

the composition of the Turkish *madjoun*. The resin which naturally exudes from the leaves and flowers, when carefully collected by hand, is known as *monessa*; the same, when beaten off with sticks, is sold under the name of *churrus*. An extract obtained by the use of butter, when mixed with spices, forms the *dawamese* of the Arabs, and is the foundation of the *hashish* of many Eastern countries and districts. The dried plant is smoked, and sometimes chewed. Five or ten grains reduced to a powder are smoked from a common pipe along with ordinary tobacco, or from a water-pipe with a peculiar variety of tobacco called *tombeki*. The resin and resinous extract are generally swallowed in the form of pills or boluses. The hemp-plant and its preparations appear to have been used from very remote times. The effects of the natural resin, or *churrus*, have been carefully studied in India by Dr. O'Shaughnessy. He states that when taken in moderation it produces increase of appetite and great mental cheerfulness,



Fig. 1270.—HEMP, (*Cannabis sativa*.)  
A, male inflorescence; B, female inflorescence.

**Hemp, n.** [A. S. *hæmp*; Ger. *hanf*; Gr. *kannabis*.] (*Bot.*) The common name of the genus *Cannabis*, (q. v.) *Cannabis sativa*, the only species, yields the valuable fibre called *hemp*, which has been known for more than 2,500 years as a material for cordage, sacking, and cloth. In England the plant grows to the height of about 6 ft., but in warmer climates it has occasionally been found 18 feet high. The principal supplies of the fibre are derived from Russia. The fruits, commonly termed *hemp-seed*, are oleaginous and demulcent, and are used for feeding birds. When submitted to pressure, they yield about 25 per cent. of a fixed oil, which is used for making varnishes. In the sap of the hemp-plant there exists a resinous substance which has extraordinary narcotic properties. In the northern climates the proportion of this resin in the several parts of the plant is so small as to have escaped general observation; but in the warmer regions of the East the resinous substance is sufficiently abundant to exude naturally from the flowers, leaves, and young twigs. The Indian hemp, which is so highly prized for its narcotic virtues, is considered by some botanists to be a distinct variety, and is distinguished by them as *C. sativa*, var. *Indica*. This herb, and the resin obtained, are largely employed in Asia, and in some parts of Africa and S. America, for the purposes of indulgence. The whole plant dried is known by the name of *gunjah* in the markets of Calcutta. The largest leaves and seed-capsules separated from the stalks are called *bang*, *subje*, or *sithor*. The tops and tender parts of the plants, collected just after the flowering-time, are in some places sold under the name of *hashish*. The dried flowers, called *kief* in Morocco, contain so much of the narcotic principle that a small pipe filled with them, if smoked, will suffice to intoxicate. The dried pistils of the flower enter into

while in excess it causes a peculiar kind of delirium and catalepsy. The effect produced by hemp in its different forms varies, like that of opium, both in kind and in degree, with the race of men who use it, and with the individual to whom it is administered. Upon Orientals its general effect is an agreeable and cheerful character, exciting them to laugh, dance, and sing, and to commit various extravagances. It, however, renders some excitable and quarrelsome, disposing them to acts of violence. It is from the extravagant behavior of individuals of this latter temperament that the use and meaning of our word "assassin" have most probably arisen, the word having been derived from *haschischain*, a hashish-eater. As a medicine, Indian hemp was tried by Dr. O'Shaughnessy in rheumatism, hydrophobia, cholera, and tetanus. In the last such wonderful cures were effected, that the hemp was pronounced an anti-convulsive remedy of the greatest value. Pereira calls it an exhilarant, inebriant, phantasmatic, hypnotic or soporific, and stupeficient or narcotic. The extract made in India, and then imported, has been found to be much stronger than that made in this country. This fact seems to prove that the plant is materially injured by the voyage.—Hemp-culture requires a rich, kindly soil, in good heart, free of weeds, and capable of enduring extremes of wet and also dry seasons, to find which the sub-soil must be examined as well as the surface. Millions of acres of fertile corn-lands in the Western States have surface-soils entirely suited to hemp-culture, but, from the retentive nature of their clayey sub-soils, hemp cannot be successfully cultivated year by year without thorough under-draining. Favorable soils are found in great perfection on the alluvial bottoms of the Mississippi and the Missouri rivers, and some of their branches. If the ground is rich, does not hold water standing on the surface after heavy rains, and in drought does not bake and crack, but has moist earth within 2 or 3 inches of the surface, it possesses the subsoil for hemp-culture. The hemp crop, which once amounted to 30,000 tons in Missouri and Kentucky, has fallen to 7,500 tons.