

In some counties in England where farming is carried to a very high pitch (although we Scottish farmers would claim superiority), the land intended for grain crops is mostly ploughed by the turn-wrest plough, more especially in Kent; hence we are often referred by writers to the Kentish turn-wrest plough. But to come nearer home, in the south of Scotland I have had the opportunity of seeing several fields ploughed, and in the course of ploughing, with an implement as above alluded to, invented and put in operation by that eminent Agriculturist Mr. Smith, late of Deanston. The constitution of the plough differed little from the one in common use: the share was formed so as to cut the furrow slice right or left; the mould boards were attached to each other, and, by a small rod scientifically attached thereto, the ploughman turned them with facility. Hence the ploughing of a field was performed without a *feering* or *hinting furrow*.

The above is the most practical method that can be adopted in ploughing land where open furrows are necessary, more especially where the fields are bounded by unequal sides; but where the fields are square or equal-sided, the desired end may be accomplished with the common plough by commencing at the boundary, and driving right round the field in the direction against the sun's course, thereby the ploughing will be accomplished, not only without an open furrow, but more expeditiously than ploughing in ridges, as the turning—a great disadvantage—is almost dispensed with. This system I have adopted with advantage; the only objection the ploughmen made being, that they could not show their dexterity in driving a 'hinting,' which, if neatly performed, is much boasted of; but profit is of more consequence than pleasure.—A. F. J.—*Scottish Farmer*.

ECONOMICAL MODE OF FEEDING STOCK.

Farmers who have but few animals, say two or three cows, a yoke of cattle, or a pair of horses, will find it greatly for their interest to cut their corn-stalks, straw, and even hay, when it bears a high price. When this is done, put the cut fodder into casks of suitable dimensions, take hot water, to prolong the heat, and salt it at the rate of two quarts to a barrel. All know that brine can be kept hot longer than fresh water. Pour this upon the cut fodder, as fast as possible, in order to prevent the escape of heat, cover the head of the cask close with a blanket, or anything convenient which will keep in the steam, and let it stand half a day, or longer, when it will be found tolerably well cooked. Now place it in troughs for the stock; and if you have a little meal or bran to sprinkle over it, your animals will relish the food so much the better, and it will do them more good. Corn-stalks, straw, and coarse hay, are worth twice as much for food, when thus prepared, than if thrown out neither cut nor steamed. We give the above from experience, having been in the habit of following the practice for years.

Farmers labour diligently during spring, summer, and autumn, to raise and harvest fodder, then allow a large portion to be wasted from sheer negligence. Winter is their leisure time, and they should endeavour, at some extra pains, to economise the food they have worked so hard to procure. Machines for cutting stalks, straw, and hay, have been much improved and multiplied within a few years past, and can now be had at low prices. It is economical to possess them, and no farmer should be without at least one on his premises.—*American Agriculturist*.

THE ART OF WHEAT RAISING.

Although the culture of wheat has been more or less practised ever since men have cultivated the earth, it is doubtful if the true art of raising it is fully understood.

It is not a difficult thing to raise wheat, when all the elements are favourable to its growth. By this we mean when the composition of the soil, and the weather and other incidents of the climate are right, and insects and certain external enemies do not interpose. But to raise it when all these requisites are not supplied by nature, is not so easy. The great art, therefore, consists in knowing, in the first place, what is needed, and, in the second place, how to supply it. Many of the countries of Southern Europe, as Sicily, for instance, which in olden times were very prolific in this grain, now afford but scanty crops of it. The reason of it is probably this: the material in the soil necessary to make a good crop of wheat has become exhausted, is taken out and carried off years ago in the abundant harvests of that time, and the peasants do not know how to supply it again. From what accounts we can gather, the art is understood at the present time as well perhaps in England, as anywhere else in the world. There are many reasons why this should be the case. The crowded state of the population there causes a great demand for bread stuffs, and these stuffs accordingly bring a comparatively great price. Hence the farmers pay greater attention to the subject, and are remunerated for their extra care and attention by the advanced state of the markets. In this country, especially in the western wheat-growing States, as they are called, no such incentives act upon the wheat raisers. They have a virgin soil to cultivate. All that is required is to plow, harrow and cast the seed into the earth, and wait patiently for the time of harvest. This course will, in time, exhaust their soil, however fertile it may be now. After generations will be under the necessity of studying the art of wheat raising, or be content with diminished crops. The experience of some of the older states is reading this lesson to them.

It has been doubted if the culture of wheat is any better understood in England than in our own country, or that they do raise any larger crops than are raised in Western New York. That they do can be abundantly proved; and even if they raised no better crops, but those equally as good, it must be evidence that they understand the art pretty well, for it must be remembered that their soil has been a long time in cultivation, and if it had not been well replenished with what that crop requires, it would have been exhausted long since.

In the transactions of the New York State Agricultural Society for 1848, we find a letter from J. Slocum, addressed to the secretary of that Society, on this very subject. Previous to Mr. Slocum's visiting England, he did not believe that the English did raise better wheat crops than were raised in New York; but actual inspection convinced him of the contrary. In the letter referred to he says:—"On the 26th of August, I visited the farm of Mr. Peter Lane, at Nazeby, Northamptonshire, 75 miles from London, and was much gratified to find him in the midst of his wheat harvest, and most seriously do I wish I could present to the view of the farmers of this country, his luxuriant fields of wheat, as they appeared to me. Having been bred a farmer, and having had for many years opportunities to observe the wheat crops of Western New York and the Western States, I thought I had seen as good wheat as could be produced; but I had never seen anything that could compare with this whole crop, which consisted of about fifty acres of winter wheat and twenty-two of spring wheat. On enquiring of Mr. Lane how much the seventy-two acres would probably yield, he answered four hundred quarters, or thirty-two hundred bushels, and in this estimate he was not disappointed, as I was again at Nazeby in November, when he had thrashed and sold a large portion of his crop. Although this seemed to me an extraordinary yield, it was not so regarded by Mr. Lane, and I was satisfied, from subsequent enquiry and obser-