

More certain knowledge was now transmitted to the West from the Macedonian colonies respecting those Indian products of nature and art which had hitherto been only imperfectly known from commercial intercourse, or from the narrations of Ctesias of Cnidus, who lived seventeen years at the court of Persia as physician to Artaxerxes Mnemon. Among the objects thus made known we must reckon irrigated rice-fields, for whose cultivation Aristobulus gives special directions; the cotton-tree, and the fine tissues and the paper for which it* furnished the materials; spices and opium; wine made from rice and the juice of palms, whose Sanscrit name of *tala* has been preserved in the works of Arrian;† sugar from the sugar-cane,‡ which is certainly often confounded in the Greek and Roman writers with the *tabaschir* of the bamboo reed; wool from the great Bombax-tree;§ shawls made of the Thibetian goat's hair; silken (Seric) tissues;|| oil from the white sesamum (Sanskrit *tila*); attar of roses and other perfumes; lac (Sanskrit *lâkschâ*, in the vulgar tongue *lakkha*);¶ and, lastly, the hardened Indian wutz-steel.

Besides the knowledge of these products, which soon became objects of universal commerce, and many of which were transported by the Seleucidæ to Arabia,** the aspect of a rich-

1829, s. 150; Droysen, *Bildung des Hellenist. Staatensystems*, s. 614.) I write Paropanisus, as it occurs in all the good codices of Ptolemy, and not Paropamisus. I have explained the reasons in my *Asie Centrale*, t. i., p. 114-118. (See, also, Lassen, *zur Gesch. der Griechischen und Indoskythischen Könige*, s. 128). * Strabo, lib. xv., p. 717, Casaub.

† *Tala*, the name of the palm *Borassus flabelliformis*, which is very characteristically termed by Amarasinha "a king of the grasses." Arrian, *Ind.*, vii., 3.

‡ The word *tabaschir* is deduced from the Sanscrit *tvakkschîrâ* (bark milk). In 1817, in the historical additions to my work *De distributione Geographicâ Plantarum, secundum cœli, temperiem et altitudinem Montium*, p. 215, I drew attention to the fact that the companions of Alexander learned to know the true sugar of the sugar-cane of the Indians as well as the *tabaschir* of the bamboo. (Strabo, lib. xv., p. 693; *Peripl. Maris Erythr.*, p. 9.) Moses of Chorene, who lived in the middle of the fifth century, was the first (*Geogr.*, ed. Whiston, 1736, p. 364) who circumstantially described the preparation of sugar from the juice of the *Saccharum officinarum*, in the province of Chorasân.

§ Strabo, lib. xv., p. 694.

|| Ritter, *Erdkunde von Asien*, bd. iv., 1, s. 437; bd. vi., 1, s. 698; Lassen, *Ind. Alterthumskunde*, bd. i., s. 317-323. The passage in Aristotle's *Hist. de Animal.*, v. 17 (t. i., p. 209, ed. Schneider), relating to the web of a great horned caterpillar, refers to the island of Cos.

¶ Thus *λάκκος χρωμάτινος* in the *Peripl. Maris Erythr.*, p. 5 (Lassen, s. 316).

** Plin., *Hist. Nat.*, xvi., 32. (On the introduction of rare Asiatic plants into Egypt by the Ptolemies, see Pliny, xii., 14 and 17.)