

woollen cloths over three fixed sticks in the ground and inclining towards each other. They next placed a vessel full of red hot stones in the centre of the tent, and crept round it, whilst the tent covering was kept very close and almost air-tight. They then threw hemp seed on the hot stones, and a smoke and steam soon arose, which was denser than the hottest vapour bath, and the intoxicated Scythians would cry and shout at the top of their voices, from the excitement and exhilaration produced by this overpowering process." It is mentioned again in another book of the same author, where he speaks of the Scythians having "a sort of hemp very much like flax," growing "both spontaneously and from cultivation," and of garments being made from it by the Heracians "very like linen." It is also spoken of by Pliny, who says the plant was well known to the Romans. Mention is also made by the writer of some medicinal properties reputed to belong to it. Thus we see that the plant was well known to the Greeks and Romans; but the Hebrews and Egyptians seem to have been unacquainted with it. At the present time it is grown to a great extent in Russia, wholly on account of its fibre, from which country we received, in 1860, 597,610 cwt. We also find it cultivated in some parts of India, Africa, and China, and also to a small extent in the United States and Canada. It grows well in England, and is cultivated largely in some counties, as Suffolk, Yorkshire, Lincolnshire, &c. The finest kind is obtained from Italy, though in small quantities; it is known as "Italian Garden Hemp," being raised by spade culture. This is sometimes eight or nine feet long, and is used for sail-cloth as well as for the finer kinds of cordage. The mode of preparing hemp much resembles that employed in the preparation of flax. Its values and uses are so well known that it is needless to mention them here. For its narcotic and resinous properties, it is exclusively cultivated in some parts of Africa and India. The value of the fibre of hemp grown in those countries seem greatly diminished, while the resin-producing properties of the plant appear much enhanced by growth in tropical climes. This resin, called in India "Churrus," is collected in the following curious manner: Men are clad in leather dresses, and sent into the hemp field, where they brush about amongst the plants in a furious manner. The soft resin, by this means, adheres to their dresses, and is afterwards scraped off and made into balls. The leathern costume is said to be dispensed with in Nepal, and the resin collected on the bare skins of the coolies. In Persia it is collected by submitting the plants to pressure between coarse cloths, which are subsequently scraped, and the resin melted in pots with the aid of warm water. A finer kind of this resin called waxen churrus, or "momeca," is collected by hand. This fetches a high price, nearly double that of the ordinary kind, which usually

sells at from five to six rupees the seer. Churrus is of a dull greyish brown color, with little or no smell, and is usually met with in cakes from two to three inches long, somewhat in the shape of a lemon. It is used in medicine in India, and is reported to have been successfully employed in tetanus, though its application in this country, for the same purpose, has failed to give satisfactory results. Its intoxicating effects, as shown by Dr. O'Shaughnessy, are most remarkable.

Hemp enters into India commerce in other forms besides Churrus. Gunjah, or Ganjah, is found in the Calcutta bazaars, and is used chiefly for smoking. It consists of the plants themselves, with the leaves and inflorescence attached, and upon which the resin is left adhering. It is made up in bundles from three to four feet long, containing about twenty plants. These are flattened by pressure, and their colour is a greenish brown, while there is present a heavy aromatic odour. It is smoked in a similar manner to tobacco, and it is said that its continued use brings on severe asthma. In Africa it is known as "Djamba," and is found in the markets packed in slips of palm leaf or husks of maize, generally about two feet long, tied at one end and bottom, and at intervals of about an inch or inch and a half throughout the whole length of the case. When required for use, one of these divisions is cut through, which is sufficient for one pipe. The packages are sometimes smaller, and the "charge" not much larger than a marble. The "Hasheesh," or "Hebisch," of the Arabs appears to differ from Gunjah in this peculiarity, that it is composed of the tops and other tender parts of the plant after the flowering period. They use it in a variety of ways other than smoking, for which purpose alone they have many modes of preparing it. They make it into an electuary, with the addition of dates, or figs and honey, sometimes cloves, cinnamon, or musk, boiled in butter, or oil and water: the filtered product used in pastry. "Bhang," "Sidhee," or "Djee," is composed of the larger leaves and stalks with a very small quantity of resin. It like Gunjah, is sold in the Indian bazaars. Its intoxicating properties are not so great; indeed it is not applied to the same use; but being mixed with water and other additions, is taken into a drink called "Subzee," which is reported to be highly conducive to health. A stimulating infusion is prepared from the plant in India, which is said to promote appetite, and has a great reputation among the upper classes. The fruits of the hemp plant, which are well known as hemp seed, are oleaginous and abundant, but appear to be devoid of any medicinal principle. Their chief use is for feeding birds. A serviceable oil is expressed from them, which is used for mixing paints, burning lamps, and also in the manufacture of soap.—*The Technologist for January.*