should be lost in doing it now. If a half acre cannot be sown, let it be less; but have the ground in good order, and plant corn or Chinese sugar-cane, in drills at about three feet apart, so as to be easily cultivated, and the weeds kept down. It should be planted at intervals of about ten days till the first of September; thus a fresh supply will be on hand as feed for milch cows. A dosan stalks cut and given to each cow night and morning, will give a wonderful increase of milk and good appearance, and the cows will very willingly come to the stable at night. We have tried this method, and recommend it to all farmers. In the Northern States, the Seed of the Southern corn, which can be procured at all grocers, will be found better for this purpose than the Northern varieties. If the butts of the stalks are too hard for the cows to eat, they can be given to hogs; thus nothing is lost.—Co. Gentleman.

## HAY AND HAY-MAKING.

Of the importance of the hay crop we need scarcely remark—save that its value exceeds that of any other product of the northern section of our country. That this value might be largely increased without extending the area devoted to grass, or giving more time to its manufacture into hay, can scarcely be doubted; for the value of hay, as food for stock, accords with the care and judgment bestowed on its making, and the difference between hay and straw is not so much in the plants themselves, as in the stage of growth in which they are cut, and the curing they receive. One farmer may keep his stock in thriving, fattening order through the winter, while another, although he feeds the product of more acres of meadow, shall find them constantly failing in condition. The first has hay made in the best manner, and "of such a quality, that a given quantity of it will produce nearly as many pounds of meat or milk, as the grass itself would have produced if eaten in green state."

In what stage of the growth of grass it shall be cut, and the manner in which it shall be cured, have long been acknowledged questions important to the practical farmer, though as yet no decisions in which all acquiesce, have made any one practice the general one. Some cut in the season of flowering before the blossoms have fallen; others not until the seed has formed; and others still, defer the operation (with some grasses,) until it is fully ripe. Some cure by exposure to the sun, as rapidly as possible; others seek to perform the same process with the smallest expenditure of labor; and others still would keep the hay as fully shaded as may be while drying. Each class bring arguments to sustain their methods of procedure, both in cutting and curing; but to our mind, chemistry and practical analogy teach us valuable lessons on the subject, which, in a condensed form, we shall attempt to present to the reader. We may state that our attention was first drawn particularly to the subject, ten years since, by an article in The Cultivator, giving extracts from a scientific report made by Dr. Thompson for the British Royal Ag. Society.

Chemistry shows us that all plants contain the largest amount of matter soluble in water, at the period of flowering, and that the sugar and gluten of the grass, and a few other soluble ingredients, constitute its chief value as food for animals. These rapidly diminish as the seed forms, changing into insoluble woody fibre, and the hay, which should as far as may be ressemble grass in its most perfect state, is worth much less if not made until after that period. There are but few exceptions to this rule, but we believe the Kentucky Blue grass, the June grass, and some others which furnish but a light amount of stem, and are most valuable for their leaves, which continue growing through the summer, may stand past the flowering stage without loss.