

sulphate ammonia thirty-three pounds; (7) sulphate soda, forty pounds. Mix numbers one, two and three together; then mix numbers five, six and seven in five buckets of water. When dissolved add the liquid to the first, second and third articles. When mixed add fourth article. The above was prepared by Liebig as an artificial guano, which every farmer can manufacture himself. The farmer if he wants good fertilizers must make them himself. In following the above receipt he must be careful not to change the ingredients, as they have important chemical effects upon each other. Nothing, for instance, will take the place of muck, on account of its carbonic (1) acid being a powerful solvent. The great trouble about people preparing these things is that they do not adhere strictly to the receipt, thinking either that they know more than Liebig or that a small departure makes no difference. All these ingredients are easily obtained. Any farmer who makes this himself will save upon the cost of a ton the cost of a ton of phosphate and have twice the value of the phosphate for his money. The cost of Liebig's preparation is estimated to amount to from \$15 to \$20, and it will go over five acres. (2)

Vineland Weekly.

Jersey Milk for Calves.

The milk is tested constantly by the only true test—*i. e.*, the churn, and the average in summer is 1 lb. to $7\frac{1}{2}$ to 8 qts., in winter $8\frac{1}{2}$ to 9 qts. Claribel, when giving $1\frac{1}{2}$ qts., made $12\frac{1}{2}$ lb. in seven days, afterwards she gave 17 qts. daily. Star and Venus both $16\frac{1}{2}$ qts. daily. H. Bee made $9\frac{1}{4}$ lb. butter, after having milked fifty-two weeks with her first calf, and within six weeks of calving. Lady Clay lost many calves with scour, and found this came from the first milk of these very rich milkers being so purging, the acid destroyed the coats of the stomach. Since feeding new born calves from cows calved some time Lady Clay has had no further trouble. The calf is tied up so that the mother can lick it, but she is milked dry. The cows are fed 6 to 8 lb. Bibby's cow meal during winter, in summer about 2 lb. For roots kohlrabi is used entirely during winter for the dairy cows; silage was fed for two months last winter, and the butter was yellow as in summer.

Jerseys are chiefly noted for their butter-producing qualities. They give a moderate amount of milk, rich in butter fat, and individual animals have produced more butter from a given quantity of milk than cows of any other breed. The Jersey is strictly a butter cow, and her usefulness is limited to that peculiarity. Her milk is not as suitable as some others for family use, on account of the rapid rising of the cream globules and their rapid concentration into a tough, leathery mass, which will not again easily mix with the milk, and Jersey skim milk is a thin, blue, and not particularly appetizing-looking compound. Another peculiarity of Jersey milk, and one which is a source of great trouble to breeders, is the effect it has on young calves, causing them to scour nearly all the time during which it is furnished them for food. Any one who is familiar with Jersey calves will have

(1) Meant, I suppose, for carbonic.

A. R. J. F.

(2) I should really like to know where this receipt is to be found. I cannot recommend such infinitesimal doses as 2.75 lbs. of nitrogen and 26 lbs. of bone-meal to the acre! The cost of the whole would not exceed four dollars.

A. R. J. F.

noticed the unthrifty appearance which they present while being fed on the milk of their kind. I will here relate a little incident about a Jersey calf. A friend of mine had one shipped to him from the neighborhood of Philadelphia. On getting it home, he was very much disappointed with it on account of its unthrifty appearance, and mildly wrote to the shipper, asking what he fed his calves on, or whether he fed them at all. The characteristic reply came back, that Jersey calves were always thin, it was a peculiarity of the breed. My friend decided to try if he could cure this "peculiarity," as far as this particular calf was concerned, and put it on an Ayrshire cow. In a few weeks it was as plump and sleek as anything in his barn. This idea has not, I believe, been patented, and Jersey breeders are at liberty to use it freely.

Ph. Stock Journal.

NON-OFFICIAL PART.

Complimentary Notice.

THE GARDEN.

For the management of vegetable gardens and practical instructions concerning the culture of flowers—for hints and information concerning all kinds of seeds, planting and cultivating all vegetables and flowers, D. M. Ferry & Co.'s Seed Annual for 1888 will be found as complete as any work of a similar character ever issued. The variety and extraordinary range of the information given renders their Annual worthy the special attention of every one interested in having luscious vegetables or beautiful flowers. D. M. Ferry & Co. make the growing and sale of Onion Seed a leading specialty, and give so much information on onion culture as to make their Annual of permanent value to all onion growers and gardeners. The Annual can be had for the asking. Address D. M. FERRY & Co., Detroit, Mich.

THE AMERICAN AGRICULTURIST.—The Publishers of the *American Agriculturist* announce in an advertisement elsewhere that that periodical, now nearly fifty years of age, begins the new year with a change in form, though the old staff which has been with the paper for thirty years remains. The Publishers are bringing out the first reproduction in this country of "Christ on Calvary" which, together with "Christ before Pilate," is offered to subscribers.

Consumption Surely Cured.

To the Editor:—

Please inform your readers that I have a positive remedy for the above named disease. By its timely use thousands of hopeless cases have been permanently cured. I shall be glad to send two bottles of my remedy FREE to any of your readers who have consumption if they will send me their Express and P. O. address.

Respectfully,

DR. T. A. SLOOM, 37 Yonge St., Toronto, Ont.