

Canadiar Agricultural Experiments

The following is a summary of the results of the experiments conducted at the Ontario Agricultural College and Experimental Farm for one year :

(1) Corn fodder newly cut and drawn from the field when green, cut into inch lengths, packed into a common, rough-stone root cellar half under ground, and weighted with six hundred pounds per superficial square yard, can be preserved, except adjoining such a wall, for an indefinite time in a condition fit for animal food, at a cost not exceeding \$1 per ton, exclusive of cultivation. (2) In competition with Swede turnips, ensilage corn fodder gave fifteen per cent less milk and thirty per cent less butter and a poorer marketable batter in color. (3) Damaged wheat can be very economically used in the fattening of cattle. Nine pounds per head per day gave a daily increase of two pounds per head per day, at a cost of four and one-fourth cents per pound of the live weight. (4) Rice-meal, in the fattening of cattle, gave a daily increase of 1.81 pounds per head per day by the use of six pounds per head per day, at a cost of about seven cents per pound. (5) Barley-meal in cattle-fattening requires a large amount of other foods in association, and eleven and one-fourth pounds per head per day gave a daily increase of 2.14 pounds per head per day, at a cost of seven cents per pound live weight. (6) Corn-meal took the highest place in a daily rate of increase in the fattening of cattle. Nine and one-fourth pounds per head daily gave 2.31 pounds per head per day, at a cost of five and one-half cents per pound of the added animal weight. (7) Pea-meal gave the second-best daily rate of increase at the least cost of all the regular cattle-feeding grains. (2) Eight and one-half pounds per head daily gave a rate of 2.28 pounds, at a cost of five cents per pound of the weight added to the animal. (8) A pure-bred Short-horn steer can be brought to a weight of 1,700 pounds, when one month under two years old, or a daily rate of increase equal to two and one-half pounds per day. (9) Hereford grade steer calves can be made to average 611 pounds in 238 days, or a rate of two and three-fourths pounds per day. (10) Aberdeen Polled grade steer calves can be made to average 720 pounds in 273 days, or a rate of two and two-thirds pounds per day. (11) During winter a 1,000-pound steer will consume daily ten pounds of hay, thirty-nine pounds of turnips, four pounds of bran and nine pounds of a mixture of grain, upon which it will add 2.11 pounds to its live weight. (1) One pound of added weight to a 1,000-pound steer can be obtained from the use of various materials that contain eleven pounds of dry substances, chemically. (13) By a large variety of experiments with several classes of cattle and many kinds of food we find the actual cost of adding one pound to the live weight of a 1,000-pound animal is six cents to the feeder who grows his own materials and nearly twelve cents when the food is bought in the regular markets—manure and management not considered. (14) Sugar beets, weight for weight with mangels and turnips, and in association with equal kinds and quantities of other foods, gave the highest returns in feeding cattle, or 270 pounds per head per day. (15) Mangels gave 238 pounds per head per day under similar conditions to the sugar beet.

Fattening Turkeys.

In answer to A. C. L. (page 770) the following is a description of the way in which turkeys are fattened in Nor-

(1) Now, in what state was the corn when cut? for on that the whole question depends.

A. R. J. F.

(2) Hah! So we have come to the real feeding-stuff at last!

A. R. J. F.

folk, which is the great English county for breeding these birds, and preparing them for the London markets: Turkeys for Christmas are shut up in a light, dry and roomy house the first week in November; troughs with as much maize and good barley as they can eat should always be by them, and they have two good meals a day of just as much barley meal mixed with skim milk as they can eat, and milk to drink. Sliced mangels, turnips, swedes and cabbage are useful and necessary, and plenty of lime, sand, ashes and brick-dust should be kept in the corners of the house. It is found to be most important that the troughs be well cleaned out every morning, and all surplus food removed, for on a farm there are usually plenty of other fowls to eat up what is left by the turkeys. Fed in this way, they rapidly put on flesh, which is usually very white in color and fine in texture.

STEPHEN BEALE.

II—, *England.*

ORCHARD GRASS.

EDS. COUNTRY GENTLEMAN—The soil best suited to orchard grass is a heavy sandy loam; it also grows well in medium and light sands. The richer the soil, provided it has much sand in its composition, the better the growth. Orchard grass, as its name signifies, is a grass better adapted to orchards and shaded lawns than it is to open field culture. Therefore, if clover is sowed with it in field culture, the clover helps to hold the moisture and also shades the roots of the grass, and as they both ripen at the same time, it is more profitable to sow them together, much more so than sowing clover with timothy, as here the clover is dead-ripe, while the timothy is hardly in blossom. On clay soils, and throughout the Northern States, clover does better with timothy. Timothy does not amount to much on our sandy uplands, and with us our best timothy lands are well-drained flats, adjacent to streams, which are generally stiff alluvials, holding the moisture well and giving for many years first-class crops. Like a great many other mistakes made by merchants in classifying an article—getting at its money value—or a substance that they are not well-informed about as to its food value, timothy hay is valued far more than it is worth. Every farmer who feeds his own stock knows that pure timothy hay is better to sell than to feed.

Orchard grass cut young, mixed with red and white clover, Kentucky blue grass, Maryland blue grass, or *Poa compressa* and Bermuda grass, all of which grasses ripen at the same time here, when made into hay form a perfect feed, not requiring grain except for working horses, and then only three or four ears of corn daily. This has been my practice for years, and farmers in this section know that my stock always looked well. Your Maryland and Kentucky correspondents should look at their soils and the requirements of this grass to find its value. If the soil and its location is suited to its wants, it is then that it will pay, not otherwise. I have been growing this grass for sixteen years and I have not yet found any fault with it. I have sold it as mixed hay, and the purchasers are always pleased, and ready to purchase more. My sales have been at top prices. It is the earliest grass for a bite in the spring, as well as the latest in the fall. It is the earliest to be made into hay—the 17th day of May I have often cut it, and the earliest cut hay with me, is always the best.

Orchard grass and the COUNTRY GENTLEMAN are my stand-bys in farming.

F. K. STEELE.

Anne Arundel County, Md., Dec. 33.