Merchants’ Implements (the Folding Balance)

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In Grave E41, an incomplete folding portable balance made of copper alloy was found within the coffin. There were no traces of a balance case or the weights. No human remains were found in the grave. There were no traces of damage to the burial and its dimensions were typical of the average graves in the Bodzia cemetery. Most probably Grave E41 is a cenotaph, i.e., a symbolic or substitute grave, not containing any human remains.¹

The balance was made up of two almost identical arm beams decorated with bands of deep regular grooves encircling their distal ends. Also half of the suspension loop of the balance and two decorated halfspherical scale pans have been preserved (Fig. 8.1). The pans bear traces of destruction (Fig. 8.2); the second pan was damaged during conservation when corrosion was being removed (Fig. 8.3). There were no traces of the pointer which, as the analogies indicate, should be made of brass, bronze and/or iron and resemble an inverted letter ‘T’, or of the two small loops used to suspend the pans on the arms by means of cords (the loops should be placed in the holes at the distal edges of the arm beams). The other missing items are three small rivets joining the elements of the pan: the handle with the pointer and the pointer with the arm beam (Fig. 8.4).²

The metallographic analysis of the discovered parts of the balance showed that they were made of alloys composed of ca. 78–87% by weight of copper, ca. 0.03–2.4% by weight of tin and as much as ca. 9.5–17% by weight of zinc.³ Thus it is not so much the ‘classical’ bronze alloy but rather brass, which at that time was an exclusive metal. The total weight of the analyzed parts of the balance (after conservation) was 19.9 g, and out of that the scale pans weigh 7.2 g and 4.8 g.

The pans of the balance have slightly uneven horizontal edges thickened to 1 mm at the rim (cf. Fig. 8.1: 4–5). On the outside they are decorated with single rows of dots, which were carefully punched below the edge of the pan

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¹ For the description of the grave see Chapters 5 and 17.
² Cf. Steuer 1984, 277ff, fig. 132; Krzyszowski 1997, 646f, fig. 4–6, etiam completely preserved balances.
³ An extensive discussion of the results of analyses of other artifacts will be presented in the Polish language version of the monograph of the cemetery.
and sometimes overlapping slightly. It is not certain whether several inscribed circles visible in the centers of either the internal or the external surfaces of the pans should be interpreted as decorative elements or accidental or intentional production marks.

The pans were carefully shaped from thin metal sheet (less than 1 mm thick) into sections of a sphere with a depth up to 1.3 cm and the external diameter of 6.3 and 5.8 × 5.9 cm. Thus they slightly differed in their dimensions, form, and probably also decoration. The detailed study of the pans, especially before