

has hardened. If it should receive several rains, it does not injure, provided you attend to turning it. The rains wash off the gum which lies on the surface of the lint, and when applied to the break, it produces a clearer staple, cleans easier, and makes less tow.

There is also another mode, when the stalk will break off short, and free itself of the lint, but the former is the most certain. The hemp as it is dried, should be thrown into shocks or ricks well secured from the weather by covering their centre. If the weather penetrates the centre, it will injure the staple by reducing its strength. In breaking the hemp, it should be broke in small hands, about one-third of the ordinary size. In all my experience, I find our hemp requires to be properly hatcheled, to stand the test the government requires. This is entirely owing to the different mode of handling the Russia hemp; but by breaking in small hands, it relieves itself of sheaves and produces less tow, and comes nearer to the quality of Russia Riga Rime, which quality of hemp the government uses for the Navy. It should not be applied to the break too often, nor the breakers suffered to practice the habit of breaking dew rotted hemp, by beating it over the break to relieve it of the heads. It should be thrown up loosely into the atmosphere, to let the air pass through it. In drawing your hemp, you should draw it from each end, so that the staple will draw clear and have an even hand. See particularly that the burls of the staple be even, and that all the drawings be handed to itself, and not placed in the prime hemp, as it is the habit of doing in dew-rotted. All hemp with the drawings secreted in the centre, will not pass inspection. The hemp must be perfectly clear of sheaves, and that must be effected not by little breaking and beating across the break, but by plenty of shaking. I have had the strongest evidence, in all my operations, that hemp broke in small hands, say 10 or 12 stalks at a time, will yield less tow in hutcheling by 20 to 30 per cent., if the hemp is properly rived. Also schutcheling helps the hemp greatly, and causes it to yield less tow, and straightens out the staple.

This process is very indispensable to produce a merchantable article. The instrument for schutcheling is a flat wooden or non knife in the form of a paddle. The hemp is placed on board upright, about four feet long; one half of the length of the hemp is held by the left hand at the top of the board, and the right applies the knife, which, when properly applied, relieves the hemp of the small sheaves which adhere to it, and strengthens the staple for the hatchel, which adds greatly to the value of the article, and consequently produces less tow.

If the farmer has a desire to arrive at that stage in their staple to be equal to Russia, it is indispensable for them to adhere to these instructions. There is no more labor attending water-rotted hemp, if properly prepared for operation, than dew-rotted. Hemp water-rotted judiciously, and handed properly, will gain from 10 to 15 lbs. on the hundred above the dew-rotted, which more than amply pays for the difference of labor or expense in preparation. This has been proven to be the fact by those who have tested it at one of my pools in Kentucky, and also by an experienced farmer in Missouri. Hemp that is darkened by the dews, or colored water, which is produced by the blackness of the soil, will not meet with a favorable demand in the eastern market; it partakes of the character and price of dew-rotted hemp. To avoid this, immediately after your hemp is cut place it under shelter, or shield it with inferior hemp, that the dews or rains will not affect it; and also let your pools be made of plank, or otherwise place them at the side of the stream, and dam it sufficient in height, that, in case the stream should be disturbed by run or freshet, it does not pass through your pool.

The construction of Pools is as follows. Small spring branches dug down two or three feet, a levee thrown up around them, and small flood gates at each end, made simply out of four pieces of board, a foot wide and

two feet long. A wicket gate around them to let the water pass to and from the pool, if so, it reduces an uneven temperature in its solution. The pools can be made of plank, and the water pumped into them, supplied for a small lease on the 15th or 20th of May. A pool 10 by 60 feet, 2 1/2 feet deep, will receive 3 to 4 acre of ordinary hemp. The pools must not be over 3 feet deep, it will produce an irregular solution, owing to the uneven temperature of the water. To water in ponds or large streams, is not so commendable, particularly running stream. The hemp becomes irregular in its solution, and loses its lint. The preparation necessary is to have two long saplings; put them at each end with a cross-bar, forming a raft, with uprights at each end, their length to be the depth of the water. These form a raft, say 20 or 30 ft. long; load your hemp on them, and sink them with rock. For the conveyance of water, and from your pools, I will call your attention to the leaden pipes manufactured in this city by Mr. W. W. Thompson. These pipes will be a great acquisition for this purpose, as also for watering stock and avoiding waste of water. They can be made any length, and at a much cheaper rate than an ordinary spout. To those farmers who are not in possession of springs, they can fix a small lifting pump in any part of their farm, and supply their vats with water.

As regards the process there need not be the slightest apprehension as to deleterious effects to health. As a demonstration of this fact, in my operations for the Government, I had about two hundred men at various pools in the hemp-growing region in Kentucky, from 1840 to 1841, in a circuit of 100 miles, and there was not one instance of sickness, although many of the men exposed themselves to the water when it was not necessary. I also advise gentlemen not to attempt to deliver more than one ton of hemp to each laborer they have, and not to exert from 5 to 10 tons the season; beyond this will produce difficulties.

I will also observe the necessity of watching your hemp closely when near the time of its full solution. If you permit it to have too much rot, it will injure the hemp seriously in strength and in weight, and to avoid this to those that are not particularly acquainted with its proper solution, they may take it out before it is carried too far, and spread it down upon two fields, for the dews and rains to finish, but at the same time be particular to attend to turning it, that it may receive an equal portion of dews and rains throughout. Hemp rotted in the spring, is not of as good quality as that rotted in the fall, say the months of October, November, and December. The spring rot produces a lightness of color, and the rot weakens and loses much in weight. This is produced by the state of the atmosphere, and the sudden and extreme changes of it, as also, the hemp lying in the stack after being a long time cut, undergoes what is termed a sweat, which changes the state of the staple. In all the hemp growing regions of Russia, the crops amount yearly to 90,000 tons. The best hemp produced is in the government of Cheringoff. The hemp is mostly of short staple, and of the very best quality, the produce is about 15,000 tons yearly;—and also in a part of the government of Orel, short staple is produced, and carried to the port of Riga, but the great part of the hemp produced in this Government is long staple, of which the produce is about 14,000 tons. The hemp of Kursk is mostly long staple, and the produce is about 13,000 tons. The hemp of the government of Icolet, is also long staple, and produces about 13,000 tons. In the governments of Tamboff and Razan, the produce is about 14,000 tons, but not of good quality, being more of the color of flax, and its staple is weak: it is chiefly produced for the Archangel market and a portion of it reaches St. Petersburg. The hemp grown in the government of Smolensk, is of short staple, partakes of the character of that produced in the government of Tamboff and Razan, and which

is mostly manufactured into sail cloth fabrics; the produce is about 8,000 tons. The government of Calonga produces about 7,000 tons, mostly short staple. The Russian mode practiced in preparing their hemp, differs only with their instruction in relation to the care and pains in preparation; a portion of the country also adopts a chemical process to produce a rapid solution of the gum, which is injurious to the staple. As this country is subject to frequent hail storms, the crops often times fall short of this.

In laying this information before you, my object is to convey to you the quantity and the various qualities of hemp produced in the hemp growing regions of Russia. You will also notice that we have a decided advantage over the Russian article, in comparing the small quantity of long staple to ours, as all our hemp generally is of long staple; therefore, by assiduous attention to the culture and preparing of it, our staple must and will have the ascendancy in the European market: in a reasonable time, Missouri can supply the whole world with hemp; as well must Illinois and Iowa arrive to be extensive hemp-growing States, and of a superior quality. And let the agricultural interest of these States buckle on their energies and industry, and consummate it to the advancement of their own prosperity and the country in general.

I have had the assurance recently given me, from a gentleman direct from London, of the highest standing in mercantile transactions, that the moment we are prepared, he will effect a contract to supply the British government with our hemp for the Navy, which consumes equal to our Navy and our commercial enterprise, about 12,000 tons yearly. Also, the consumption of the port of London is 20,000 tons yearly, embracing the requirement of the Navy. I have also had the assurance, from a gentleman of high standing in commercial transactions in France, that from the character of our hemp, the moment the country is prepared, he will effect the supplying of the French Navy with our staple. These countries are desirous to encourage us, that they may have two markets to go to in case of any warlike disturbance.

I have labored with great sacrifice of interest for these four years, with the pleasing and proud anticipation to see the country independent of this foreign staple, and that we may become heavy exporters; and the day is not far distant, when these anticipations will be fully realized.

And to facilitate this most important object, I have, by the solicitations of a number of gentlemen, delegates from the West, and others in power at this city, consented to embark upon this arduous and hazardous undertaking with the view supplying the Navy with American Water-Rotted Hemp, from the West, for a term of years. I do assure you gentlemen, that no pecuniary inducement could have influenced me to embark upon this work of enterprise again. But something must be done to keep alive and finish this great work, which has been commenced, and is in progress to its ultimate accomplishment. I have lost a large fortune in establishing the practicability of it, and have undergone great afflictions, in consequence of which I have felt reluctance to subject myself to a second trial of the various circumstances which befel me, in effecting that important object. But with a desire to promote the agricultural interest of the West, and to see my country speedily independent of this foreign staple, and with the confidence that I have in you, that you will support me in this act of enterprise, I now come forward once more with all my resources and energy, to give this subject additional impetus, that will convince the world and the Russian Autocrat, that this Republic can stand free and independent of her staple and fabrics, and can supply the commercial world. To accomplish this great work, I lean upon you, the Farmers of the West, to rally to my aid, and give me your most energetic co-operation. And to you, enterprising

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