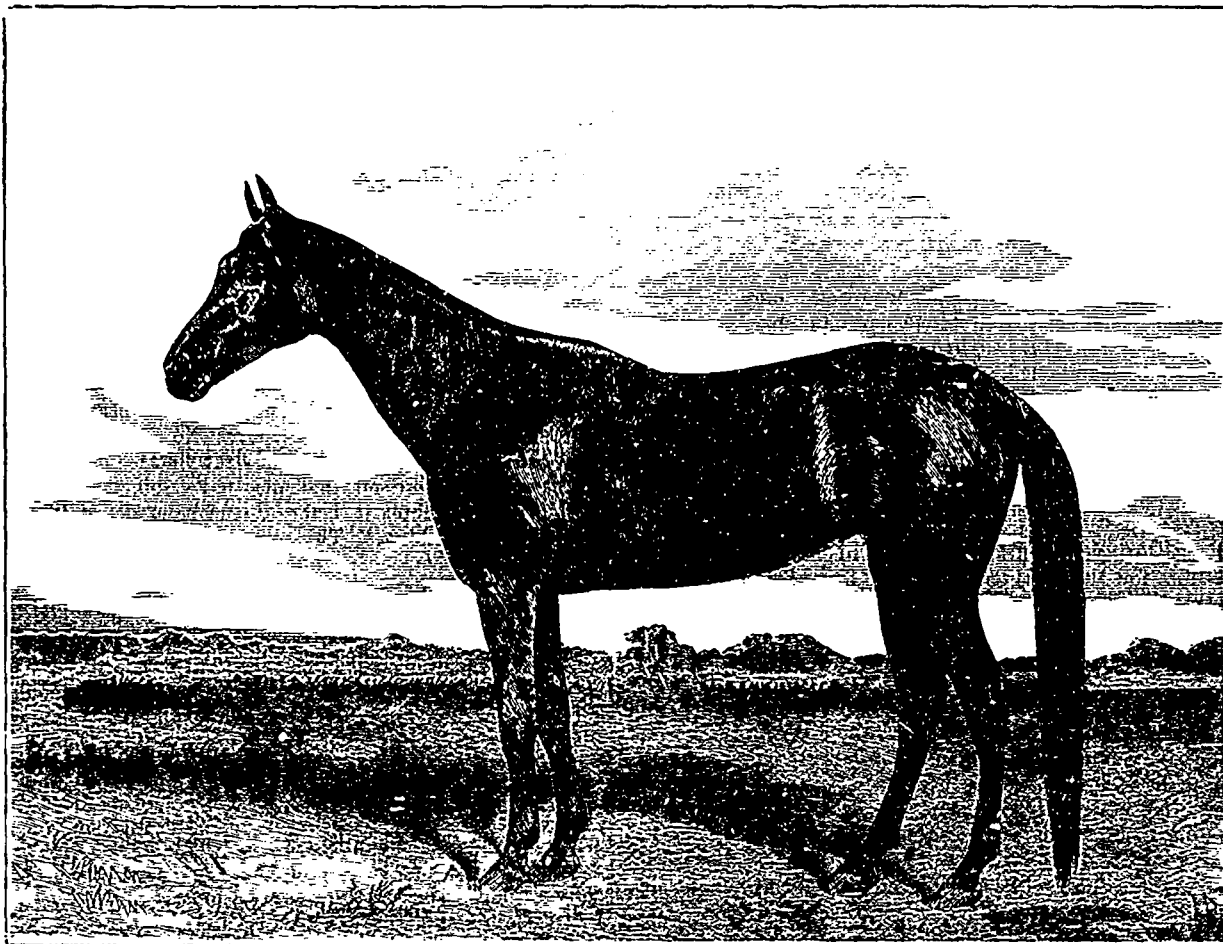


bloom, and always he found a large gain in timothy. He thinks it passing strange that any student of agriculture should hold that the plants we cut and store for hay made no growth after bloom, as it is certainly plain that a very rapid growth is made from bloom to seed formation in most of our farm crops.

That the feeding value of early cut hay is the greater, Prof. Sanborn, after, as he says, taking the testimony of the steer for four years, clearly disputes. Experimental feeding has shown him that timothy cut from 10 to 16 days after bloom, contains as much or more nutrition than when cut in bloom, and of course more per acre. He does not deny that this may be in opposition to the results obtained by scientific

one result, and that in favour of early cut hay. For the reason that early cut hay is more palatable than late cut; as a result after a change to late cut hay the animal for a time refuses to eat a normal ration, and the result will not be so satisfactory as with early cut hay. While palatableness is a valuable quality, it must not be mistaken for actual nutrition.

As to the exact time at which hay should be cut, I can heartily agree with Prof. Sanborn. While not believing in early cutting, I am clearly of opinion with him that it is improvidence to cut hay so late as maturity. A large proportion of the nutriment of plants is contained in the seeds. These seeds shatter in handling at maturity, and those which



MAUD S, "QUEEN OF THE TROTTER TURF," RECORD 2-093.

chemical analyses; but he disputes the efficacy of these means to determine this question, and shows that they have often led to erroneous conclusions. Above them he would place actual, practical feeding trials; and the result of quite a number of these he finds to favour cutting after bloom, for the steer. Farmers will like his method best, though we may be inclined to half-way dispute his conclusions. Prof. Sanborn does not deny that many farmers will disagree with him as to the relative feeding values of early and late cut hay, founding their opinions upon actual feeding tests. But he thinks their results have been arrived at by feeding early cut hay one week, noting the yield of milk or fullness of steer, and then changing to later cut hay, and again noting the result. Such a system of testing, he says, can only show

do not shatter go through the system only partially digested. The later hay can be cut, and yet escape waste in handling, the better; and this is when the seeds are forming, or about what we term the milk stage in other crops. I am well aware that many good authorities oppose this, in fact, all theoretical writers do. I notice that Prof. E. W. Stewart says that grass should be cut just before blossoming. But with Prof. Sanborn I must say that the steer gives the better test. I may be wrong; but if experimenters would convince me of it, they must appeal to actual feeding tests and not to chemical analyses. (1)

JOHN M. STAHL.

(1) The question is still undecided. Practically, I find that sheep and cows do best with hay cut young, horses with hay more matured.

A. R. J. F.