

say "they based their final decision on the fact that *Mr. Duchop's butter was equal at least to Mr. Chamberlain's, and from the manner it was put down, appeared more likely to keep.*" This was his manner of making: "The milk is kept in tin pans and churned every morning, if the weather is warm, the butter-milk is removed by frequent washing in water, and four pounds of salt and one pound of sugar used for each hundred weight of butter, packed in wooden vessels, and set in a cool place." The merits and demerits of washing butter appear to be nicely appreciated by a practical French writer, in the following sentence taken from the journal before quoted:—"Fresh butter is distinguished by a mild and agreeable flavour, the less it is washed the more delicate and fine it is. But in this case its delicacy exists no longer than from one day to the next, particularly during great heat. This delicacy is owing to the milk which remains with it, and it is that which prevents the butter from keeping, by communicating to it a sharp sour taste. Thus you cannot dispense with freeing the butter from milk, excepting when it is to be used immediately. That which is intended for keeping cannot be too carefully attended to in this respect. To procure butter of an exquisite flavour and extreme delicacy it must be washed finally with new milk; the cream of this new milk is incorporated with the butter, and communicates to it its sweetness and delicacy. Like butter that has some of the butter-milk remaining in it, however, this will not keep well."

On the whole, then, though good butter, that will keep for at least a year, may be put down without washing during any part of the grass season, yet we have sufficient evidence that most farmers of the interior fail to do so; and surely a great good would be effected, could they be induced, by observing the two cardinal conditions, to effect a change in this respect. In making, *except the butter-milk*; in packing, *exclude the air*. The first is accomplished most certainly by cold water; the second by packing close in new casks, containing 50 to 100 lbs. each, and made of white oak—the salt should be fine and of the best quality; ladies who are particularly nice in this matter, make it still finer by the rolling pin before using; the butter should always stand twelve to twenty-four hours after salting, and then be worked over, using the linen cloth under the hand, till all the salt-water, now collected in small drops, is absorbed; now pack, and when the cask is full, add an inch of dry salt, and head up; or, if pickle be preferred to cover the surface, boil and skim it first, and apply it when cold; keep in a cool place; it seems not material to the keeping of butter, whether sugar be added or not—salt-petre should never be used. Though to make butter of the highest flavour, cream should stand in summer but twenty-four hours, it is generally considered sufficiently often, if kept in a cool place, to collect at three times a week.

As evidence that neither our climate nor soil is defective, it may be remarked, no market, perhaps, can furnish more delicate or richer specimens of fresh butter, than that presented during the grass season in our own; and it may not be too much to say, that the summer and fall butter is generally good, *very good* when it finds its way to market within a day or two of the time it is made; but unless kept in a place cooler than most cellars, it loses its sweetness about as soon as new milk would if kept in the same temperature: this serious defect can proceed, I think, but from one of two causes; the presence of butter-milk, or from the excellent flavour and creamy sweetness of much of it when quite new, there is reason to apprehend that the practice prevails to some extent, of washing with new milk: this, as we have seen, is utterly incompatible with its preservation, and no dairyman should hazard the experiment who cannot, by attending market daily, sell his produce within twenty-hours of the time it is made.

An extensive demand exists for a sweet grass-made butter for winter use, and the interior counties of this State must supply it, or it will be imported from elsewhere—a process already carried on to some extent, and which, under existing circumstances, must rapidly increase. For the greasy rancid material that now abounds in every grocery store, under the cognomen of "roll butter," we should see substituted a rich sweet article,

retaining its good qualities through the year in all climates. For the misshapen masses of particularly coloured stuff that now encumber cart-tails, or barrel-heads at store doors, and which is, much of it, dear at the price asked,—about that of lard—we would see the new firkin with its golden contents,—the joint product of the labour and skill of the thrifty husbandman and his accomplished daughter—meeting ready sale in this and foreign markets at double the price of the present article. Philadelphia, 2nd mo., 1844.

WORN OUT LANDS.

For the Farmers' Cabinet.

In the *American Farmer* of December 27th, appeared an extract from a communication by John Jones, of Wheatland, to the *Farmers' Cabinet*, in which he makes allusion to the astonishing effects brought about in the renovation of worn-out lands in Delaware, by Dr. Noble, of Philadelphia. On land which cost but \$15 per acre, and produced but five bushels of wheat three years ago, by the application of eight loads of manure, costing—freight included—less than \$1.50 per load; the Doctor has raised forty-seven bushels of wheat from one acre, and from the remainder rather less, the average being an enormous increase over the produce of former years. The editor of the *A. Farmer* expresses an "intense desire" to learn the secret by which the Doctor has been enabled, at the small expense of less than \$12 dollars per acre, to effect such astonishing results.

We would inform him, there is no secret whatever in the method pursued, but such as any farmer might discover for himself, if he would but take the trouble to read some of the numerous works upon the application of Chemistry to Agriculture, lately published. Knowing by chemical analysis or examination, the composition of the grain and straw of wheat, and that of the soil, it was an easy matter to apply those materials which were needed, in order to produce a healthy and vigorous growth. He prescribed for his wheat and soil as he would for a patient, and with equal success, health and strength have been restored to the suffering subject.

Now, as to the sources of the manure which he has made use of, we will say a word; it is in the power of every farmer, near large cities, to procure the materials which are needed to enrich the soil.

The Doctor formed a compost obtained from various sources, consisting of the refuse of tanners, soap boiling establishments, &c.; in short, of such animal and vegetable substances as contain soluble salts, or which can be made subservient to the growth of plants. In the selection of these substances he was guided by their composition as made known by chemical analysis. "Give," says the rational agriculturist, "to one plant such substances as are necessary for its development, but spare those which are not requisite, for the production of other plants which require them."

"An empirical," or quack system "of agriculture, has administered the same kind of manures to all plants, or where a selection has been made, it has not been based upon a knowledge of their peculiar composition." The phosphate of soda or lime, the silicate of potash, and sulphate of ammonia, or other salts containing these in other combinations, are necessary for the production of wheat; these have been supplied by the Doctor, and why should we be astonished at the results which have followed their application? He has adopted the *scientific* method of manuring, and if his knowledge of the composition of the soil and wants of the crop was exact, and his conclusions correctly drawn, he could not err in the application of his manures. His is indeed a triumph of science over the old fashioned, uncertain, and empirical mode of farming; here is an example worthy the attention of every farmer, and especially should it be considered by those whom prejudice has so blinded that they cannot perceive the vast benefits arising from the judicious application of scientific knowledge to agriculture. It is indeed "creditable to the Doctor as a scientific farmer;" we hail him as a benefactor, and desire that he may persevere in that path of usefulness in which he has found both pleasure and profit.

J. S. L.

Philadelphia, Second month 6th, 1844.

GORE DISTRICT AGRICULTURAL SOCIETY.

Copies of the following Petition have been forwarded to both Houses of the Imperial Parliament:—

To our Gracious Sovereign Queen Victoria, Queen of Great Britain and Ireland and by the Grace of God, Defender of the Faith:

The Petition of John Wettenhall, Esq., President, and James Sodgwick Wettenhall, Esq., Secretary, in the name and in behalf of the President, Vice-President, Directors, Secretary, and subscribers of the Gore District Agricultural Society in Public Meeting assembled:—

Your Petitioners approach Your Majesty as loyal and dutifully attached subjects, and in common with the great body of the Agricultural community of the Province of Canada, with sincere gratitude for your Majesty's solicitude in our welfare as evinced by the enactments of the Imperial and Colonial Parliaments, by the recommendations of your Majesty's Ministers in favour of a protection, and encouragement to agriculture in Canada, now graciously recognised as an integral part of the British Empire.

Your Petitioners humbly beg to state that although deeply impressed with the benefits thus conferred upon this Province, they are led to view with alarm and apprehension the progress now making in England by a large body of individuals, known as the Anti Corn-Law League, whose avowed object is not only the entire abolition of the existing Corn laws, but free admission of grain into the Ports of Great Britain from all parts of the world.

We, your Petitioners, humbly desire to represent to your Majesty, that such a measure, if accomplished, would be in its effects undoubtedly ruinous to the Agriculturists in this rapidly growing colony, and ultimately to every other class and interest connected with it.

The heavy charges of freight and insurance as compared with the expenses of transit from the Continent of Europe, would amount to the exclusion of our produce unless protected against foreign competition by adequate duties.

Your Petitioners, therefore, humbly pray that your Majesty will favourably consider the welfare of your subjects in Canada, and that it will please your Majesty to continue such a rate of duty on the admission of grain, as will protect so valuable a colony from so serious a misfortune, which would likewise, although in a less degree, fall upon the manufacturing classes of Great Britain, as the Colony mainly depends upon the proceeds of its Agricultural productions for its supplies of manufactured goods.

And that the Almighty God, the Disposer of all events, may ever bless and protect you, our Gracious and beloved Queen, is our fervent prayer.

JOHN WETTENHALL,

President G. D. A. S.

JAMES WETTENHALL,

Secretary G. D. A. S.

CHEVROT SHEEP.—Count de Gourcey saw a splendid flock of these sheep, on a poor and rough mountain pasture in Sutherland. He was much surprised to see these "horrible mountains and miserable pastures, stocked with such fine animals, yielding on an average 5 lbs. of long beautiful wool—wethers at three and a half years old, without having eaten any other thing but what is to be found in these wilds, weighing alive 200 lbs." "What I have seen in this journey, makes me more convinced than ever that the Chevrot breed is one of the highest merit, since they live and fatten on such land, and that, too, without adding any other food besides what these wilds produce."

SUB-SOIL FLOWING.—At a late meeting of the Cornwall Agricultural Association, Mr. Hiley stated that he had practiced sub-soil plowing, for four years, and that all his crops had been greatly benefited. His carrots had doubled in quantity, his turnips had greatly increased, his man gold wurzel was nearly doubled.