

Smith, at Lois Weedon. The manner of his yearly cultivation is as follows: At the usual time in autumn, the seed is drilled into stripes, which (consisting as each set does, of three rows, ten inches apart) occupy thirty inches in width, and between strip and strip, there is left an unseeded space of similar dimensions. During the growth of the plants in the ensuing season, the rows receive sedulous attention in hand-hoeing; while, at the same time, the interspace between strip and strip undergoes a constant succession of horse-hoeing and other fallow operations. Next year these fallowed spaces bear the stripes, and the stubble of the preceeding year's crop is plowed up and summer-fallowed in like manner. In one point of view, there is a perfect analogy between this expedient and a practice not uncommon on the heavy land of Essex, in which is pursued field by field the simple alternation of corn one year and fallow the next, to be again succeeded by corn, and so on for ever; but in various circumstances of detail, into which we shall not here enter, the Lois Weedon method possesses a superiority very favorable to both healthy and prolific cereal productiveness. M. Smith's experience in this mode of management dates back to the year eighteen forty-six. The area of his operations is comparatively small, being only five acres. The soil is above average quality, and consists of a staple of good wheat land, resting on wholesome clay, and naturally dry. The implement used for inverting the soil is the spade, or fork, in place of the plow. The average yearly produce for twelve years, ending with crop 1859, has been upwards of thirty-six bushels per acre of prime marketable wheat; and the expense of tillage, rent, &c., are as follows;

|  | £ | s. | d. |
|--|---|----|----|
| Digging and cleaning.....                                    | 1 | 14 | 0  |
| Horse-hoeing, three times.....                               | 0 | 6  | 0  |
| Plowing.....   | 0 | 4  | 0  |
| Hoeing and hand weeding.....                                 | 0 | 5  | 0  |
| Three rollings with crushers at seed time and at spring..... | 0 | 3  | 0  |
| Two pecks of seed.....                                       | 0 | 2  | 6  |
| Dibbling.....  | 0 | 5  | 0  |
| Bird-keeping.....  | 0 | 4  | 0  |
| Earthing up wheat.....                                       | 0 | 3  | 0  |
| Reaping, &c., trashing and marketing.....                    | 1 | 13 | 0  |
| Rent £2, rates and taxes 4s. 3d.....                         | 2 | 4  | 3  |

Total yearly expenses..... £7 3 9

Value of thirty-six bushels of wheat at an average price  
of 6s. 6d. per bushel..... £11 14 0  
Deduct expenses as above..... 7 3 9

Annual profit per acre besides the value of the straw, £4 10 3

One other element of Mr. Smith's practice still remains to be stated, (and on account of its paramount importance it has been reserved for special notice,) namely this, that in each summer fallowing of the interspaces a method of deep cultivation is pursued, by which the upper and lower strata of the staple are stirred, and inverted to the depth of ten or eleven inches; and if it be asked upon what grounds was this trenchant and very thorough tillage resorted to, the reply is, because theory and practice alike assured the experimentalist—1st, that usually in the soil, and ever in the air, there is abundance of nutriment for cereal crops, in proportion as the mineral and atmospheric elements are brought into mutual reaction within the pores of the soil, by perfect tillage, the aid of adjuvant fertilizing substances is not indispensable to the profitable growth of corn.