

hemp stems in water, but he did not find that the peeling was facilitated. Marcandier recommended a second watering, and also the use of a warm alkaline ley, (1 c., pp. 243 and 245).

We have seen the use of hot water successfully applied to flax in recent times, and soap has been used in several processes, and in a very ingenious manner in one in which a little acid is afterwards added, so that decomposition takes place, in consequence of the acid uniting with the alkaline base, when the oil which is set free assists in softening the fibre.

There is a peculiar method of drying, to which the Livonians are said to ascribe the good or bad quality of their hemp. The stems are first set up to drain, and then spread out for a day to dry; after which they are made up in heaps, and covered over with straw, or other similar material of any kind, to make them *sweat*. When they have sweated *enough*, they are laid again in small heaps, so that the air may dry them in the shade by blowing through them; after which they are effectually dried by fire, kiln, or oven, and immediately put under the breakers whilst yet hot. Dr. Royle observes, it is probable that this method, when skilfully practised, must produce some of the same effects in hemp as in some other vegetable substances. Mr. Frushard remarks, with regard to the natives of India; "The reason why their tobacco falls so much to dust, is owing to its not being *sweated* enough. When properly *sweated*, as they manage it in America, it becomes tough like a bladder; and toughness and suppleness are the qualities wanted in hemp." (Wisset, p. 223).

Besides these, there is also the dry method of separating hemp in some places, as related by Mr. Durno, who was the British Consul at Memel, and states that in the Southern parts of Poland, steeping is not practised at the supposition that the harle is thereby weakened, and the color darkened. Instead of steeping, they there dry the stalks in the sun. But the dressing is more laborious, and consequently more expensive. Mr. Dickson (of England) has succeeded admirably in separating hemp fibre by passing dried stems from Italy under the rollers of his machine.

Crop and Profit.—Mr. Rowlandson says the best land for obtaining fibre of the strongest description is a fat loam, not too heavy with clay, and a portion of sand intermixed. On such land, succeeding a crop of beans, hemp will grow six or seven feet high, and bean stalks in such make good manure for hemp. He adds: "I have known 9 quarters of beans per acre after hemp, weighing 21 stone per sack. Hemp after beans will produce 30 stone more per acre, of the strongest and heaviest fibre, than by any other mode of culture; the weight of fibre in ordinary culture and circumstances will produce 60 to 70 stone per acre." A good crop of hemp after beans will produce 28 to 30 bushels of seed per acre; in the ordinary way, 20 to 22 bushels per acre.

The co-operation of purely manufacturing establishments will facilitate and give advantages to the production of hemp, as to that of flax.

The following table shows the imports of hemp from Russia and the British territories in India, from 1847 to 1851. In the year 1831, 506,803 cwt. were imported from Russia, and only 9,472 cwt. from the East Indies.

Quantities of Hemp imported into the United Kingdom from

	1847.	1848.	1849.	1850.	1851.
Russia	544,844	540,207	641,548	614,535	672,342
Brit. Territories in E. Indies.	185,788	258,239	360,362	399,345	590,923