they announced that they had resolved upon a method which is cheap and entirely satisfactory.

They have found that the consistency of cream maybe restored by the addition of lime in solution. As lime is only slightly soluble in water, simple lime water cannot be used, as the volume that would be required would dilute the cream too much. In order to overcome this difficulty they use lime dissolved in a solution of cane sugar, as this solution is over one hundered times more concentrated than simple lime water. It can be used without decreasing the percentage composition of the solids of the cream to any appreciable extent. This solution of lime in sugar is called "viscogen" on acount of its viscuous producing powers, and the treated products, visco-cream, visco-milk.

The method of preparation is as follows: Two and one-half parts by weight of granulated cane sugar are dissolved in five parts of water, and one part of quicklime gradually shaked in three parts of water. The milk of lime is strained and added to the sugar solution. The mixture is agitated at intervals for two or three hours and then allowed to stand until the clear liquid can be siphoned off. The solution should be kept in well corked bottles as it has a tendency to absorb carbonic acid, thus reducing its strength and giving it a dark color.

As it is strongly alkaline, it must be used with caution. Under no circumstances should the milk be rendered alkaline. Either normal or pasteurized cream should not contain over two-tenths per cent. of lactic acid. To completely neutralize a two-tenths per cent. milk would require one part of viscogen by volume to about ninety of cream. As it should never be fully neutralized, the amount of viscogen required in the prepared cream is usually about one part to one hundred and fifty.

The exact amount of viscogen needed can be determined as follows: Take a graduated pipette filled with viscogen and titrate the amount required to completely neutralize a definite quantity of the cream. The neutral point is determined by the use of indicators, such as litmus or phenolphthalein. When near the neutral point, add more carefully, noting quickly any slight change of color. As soon as a pink color appears in the cream, it shows that the neutral point has been reached. The color should disappear quickly, or it is a sign that too much of the solution has been added. The total amount of viscogen necessary to neutralize this unit of volume should then be carefully noted, and the ratio of the whole amount of cream to this unit determined.

For instance, suppose that it takes four cubic centimeters of viscogen to neutralize one pound of cream, and we wish to treat one hundred pounds, then there will be required 100 x 4 or 400 c. c. of viscogen to completely neutralize the whole amount. But as the cream must never be neutral, it would not be advisable to add more than two-thirds of this amount, or 267 c. c.

Having determined the proper quantity of viscogen to use, it should be carefully measured, and slowly added to the cream, with constant stirring. Before adding the viscogen the cream should be cooled to a point below 60° F.

This viscogen may also be used effectively for increasing the body of separated cream, or to increase the viscosity of cream intended for whipping, as it enables one to whip cream at temperatures that would otherwise be impossible.

A great advantage of this viscogen is that it does not deteriorate, but rather adds to the value of the milk. No one can object from a sanitary standpoint to the amount of sugar added, while the lime is insignificant, not exceeding the variations in lime content between samples of normal milk from different sources.

Farming in Bermuda.

In the following short article I shall confine myself to a few random remarks on some of the natural conditions which influence agriculture down here in Bermuda.

First, meteorological conditions. Although but about sixty hours from Ontario, frost is here unknown. The following temperatures were taken indoors at the hours of 10 a.m., noon and 3 p.m. The lowest is for March: 64.3°, 65.2°, 65.6°. The highest is for August: 81.9°, 82.9°, 83.4°. The temperatures are for 1893, the latest that I could obtain.

Owing to the moist climate slight excesses of temperature are felt much more than in the dryer climate of Ontario. The average rainfall for ten years is 5.3 in., 2.7 in. more than the average precipitation (snow and rainfall combined) in Ontario for ten months in fourteen years. Rain-water is used almost entirely for drinking and for stock. When the necessary precautions are taken it is quite pure, and the flavor is very good; but it is not cold. Bermuda is "the still-vex'd Bermoothes" of Shakespeare, and well does it deserve the term. Wind-storms are prevalent, and are the worst enemies against which the farmers have to contend. The wind is not half so bad as the salt spray which is blown across the island, injuring severely all our crops.

The average soil is a dark red brown, grading into sandy loam on uplands, and clay loam in bottom lands. It is light and friable, and very easily cultivated. The lime-stone bottom is in many places but a few inches below the surface. Owing to the open nature and shallowness of the soil, it retains moisture but a short time. Pasture is almost altogether permanent and natural. The poorer land is generally reserved for this purpose; therefore, the pasture is in many cases short and scanty. Crab-grass is the most important pasture grass. There are a few wild legumes; the most common is Marylock. Sea-grass, driven into our bays by Atlantic storms, is used largely as manure.

I consider Nut-grass (Cyperus rotundus) and fine or Bermuda-grass (Cynodon Dactylon) to be the only weeds found in our cultivated fields that are really obnoxious. The first has an under-ground "nut" that will spring when the parent plant has been removed. The second is similar to Couch grass, but smaller—and worse. Wire-weed and Vervain (Verbena hastata) are obnoxious in our pasture. Of the "bad" weeds of Ontario we have representatives. As our mode of farming is so very different, these weeds do not affect us as they do the Ontario farmer. I have noticed the following weeds growing here: Mustard, pepperwort, chickweed, purslane, mullein, ox-eye daisy, tansy, golden rod, sow thistle, chicory, dandelion, motherwort, catnip, rib-grass, and may-weed.

We have not many birds that affect us. Our best insectiverous bird is the Blue Bird (Sialia sialis). This bird is being fast driven to the wall by the English sparrow. The latter bird is as aggressive and troublesome here as elsewhere. Black Birds trouble our fruit. Crows used once to be very troublesome, but since a bounty was placed on their heads they have retired. While speaking of pests, I must not omit rats. These destroy our produce mostly when stored, but some they attack in the fields, especially sweet-potatoes. Of insect pests, cut worms are the worst. I have noticed the oyster-shell bark-louse (Mytilaspis pomorum) on the Guava tree (Psidium Guaiava); and the mealy bug (Dactylopius destructor) on the Sugar apple-tree (Anina mioricata).

Mac., '95.

St. Davids, Bermuda.