

## CULTIVATION FOR CORN.

It is a curious fact and not easily explained, that whilst improvement has constantly of late years been making in the machinery and implements of the farmer to lessen his labour, and notwithstanding that ploughing is done with half the strength, and the produce is prepared and marketed, at the present day, at half the cost of 70 years ago, there are still many instances of land being worked with the spade, and without the advantages of machinery, competing in its returns with the most intelligent farming. To what is this owing? The last edition (the 8th) of the Rev. Mr. S. Smith's work, "A Word in Season," informs us that his sixth running crop of wheat has yielded upwards of five quarters to the acre, and a margin for rent and profit of £8 an acre. What farming with the plough approaches this spade husbandry? The only explanation I can offer, and this accords greatly with my own experience, is, that whilst the farmers have been seeking reduction of cost in their ploughing, they have been overlooking the value of deep cultivation and fine comminution of the under strata into which the seed has to push its roots. I have long seen the value in this respect of the Kentish turnwrest plough, which breaks up the bottom and sifts the crumb it makes underneath; and after using almost every plough, I still work it whenever I think the crop will be the better for two or three inches of fresh soil, pulverised bed, and a permeable subsoil in place of the five or six inches of block and the hard pan underneath, left by the cutting ploughs. I had the pleasure of seeing Mr. Smith's crop in the spring, and I was much struck with it; I spoke of it when looking at the crops of one of our finest agriculturists, where the wheat was all drilled 14 inches apart, and with only three pecks of seed on an acre. The impression on him of what I told him I had seen, was such that he immediately had an acre of his wheat measured off, and every other of the rows upon it dug in, so that on this acre the wheat stood in rows at 26 inches apart, and only with 1½ peck of seed to the acre. The effect of the digging very soon showed, although the wheat over the rest of the field presented an appearance of luxuriance I believe seldom seen; still this acre was distinguishable by its superior growth, and in the summer it became apparent there would be far too much to stand till harvest, and such proved the fact: for before harvest its great length of straw brought it to the ground. The fault was over luxuriance. Here the grower had to complain of his land being too rich—a fault it does not cost money to cure; and to what was this owing, but to the larger amount of food opened to the roots by the turning in of the intermediate space. The value of such instances as these lies not so much in them as examples to follow, as

in throwing light on the mysteries of vegetation, and showing the importance of better cultivation. We are here taught how land may be enriched—not by costly manures, but by more effective labour; and, if rightly viewed, we shall see from Mr. Smith's crops, and the instance mentioned, the direction to which our attention should be turned for giving greater fertility to our land. Numerous instances in confirmation of these examples present themselves to me. I can here but mention two. A large landed proprietor, desirous of clotting the open ground round his house, planted, about 30 years ago, numerous clumps of trees, and anxious to give a rapid growth to those nearest his mansion, he for many years had their beds turned in annually. These took the lead, and are now double the size of the beds that were not so treated, and have had to be thinned five or six times; and there can be no question, on looking at the two, that the extra growth has more than doubly repaid the labour upon them. The other case is that of a farmer in Hertfordshire, who, having a poor side of a field that he would not make productive, one winter, 20 years ago, being overseer, put all the able paupers to work upon it in trenching it: and this side of the field has ever since been the most productive of the two. These are cases I can vouch to; but who is there that does not know the difference that an old garden or hop-ground ever shows; it cannot be the manure, for the difference is seen after any number of years: it lies in the greater depth of soil given by the culture to the plants to feed from.—*Hewitt Davis, 3, Frederick's-place, Old Jewry, London, October 13.*

## LINEN MANUFACTURE—IMPORTANT DISCOVERY.

We have learned that one of the first linen houses in this part of the country has discovered an invaluable process, by means of which linen goods can be bleached and finished within from ten days to a fortnight. And let it not be imagined that the vast and manifest importance of this discovery is in any degree diminished by the least inferiority in the article produced. The reverse is the case. We are assured that, so far from the new process tending to injure the fabric, or deteriorate its commercial value, it greatly improves the quality of the article, being unattended with any of the injurious effects produced by the old process. Of the nature of this process it is not within our power to speak; we can only state, with the utmost certainty and confidence of its effects, and of the great advantages it will confer upon the community. By improving the quality of linen fabrics, it will place them once more far ahead of the competition of cotton goods and cotton mixtures, which has latterly run them so close; by the unlocking so large an amount of slumbering capital, it will give greater activity to the linen trade, afford a large margin of profit, and, by consequences, a wider field of employment; whilst it will also have the effect of enabling the manufacturer to supply his goods to the public at a