

would have been without it, and as these roots, when ploughed under, became food for the succeeding crops, we have not been able to discover any injurious effect from the use of plaster on the soils and crops referred to. We refer Mr. Jacques to the May number of the *Agriculturist*, page 126, for some further observations on this point.

PROPER TIME FOR CUTTING GRASS.

At the recent trial of Implements at Syracuse, N. Y., it was arranged that discussions on various subjects connected with agriculture should be held during the evening. A brief report of one of these, which we find in the *R. N. Yorker*, of Rochester, may be worth copying. The subject is one of considerable importance. Says the report:—

“On Wednesday evening Sanford Howard, Esq., was announced to deliver a lecture on the ‘Grasses, Proper time of Cutting, &c.’ The weather being exceedingly warm, and the speaker much fatigued by the labors of the day, it was proposed that a general conversation be had on the question. Mr. Howard opened the discussion by saying that the subject was very important, as the hay crop was now one of our most valuable products, and it was well to know when to cut it, and how to make it. We should first settle the principle, what is the best condition of the grass for cutting, and why? He believed all plants contained the most nutritive matter when in full bloom. The object which nature seeks is the production of seed. Plants, when they first come from the ground, contain more water than at any other time. At flowering, a crisis arrives, and all the energies of the plant, from that time, are directed to the formation of seed. If seed was sought, it would be well to wait until it ripened or matured, before cutting; but as herbage is sought in hay, it should be cut before the formation of seed, as they are not digestible, not one seed in a million being digested in passing through the animal; therefore, all the substance used up in the formation of seed is lost. Timothy, and all grass, should be cut when it contains the greatest amount of nutritive matter. Convenience, and other things may sometimes operate against carrying out this principle. For instance, Timothy is an imperfect perennial. Further south it is uncertain in endurance. It is found necessary to allow the seed to mature, so as to keep the ground seeded. Sinclair stated that the amount of nutriment contained in grass was ascertained by the proportion soluble in warm water. Prof. Johnston and others had proved that test incorrect, and, indeed, Sinclair had not much faith in it himself.

As to the mode of curing, he could call attention to the method generally practiced of preserving herbs. No one would think of drying them in the sun, or where the dew and rain would fall on them. So with grass, cut when dry, dry it as little as possible in the sun, and let it cure by sweating. A certain degree of decomposition is beneficial, turning the starch into sugar, and making the hay more tender. In answer to a question as to the value of hay caps, Mr. Howard stated they were used by all large farmers near Boston, and were considered very useful.

Mr. Vick inquired if any better test of the value of grass as food had been discovered than the proportion soluble in water. And, also, whether the experience of the farmers present would go to prove or disprove the statement of Mr. Howard, that the best time for cutting Timothy was when in flower. He cared little about the theories of Mr. Johnston, or any other chemist. This, like all other things in agriculture, must be proved by repeated and careful experiments. He would like the experience of farmers.

Mr. Wilson, of Iowa, gave the experience of a neighbor, who raised and sold great quantities of hay. He always cut when in flower; his hay was always prized and sought after by the proprietors of stages, and he got fifteen per cent. more than the ordinary price.

Mr. Stanton Gould, of Hudson, N. Y., made a glowing speech in defence of chemical science, and the doubts attempted to be cast upon the reliability of chemical experiments. The matter which our bodies is composed now is not the same as that which composed