

SALT FOR CROPS.

We give the following account of a test made by W. J. Winter, Massie's Mills, which we extract from the *Globe*, being one of the best tests we have seen recorded this year:—

Experiment No. 1. On peas, three quarters of an acre, two bushels Black-eyed Marrowfat, sown on the 13th April. Ploughed in six inches deep. A wet time following, packed the ground and rotted fully half the seed, it only coming through properly on the crown of the ridges, where the furrows stood on end. Saw a report in "Johnson's Chemistry" on peas and oats being benefitted by salt and gypsum, thought it might answer for mine; mixed 100 lbs. salt, with 75 lbs. of gypsum, and sowed over them when about two inches high. Crop, one large waggon load of peas and straw; threshed 24 bushel of clean peas and a little over by measure. The following year the wheat on that piece was better filled, and the straw a more beautiful color than the rest of the piece, although the whole was alike manured, so much so that several visitors asked me if I was growing a new kind of wheat. This led me to try another experiment.

No. 2. One acre; soil loam, about ten inches in depth; subsoil yellow clay and limestone gravel mixed, well cropped out. May, 1867, manured with 30 loads of fresh horse dung, much of it very long; had to employ a boy to fork it into the furrows as I ploughed it in; ridges one rod wide; harrowed lightly after ploughing; then sowed 1½ bushels of Fife wheat and half a barrel of the best common salt; harrowed all in; when the wheat was in two blades, sowed 100 lbs. of gypsum; the day after sowing the wheat a terrible rain storm washed half of it out of one side of the ridges (they happening to be across the slope), and deposited it in the water furrows, where it perished. Sowed on the 18th of May. Result—straw moderately long, stiff, glassy looking, a beautiful pale gold color; head well filled; very plain and clear; yield, 23 bushels; cleaned three times for seed, and separated about a bushel of tailings. Considering that the half of each ridge was washed out, as above stated, I thought it a success, for the rest of my Fife wheat only averaged 16 bushels per acre. I should have said that the bind was 25 stooks of 12 sheaves.

The same year I summer-fallowed two adjoining acres; manured with thirty loads of rich stable and garden manure per acre, and sowed them, as well as the salted acre, once ploughed, with fall wheat, Soules.

Fall of 1867. Salted piece looked the strongest; sowed plaster on the other two acres, 100 lbs. to each.

1868. Wheat badly killed; salted piece the best plant and least damaged; when ripe, the grain was better and straw firmer, glazed and nicer color; but as all was damaged by winter-killing, I did not think it worth while to separate the grain of the different pieces to thrash; average yield, 21 bushels per acre; the whole three acres having been seeded this spring with clover and timothy, now the salt showed its power; the clover plant was twice as strong as on the unsalted piece.

1869. Salted acre could be noticed at a distance by its dark color; crop, five loads of hay, estimated at 1,500 lbs. each on salted acre; three each on the other two. The aftermeath was double on salted acre, and tall enough to sweep the cows' bellies as they went through it.

1870. Sowed 100 lbs. of plaster on each of the three acres. Crop, four loads on salted, acre; two-and-a-half each on others; again excelled in aftermeath.

1871. Season too dry. Crop, two loads on salted piece; one each on other two; no after

meath on any of it worth noticing. I pitched all the load each year myself, and was careful to put on about the same quantity each time.

Now, as all the land is alike; manured alike, and plastered alike, I attribute the very large extra returns of the one acre to the salt, and I am well satisfied with the result. I have pointed the piece out to many, and all are astonished at the great difference in appearance.

If you think these facts are worth publishing, and that they will be of interest to the farming community, it will encourage me to send you an item now and then.

WILLIAM JOHN WINTER.

Massie's Mills.

Wood ashes constitute a most valuable manure on almost every soil. Their chemical constituents consist of saline, alumina, oxide

of manganese, potash, soda, and phosphate. These constituents are essential to the growth of plants, but potash is the most important of all. It is always needed to decompose the various organic substances which exist in the soil—a change is prerequisite to their becoming food for plants. Potash also renders inert minerals into useful plant food. Sandy soils are the most benefitted by the application of ashes, and they are more particularly useful for the following crops: potatoes, carrots, corn, beans, peas, clover and grass generally. A compost can be made of hen manure, soil and ashes, which is almost as valuable as the most expensive guano. This compost may be made by thoroughly mixing three parts of pulverized soil, one part of hen manure and two parts unleached wood ashes. Mix well, moisten, and allow to stand from four to eight weeks. Apply dry—a handful in each hill, as with guano, and the result will pay your trouble to unfold.

2nd. Those which depend upon the composition of the milk itself.

Among the first are to be considered—

(a.) The churning of the whole milk or cream.

(b.) The external temperature while the milk is standing.

(c.) The description of pans to be used.

(d.) The period of time the milk should stand before skimming.

(e.) The rapidity with which the milk becomes sour and thick during churning.

(f.) Different kinds of churns.

(g.) Temperature during churning of the cream or milk, and of the air.

(h.) The kind of motion required to churn.

Among the second—

(a.) The description of food.

(b.) Whether the cows are old or young milkers.

(c.) The individual character of the cow—old or young; quantity of milk given; peculiarity of breed.

(d.) Length of time the cow has given milk.

(e.) Milking twice or thrice daily.

(f.) First and last milk from the cow.

After remarking that the causes in the first class are the most important for the farmer to attend to, Mr. Peterson states that, "The churning of whole milk is, as a rule, little known. It is, however, often resorted to in Holstein, where cheese is not made. The general mode of procedure is self-evident; instead of being skimmed, when it is ripe enough, the whole of the milk is worked in the churn."

All the experiments I have made to determine which method yields the most butter, have been in favor of churning the whole milk, when other circumstances have been equal.

To obtain the greatest amount of butter in churning cream, it is necessary—

1st. To be in a position to control the temperature at all times of the year.

2d. To be able always to perform the skimming at the right time.

3d. Such a daily supply of milk as will yield enough cream to allow it to be churned before its yield of butter is damaged by standing too long.

These conditions cannot be complied with in all dairies, and the less so the smaller the establishment. The greater number of dairies depend on three or four cows, and the yield of butter is often considerably lessened by the cream standing too long, owing to the quantity not being sufficient to churn.

In churning whole milk I always proceed as follows:

The evening milk of one day and the morning milk of the next are churned together. The former is placed in a tub directly after milking, and the latter added to it the next morning.

In summer the milk is allowed to stand, at most, two feet high in the tub; in the winter about two and a half feet. In very hot weather the morning milk is cooled down to 16 to 20 degrees R. before it is added to the evening milk. Under these circumstances the milk is nearly always ripe for churning when the evening milk has stood 36 and the morning 24 hours. The temperature of the milk when being churned should be from one-half to one degree R. warmer than when cream is churned. The churning itself should be hurried as little as possible, since the butter globules being more widely separated in milk than in cream, rather more time is needed for them to collect.

In churning whole milk there is an increase in labor, owing to the necessity for more frequent churnings, but this is far outweighed by the other advantages resulting from it.

Many make a good profession; comparatively few make their profession good.



Your Humble Servant, W. W. WELD, the "Farmer's Advocate."

We have in our list the names of many ladies who subscribe for our paper. Three years ago we received a request from one we have never seen, and probably never shall have the pleasure of seeing, that we should give our portrait as an illustration. Last year we received a similar request from another lady. Both of these ladies live hundreds of miles from us, and perhaps we may never have the pleasure of meeting with either of them. We have also had similar requests from parties near home.

Being desirous of pleasing the ladies, as editors generally are, we have acceded to the request, but we must ask a favor in return: Don't you tell my wife you asked for my portrait, else she may be pulling some of the gray hairs out of my head, as she has done before. But this might cause her to be less particular; she might yank out a considerable number of the black ones, with them, and it is not pleasant to become prematurely bald by such a process.

We do not give it to you because we consider we are handsome or prepossessing, but we claim to have done more for the agricultural interest of the country, and for the advancement of the farmers' interest, than any other person during the past seven years of oppression we have just passed. We hope to do more good to ourselves and to you during the next seven years. We feel as if we can stand seven years yet.

EXPERIMENTS IN CHURNING.

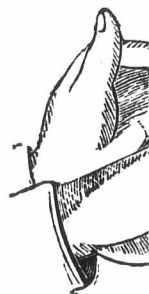
The London Milk Journal furnishes the following extract from a paper by C. Peterson, of Windhausen, translated from the *Milch Zeitung* of Oct. 1:—

The causes affecting the yield of butter from milk may be divided into two classes.

1st. Those which depend upon the technical handling of the milk.

Youths

Wishing to be cheerful, with kind words, so that the holiday behind them please year we have no more space to our to some puzzles, seen before, we are ing shadows on the the hope that you selves and your vings of the holi make your Adv your selected frie and make the sh fail once or twice the hands and shadow as seen i until you have n



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