

should do, that others may not also be deceived. Mr. Arnold has only quoted a part of what I said in my essay about the profits of dwarf apples, the reply giving it a different meaning entirely. Will you turn to it, Mr. Editor, and fellow farmers, and read it for yourselves, and ask Mr. Arnold why he did not copy it as it reads? Does that say a garden of dwarf trees alone, as Mr. Arnold infers it does, or is it intermingled with currants, raspberries, and strawberries which would help to make the profits I spoke of? And I did not say how large that garden should be; but say an acre, which is not too large for an ordinary garden, and have you not seen reports often and again of strawberries alone producing from 6 to \$800 worth from an acre, to say nothing about the currants, raspberries, and dwarf trees, which would produce as much more when they get old enough? Where will you find more profit from fifty acres devoted to agricultural purposes?

And now, Mr. Editor, in reply to your word of caution about the communications. I assure you there is nothing but the best of feeling on my part, although I may express my sentiments in a plain and off-handed manner, for what else could you expect from a rough bark farmer as I am but to say hard things, when I have been imposed upon by those so-called dwarf trees for the last 10 or 12 years, which are without bearing fruit; and are growing so large that they will soon crowd me out of the garden, and must be cut down to give room for things of smaller dimensions? Would not this try your patience, especially when the nurserymen still keep boasting of having genuine trees, yet won't let us have them? Therefore, my only object is to expose the deception, whether it be in the trees or the men. This, Mr. Editor, is my only excuse.

Yours, &c.,

R. B. WERDEN.

Picton, Jan. 28, 1863.

The Dairy.

MILK.

There are but a few of the natural productions of the animal kingdom more subject to diversity of quality than cow's milk. According to the old saying, "It's what goes in at the mouth that makes the cow;" but the truth of the adage depends upon many other conditions than the quantity and quality of the food consumed. Thus, different breeds are not more diversified than are individuals of every specific breed, and this is equally applicable to the quantity of the milk as to the quality. But singularly numerous as these diversities may be, they are all subject to certain chemical and physiological laws, although such as yet may not be properly understood.

The chemistry and physiology of milk are two important topics, and it is very desirable that a knowledge of both were much more extensively and generally cultivated. The motto of the Royal Agricultural Society, "*Practice with Science*," is a golden one; but when we begin to apply the will to the investigation of either the chemistry or physiology of this important secretion, the natural food of all young animals, we at once find ourselves in the dark, emerging, as it were, from under the canopy of night into a region where the rays of science are only beginning to shed their enlightening influence upon the face of things. No doubt, of late years, chemistry has done much in the analytical investigation of the subject, while physiology has been making equally laudable progress; but, as the old proverb, "a little knowledge is dangerous," here applies, this only renders our position at the present time all the more unsafe, and every step we take in advance in a higher degree dangerous.

An instance of this has just occurred at present, a continental chemist having made the discovery, in his laboratory, that the milk of the evening milking is richer than that of the morning. One of our medical journals lays claim to the priority of the discovery, such having been made by its analytical commissioner some ten or twelve years. Now, as regards the facts here discovered, most intelligent farmers have long been familiar with them, so that neither of our would-be chemical teachers have any right to lay claim to the discovery. We ourselves, for example, were thus taught when serving an apprenticeship some thirty years ago—not as a secret, but a fact generally well known; although the contrary doctrine is often advocated by those who dispose of the morning milk, and reserve the evening for throwing up cream; and which, we aver, is highly credited by an unthinking public, who thus allow themselves to be imposed upon.

It is this exception and diversity in the degree of richness which renders the course of teaching pursued by the above chemists dangerous, and therefore highly objectionable, when received as a general rule of guidance. In short, granting that the milk of every individual cow in a large herd were analyzed with the utmost accuracy, as to the percentage of butter and cheese, the experiment would only be applicable to that herd, and not to another. And even in this limited light the analytical investigation falls far short of complying with the demands of the golden motto, "*Practice with Science*," already quoted. In other words, the practice performed by the chemist in his laboratory differs widely from the practice performed by the cow in the manufacture of milk; but the doctrine taught by the former is evidently the science of the latter practice, so that our objection, when reduced to its simplest form, is the appending to the tail of one practice, if we may so speak, the science of another.