

**EARLY-CUT HAY BEST.**—Of this there can be no "probable, possible" doubt. It seems scarcely necessary to enter upon a long scientific disquisition upon this point of practice, but those who wish to know all about it should read the pamphlet reprinted from the Bath and West Journal, and referred to last week, by Dr. J. Voelcker and Mr. Martin J. Sutton. The early cutting of hay is beneficial in all respects, because the total produce of the meadows is not decreased by a slightly lighter hay crop. The quality of the hay is much better, and the aftermath is earlier and more valuable. To this may be added the fact that grasses when late cut are weakened in constitution, so that when we say that late-cut grass crops "draw" the land, we should be more correct in saying that they "draw" the grass itself and render it weaker. Seeding is the final effort of the plant's growth, and if we can cut so as to save the plant this exertion it will thicken in growth and develop more herbage. That early-cut grass is in all respects more nutritious than late cut grass is well known, and is explained in a great measure by the fact that when allowed to stand too long the juicy and succulent cellulose which so largely composes the stem becomes changed into indigestible woody fibre. The starch, sugar, and albuminoids also collect in the seeds, which, in hay crops, is not desirable.

*Eng. paper.*

#### EARLY-CUT HAY.

—Our long-time and valued correspondent, Mr. S. T. Floyd, in his article last week referred to the feeding value of early-cut hay. We call it up again for the reason that it is a matter to which the editor of the *Farmer* has recently had his attention called in his own practice. We have for some time past been feeding extra early-cut hay to cows giving milk, and also to fattening oxen. While experience with such hay has before led us to dislike it, we must say that this latest trial has more than confirmed our former estimate of it. We do not like early-cut hay as a stock-fodder. The reason we do not, is because the stock does not eat it as well as later cut, it does not contain the substance, nor will it produce the results, either in fattening oxen or making butter. Judging from experience in feeding, we get the best results from grass that stands till it has arrived to its full maturity.—*Maine Farmer.* (1)

Professor A. J. Cook says, in the *Tribune*: "As I have often urged, there is no substance so excellent to kill injurious suetorial insects as kerosene emulsion. It is quick death to lice of cattle, hogs and horses, and to sheep ticks. It is easily made and very cheap. Many a stockman is thankful for having learned of this insecticide for stable and sheep-fold. This same kerosene emulsion is equally valuable against plant-lice and other insects; last year we actually killed the

terrible rose-chafer by its use. My formula for its manufacture is as follows: Dissolve one quart (one pint will do very well) of soft-soap, or one-fourth pound of hard-soap, in boiling water; then remove from the fire and add, at once, one pint of kerosene, and stir violently by pumping the mixture back into itself with a force pump; I know of no good way to stir hard enough, except by use of pump or syringe; stirring with a stick will not do. After about three minutes' stirring it looks like rich cream, and will then remain permanently mixed and bear any dilution with water, with no separation of the oil. This formula gives a perfect emulsion with any water, and even if the oil is ice-cold. For treating stock this may be used with little or no dilution. For plants it should be diluted so that only one-fifteenth of the whole is kerosene. If the emulsion is not diluted at once, a gelatinous mass is formed which does not break up easily with cold water. It is easy to dilute the first day with cold water, after that the diluent should be hot."



Group of Cheviot Ewes, the Property of Mr. D. F. Wilber, Oneonta, N. Y.

#### Crops Seasonable Notes.

##### THE SOIL.

Few raw materials are so complicated as the soil. Let us consider for a few moments the constitution of this familiar substance. The soil is well worth the attention of farmers, but it is a subject upon which many farmers bestow but little attention. It is true that, in a sense, most of those who live by the land are students of the soil. They are alive to the differences be-

tween good and bad, light and heavy soils, and they are skilful in tilling it. They are, however, in most cases more practical than scientific, and we do not quarrel with them for this. One ounce of practice is better than a ton of theory without practical knowledge, but a fair seasoning of theory or science can be no disparagement to a practical farmer. On the contrary, some idea as to the composition and constitution of soils is exceedingly valuable, especially as an aid to successful manuring and judicious cropping. The subject is, indeed, so large that we may be pardoned if we break off in the middle, and resume it on a future occasion.

##### THE AGE OF THE SOIL.

If we wish to realise the venerable antiquity of the soil we must study geology. Soil is one of the slow results of time. It has been produced by the action of forces which are still at work. The same gradual decay which in time wears away the solid rocks, and resolves granite into its component parts of clay and sand, is the cause of the loose material which overlies the earth's surface, called soil. All rocks are subject to its irresistible power, and limestones, clay rocks, sandstones, and the compacter marbles, porphyries and greenstones, are all in time, when exposed to atmospheric changes, slowly but surely disintegrated and redistributed in the form

(1) Compare and judge!

A. R. J. F.