

tion in the field, not only may much reliable information be elicited, but a good practical man will not often be at a loss in coming to a pretty satisfactory conclusion.

Wheat Culture.

We gave some time ago some notices of the experiments of the Rev. Mr. Smith, of Lois-Weedon, Northamptonshire, England, in cultivating wheat on an adaptation of the Tullian theory. The following exposition of the plan, which we take from the Irish Country Gentleman, will be found interesting :

AN ADAPTATION OF THE LOIS-WEEDON ON HUSBANDRY.

BY A. HARDY, SEEDGROWER.

Some time ago I advised farmers, allottees, and cottage gardeners, to grow wheat instead of the precarious potato, and, for true economy, to do so on the Lois-Weedon principle. To render my advice the more practicable, I would now show how this principle may be carried out with the ordinary appliances on other farms. But I must show briefly first, Mr. Smith's own system in operation and in its results.

At the outset of his farming, fifteen years ago, Mr. Smith had a four-acre field, which was in grass; this he pared and took off the land, then ploughed it the full depth of the 5-inch staple for a crop of oats, followed by vetches. After this came the first triple-rowed wheat crop, with its wide intervals, which he dug one spade deep, bringing only a very few inches of yellow clay subsoil to the surface. The second year, these well-stirred intervals bore the wheat crop, and the stubble was dug in. And thus year after year, alternately, the same acre of land has had a fallow and a wheat crop too. In the third and fourth years the spade went down a few inches deeper, and so, gradually and regularly, for four years more, till a depth of sixteen or eighteen inches was reached, when he stayed his hand, and after that was satisfied for the four following years with a single spit. Last year, however, he returned to the double spit, and a fresh inch of clay. The digging, as may be seen, is now two spits deep; and after the pan was a little stirred, the staple, with the stubble, was returned upon it; the clods were shattered, and the second spit, with its sprinkling of yellow clay, was gently laid uppermost, in such a form that the frost might be let right through the whole. These high-ridged intervals will be thus, during winter, higher than the tender wheat, protecting it, and checking the drifted snow.

The winter fallow over, he levels the ridges

with the horse-hoc, cleans the rows well, and the intervals, keeping the surface of the latter constantly open, till the wheat is about to flower. Then will come a process peculiar to the plan and which meets a serious difficulty in our uncertain climate. We, rotation farmers, have sometimes a heavy crop of wheat, from high farming, &c.; but the wind and the rain, as in the present and many other seasons, we are utterly helpless against, whilst Mr. Smith enjoys general immunity from their evil effects. The broad fallow intervals enable him to take a turn with the plough, to *earth up his wheat with the mould-board*. Immediately after this, the same day it may be, follows another of singular efficacy in swelling the grain. He *subsoils*, with "Sigma's Subsoiler," as deeply as he can, with two horses, in the centre of each furrow just made by the plough, and this closes the work till harvest.

The crop being carried, he makes preparation at once for sowing. He first lightly horse-hoc and cleanses the furrows; then ploughs close the stubble, casting the earth back again in the centre. There are thus two furrows in each interval, and *these* he also subsoils, which leave the whole of the land intended for the next crop in a perfect hollow and pulverized condition. But though wheat loves a mellow bed, it loathes a soft one. He therefore consolidates the soil with a double clod-crusher, which takes two beds at once, the horse walking on the stubble in the centre. This being done he waits till near the middle of September for the rains, if it may be, to perfect the culture.

I would be glad to have your close attention while I now describe the sowing, because upon the accuracy of this process depends not only the goodness and fulness of the crop, but the great pleasure of, perhaps, a daily inspection of the true lines, and even vegetation of this beautiful plant for ten months in the year.

All machinery for sowing, besides the single hand dibble, he has long discarded. He rejects even "Sigma's" admirable planter—which he hears is so efficient—believing all to be comparatively unsafe and inefficient; for, with the hand dibble, the right hand dibbling and the left dipping the grain, *he can see the seed deposited* and he knows that it is there in its right place and at the right depth. He is satisfied too, of the rapidity with which the practised workman does his work. It is true, his work is made out for him more accurately and quickly than could do it himself. Another hand stretches the line nearly, but not quite in the centre, from end of the interval to the other. With a light hand implement, invented by Sigma, which has three small mould-boards, set at the required distance apart, he now, guiding the middle mould-board by the line, draws with all mathematical truth three minute furrows, which the dibbler deposits the seed. And the whole piece is completed, if the surface is dry enough, he covers over the seed, and c