

HEMP AND FLAX.

HEMP.

The true hemp plant is the *Cannabis sativa* of botanists. Its fibre is so generally employed for cordage that the value of all other fibres is estimated not so much from their intrinsic properties, as from their greater or less resemblance to hemp, and especially to Russian hemp. The growth of fibre is promoted by shade and moisture, which are procured by thick sowing, but where the plant is cultivated for its resinous and intoxicating secretions, it requires exposure to light and air.

By the celebrated Jussieu the hemp and the hop plants were placed in the same natural family with the nettles. In more modern works they are separated into distinct families. These two plants are closely connected in properties, as in structure.

The hop (*Humulus lupulus*), besides a bitter, secretes a resinous principle. Hop bines abound in fibre, and have often been proposed to be turned to useful account for cordage or paper, but as yet to little extent.

The hemp plant likewise secretes a resinous principle in its leaves, on which account these, as well as the *churrus* collected from off the young tops of the stem and flowers, is highly esteemed in all Eastern countries, on account of its exhilarating and intoxicating properties. Hence, among the Arabs the hemp has a variety of names, as "the increaser of pleasure," "the cementer of friendship," &c. By its name of *Hasheesh* it is often mentioned in the works of travellers in Egypt, Arabia, and Syria; while the name of *Bhang* is not less celebrated in the far East.

The following description of the plant is extracted from the "Manual of Materia Medica" by Dr. Royle, pp. 622-629, 2nd ed.:

"The hemp is diœcious (occasionally monœcious) annual, from 3 to 10 feet high, according to soil and climate. Root white, fusiform, furnished with fibres. The stem erect; when crowded, simple; but when growing apart, branched even from the bottom, angular, and, like the whole plant, covered with fine but rough pubescence. This stem is hollow within, or only filled with a soft pith. This pith is surrounded by a tender, brittle substance, consisting chiefly of cellular texture, with some woody fibres, which is called the *reed, boon, and shove* of the hemp. Over this we have the thin bark, composed of fibres, extending in a parallel direction all along the stalk. These fibres consist of delicate fibrils, united together by cellular tissue, and all covered by the thin membrane or cuticle.

The leaves are opposite or alternately, on long petioles, scabrous, digitate, composed of from 5 to 7 narrow, lanceolate, sharply serrated leaflets, of which the lower are the smallest, all tapering at the apex into a long entire point. Stipules subulate. *Males* on a separate plant. Flowers in drooping, axillary, or racemose panicles, with subulate bracts. Perianth 5-parted, segments not quite equal, downy. Stamens 5; filaments short; anthers bare, pendulous, 2 celled; cells united by their backs, opening by a