



The Field.

The Big Trees of California.

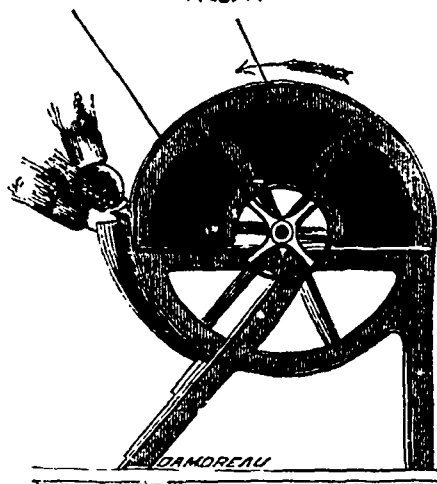
"Let us first walk upon the 'big tree stump.' You see it is perfectly smooth, sound and level. Upon this stump, however incredible it may seem, on the 4th of July, thirty-two persons were engaged in dancing four sets of cotillions at one time, without suffering any inconvenience whatever, and besides these there were musicians and lookers on.

"Across the solid wood of this stump, five feet and half from the ground, (now the bark is removed, which was from fifteen to eighteen inches in thickness,) measured twenty-five feet, and with the bark twenty-eight feet. Think for a moment; the stump of a tree exceeding nine yards in diameter, and sound to the very centre! This tree employed five men for twenty days in felling it—not by chopping it down, but by boring it off with pump augurs. After the stem was fairly severed from the stump, the uprightness of the tree, and breadth of its base, sustained in its position. To accomplish the feat of throwing it over, about two and a-half days were spent in inserting wedges and driving them in by the butts of trees, until at last the monarch of the forest was forced to tremble and then to fall, after braving 'the battle and the breeze' for nearly three thousand years. This noble tree was three hundred and two feet in height, and ninety-six feet in circumference at the ground."

Again he says—"A short distance from the above lies the prostrate and majestic body of the 'Father of the Forest,' the largest tree of the whole group, half buried in the soil. This tree measured in circumference at the roots, one hundred and ten feet. It is two hundred feet to the first branch. By the trees that were broken off when this tree bowed its proud head in its fall, it is estimated that when standing it could not be less than four hundred and thirty-five feet in height. Three hundred feet from the roots, and where it was broken off by striking against another large tree, it is eighteen feet in diameter."—From "Scenes of Wonder and Curiosity in California," by HUTCHINS.

HULLING CLOVER.—On this subject G. T. B., of Granville, Nova Scotia, thus writes to the *Maine Farmer*:—"Last summer I had a very fine piece of clover, from which I wished to raise seed; so I made inquiry of my neighbors how I should clean the hulls off so as to have a marketable article, but to my great surprise no one could tell me. So far as I know there is not a clover mill in Nova Scotia—that way of surmounting the difficulty, therefore, was denied me. But after a few experiments, I succeeded so well, using nothing but tools that every farmer has about him, that I determined to make my mode public for the edification of anyone as ignorant as I was last spring. I first had it threshed in the ordinary way, and very carefully cleaned with a rake; then

threshed again with an iron rod about a quarter of an inch in diameter; then put it through a fan mill, using very light wind and the tail-board well up; this separated the chaff from the seed and hulls still holding seed; this I put again through the mill with a very strong wind, and the securing board well back, when the clean seed all went into the foul seed box, and the hulls blew out on the floor ready for another threshing. This work was done at odd times and stormy days, but after the first threshing, which is very quickly done, I think a man would easily clean up ten or twelve pounds a day, in dry, cold weather, probably more. I have tried the Alsike or Swedish clover and like it very much; it fills up the bottom very much better than white or red."



Rowan's Mill for Scutching Flax.

THE increased attention which is happily being paid to the cultivation and manufacture of flax, naturally raises the question, What machinery is best adapted for dressing it? We give herewith a cut representing Rowan's Improved Scutching Machine, which is highly recommended by experienced manufacturers, such as Herdmans & Co., of Strabane; Ferguson, of Belfast, &c. It is simple in construction, easily worked, occupies but a very small space (3 feet 9 in. by 3 feet 4 in.), and is easily driven and attended. Two persons are required to work it, and it will clean from 25 lbs. to 35 lbs. of flax per hour, when properly managed. It is also said to yield a larger proportion of fibre from the same amount of straw, than can possibly be obtained by the use of the ordinary handles. One great advantage about it is, that it can be attached to an ordinary threshing machine power, so that farmers possessed of such powers can dress their own flax, thereby obtaining a larger profit on the crop. In many cases, doubtless, several parties owning adjacent farms, and jointly interested in a threshing machine, could advantageously unite in the purchase and use of one of these Scutching Mills. This would make the outlay

but a trifle to each. The price of this Flax Mill is £24 stg. It is made by John Rowan and Sons, York Street Foundry, Belfast. We copy the following description of the Machine, and directions for its use, from the circular issued by its makers:—

"The workman takes a "strick" of flax straw, (without being rolled, or other preparation), holding it near the root end, and passes it into the openings at the side of machine, when it is subjected to the action of the scutching apparatus. The "strick" is then withdrawn by the opening where it was entered, and the other side turned to the action of the beaters and re-entered as before. The flax is now partially scutched or "roughed," when two or three pieces are then put together, and again the same operation repeated as before described. When withdrawing the flax from the machine let it be drawn slightly end-ways; for, by attending to this, the flax is found thoroughly scutched, and with the ends perfectly finished—an advantage over the ordinary system. The operation is remarkably rapid, and there is no risk of accident whatever. The "boon" falls through the machine, and the tow, of which very little is made, is collected at the back. The machinery is so simple that it cannot go out of order, and has been fully tested to the complete satisfaction of competent judges.

"The arrow shows the direction in which the cylinder revolves. The velocity of the machine to be driven to say—460 revolutions per minute for average quality of straw. If the straw be hard and wiry, then the speed to be a little higher, and if soft, slower. The regulating screw in front of machine is for the purpose of adjusting the breast-plate either wider or closer from the beaters, to suit the various qualities of flax. The only attention the machine requires is to keep the bearings well oiled."

Mr. Walker, whose report in reference to flax culture in Canada appears in another column, informs us that, whereas ordinary Flax Scutching Mills require skilled operatives, this machine can be worked, after very little practice, by parties who have had no training whatever. He also states that it is not liable to those accidents to life and limb which sometimes occur in the use of the ordinary machinery. We may add that Rowan's Mill took the prize of the Gold Medal at the Exhibition last year, at Lille, in France.

EUROPEAN WEEDS IN NEW ZEALAND.—Dr. Hooker states, in the *Natural History Review*, that the water-cress increases to such an extent in the rivers of New Zealand as to threaten to choke them up; that in the Avon, a deep stream running through Christchurch, the annual cost of keeping the river free for navigation is £300, and that the stems have measured as much as 12 feet long, and three quarters of an inch in diameter. Docks are to be found in every river bed, and the sow thistle has spread all over the country up to an elevation of 6,000 feet: