

fixed at right angles into the head of the long hand of the lever, and plays upon the rice in a wooden mortar. The *súcana* may be built by anyone on a suitable stream by permission of the district governor, and on payment of a fee to Government of sixty *tanga* (fourteen rupees about) and this clears him of all further taxation on its operations. The miller's charge is one *chárak* in fifteen of husked rice. The entire mechanism of the mill is in wood-work, and the several parts are very neatly put together. We saw several of these mills at work on the canals in the line of our march, and were impressed by the stride in civilization in advance of what we had left behind us in Kashmir, where the laborious and by no means graceful operations of the pole pestle and mortar are a prominent feature in the scene peculiar to the banks of the Bidasta.

Lucerne (*Yúrúshca*), green, and *beda*, dry.—Sown in August and September; sprouts in March and April. Is cut three times in six months, and after each receives a top-dressing of manure, and free irrigation, one sowing lasts three years, after which the roots decay. When sown, the seed is mixed with an equal quantity of barley, otherwise the lucerne does not thrive. It is extensively grown as a fodder crop, and is stored in bundles for winter use.

Millet (*Joári*)—Is grown in the southern districts, mostly at the same time as maize. Grain and stalks used as winter fodder for cattle, and the meal as a bread stuff.

Cotton (*kiwaz*).—Largely cultivated in Khutan, Yarkand and Turfán, and exported east and west in both the raw and manufactured state, and also extensively consumed for home use. The seed is sown in April and May, flowers in July, and pods continue forming till the end of October. They are gathered three times in the season, and after the last gathering the stalks are cut away close to the ground. The plant does not grow higher than two to three feet, and bears much more fruit than foliage. Fresh seed is sown every year. Two *chárak*=forty pounds of seed are allowed to each *tanáb* of land=560 yards square, and yield eight *tártam*=twenty pounds of cotton, and twenty-four *tártam*=sixty pounds of seed. The Government tax is five *tanga*=about one rupee on each *tanáb*, or less according to quality and selling price. The seed is separated from the cotton by an ingenious roller gin, worked by pedal and eccentric wheel; it is called *chihric*. The seeds are pressed for oil, and the cake given to fatten cattle. The cotton is considered of excellent quality, and is in great demand for the Khokand and Tashkand markets.

Flax (*Zighir*).—Extensively cultivated for its seed in all the western divisions. The seed is the chief source of the oil used in the country, and the cake is given to stall-fed cattle. The oil-mill or press is worked by horses or oxen, and is similar to that used in the Punjab. The seed is sown in April and May, and the crop is cut in October.

Indian hemp (*Kandir*).—Grown largely in the Yarkand division. The resin is collected in October and packed in bags of raw hide for export, principally to India; and hemp is prepared from the stalks, but it is a very coarse fibre and only used for twisting into rope by the peasantry. The resin packed for exportation is usually pounded up with a varying proportion of the green leaves, and the adulteration is carried to such an extent that in the Yarkand bazar the drug sells at only twelve or twelve and a half *jing* to the *chárak*, instead of sixteen which is the proper measure. That is to say, a fourth part or thereabouts is struck out of the calculation for payment. For example, the selling price of *chars* (the resin) is from thirty to fifty *tanga* the *chárak* of sixteen *jing*; the seller, who is the producer too, weighs out sixteen *jing* and takes payment for only twelve, receiving twenty-two and a half to forty-two and a half *tanga* instead of thirty to fifty. There are different qualities of the drug according to the manner and period of its collection, and they are carefully scrutinized by connoisseurs. The Government tax on the drug is two *tanga* (eight annas nearly) per *chárak*. Hemp resin is very generally consumed by all classes, and in the cities it is abused to excess with very injurious effects upon the health of the people. It is generally called *bang*, and is smoked mixed with tobacco, or eaten in the form of a confection. The confection is thus prepared:—to ten *tolas* of *bang* add ten pints of water, and boil; then remove from the fire, and on cooling, strain through muslin. To the strained liquor add five *tolas* of mutton fat, and boil again till the suet is melted; then remove from the fire and pour in cold water till the fat cakes with the *bang* and subsides and clear liquor only remains. Pour this off, and to the fat add saffron one *mithcál*, zedoary one *mithcál*, and cinnamon one *tola*, all finely powdered, and honey, ten *tolas*, and thoroughly mix together.