

give between 1.4 and 1.5 m. in a straight line from end to end. The Yrzi bow is 1.47 m. along the curve (see below). The position of the bone remains of an Avarian bow in Grave 130 of Üllö, Hungaria, shows that its length has been 1.6 m. (Horváth, p. 21).

The broadest part of our bow must have been at least 4 cm.

When this type of bow has been found in graves only the bone parts have been, as a rule, preserved. Besides the two pairs of ear-pieces there are also bone elements from the grip or handle. From our bow there is one narrow curved bone strip that can hardly have formed part of an ear (it is wedge-shaped at one end, just as is the left one in the Fig. on p. 39 in Werner's paper), and a fragment of a 2.9 cm. broad lamella. The latter certainly comes from the curved grip (cf. Werner, Fig. on p. 37, and Marosi, *Fettich*, Pl. III: 5—6), as the grip must have been rigid to allow of such a marked cupid's bow shape as our bow undoubtedly possessed. Apparently it was "pre-shaped" to a great extent. Among the other fragments of wood and horn it is impossible to make any determinations as to their exact place in the bow. A horn lamella is 3.3 cm. broad and 0.4 cm. thick.

The reconstruction seen in Alföldi Fig. 2 comes very near the general outline of our bow.

The effective pull in this type of bow is limited to a rather short area.

The middle part of the Lop-nor bow recalls the shape of the so-called Scythian bow as we know it from various representations on reliefs, coins and so forth, but the ears are nearly straight whereas the ears of the Scythian type are strongly curved and apparently made mostly of horn, Fig. 31;<sup>1</sup> the difference in length must also be considerable. Unfortunately no actual specimen has come down to us. The Lop-nor bow is more closely related to the "Sassanian" type.

The general construction is that of the Yrzi bow from the Baghouz necropolis on the Euphrates (Brown, with full bibliography). This Yrzi bow is of about the same age as the Lop-nor bow, and one of the few Asiatic compound bows that has been carefully published. I want to take this opportunity of conveying to Dr. FRANK E. BROWN of the Yale University my thanks for his kindness in drawing my attention to some features of the Lop-nor bow that I might otherwise have overlooked.

The oldest extant compound bow was preserved in an Egyptian tomb of the fifteenth century B. C. (Litt. in Brown, footnote 5), but whether the origin of this contrivance is to be sought in Egypt is uncertain. More likely the evolution of the composite bow took place in Asia, and the homeland of such complicated forms as the Yrzi and the Lop-nor bows is to be looked for in Central Asia. No really old complete bows are known from Central Asia. Among the oldest fragments there is a yet unpublished bone tip excavated by myself in a Han dynasty fortress on the lower Edsen-gol river in Inner Mongolia.

<sup>1</sup> It is hard to get a clear impression of the Scytho-Sarmatian bow-ear of bone, from South Russia, reproduced in Ebert's *Reallexikon*, 13, Taf. 39 A.