

blue grass as it grows in Canada, many suppose because it looks so different from what it does in Kentucky, that it cannot be the same at all. The two samples look so exceedingly different that they are generally supposed to be different. In my travels through Kentucky I have noticed the same difference in the grass there, and even wider differences than here. The grass obtains its beautiful blue color from the limestone rocks over which it grows, and as soon as you get off the lime of those blue limestone rocks the grass you meet is paler in color. I have noticed this difference in the grass when the two plots were not ten rods apart. The limestone in the soil imparts a dark color to the grass which it does not get elsewhere. There are several species which go by the name of blue grass which are not genuine, but all belong to the same family and resemble one another. A species known as knot grass is a good deal like the June grass, but it is not so valuable as a nutritive element. I have known hundreds of bushels of the seed of this grass shipped from New York state to Kentucky as genuine Kentucky blue grass seed. Those who shipped it did not know the difference. Many of us do not cut hay when it will make the best fodder. We cut hay, not grass. We cut it when it is too far gone. If we cut grass year after year, instead of cutting hay as Mr. Chadwick suggests, it would be far better. He who leaves his grass until it becomes ripe or so as to get its full growth, loses valuable material. He may gain in weight of stem, but the value of the hay is not in the weight of the stem. The value lies in the grass—in the tender plant. Experiments with hay and fresh cut grass show a difference in nutriment of nearly one half in favor of the fresh grass. I believe with Mr. Lewis, that there is nothing like grass for the dairymen. It should be grass, whether green or dry. There is very little difference in grass, whether green or dry, and cattle can make use of the whole of it when it is cut and cured as grass, which is not the case with hay.

GRASS VS. HAY.

Rev. Mr. Clarke asked Prof. Arnold if he could explain the results of Prof. Caldwell's analysis in the matter of cutting grass early and late. It is stated that while certain food properties are obtained in larger proportion by cutting early other valuable ones are lost, but taking the aggregate of all grasses for feeding purposes, it is really more valuable to cut some late rather than on the early side.

Prof. Arnold—I have not examined those experiments. I simply saw them alluded to in the *New York Tribune*. In my own practice I have found that the late cut grass does not do the business. Whatever chemistry may say, the practical results are invariably in favor of cutting early.

Mr. Casswell said that some years ago Mr. Chapin, of Norwich, made some winter cheese. He bought the cheese and his customers pronounced it very fine and equal to grass cheese. Mr. Chapin, in answer to a question as to how he made it, said he took particular care with the food given to his cows. He gave them the best clover hay mixed with corn meal and ground oats. Mr. Casswell thought there must be something in hay cut at the proper time when such cheese could be produced in winter time. He would like to ask Mr. Arnold what was his opinion of the red clover hay—its effect upon the flavor and keeping qualities of cheese as compared with green clover.

Mr. Arnold—Under the old process of making cheese—I may say under the ordinary process—the free use of green clover does not make good-keeping cheese. It gives the cheese a strong flavor and a tendency to decomposition. That has been my observation for years. I have seen many cases of floating curds produced from the free use of green clover. It has this tendency in a marked degree. Take the same clover and dry it and the effect before noticed will disappear. But with my process of making