

not held up by bandits; also his baggage in which the stone is hidden is safe from attack, and its wearer rises in the esteem of his fellow-mates.<sup>1</sup> I do not know what Chinese stone is understood here.

20. It is well known that the Chinese have a peculiar alloy of copper consisting of copper 40.4, zinc 25.4, nickel 31.6, iron 2.6, and occasionally some silver and arsenic. It looks white or silver-like in the finish, and is hence called *pai-t'un* ("white copper"). In Anglo-Indian it is *tootnague* (Tamil *tutunāgum*, Portuguese *tutanaga*).<sup>2</sup> It is also known to foreigners in the East under the Cantonese name *paktung*. It is mentioned as early as A.D. 265 in the dictionary *Kwan ya* 廣雅,<sup>3</sup> where the definition occurs that *pai-t'un* is called *wu* 鑄.

This alloy was adopted by the Persians under the name *xār-šīnī* (Arabic *xār-šīnī*).<sup>4</sup> The Persians say that the Chinese make this alloy into mirrors and arrowheads, a wound from which is mortal.<sup>5</sup> Vullers cites a passage from the poet Abu al Ma'anī, "One who rejects and spurns his friend pierces his heart with *xār-šīnī*." Qazwīnī speaks of very efficient lance-heads and harpoons of this metal. The Persians have further the term *isfīdruj*, which means "white copper," and which accordingly represents a literal rendering of Chinese *pai-t'un*. Moreover, there is Persian *sepīdrūi* (Arabic *isbiadāri*, *isbādārīh*); that is, "whitish in appearance." English *spelter* (German *spiauter*, *speauter*, *spialter*, Russian *špiauter*), a designation of zinc, is derived from this word.<sup>6</sup> Dimašqī, who wrote about 1325, explains *xār-šīnī* as a metal from China, the yellow color of copper being mixed with black and white; the mirrors imported from China, called "mirrors of distortion," are made from this alloy. It is an artificial product, hard, and fragile; it is injured by fire, after being wrought. Qazwīnī adds that no other metal yields a ring equalling that of this alloy, and that none is so suitable for the manufacture of large and small bells.<sup>7</sup>

21. In the thirteenth century the Arabs became acquainted with saltpetre, which they received from China; for they designate it as

<sup>1</sup> RUSKA, *ibid.*, p. 21.

<sup>2</sup> Cf. YULE, Hobson-Jobson, p. 932. This, of course, is a misnomer, as the Indian word, connected with Persian *tūtiya* (above, p. 512), in fact refers to zinc.

<sup>3</sup> Ch. 8 A, p. 16 (ed. of *Ki fu ts'un šu*).

<sup>4</sup> Literally, "stone of China." Spanish *kazini* is derived from the Arabic word.

<sup>5</sup> STEINGASS, Persian Dictionary, p. 438.

<sup>6</sup> It seems also that the Persian word is the source of the curious Japanese term *sabari* or *sahari*, which denotes the white copper of the Chinese. The foreign character of this product is also indicated by the writing 胡銅器.

<sup>7</sup> Cf. E. WIEDEMANN, *Sitzber. Phys.-Med. Soz. Erl.*, Vols. XXXVII, 1905, pp. 403-404; and XLV, 1913, p. 46; R. DOZY, *Supplément*, Vol. I, p. 857.