

salsola, and a Caryophyllaceous *Arenaria*, both of which are called *burtsi* by the natives of Thibet, to whom, in common with other travellers in this region, they are the only sources of fuel; or else, at some springhead, there is an oasis of green grasses and sedges with crowfoots and gentian. On the slopes and hollows where the soil is slaty, rhubarb grows in plenty, and where granite more predominates are found two or three varieties of large leafed Umbellifer, Saxifrages, and the *Saussurea*, whilst thistles and the prophet flower or *Arnebia* are met as common roadside plants in the intermediate elevations at almost every bed of gravel or sand.

On the deserts, vegetation of every kind is extremely scanty. Wide patches of tall reeds, species of *Arundo* and *Andropogon*, are found where the surface is water-logged by marsh or pool; and where there are desiccated hollows, deep with loose pulverulent salines, the *Hololachne*, *Salsola*, *Halicornia*, and other saltworts, with a degenerate sort of dwarf tamarisk, luxuriate in proportion. For the rest the surface is a sheer waste of bare arid sand, till its continuity is cut by some river bed, when vegetation again appears in belts of thick forest along each bank. Here the chief constituents are tall reeds, called *comush* (*Andropogon*) and *chigh* (*Arundo*), the poplar, called *toghrac* (*Populus balsamifera*), and the tamarisk, called *yulghun*.

On the plains, or waste tracts between the cultivated settlements, is a very scanty and widely dispersed scrub of camels thorn, wild liquorice (on both of which are seen the tangled skeins of the dodder), *Calligonum*, *Lycium*, and *Peganum*, with here and there patches of *Hololachne*, and spreads of *tribulus terrestris*, with trefoils and melilots; the convolvulus, goosefoot, chamomile, artemisia, dandelion, thistle, and other common herbs of every English roadside.

In the cultivated settlements vegetation reaches its greatest development, and, by comparison with the wastes around, flourishes in rich abundance. The wild herbs of the fields and meadows are those of England. The corncockle and poppy, the tare and trefoils, with the plantain and polygony, peep out amidst the growing crops with familiar habitude; whilst the fumitory, marsh mallow, amaranth, and darnel spread a carpet on the foot-paths, and conduct to the meadows of rich clover and grass, radiant with buttercup and daisy, potentil and tormentil, anemone and geranium; and fragrant with mint and thyme, and sage and centaury.

All the settlements are well stocked with trees for fuel, timber, and fruit. The common roadside trees are the poplar and the willow, and there are two kinds of each, the *toghrac* or "populus balsamifera" and the *tarik* or "populus alba," the *bed* or "weeping willow," and the *sugat* or "common willow." The *toghrac* yields a gum and a fungoid growth called *toghraghú* which is used in medicine and as a ferment in baking; and the *tarik* furnishes the timber used in house-building. The *bed* is an ornamental tree, not very common, and with its relative, the *sugat*, which is always polled for the purpose, is the principal source of fuel during winter. The other common trees are the *uzma* or mulberry, the *sadda* or elm, the *jighda* or celeagnus, and the *chilán* or jujube. I saw the *sadda* only in the Yarkand division, but the others are common everywhere, and their fruits are largely consumed; those of the two last never fail to appear on every *dasturkhwan*; and I must record never seem to grow less, so long at least as there is anything more palatable and satisfying at hand. The walnut grows at Yarkand and in the southern divisions, but I did not see it at Káshghar, whither the fruit is carried to market from Yarkand.

For the rest, the vegetation of the settlements may be included under the head of agricultural products, and will be noticed hereafter when describing the agricultural industry of the country.

*Mineral.*—The mineral products of Káshghar are varied, and from all accounts abundant, though lamentably neglected and undeveloped. The gold-diggings and jade-quarries of Khutan have long been famous in history, the iron furnaces of Kizili are still in operation, and the coal of Aksú and Turfán continues to burn on the domestic hearth in those places. That found in the former locality is described as of excellent quality and very black; whilst that of Turfán is said to be of a reddish-brown color and of very inferior burning power, owing to its gritty and earthy impurities. The Aksú coal is said to come from the vicinity of Karábágh, and that of Turfán from the hills about Sirkip near Ghochang. The Turki name of the mineral is *tásh kúmúr* or "stone charcoal."