

estimation of judges. And this, too, must undergo the operation of rolling before the drill or dibble can deposit the seed; and thus, instead of comminution, to form a seed-bed, the soil is rendered as hard and unfit for that use as the art and implements of the farmer can make it."

This is strong language; but the importance of the matter, and the grave nature of the error which has crept into it—the sacrifice of utility to mere surface beauty—certainly demands that strong language should be used in drawing attention to it. The "Old Norfolk Farmer" blames the judges at competitive trials, especially those of the Royal Agricultural Society of England, and not the implement makers, who are forced "to carry out the absurd ideas of the judges," or run the risk of finding their ploughs condemned.

The writer in the *Journal of Agriculture* considers that light has been thrown on the subject by the efforts of Mr. Smith, of Woolston, who, he believes, has struck into the right path in his "smashing up" system of cultivation; but he considers the Tweeddale plough "superior to the 'cultivator,'" and believes that "if it can be worked by team, instead of horse-power, will supply every requirement of cultivation." This is precisely the view taken by Mr. Pentland, whose experience of the Tweeddale plough and sub-soil-trench plough we recorded in our columns nearly four years ago (*FARMERS' GAZETTE*, Sept. 3, 1859), and we know that similar opinions are held by others who have introduced the Tweeddale implements on their farms.

The "Old Norfolk Farmer" insists strongly on the importance of "speedy pulverisation, deep culture, and thorough draining," as "the distinguishing marks of good husbandry." Not deep culture on water-logged soils, or thorough draining followed either by scratch or ploughing, or a system which turns up the land in "hard, elongated, smooth, unbroken furrow-slices," but deep culture preceded by thorough draining, and the use of such implements as will break up the soil in the most effectual manner, for the admission of those sweetening atmospheric influences which are shut out when those essential marks of good husbandry, deep culture and thorough draining, are neglected. Three years ago the writer of this article read a paper on "Deep Cultivation and its results," at a meeting of the Dublin Chemical Society, (see *FARMER'S GAZETTE*, May 5th, 1860), in which precisely similar views were set forth as those which we find expressed by the "Old Norfolk Farmer." Like him, we have long known and felt the importance of this subject, not only to farmers, but the community, seeing that—to use his words—"On this question of comminution and deep culture, united with thor-

ough draining as the basis, depends the future of agriculture," and for this reason we desire to urge the serious consideration of it on our readers.

### LEICESTER SHEEP AND THEIR MANAGEMENT.

At a recent meeting of the Boroughbridge (Yorkshire) Agricultural Society, a member of long experience in sheep management, gave an interesting account of the results of various crosses, and found that the largest and coarsest breeds were not the most profitable. He, and his neighbours, had of late years adopted the improved Leicester with entire satisfaction, and the following is given as a correct description of the best specimen of such an animal, which our Canadian readers will find in some important respect not wholly applicable to sheep which pass for Leicesters here, although we have some really good flocks in different parts of the Province, and which are regarded by their owners as the best and most profitable sheep, on the whole, for our climate and pastures:

"The head should be small but rather long, light complexion with fine muzzle, open nostrils, prominent eyes, placid countenance, short thin ears, hidden in wool, the neck not too long, but broad and well filled with flesh, so much so that the head cannot be raised much above the level of the back, the breast wide and deep, and projecting in front of the fore legs, where it should be met by a heavy neck vein; shoulder-blades inclining 'wards the crops, and hidden in flesh at the summit; girth behind the shoulders deep, the chine forming a straight horizontal line, should be thickly covered with firm flesh, cloven from shoulder to rump, broad loins, the chine here a little convexed than otherwise. The extremity of the rump should be nearly in a line with the back, the thighs well filled and terminating abruptly a little above the hocks; feet well apart, and knees and hocks slightly inwards. The entire surface of the skin, except the muzzle, face, legs and pits, should be covered with long wool of high lustre, varying as little as possible throughout in length or quality of staple, not terminating in too fine a point."

He then goes on to discuss the merits of these sheep. The following extracts from his remarks, include some useful hints:

"The time of admitting the ram to the ewes should be according to the locality and the climate—the second or third week in October is the usual time with us. Stocking is not only productive of more lambs, but is also