...count is to obtain a fair knowledge of the milk yield of each cow. To do this a sheet of paper should be ruled in lines both ways, with the names of the cows each occupying a line upon the left hand side, while the days of the month run across the top of the sheet, two spaces being allowed for each, so that morning and night's milk may be recorded. These record-sheets can be made on brown manilla paper, by the use of a rule and lead pencil at a trivial expense. We have found it better to use small sheets and record only for a week on a sheet since large ones are apt to become very much soiled and the figures too dim for easy reference. For scales probably the spring balance is the cheapest, but a platform scale will be more accurate. If one has a double beam scale, the weight of the pails, which should be uniform, can be set upon one of the beams so that no subtracting need be done. Pails can be made of uniform weight by running a little solder upon the bottom of the lighter ones to bring all to a uniform standard.

I believe it will pay any farmer to weigh the milk of each cow every milking in the year. The time occupied in weighing is far less than one supposes. I have often timed our milkers when they did not observe what I was doing, and found three-fourths of a minute to be all that was required for weighing the milk and recording the figures. I believe the extra amount of milk drawn by good, careful milkers will more than pay for this time, since they have upon the sheet before them the results of previous milkings, and do not like to have the yield run down too rapidly.

If one cannot make up his mind to do his best in this particular, let him take a single step in the right direction and weigh the milk for one day in the seven, choosing that which is most convenient for the purpose and having a regular day, say Saturday or Monday. On this day let the morning's and night's milk be weighed, and the same multiplied by seven to determine the yield for the week, or rather at the end of three months calculate the yield of milk from the several weekly weighings for the quarter. At first let each cow's milk be tested until the owner feels confident he understands the quality of each cow. It is not necessary to test a cow quarterly from year to year, but for the first year or so she should be, and in after years occasional tests should be made to ascertain if there are any material variations. From the total yield of milk, as ascertained by the daily or weekly weighings and the percentage of fat, the dairyman has two very essential factors for making up the verdict as to the merits of the individual cows. Of course these are by no means all the factors that must be taken into consideration; the age of each animal, the favorable or unfavorable conditions under which they commenced giving milk, the season of the year, and kind of feed must all be taken into account and are important. I need not enlarge upon these for they are apparent to every good dairyman. Knowing the yield of milk, however, and the quality of it, one is in an excellent position to sort over the herd and dispose of those animals considered as possessing the least merit.

Because of not having a knowledge of the total yield of milk and the percentage of fat contained, I believe that many of the best cows in the herd are sold through ignorance and left without progeny to succeed them. It costs something like forty dollars a year to maintain a cow, and the profit lies in what she yields above the cost of care and maintenance. From this it follows that even a small increase in the amount of butter very materially affects the value of the individual. I can explain it perhaps better by wheat-raising; supposing it costs 75 cts. to grow a bushel of wheat which brings 80 cts. in the market; five cents then, is all the clear profit there is on a single bushel. Should the price of wheat advance to 85 cts. per bushel the profit becomes twice as great as at the former figure, so that the seemingly small advance is of considerable importance to the grower. The same thing is true with dairy cows. In my judgment a farmer will not use the milk test more than a month or two until he will wonder how he ever got along without it. We have in the past been sailing the dairy sea without rudder or compass. By weighing the milk and determining its richness we can pursue a definite track and make headway far more rapidly than ever before. —[Abridged from Hoard's Dairyman.

The Farm.

Sir John B. Lawes' Experiments.

A number of English farmers visited Rothamsted, one of them reported on some of the experiments as follows:—The first experimental plots examined were those in the Park, the object being to show the effects of the different kinds of manures on permanent pasture which has been in grass as far back as can be traced, nor can it be proved that at any time any renovating or other grasses have ever been artificially sown; we may, therefore, take it for granted that it is really what is in some districts termed a natural pasture, or one where the only plants growing before the experiments were begun would be those indigenous to the soil. The very first plots to which our attention was called were two which had been treated thus—A. From 1856 to 1863, eight years, fourteen tons farmyard manure, average produce, as hay, 42⅞ cwt.; 1864 and since, no manure of any kind applied, the average produce for twelve years, 1864 to 1875 was 38¾ cwt., and for eleven years, 1876 to 1886, 32⅝ cwt., per acre. Plot B. had received no manure of any kind, nor, of course, the droppings of any stock since the year 1856; on this plot, during the first ten years, the weight of hay was only 22½ cwt., or only about half as much as on the plot dressed during eight of the ten years with farmyard manure; for the next ten years the figures were 20 cwt., and for the third period, from 1876 to 1886, 27 cwt. against 32⅝ cwt., and, what appears still more remarkable, the beneficial effects from the application some twenty-five years since of this farmyard manure are, after this great lapse of time, yet visible; indeed, the produce in the year 1886 from the plot on which the manure was applied was greater by about 4 per cent. than on the unmanured plot. A question was asked of Sir John, if he could account for this marvellous effect of farmyard manure a quarter of a century after its application. Sir John frankly replied that he was unable to give a sufficient explanation; he could only call our attention to the fact. On another portion of the farm we were much struck with the wonderful improvement, not alone in the quality, but also in the quantity of the herbage on the grass land where the cattle had for some years been fed with decorticated cotton cake compared with the adjoining pasture which had not been so treated.

Some years since, a keen discussion took place between a professional man and a practical, as to whether or not a pasture would be cheaply and permanently benefited by the application of nitrate of soda, the whole of the growth of grass being consumed by cattle on the pasture. The farmer maintained that the weight of grass grown on the land, being so much greater and a larger quantity of manure consequently being returned to the land, the latter must be richer and the pasture improved. On the other side, it was maintained that greater permanent benefit at less expense would accrue by the feeding of decorticated cotton cake to the cattle eating off the grass. From what was seen at Rothamsted, it was very evident that if the two systems were on other points equally beneficial the advantage must be immensely in favor of the use of the cake against the nitrate of soda, so far as the herbage is concerned. We saw how changed and improved the grass was where cake had been for some years fed to the stock, and we also saw that heavy dressings of ammoniacal manure alone had actually exterminated all the finer and better grasses, whilst on other plots, where the dressing was lighter, the ill effects on the herbage were still visible, although, of course, not to the same extent.

Farming Affairs in Great Britain.

(From our English Agricultural Correspondent.)

London, Jan. 12.

RETROSPECT AND PROSPECT.

The past year has been, in many respects, a remarkable one for British agriculturists—full of disappointments in respect to its brightest promises and its worst threats alike. It is characterized very differently by various classes of farmers; to some of whom it has brought good fortune and bright hopes, while to others it has brought losses and depression. It opened favorably, with mild weather after a dry early winter, and with autumn-sown crops in excellent condition, but, at the end of January a severe winter set in and lasted, with few and brief intermissions, nearly to the end of March, being followed by a heavy rain-fall. By this time it was found that the fall of lambs had been a very short one, and this was the first disappointment. Next to deplore was the lateness of spring sowing, which was not generally begun till the first week of April, by which time it should have been nearly finished; but, the land worked exceptionally well after the frost, and barley and oats were sown quickly and well, as were peas and beans, though very late, and mangels and Swedes afterwards. A hot and showery summer would have given us a splendid harvest, as the crops were thick on the ground at the beginning of June, though backward. Unfortunately, we had instead a very cold and persistently wet summer, which injured nearly all the first crop of hay, and quite spoilt a good deal of it, besides beating down the best of the grain crops. Harvest began about a month later than usual—the weather still being wet. It was not till September that fine and sunny weather set in, and by that time about half the grain crops had been stacked in damp condition. Then we had a fine autumn, which ripened the crops in the late districts, and enabled them to be got in better than could have been anticipated, while excellent second crops of grass and clover were made into passable hay or good silage—the latter chiefly by the stack system, instead of in silos. Even for the root crops the summer had been too cold and wet, and consequently they proved only moderately good