

where only one grow; and where the farmer who now raises fifteen bushels of wheat to the acre might raise thirty, or who now grows forty bushels of corn might produce eighty or one hundred, he has not yet given such a fair trial to his present opportunities as to entitle him to experiment with an increased acreage or to turn his lands to new crops. The future farmer will, first of all, by all methods not exhaustive of the soil, so till his lands as to get the largest available yield of the crops which he now cultivates with profit.

ABSORBENTS.

The question, What to use as an absorbent in stables? is one that must be answered by each farmer, according to the convenience with which he can obtain the several substances named. Sand is undoubtedly, of itself, better to spread upon muck or clay lands than either muck or clay, but the quantity that would be likely to be used in the stables would have an effect upon a clay farm or a large muck swamp, so small as scarcely to be appreciable. In practice, farmers will use such absorbents as they can get. Where sand is plenty, it will be used largely by good farmers, even upon sandy land. Sand and sawdust are each very clean absorbents to use in stables, while muck is decidedly otherwise. Whatever may be used as an absorbent in stables, should be made as dry as practicable, and kept so till used. Many years ago we built an addition to our barn for the express purpose of laying up sand and dry earth for spreading upon the stable floors, and we know of no investment that has paid better. The addition is at the rear of the stables, running their whole length. It is ten feet wide, and will hold eight or nine months' supply of dry material. It is filled in during the fall, while dry, and being on the north side of the stable, keeps out a great amount of cold during the winter, and yet it never freezes so hard that it cannot be used during the coldest weather. If planning a new barn, we should as soon think of dispensing with hay room as to neglect to provide suitable room for dry earth. And yet we do not consider dry earth in itself a manure, whether it be sand, loam, or muck.—*New England Farmer.*

CLOVER AND DROUTH.

With the experience of the present season I am disposed to value red clover more highly than ever before as a drouth-enduring plant. Its intrusion into our meadows has this year proved a blessing, especially to those who, like myself, believe in early haying. I cut my grass early in July, and the clover springing up immediately, soon grew a foot high and blossomed. I then turned in my cows and kept up a flow of milk which, without the drouth-proof clover, would have been impossible, except by daily feeding with green corn or other milk-producing equivalent.

ASHES FOR FERTILIZING.

Unleached wood ashes contain all the constituents of the plant food that the ordinary or worn-out soil needs, except nitrogen. By their chemical action, they render much of the inert nitrogen in soils available, and in that way may be said to furnish nitrogen. This is true of lime, and on this power of making nitrogen available, the greatest value of lime, when applied as a fertilizer, depends. Ashes also have a good mechanical effect upon the soil, especially heavy clay soils, which are made lighter and more porous, so that air and water circulate more freely. Ashes do not suffer waste by being washed out, to the extent that is true of the more soluble and concentrated fertilizers sold in the markets—their effects are therefore more lasting.

THE DAIRY.

GOOD COW PERFORMANCE.

EDITOR RURAL CANADIAN,—Seeing in your issue of 1st inst. that Colonel Thomas Fitch, of New London, Conn., hazards the opinion that "more than half of the cows registered in the 'gilt-edged register' of the American Jersey Cattle Club will not give an averaging ten quarts of milk daily, or make one pound of butter a day for three months;" and referring to the recent sale of the bull Polonius for \$4,500, also a more ordinary-looking thirteen-year-old cow for \$8,000, of "the Alpha Craze strain of blood," he says: "Down with such wild-cat theories, and give us good blood at fair prices and less humbug." I wish to show Colonel Fitch I can do it. I keep two cows; grades, a cross between Durham and Ayrshire. Both had calves last spring. For three months after they gave five "Yankee pails" of milk daily,—that is 52 quarts, or 26 quarts each cow per day. Now they give 40 quarts, or 20 quarts each. The pasture is not so good now. They get nothing in the summer except the grass they gather in the field, and it is not always abundant. I am sure with better feed they would yield more milk. Out of this milk we sell some daily, fresh from the cows. The family has plenty of cream and milk for all purposes. We feed a calf on sweet skim-milk. It gets 15 quarts daily; and during the last 30 days we made 82½ pounds of butter. Who beats that?
R. MUNRO.

Georgetown, P. E. I., Sept. 15, 1881.

[The above is an excellent showing for a couple of cows, and speaks volumes as to the mingling of Ayrshire and Shorthorn blood. There is no better cross for dairy purposes; and if our dairymen would only try it, they would find it so much to their interest, that they would be sure to adopt it, and weed out the common cattle whose poor performance makes such a discouraging hole in the profits. Let any man figure up the financial results of keeping up a herd wholly made up of such cows as described by our correspondent, and he cannot fail to see the folly of keeping poor cows.—Ed. R. C.]

THE COST AND PROFIT OF KEEPING A COW.

Dairying would be a more money-making business if greater care were taken to keep only the best cows. Many cows are a dead loss to their owners. This is conclusively shown by a prominent New York dairyman, who has been investigating the business of thirty dairies with the following results:—

"In the thirty dairies there are 939 cows, an average of about 31 cows to the dairy. The whole number of pounds of milk sent by them to the factories during the season was 3,658,945. This gives an average of 3,900 pounds to the cow. I calculate that it takes at least one cow to each dairy to supply the family with milk, therefore 30 times 3,900 is to be added to the above amount, or 117,000 pounds. Last season was an exceptional one, and the factories were run for a longer period than usual. They were open on an average fully seven months, or 214 days. If this be deducted from 365 days, there will be a remainder of 151. The average time for a cow to go dry is about 60 days, and this, taken from 151, leaves 91 milking days, in addition to the time during which milk was sent to the factory. This is nine twenty-firsts, or somewhat less than one-half of the factory time. But it comes at the beginning and end of the season, when the cows will not average so good a yield as during the time of pasturage, and I think that one-third of the amount given during that period would be a fair average for the remaining portion of the year.

We are now in a position to get at the total annual yield of these 939 cows, and it may be tabulated as follows:—

Whole number pounds of milk sent to factories. 3,658,945
Yield of one cow to each dairy, for family use. 117,000
One-third of above amount, for 91 days remaining. 1,219,618

Total number of pounds per year for 939 cows 4,995,563

"If now we divide this amount by the number of cows, we find that the annual yield for each cow was 5,320 pounds, a result which may be looked upon as quite satisfactory. One of the questions upon my postal was the 'average number of pounds of milk to one pound of cheese.' In every instance this has been answered, and I presume in accordance with the factory figures. The range of these figures is from 9.67 pounds to 11 pounds, and the average of the 80 factories selected is 9.8164 pounds. A calculation made upon this basis, therefore, would give, providing the entire season's milk had been made into cheese, 542 pounds to each cow. Multiplying this by 8.717 cents, which was the average price of cheese for the entire season upon the Utica market, the result shows that the average money product of each cow was \$47.25.

"We now turn to an entirely different set of figures, which are to show us what is the cost of producing this milk. The first item, of course, is the food of the cows, and in regard to this the estimates of different men differ greatly. The discrepancy probably arises from the different methods of feeding and the various kinds of food used. The estimates range from \$15 to \$30, and in two cases even rise as high as \$35. It is also probable that the quality of feed ranges from simple grass and hay to oat and corn meal and bran. But the average cost of feeding our thirty dairies amounts to \$25.26 per cow. Then comes the expense of labour in taking care of the dairy, and the average cost per head of cattle is \$6.67. The item of manufacturing the cheese ranges from \$1.25 to \$2, and as it may be interesting to see the different prices charged at various factories I give them:—Starting at \$1.25, they go to \$1.30, \$1.35, \$1.40, \$1.45, \$1.50, \$1.52, \$1.56, \$1.75, and \$2. The average price is \$1.49½. This makes the manufacture of 542 pounds of cheese cost \$7.77. Here, then, are the cost figures:—

Feed	\$25 26
Making	7 77
Labour	6 67
Total	\$39 70

"We found the money product of the cow to be \$47.25. If we deduct the cost of that product viz., \$39.70, we have a balance of \$7.55. Very well. That would be a small, but at least a respectable, percentage of profit, if it were such. But is it? If so, what is going to pay for the taxes and insurance, for the inevitable expenses of repairs to buildings and machinery, to say nothing of the interest on capital invested and the cost of supporting a family? The probability is that in the case of average cheese dairies the product of the cows during the year 1878 was barely enough for their own support. My cards called for the number of horses, the cost of feeding them, and their value, inasmuch as they are indispensable adjuncts of the dairy. The estimate generally is that a dairy of 30 cows requires the use of a span of horses. But I have left out of the estimate the expense of keeping horses and interest upon their value, which ought properly to be included, for the reason that it would make the estimate look altogether too formidable. It is bad enough as it stands, and I would fain improve it if possible."

A CREAMERY is to be established at Londesborough. Of the \$2,000 capital required \$1,200 has already been subscribed, and the balance is expected in time to commence work early next spring.