

before churning. (1) This may be produced by the addition of a little butter milk twelve hours before churning, or by increasing the temperature to 65 deg. Fabr., and covering it up for a few hours. Slightly sour (not stale) cream will give more butter, and of better flavour than cream perfectly sweet. An enormous quantity of butter is lost every winter from neglect of this rule, as in very cold weather cream does not sour even in a week. The Scotch churn whole milk, and the same thing is done in the Channel Islands, but great care is taken to "lapper" it that is, to give it sufficient acidity to thicken before churning. (2)

### THE HARROWS.

The past twenty years have witnessed a great improvement in the implements for pulverizing the surface of the soil, and in the aid they have afforded in preparing for and cultivating crops. At an earlier date some of the best farmers were aware of the importance of fine pulverization, and with the old Scotch and other erect tooth harrows, made up in continued repetition what these implements lacked in efficiency. Since then we have witnessed the advantages of using where needed the Shares, disc, slant tooth, Acme, and the several spring-tooth harrows. These have made the work so much easier, that the farmers who use them are tempted to make too short work with them, and not to give that complete finish to a fine, mellow soil which the best success demands.

The disc harrow, and the Acme (the latter somewhat similar in principle to the Shares, and a great improvement on it,) have the advantage of working efficiently on inverted sod without tearing up the grass. They press down the lower portion of the sod at the same time that their blades slice up and pulverize the upper portion. Hence their value in preparing inverted sod for planting corn, for working in young orchards, the roots of which they will not tear, and for covering broadcast seed. The Acme is valuable for many purposes, where the soil is already in partial condition, but which may be finely pulverized and cleared of weeds without the slow process of plowing. The spring tooth harrows will work in hard or stoney ground to which the last mentioned is not adapted, and which would otherwise require the use of the plow. They are not so well adapted to pulverizing the surface of inverted sod as the teeth, pointing forward, would be more likely to tear up the buried grass. The slant tooth or smoothing harrow has some advantages not possessed by the others, among which is clearing out the starting weeds in the rows of young corn, and entirely saving the labor of hand hoeing, (3) and in harrowing crops of grain broadcast in spring, by which the crop is often largely increased. Like the disc and Acme, it may be used on the surface of inverted sod, and in young orchards, the roots of which it will not injure, and it performs a good service in breaking up and spreading evenly coarsely spread manure.

These different harrows are not all suited alike to different soils and conditions of land, and farmers must judge for themselves which will be the most useful, and provide themselves accordingly. A freer use of them generally would undoubtedly increase the farm crops of the country at large.

C. Gent.

(1) I confess myself a partizan of the "slightly acid" faction. I find the creamery butter, as a rule, decidedly *fade* or insipid.

A. R. J. F.

(2) I never tasted any butter fit to eat in either country.

A. R. J. F.

(3) It may be so, but I never saw any implement that would thoroughly clean foul land without the use of the hand-hoe.

A. R. J. F.

The Chicago pleuro-pneumonia is believed to be thoroughly extinct, and the governor of Illinois asks that all quarantines against the State be removed. There are rumors of sporadic outbreaks in Ohio and Northwest Pennsylvania, to which not much importance need probably be attached at present—reporters for the daily press are very likely to diagnose any sickness among cattle as "contagious pleuropneumonia," now that they have generally become informed that there is such a disease in the country and that it is of a serious nature.

The cattle disease commissioners of Massachusetts sent the following communication to the Board of Health last week:

"It having come to the knowledge of the undersigned, that contagious pleuro-pneumonia, or lung plague, has made its appearance in at least eight counties of the State of New York, you are therefore directed to seize and quarantine, at the expense of the owners thereof, all working oxen, milch cows and store cattle, which are brought to your municipality from that State after this date, unless they have a special permit from this board, or from a United States inspector.

"Beef cattle which, in your judgment, are intended for immediate slaughter, and are not being surreptitiously moved for other purposes, you will allow to pass from either Watertown or Brighton to the abattoir, but cattle going to remote places in the State must be moved by railroad to the nearest designated place of slaughter, and may be thence driven to the same."

### NON-OFFICIAL PART.

#### The Culture of Farm Crops.

The necessity for an accurate knowledge of the principles of Agriculture for the guidance of farmers, presented in a plain and simple manner so that it can be easily understood, has been very apparent to all concerned, both to those whose business is to teach and to those who have to learn. This paramount need has led to the production of a Hand-book of Agricultural Science and practice by the well known author and writer upon Agricultural matters Mr. Henry Stewart. This work is entitled the "Culture of Farm Crops" and is intended to tell the whole story of Farm practice and to explain the principles upon which this practice is based. This book should be in every farmer's house and in every student's library; for the farmer it is a library in itself and for the student a most valuable book for reference, because of the very large amount of matter which is condensed in its pages. It is published by Duane H. Nash, of Millington, Morris Co., New Jersey.

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