> ; two su- perimposed canine foot- prints (Fig. 9, Fig. 24)	
38	65/1885 67.47.48 300	<i>later bessalis</i>	19.9 × 19.7	7.5	LEG I ADI	Leg(io) Ī Adi(utrix)	96 × 32	in <i>tabula ansata</i> like frame (Fig. 9, Fig. 23)	

39	65/1885 67.47.51 515	<i>later bessalis</i>	20.7 × 19.7	7.0	LEG I AD	L ◦ eg(io) ◦ I ◦ Ad(iutrix)	115 × 31	in double rectangular frame (Fig. 9, Fig. 23)	SZILÁGYI 1933, 9/33, Tab. 2.33
40	65/1885 67.47.65 311	<i>later bessalis</i>	20.7 × 19.7	6.9	LEG I ADI	Leg(io) I Adi(utrix)	97 × 23	retrograde; in rectangular frame (Fig. 10, Fig. 28)	
41	65/1885 55.23.4	<i>later bessalis</i>	20.5 × 19.9	6.8	LEG I AD	Leg(io) I Ad(iutrix)	131 × 32	in rectangular frame (Fig. 10, Fig. 25)	
42	65/1885 55.23.7	<i>later bessalis</i>	20.2 × 20.2	6.3–6.5	LEG I ADI E	Leg(io) I Adi(utrix) E	161 × 25	retrograde; in rounded rectangular frame (Fig. 10, Fig. 24)	
43	65/1885 67.87.1 264	<i>later bessalis</i>	20.5 × 17.5	5.9–6.2	LEG I ADI E	Leg(io) I Adi(utrix) E	162 × 25	retrograde; in rounded rectangular frame (Fig. 10, Fig. 24)	
44	65/1885 55.23.3 253	<i>later</i>	26.1 × 27.1	5.1–5.5	LEG I ADI E	Leg(io) I Adi(utrix) E	161 × 26	retrograde; in rounded rectangular frame (Fig. 10, Fig. 24)	SZILÁGYI 1933, 13/60a, Tab. 3.60
45	65/1885 67.47.59 164	<i>later pedalis</i>	29.3 × 29.6	4.6–5.0	LEG T A P F	Leg(io) ◦ I ◦ Ad(iutrix) ◦ P(ia) ◦ F(idelis)	149 × 38	in <i>tabula ansata</i> ; (Fig. 10, Fig. 25)	
46	65/1885.199 54	<i>later</i>	36.5 × 25.7	5.0–5.4	COH VII BR ANT	Coh(ors) VII Br(eucorum) Ant(onianina)	140 × 25	in rectangular frame; NT ligature (Fig. 10, Fig. 29)	
47	65/1885 67.58.2	<i>later</i>	35.5 × 25.5	5.0–5.5	COH VII BR ANT	Coh(ors) VII Br(eucorum) Ant(onianina)	149 × 27	in rectangular frame; NT ligature (Fig. 11, Fig. 29)	
48	65/1885	<i>later</i>	35.7 × 26.6	4.8–5.5	COH VII BR ANT	Coh(ors) VII Br(eucorum) Ant(onianina)	171 × 34	in rectangular frame; with retrograde N; OH and BR ligature (Fig. 11, Fig. 29)	
49	65/1885.184 159	<i>later</i>	38.4 × 26.3	7.0–7.5	QVADRIB	Quadrib(urgium)	122 × 21	retrograde; in rectangular frame (Fig. 11, Fig. 31)	

50	65/1885.A	<i>later</i>	42.6 × 41.8	7.2–7.4	illegible		136 × 23	in rectangular frame (Fig. 12)	
51	65/1885.275 615	<i>later</i>	42.5 × 42.2	7.2–7.8	LEG XI C P F	Leg(io) ◦ XI C(laudia) P(ia) F(idelis)	91 × 41	in rectangular frame with zigzag border (Fig. 12, Fig. 21)	
52	65/1885 67.47.74 273	<i>later</i>	44.0 × 40.5	6.0–6.5	LEG I AD	Leg(io) I Ad(iutrix)	110 × 40	in rectangular frame (Fig. 13, Fig. 25)	
53	65/1885.100 67.53.1.	<i>later</i>	28.4 × 26.3	6.4–6.5	LEG XI C P F	Leg(io) XI C(laudia) P(ia) F(idelis)	90 × 30	in rectangular frame (Fig. 11, Fig. 21)	
54	65/1885.243 55.23.49	<i>later</i>	17.5 × 21.5	6.7	EG XI C P F	[L]eg(io) ◦ XI C(laudia) P(ia) F(idelis)	82 × 41	in rectangular frame with zigzag border (Fig. 11, Fig. 21)	
55	65/1885 55.23.50	<i>later</i>	19.5 × 24.5	8.5	G XI C P F	[Le]g(io) ◦ XI C(laudia) P(ia) F(idelis)	80 × 31	in rectangular frame (Fig. 13, Fig. 21)	
56	65/1885 67.47.76 423	<i>later</i>	29.7 × 16.5	4.1	LEG I AD P F	Leg(io) I Ad(iutrix) P(ia) F(idelis)	100 × 26	in <i>tabula ansata</i> ; retrograde P and F (Fig. 13, Fig. 25)	SZILÁGYI 1933, 16/81, Tab. 3.81
57	65/1885 67.47.75	<i>later</i>	30.0 × 19.5	5.9	LEG I AD	Leg(io) I Ad(iutrix)	110 × 40	in rectangular; frame (Fig. 13, Fig. 25)	
58	65/1885. C 522	<i>later</i>	29.9 × 34.0	6.8	LEG I AD	Leg(io) I Ad(iutrix)	88 × 33	in <i>tabula ansata</i> ; (Fig. 13, Fig. 26)	SZILÁGYI 1933, 12/52b, Tab. 2.52
59	65/1885 67.47.72	<i>later</i>	43.5 × 35.2	6.7	LEG I AD	Leg(io) I Ad(iutrix)	110 × 41	in rectangular frame (Fig. 14, Fig. 25)	
60	65/1885.293 518	<i>later</i>	58.5–59.0 × 35.0	7.5–8.0	LEG I ADI	Leg(io) I Ad(iutrix)	89 × 33	in <i>tabula ansata</i> ; five identical stamps! (Fig. 14, Fig. 26)	SZILÁGYI 1933, 7/17, Tab. 1.17

61	65/1885 55.23.16 512	<i>later</i>	16.5 × 22.0	8.0–8.5	LEG I ADI	Leg(io) I Adi(utrix)	88 × 34	in <i>tabula ansata</i> (Fig. 14, Fig. 26)	SZILÁGYI 1933, 12/52a, Tab. 2.52
62	65/1885. D 277	<i>later</i>	37.5 × 27.0	7.0	LEG I A P	Leg(io) I A(diutrix) P(ia) F(idelis)]	118 × 27	in <i>tabula ansata</i> (Fig. 15, Fig. 26)	
63	65/1885 67.47.73 260	<i>later</i>	40.0–36.0	6.2–6.6	LEG I AD	Leg(io) I Ad(iutrix)	122 × 24	Two canine footprints; in <i>tabula ansata</i> (Fig. 15, Fig. 26)	
64	65/1885 263	<i>later</i>	27.0 × 20.5	6.5–6.8	LEG I A P	Leg(io) I A(diutrix) P(ia) Fidelis)	149 × 35	in <i>tabula ansata</i> ; PF ligature (Fig. 15, Fig. 26)	
65	65/1885.115 513	<i>later</i>	21.5 × 23.5	5.9	COH VII BR ANT	Coh(ors) VII Br(euconium) Ant(oniniana)	145 × 24	in rectangular frame; NT ligature (Fig. 15, Fig. 29)	
66	65/1885 55.23.13	<i>tegula</i>	18.5 × 20.5	3.0	LEG I ADI	Leg(io) I Adi(utrix) [- -]	116 × 19	in rectangular frame (Fig. 15, Fig. 27)	
67	65/1885 67.47.18	<i>tegula</i>	14.7 × 22.0	2.9	LEG I AD P F	Leg(io) I Ad(iutrix) P(ia) F(idelis)	109 × 17	in <i>tabula ansata</i> (Fig. 15, Fig. 27)	
68	65/1885 55.23.22	<i>tegula</i>	21.0 × 21.0	3.0–3.2	LEG I A	Leg(io) I A[d(iutrix) - -]	88 × 35	in <i>tabula ansata</i> (Fig. 15, Fig. 27)	
69	65/1885 67.47.13 224	<i>tegula</i>	30.5 × 25.5	3.2–3.6	LEG I AD P F	Leg(io) I Ad(iutrix) P(ia) F(idelis)	109 × 18	in <i>tabula ansata</i> (Fig. 16, Fig. 27)	
70	65/1885 67.47.7 324	<i>tegula</i>	36.0 × 27.5	2.9–3.5	LEG I AD	Leg(io) I Ad(iutrix)	105 × 24	in <i>tabula ansata</i> ; retrograde D (Fig. 16, Fig. 27)	
71	65/1885 67.47.19 275	<i>tegula</i>	21.0 × 17.5	3.1–3.4	I AD P F	[Leg(io)] I Ad(iutrix) P(ia) F(idelis)	90 × 28	in <i>tabula ansata</i> ; retrograde; I instead of F (Fig. 15, Fig. 27)	
72	65/1885 67.47.12 434	<i>tegula</i>	31.5 × 36.5	3.0–3.8	LEG I ADI P F	Leg(io) I Adi(utrix) P(ia) F(idelis)	130 × 27	in rectangular frame; with retrograde PF; signature (Fig. 16, Fig. 27)	SZILÁGYI 1933, 14/64b, Tab. 3.64

73	65/1885 67.47.5 417	<i>tegula</i>	26.0 × 27.5	3.2–4.5	LEG T A P F	Leg(io) Ī ° A(diutrix) P(ia) F(idelis)	119 × 23	in <i>tabula ansata</i> ; retro- grade (Fig. 16, Fig. 27)	SZILÁGYI 1933, 15/71b, Tab. 3.71
74	65/1885 55.23.149 346	<i>tegula</i>	21.5 × 16.5	3.4	LEG I ADI P F	Leg(io) I Adi(utrix) P(ia) F(idelis)	158 × 32	in <i>tabula ansata</i> (Fig. 16, Fig. 27)	SZILÁGYI 1933, 17/95, Tab. 4.95
75	65/1885 55.23.41 409	<i>tegula</i>	31.0 × 15.5	2.5	G I A P F	[Le]g(io) I A(diutrix) P(ia) F(idelis)	125 × 39	in <i>tabula ansata</i> (Fig. 16, Fig. 28)	
76	65/1885 55.23.11 433	<i>tegula</i>	13.5 × 14.0	3.0	LEG I AD P F A	Leg(io) I Ad(iutrix) P(ia) F(idelis) A[nt(o- niana)]	129 × 28	Fig. 17, Fig. 28	SZILÁGYI 1933, 17/98a, Tab. 4.98
77	65/1885.239 67.47.17 495	<i>tegula</i>	31.0 × 24.0	2.6–3.0	LEG T A P F	Leg(io) Ī Ad(iutrix) P(ia) ° F(idelis)	164 × 39	in <i>tabula ansata</i> (Fig. 17, Fig. 28)	
78	65/1885 67.47.8 327	<i>tegula</i>	50.5 × 25.0	2.0–4.0	LEG I AD	Leg(io) I Ad(iutrix)	140 × 25	in <i>tabula ansata</i> ; retro- grade (Fig. 17, Fig. 28)	
79	65/1885.210 10.51.100 437	<i>tegula</i>	15.5 × 14.2	3.5	EG XXX	[L]eg(io) ° XXX ° [V(lpia) V(ictrix)]	87 × 32	Fig. 17, Fig. 21	SZILÁGYI 1933, 83/1, Tab. 22.1
80	65/1885.207 55.23.53 365	<i>tegula</i>	25.5 × 15.0	2.7	EG XXX V	[L]eg(io) ° XXX ° V(lpia) [V(ictrix)]	117 × 35	Fig. 17, Fig. 21	SZILÁGYI 1933, 83/1, Tab. 22.1
81	65/1885.71 55.23.163 282	<i>tegula</i>	12.0 × 11.5	2.3	C F H	C(lassis) F(lavia) H(istrica)		in <i>tabula ansata</i> (Fig. 17, Fig. 29)	
82	65/1885.294 67.58.10 259	<i>tegula</i>	54.1 × 40.2	2.5	COH VII BR ANT	Coh(ors) ° VII ° Br(eucorum) ° Ant(oniniana)	150 × 21	in rectangular frame; NT ligature (Fig. 18, Fig. 29)	SZILÁGYI 1933, 89/28b, Tab. 24.28

83	65/1885.253 377	<i>tegula</i>	34.5 × 24.5	2.3	COH VII BR C	Coh(ors) VII Br(euconum) G[ord(iana)]	167 × 31	in rectangular frame (Fig. 17, Fig. 29)	SZILÁGYI 1933, 90/44, Tab. 24.44
84	65/1885 57.90.4	<i>tegula</i>	22.5 × 33.4	2.4–2.6	QVADRI BVR	Quadribur(gium)	147 × 26	in rectangular frame; retrograde Rs (Fig. 18, Fig. 31)	
85	65/1885 55.23.140.	<i>tegula</i>	17.0 × 17.5	2.3–2.7	CORTA VIC	Corta ° Vic[en]	152 × 24	in rectangular frame; signature (Fig. 18, Fig. 32)	
86	65/1885.245 351	<i>tegula</i>	28.5 × 22.7	2.4	CORTA	Corta [Vicen]	120 × 23	in rectangular frame; signature (Fig. 18, Fig. 32)	
87	65/1885.314 55.23.76	<i>tegula</i>	14.1 × 10.6	2.7	QVAD	Quad[riburgium]	69 × 30	in <i>tabula ansata</i> (Fig. 18, Fig. 31)	
88	65/1885.67 55.23.157 284	<i>tegula</i>	22.5 × 12.5	2.4	TERE VPD	Tere(ntius) v(ir) p(erfectissimus) d(ux)	150 × 26	in rounded rectangle (Fig. 18, Fig. 30)	
89	65/1885.68	<i>tegula</i>	45.3 × 29.1	3.0–3.3	TEREN	Teren[tian trib] ?	81 × 23	in rectangular frame; three fingers (Fig. 19, Fig. 31)	
90	65/1885. B 326	<i>tegula</i>	34.8 × 36.5	3.4–3.8	LVPICINI TRB	Lupicini tr(i)b(uni)	169 × 28	in rectangular frame (Fig. 19, Fig. 30)	
91	65/1885 55.23.123 386 and 65/1885 55.23.119	<i>tegula</i>	21.5 × 12.0 19.5 × 15.5	3.2–3.6	LVPICINI TRB	Lupicini tr(i)b(uni)	170 × 30	broken <i>tegula</i> ; in rectangular frame (Fig. 19, Fig. 30)	SZILÁGYI 1933, 98/33, Tab. 26.33
92	65/1885 55.23.118 378	<i>tegula</i>	23.0 × 29.0	3.2	VPICINI TRB	[L]upicini tr(i)b(uni)	151 × 30	Fig. 18, Fig. 30	SZILÁGYI 1933, 98/34a, Tab. 27.34

93	65/1885 55.23.122 368	<i>tegula</i>	18.5 × 19.5	2.5	LVPICINI T	Lupicini t[r(i)b(uni)]	131 × 29	in rectangular frame (Fig. 19, Fig. 31)	SZILÁGYI 1933, 98/34a, Tab. 27.34
94	65/1885 55.23.117 376	<i>tegula</i>	19.2 × 22.0	3.4–4.0	PICI	[Lu]pici[ni tr(i) b(uni)]	85 × 26	Fig. 19, Fig. 31	SZILÁGYI 1933, 98/36e, Tab. 27.36
95	65/1885 55.23.120 325	<i>tegula</i>	15.0 × 15.5	2.8	O TRB	[- -]o tr(i)b(un)o	96 × 26	in rectangular frame (Fig. 20, Fig. 31)	SZILÁGYI 1933, 98/33, Tab. 26.33
96	65/1885 55.23.21 413	<i>imbrex</i>	13.0 × 20.5	2.1	LEG I AD P F	Leg(io) I Ad(iutrix) P(ia) F(idelis)	107 × 25	in <i>tabula ansata</i> ; AD liga- ture (Fig. 20, Fig. 28)	SZILÁGYI 1933, 16/84, Tab. 3.84
97	65/1885 55.23.17 331	<i>imbrex</i>	10.5 × 16.0	1.7	LEG I AD P	Leg(io) I Ad(iutrix) P(ia) [F(idelis)]	88 × 28	in <i>tabula ansata</i> ; retro- grade P (Fig. 20, Fig. 25)	SZILÁGYI 1933, 14/64b, Tab. 3.64
98	65/1885 67.47.68	<i>imbrex</i>	38.0 × 20.0 × 9.3		LEG I AD I E	Leg(io) I Adi(utrix) E	164 × 24	in rounded rectangle; retrograde; two partly superimposed canine footprints (Fig. 20, Fig. 23)	
99	65/1885 55.23.108 380	<i>imbrex</i>	13.0 × 12.0	2.3	LVPICINI TR	Lupicini tr(i)[b(uni)]	121 × 24	Fig. 20, Fig. 31	
100	65/1885 55.23.89	<i>imbrex</i>	12.3 × 14.2	2.2–2.5	IGERIDVS V	[Fr]igeridus v(ir) [p(erfectissimus) d(ux)]	115 × 27	Fig. 20, Fig. 30	



Cat. 1. - 63.16.1.



Cat. 2. - 65/1885.170a



Cat. 3. - 65/1885.224.A



Cat. 4. - 65/1885.224.B



Cat. 5. - 65/1885.224.C



Cat. 6. - 65/1885.224.D



Cat. 7. - 65/1885.224.E



Fig. 4. Antefixes and terracotta water pipes (photos: P. Gerecze and L. Dobosi).



Cat. 8. - 65/1885.F



Cat. 9. - 65/1885.G



Cat. 10. - 65/1885.

10 cm

Fig. 5. *Tubuli* (photos: L. Dobosi).



Cat. 11. - 65/1885 - 67.47.66.



floor tiles



spacers



Cat. 12. - 65/1885



Cat. 13. - 65/1885

10 cm

Fig. 6. *Tubulus*, dog bone shaped floor tiles, spacers and round *suspensura* bricks (photos: P. Gerecze and L. Dobosi).



Fig. 7. Round *suspensura* bricks (photos: L. Dobosi).



Fig. 8. Round *suspensura* bricks (photos: L. Dobosi).

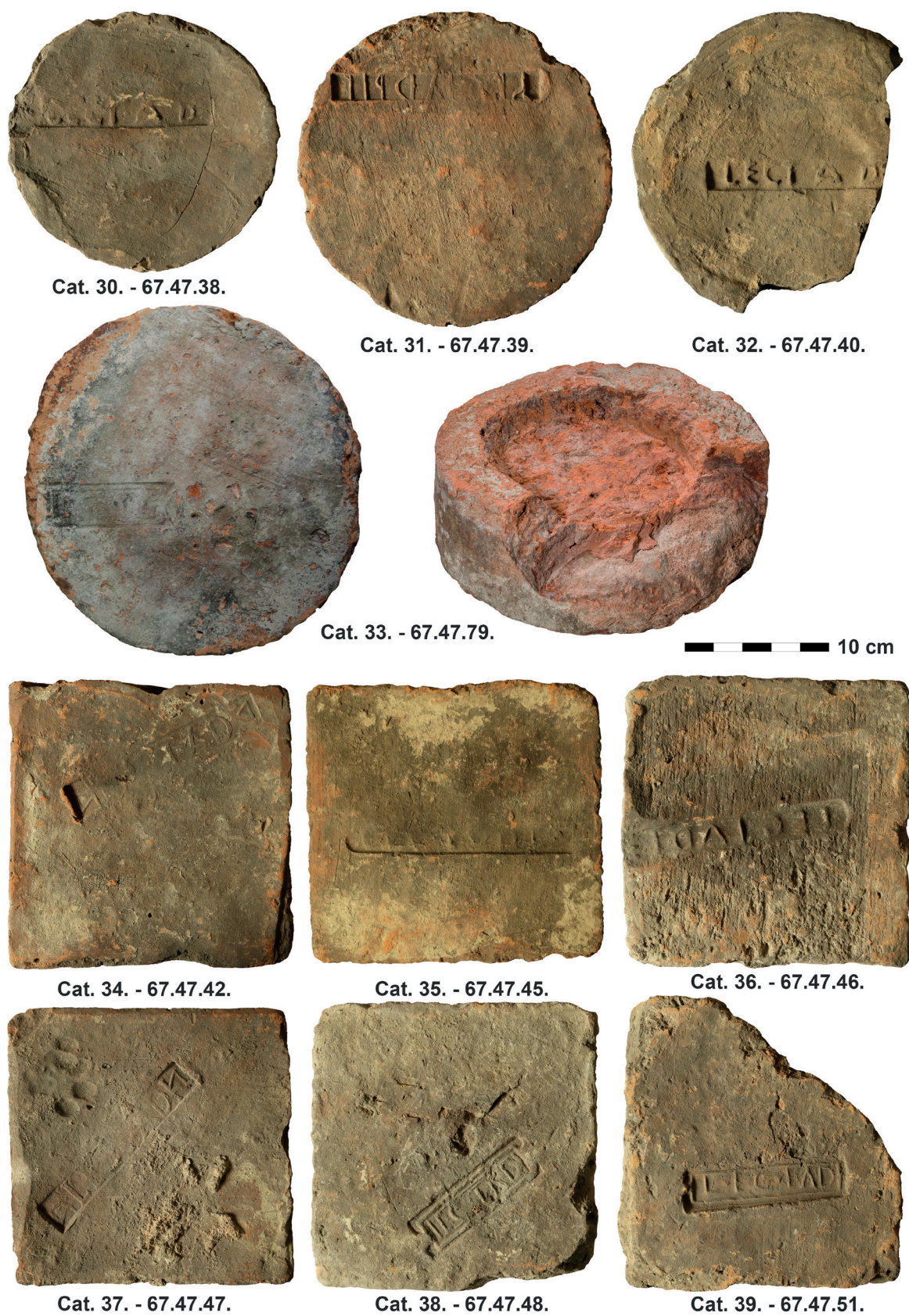


Fig. 9. Round *suspensura* bricks and *lateres* (photos: V. Törő and L. Dobosi).



Fig. 10. *Lateres* of different sizes (photos: L. Dobosi).



Cat. 47 - 67.58.2.



Cat. 48 - 65/1885



Cat. 49 - 65/1885.184.



Cat. 53 - 67.53.1.



Cat. 54 - 55.23.49.

10 cm

Fig. 11. *Lateres* of different sizes (photos: L. Dobosi).



Cat. 50 - 65/1885.A

Cat. 51 - 65/1885.275.



10 cm

Fig. 12. *Lateres* of different sizes (photos: L. Dobosi).

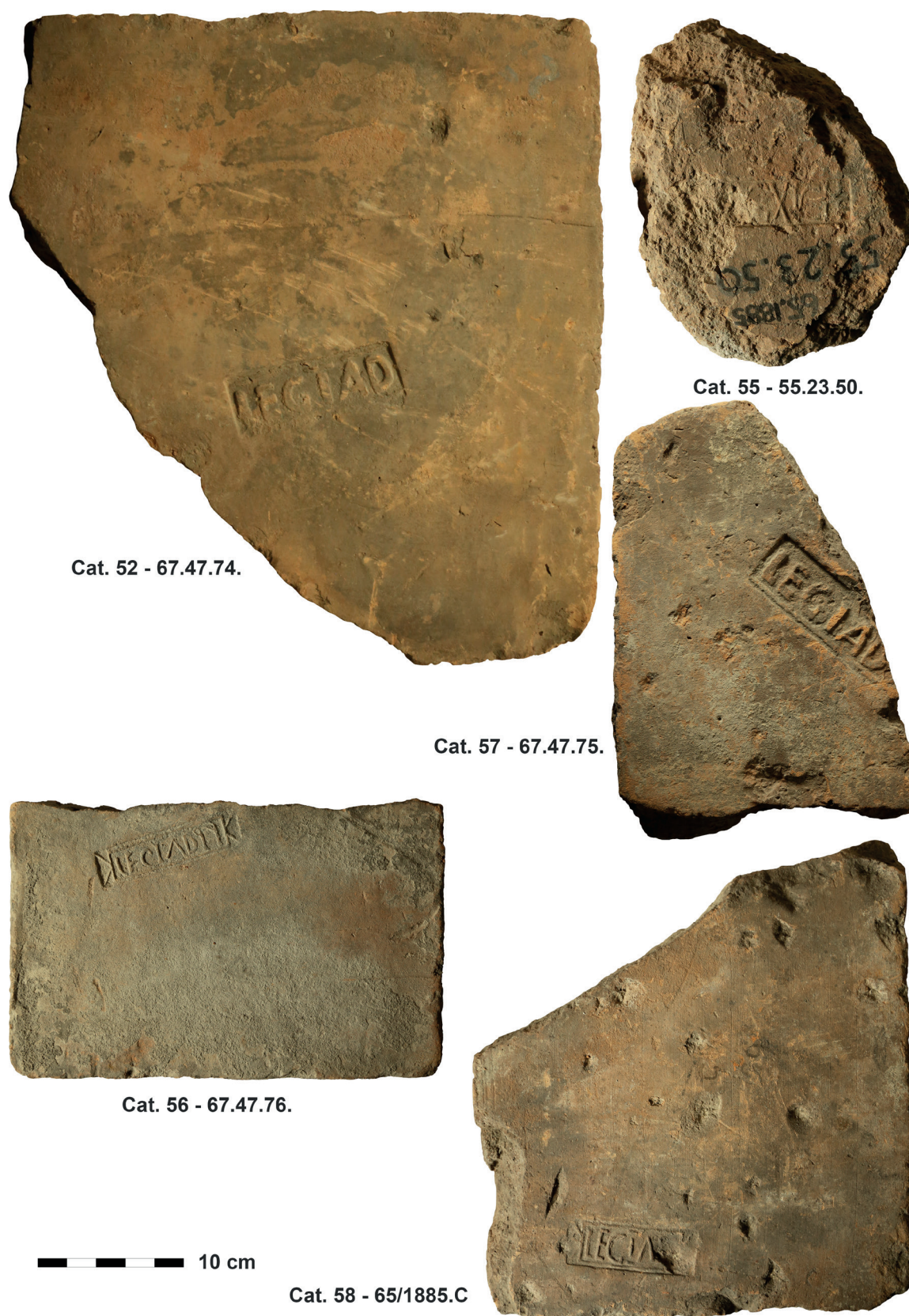


Fig. 13. *Lateres* of different sizes (photos: L. Dobosi).



Cat. 59 - 67.47.72.



Cat. 61 - 55.23.16.



Cat. 60 - 65/1885.293.

10 cm

Fig. 14. *Lateres* of different sizes (photos: L. Dobosi).



Fig. 15. *Lateres* of different sizes and tegulae (photos: L. Dobosi).

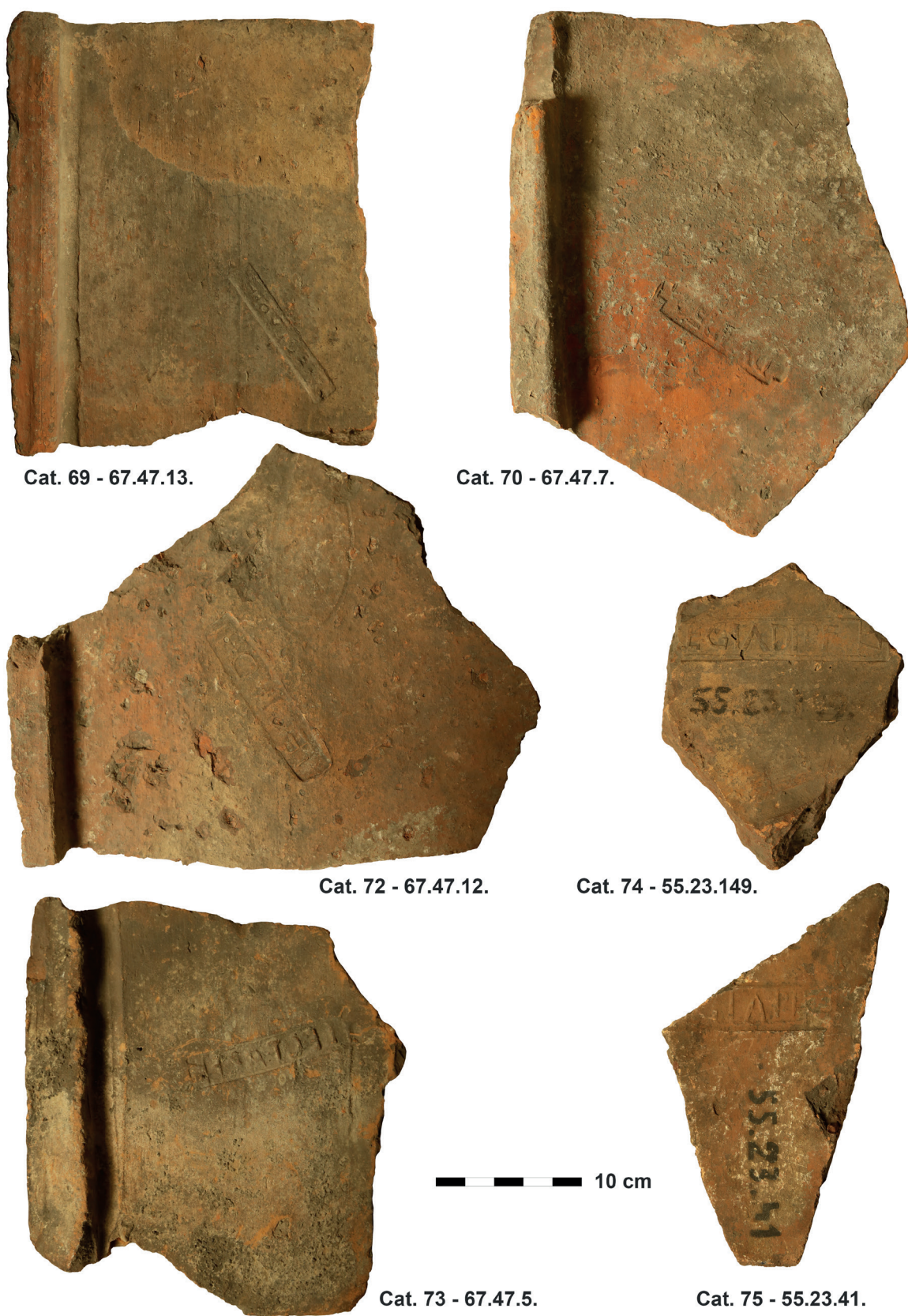


Fig. 16. *Tegulae* (photos: L. Dobosi).



Fig. 17. *Tegulae* (photos: L. Dobosi).



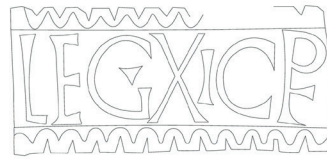
Fig. 18. *Tegulae* (photos: L. Dobosi).



Fig. 19. *Tegulae* (photos: L. Dobosi).



Fig. 20. *Imbrices* (photos: L. Dobosi).



Cat. 51 - 65/1885.275.



Cat. 54 - 55.23.49.



Cat. 53 - 67.53.1.



Cat. 55 - 55.23.50.



Cat. 80 - 55.23.53.



Cat. 79 - 65/1885.210



Cat. 11 - 67.47.66.



Cat. 14 - 65/1885.H

5 cm

Fig. 21. Brick stamps: *legio XI Claudia PF*, *legio XXX Ulpia Victrix* and *legio I Adiutrix* (photos and drawings: L. Dobosi).



Fig. 22. Brick stamps: *legio I Adiutrix* (photos and drawings: V. Törő and L. Dobosi).



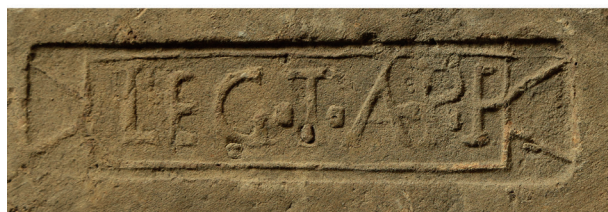
Fig. 23. Brick stamps: *legio I Adiutrix* (photos and drawings: V. Törő and L. Dobosi).



Fig. 24. Brick stamps: *legio I Adiutrix* (photos and drawings: L. Dobosi).



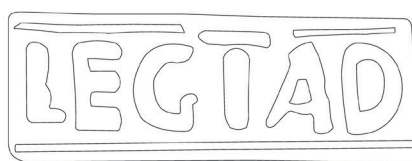
Cat. 41 - 55.23.4.



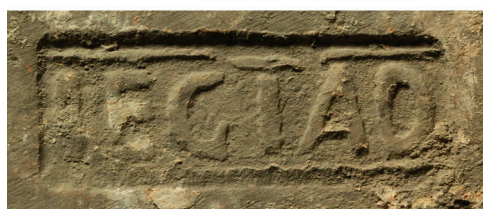
Cat. 45 - 67.47.59.



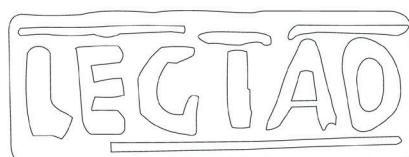
Cat. 52 - 67.47.74.



Cat. 57 - 67.47.75.



Cat. 59 - 67.47.72.



Cat. 56 - 67.47.76.



Cat. 97 - 55.23.17.



5 cm

Fig. 25. Brick stamps: *legio I Adiutrix* (photos and drawings: L. Dobosi).



Cat. 58 - 65/1885.C



Cat. 61 - 55.23.16.



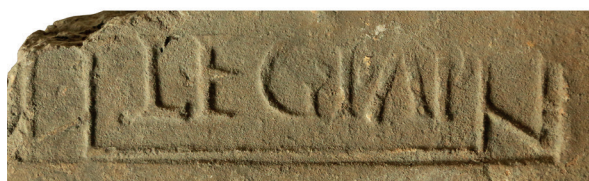
Cat. 60 - 65/1885.293.



Cat. 62 - 65/1885.D



Cat. 63 - 67.47.73.



Cat. 64 - 65/1885



5 cm

Fig. 26. Brick stamps: *legio I Adiutrix* (photos and drawings: L. Dobosi).



Cat. 66 - 55.23.13.



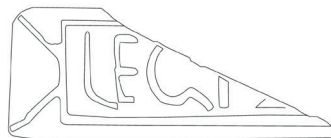
Cat. 67 - 67.47.18.



Cat. 69 - 67.47.13.



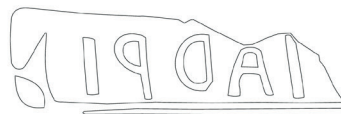
Cat. 68 - 55.23.22.



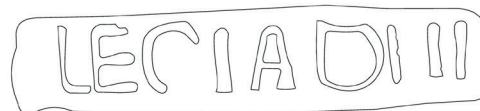
Cat. 70 - 67.47.7.



Cat. 71 - 67.47.19.



Cat. 72 - 67.47.12.



Cat. 73 - 67.47.5.



Cat. 74 - 55.23.149.

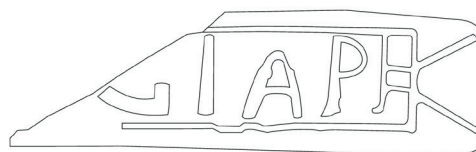


5 cm

Fig. 27. Brick stamps: *legio I Adiutrix* (photos and drawings: L. Dobosi).



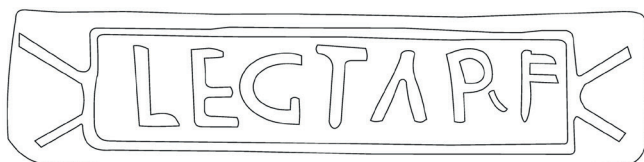
Cat. 75 - 55.23.41.



Cat. 76 - 55.23.11.



Cat. 77 - 67.47.17.



Cat. 78 - 67.47.8.



Cat. 96 - 55.23.21.



Cat. 40 - 67.47.65.

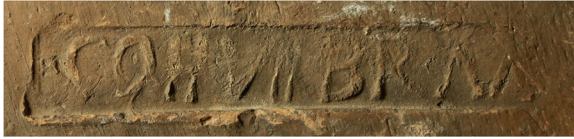


5 cm

Fig. 28. Brick stamps: *legio I Adiutrix* (photos and drawings: L. Dobosi).



Cat. 81 - 55.23.163.



Cat. 46 - 65/1885.199.



Cat. 65 - 65/1885.115.



Cat. 82 - 67.58.10.



Cat. 47 - 67.58.2.



Cat. 48 - 65/1885

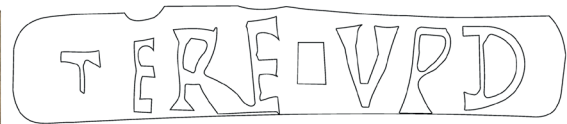
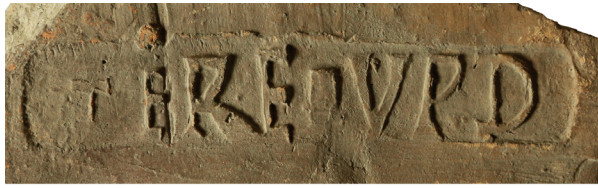


Cat. 83 - 65/1885.253.



5 cm

Fig. 29. Brick stamps: *classis Flavia Histrica* and *cohors VII Breucorum* (photos and drawings: L. Dobosi).



Cat. 88 - 55.23.157.



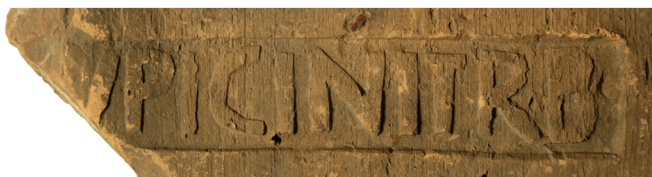
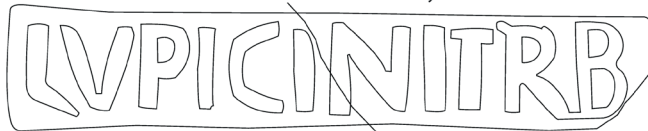
Cat. 100 - 55.23.89.



Cat. 90 - 65/1885.B



Cat. 91 - 55.23.119, 55.23.123.



Cat. 92 - 55.23.118.



5 cm

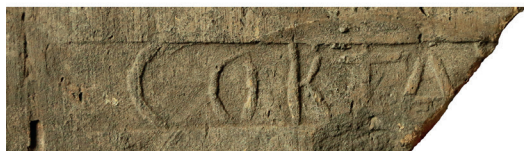
Fig. 30. Brick stamps: Terentius *dux*, Frigeridus *dux* and Lupicinus *tribunus* (photos and drawings: L. Dobosi).



Fig. 31. Brick stamps: *Lupicinus tribunus*, *Terentianus tribunus* and *Quadriburgium* (photos and drawings: L. Dobosi).



Cat. 85 - 55.23.140.



Cat. 86 - 65/1885.245.



5 cm

Fig. 32. Brick stamps: *Corta Vicen* (photos and drawings: L. Dobosi).