

paper; that some of the smaller grasses are much used for thatch; and that the stems of wheat and other grasses are split and plaited into straw hats, ladies' bonnets, etc.

Rice (*Oryza sativa*) has been long under culture in Southeastern Asia, and furnishes food to more human beings than any other single plant. It is cultivated also in Egypt, Italy, Brazil, and the Southern United States.

Maize or Indian Corn (*Zea mais*) is a native of the warmer parts of the new world, and was cultivated by the aborigines of both North and South America long before the time of Columbus. It is one of the most valuable of the cereals, and is now cultivated almost all over the world. Of its numberless varieties, the larger are grown in the hotter, and the smaller in the cooler climates. From it we obtain corn-starch, corn-meal, sugar, whisky, and food for cattle.

Sugar Cane (*Saccharum officinarum*) is a native of the warmer parts of Asia, and somewhat resembles Indian Corn in size and appearance. From its sweet juice most of the sugar and molasses of commerce are made. It is cultivated extensively in the United States, Cuba, Brazil, and other warm countries. It is a curious fact that while the annual production of cane sugar in the world is now about 4,000,000 pounds, yet 500 years ago it was but little known to our European ancestors, and even a century and a half ago it was one of the luxuries. Rum is another well known product of the sugar cane. The Chinese sugar cane (*Sorghum, vulgare*) a native of India, has within a few years been brought into cultivation in the United States for its sweet juice, from which molasses and sugar are made. One variety of this species is the broom corn used in the manufacture of brooms.

Of Bamboo (*Bambusa*) there are several species, and its uses are almost innumerable. The Chinese make paper from the young shoots. The natives of India use the larger species in the building of their houses, and every American is familiar with it in the form of fishing-poles, chairs, pipes, fans, boxes, etc. *Bambusa arundinacea* sometimes attains the height of 100 feet.

The underground runners of some species, as the Marum grass and Sea Lyme grass, make them particularly useful for binding and fixing loose sands. The perennial roots and runners of others contain peculiar substances, on account of which they are used medicinally, as those of Couch-grass. In others the stems and leaves bear a very agreeable fragrance when dried, e.g. sweet-scented Vernal-grass, Lemon-grass, Vittievayr, etc. It has been alleged that the seeds of a few grasses are poisonous, but this in every case requires confirmation, although Darnel (*Lolium temulentum*) in particular has a bad reputation.

So much for the most important members of Gramineæ, and we can only refer to the different kinds of Hair-grass, Feather-grass, Manna-grass, Panic-grass, Bear-grass, Fescue-grass, Meadow-grass, Marsh-grass, Speared-grass, Beard grass, Brome-grass, Bermuda-grass, Canary grass, Millet-grass, and Foxtail-grass before hastening on to the sedges.

Sedges so nearly resemble grasses in appearance that the one may be readily mistaken for the other. In a loose popular sense of the term sedge includes coarse, grass-like, rush-like, or even flag-like herbs, growing on the banks of lakes, ponds or sluggish streams, but in a more accurate, scientific sense they are herbaceous plants with *three-angled solid stems* having alternate