

without the concurrence of soil, of seasons, and of climate, the mode of sowing and of culture, and the degree of ripeness.

*Drying after Watering.*—When the hemp is sufficiently retted, it is taken carefully out of the water, and then carried to a field of aftermath or any other grass (hence called "grassing") that is clean and free from cattle. Here it is spread out very evenly, and will probably require to lie there for three weeks or more, in order to bleach, and the fibre to become free; during which time it must be carefully turned over with light long poles every three or four days. Mr. Rowlandson says it is sufficiently bleached when pink spots appear on the stem. It is sometimes dried along a wall, or on rocky ground. When dry, the hemp is tied up in bundles again, and carried to the barn or rick.

*Peeling and Breaking.*—When the hemp is sufficiently dried, the next process is either to *peel* it, by taking one stalk after the other, breaking the reed and slipping off the bark. The process is simple but tedious, and will give occupation to those who are without any. But it comes off in ribbons which do not heckle so well as hemp that has been broken, and they are apt to retain some of the thick parts next the root, hence the saying that this mode is better for the seller than the buyer.

The term of breaking or braking hemp, applies rather to the boon or reed than to the fibre, for this only bends under the hand of the dresser, and does not break. The operation is performed either by beating the hemp, which is a laborious and tedious work, or by the break, which may be moved either by hand or by a spring or treddle attached to the upper jaw of the break; or by fluted rollers, worked by horse, wind or water, and now sometimes by steam power. When hemp has undergone the process of breaking, it is ready like flax, for the process of scutching, in which scutching mills are now used, as in the case of flax. By rubbing, beetling, and striking the hemp with reiterated blows, the longitudinal fibres are separated from one another, and in proportion to the greater or less degree of that separation, the hemp becomes more or less fine, elastic, and soft to the touch.

*Dew-retting.*—Mr. Rowlandson says (1 c., p. 180)—will produce the most valuable white hemp. The stems, after being pulled, are allowed to stand in the stocks for two or three days; they are then spread out on land where the grass is plentiful, and may require to be there for six weeks, and to be frequently turned. The process will be completed when the pink spots appear, as before noticed, which must be carefully looked for, when it will be ready to gather and tie up in bundles, to form stocks, in order to dry; the fibre will not sustain any damage before the pink spots appear. *Snow-retting* is practised in Russia and Sweden. After the first fall, they spread the hemp (which has been dried in the sun or otherwise) on the snow, and leave it there to be covered with other falls of snow, until Spring, when it is usually found to be sufficiently retted (Wisset, p. 194). In Livonia they steep their hemp in a manner which is a medium between still and running water, in a series of basins, one above the other.

In addition to the ordinary methods of preparation of hemp there are others which may be briefly noticed.

The Abbé Brulles recommended the use of soap in the proportion of one part to forty-eight of water, at a temperature of about 200° F., and the water to be about forty times the weight of the hemp. Du Hamel tried boiling the