among the farmers of the United States. The *Germantown Telegraph* says: "Buckwheat will grow and produce a fair crop on land so rugged and hilly that scarcely anything else worth the tillage will grow. Indeed on steep hillsides and land nearly covered with small stones, where it is difficult to get any other crop, it not merely does well, but these apparent drawbacks add to the quality and value of the grain. Buckwheat is raised throughout Europe and Asia, and has been known for many centuries. It forms a crop to some extent upon almost every farm, either for market, demestic consumption, or both. The crop is sown in the Middle States about the first week in July, and if drilled in, a half bushel to three pecks of seed are required per acre; but if sown broadcast, about one bushel. It is, next to red clover, the best green crop to plough under as a manure. When so intended the crop should be put in from the 15th to the 20 of June, the ground being ploughed deep and pretty liberally manured. The seed should be sown broadcast with a bushel and a peck of seed to the acre. It should be ploughed down when it has its full growth. Some farmers roll it well before turning under, and others use a chain attached to the clevis of a plough. Bone-dust or bone-phosphate is recommended as an excellent fertilizer for this crop.

SUBSTITUTES FOR HAY.

A dry May makes a short hay crop. We have experienced the former, and shall suffer from the latter in all probability. Farmers who bestir themselves in time may secure abundant crops of hay, or substitutes for the general hay crops thus cut short. That which will first suggest itself to most persons is

Fodder Corn.—This requires soil in a fair state of fertility, a fresh sod or manure. It may be sowed at any time before the 10th of July. There are three kinds of corn commonly used for seed, viz., any large sweet corn like the Evergreen or R. I. Asylum, the southren White Dent or Yellow Western Dent; besides, any tall-growing variety will do. It is sown in drills, 24 to 30 inches apart, or broadcast Drill-culture requires less seed; a better and evener stand is usually secured; cultivation with horse-hoe is possible, and usually remunerative, and, with green fodder in small quantities is required, the rows may be easily thinned.

In planting, the ground should pe laid off with a marker, furrows opened, manure dropped in them, and the corn scattered by hand, or by a sowing machine, at the rate of about eighteen to twenty kernels to the foot. This requires three to five bushels to the acre, according to the size of the kernals, and the distance the rows are apart. In furrowing, if a common one-horse plow be used, the furrows should be alternate, turned together in pairs, the plowing being done back and forth across the field in the most natural way. Then, if one has a Shares' cultivator, the teeth being removed, and the wings opened, two drills may be covered by once passing through, which will greatly expedite matters. Corn sowed broadcast, if the ground be rich enough, and the stand be thick enough, gives an excellent return of fine, tender fodder. It is hardly possible, however, to get so heavy a yield, and it requires fully one-third more seed, which, when seed-corn is worth two dollars per bushel, is an item worth considering.

Millet is another summer crop, which affords an excellent substitute for hay. This will grow well on light, rather dry soils, bears drouth well. and produces on ordinary land some two to two-and-a-half tons of excellent hay to the acre, if cut before it is fully ripe; indeed, while the ripest of the grain is still in the milk. There are several kinds of millet, of which

Hungarian Grass, since its introduction some fifteen years ago, has grown in favor, and in many sections is cultivated to the entire neglect of other varieties of millet. It is really only a delicate variety of the Italian millet, having a closer, shorter head, and more abundant foliage. It is usually sown after the hay-crop is known to have been cut short, rarely before the middle of June, and very good crops may be obtained, if sowed as late as July 10th to 15th, as it needs only about sixty days to mature. Of course, it needs moist weather to promote the germination of the seed, but after it has a good start, it will bear dry, hot weather well. A rich, sandy loam is best for it, but it will make a crop on any tolerably clean land, with a top-dressing of some good fertilizer. It should be cut before the seed approaches ripeness, as the hard shell, which incloses the ripe seeds, is so indigestible, that injury sometimes comes from feeding the unthrashed straw of the ripe millet. Horses, and all other domestic animals, are very fond of hay from Hungarian grass, and, if cut early, it may be fed with impunity.—*American Agriculturist.*

THRASH THE GRAIN EARLY.

It is always economical to thrash early. We would advise every farmer, who can possibly do it. to thrash his wheat, rye, or oats, as the crop is drawn from the field. There are many considerations in favor of doing this. 1st. By reason of the state of dryness in which it is hauled off the field, the grain is in better condition for the thrashing machine (or certainly as good), than at any other time. 2d. Only one handling is necessary, and thus labor is saved. 3d. At harvest-time grain is almost always in better demand by millers, and in the general market often brings a higher price than at other times. Take one year with another, it will be found that this is the most advantageous time to market grain. If the farmer holds his grain for speculation, very well: he has a right to become a speculator if any one has; but we hold as a general rule, that so soon as a farmer has his produce ready for market, then is his best time to sell. The earliest markets are almost invariable the best. We were once enable to sell the whole of our crop of wheat at a high price, for seed, because we had thrashed in time and none of our neighbors had. Lastly and most worthy of consideration is the fact that, by thus early thrashing and marketing, the destruction by vermin—mice, rats, weezil, etc. —is prevented. We believe that ten per cent at least of the grain put into barns is put there,—unintentionally or course, but not the least surely, —for the benefit of rats, and mice A granary may be made rat-proof, but a barn cannot, and if it could, would soon be stocked by the animals carried in from the field among the sheaves.