

Ireland, is, we believe, as good as any in the market. It costs in Ireland about £20 to £25 sterling, and could be imported to this country for about \$150 to \$180, including cost, freight and duty. There are several of these mills in the country already, and they have been found to work satisfactorily. If a considerable demand should arise for them they would doubtless be manufactured here, and wou'd then become cheaper than if imported. A steam engine or driving power of a thrashing machine of two to four horse power is sufficient to work the machine. Steam or water power is better than horse power, being more easily regulated. The cost of the motive power, whether horse or steam, would be, say not over \$300, to \$400, and the entire capital required to establish such a machine in operation, would probably not exceed \$500. It must be observed however, that the machine is portable, and can be taken from place to place, making use of the motive power already established for other purposes. If the machine was made stationary, of course a building would be required, in addition to the cost of the machine and motive power. One hundred acres of good flax would be sufficient to keep a single machine employed a great part of the year, but a much less quantity would pay for the introduction of a machine into a neighborhood.

As to making flax growing profitable, the principal point is to grow a good crop and dress it properly. It will then be sure to be profitable, when once a trade in the article is established. It will be even profitable as things stand at present on a small scale, for the seed and domestic use.

We have already given ample directions in this Journal for the cultivation of the crop and preparation of the fibre, and may probably refer to the subject again on some other occasion. We shall be glad to hear from our correspondent as to the success of his endeavors to promote the cultivation in his neighborhood.—Eds.]

### WHEAT GROWN FROM OATS AND BARLEY.

EDITOR OF THE AGRICULTURIST.—DEAR SIR,—The subjoined, which I copy from the London (Eng.) *Times* of the 10th Dec., 1862, may be interesting to some of your readers.—Yours, &c.,  
Wm. A. COOLEY.

Ancaster, Jan. 7, 1863.

"The following letter, dated Wappenham,

near Towcester, Northamptonshire, appears in the last number of the *Berkshire Chronicle*:—

'In answer to your letter, dated December 2nd, it is a positive fact that I grew both wheat and barley from oats. The wheat I continued to grow up to last year, but in consequence of the crop going off I was obliged to fill it up with spring wheat. The wheat I grew from the Dutch oat was a beautiful quality, small seed, weight 65 lbs. per bushel, light-coloured chaff, fine straw and blade. The wheat I grew for about 10 years, and sold lots of it to my neighbors for seed. Now I am growing a coarser wheat that a neighbour of mine grew from the Poland oat. That is a much stronger straw and larger ear, but is very apt to mildew the last few seasons. The way I adopted was to plant it thin, under a sheltered wall, the middle of June; it then will require to be cut off about one inch from the ground before coming into bell three times the first season; the following year it produced the wheat I speak of. Many people saw it when growing; it was a very thin berry the first year. The difficulty is in keeping the root to stand the winter. At the Towcester Union theirs produce barley, and mine has the same from a coarse oat. Black oats will produce rye the same way. You are quite at liberty to make use of my name.

"From yours truly,

"WILLIAM COWPER."

"MR. CHAS. SIMMONS."

We insert the above as a curiosity, without endorsing the correctness of the conclusions. The transmutation of distinct species of the vegetable kingdom into one another involves a doctrine that has been almost universally rejected by the highest authorities in natural history. If such were the case it is difficult to conceive how the uniformity of nature, in her grand outlines, could be maintained. We think there is probably a mistake or fallacy somewhere. There are no doubt a number of facts which seem anomalous, and not easily explained in the present state of knowledge. We subjoin an interesting article on this subject, from a recent number of the *Mark Lane Express*:—

#### Transmutation of Oats into Rye.

A correspondent has written to us requesting information respecting the transmutation of oats into barley and rye, a statement on the subject having appeared in this journal some months since, in a letter from a correspondent. We will first repeat the fact stated in that letter, and then endeavor to explain, as well as we can, the *rationale* of the phenomenon, as deduced from the nature of the plant. It appears that a farmer in Huntingdonshire having heard of the transmutation of oats into rye, resolved to try an experiment of the kind. He accordingly planted some carefully selected grains of oats singly in his garden, in the month of June.