

ried mostly undrained, and, as the climate is very moist, deep furrows had to be made on each of the land to carry off the water—these rendering the effective working of machines difficult or impossible. Grain too, in general, is much softer in the straw in Britain than in this country, which makes it much worse to cut with machinery—but probably the chief reason of the little encouragement inventors met with, was at shortly after the close of the war in 1815, labourers became so plenty, and labour could be had at so cheap a rate, that there would have been little or no profit in using a machine, over and labour. The state of society is very different from ours—there both men and women labour in the harvest field, and not only agricultural labourers but many tradesmen—there army-men and apprentices, in the country, and villages, turn out to the labours of the harvest-field. And further, those who recollect how many threshing machines were destroyed by royal labourers on their first introduction into some parts of England, can have no doubt that mowing machines, had they been introduced at that period, would have shared the same fate.

We shall now notice some of the earlier mowing and reaping machines tried in America. In this country the case was entirely different from Britain. Such has been the condition of the people in this country—that in many parts of it manual labour has been found inadequate to the work of harvesting grain and grass in proper time and manner, while in all sections the cost of manual labour, where to be had, has often been found too expensive for profitable farming. We have seen a notice of a reaping machine that was invented by a Jeremiah Bradley, of Chester County, in 1821. It is stated that this machine answered the purpose tolerably well, and was used to some extent.

In looking over a file of the *Albany Cultivator* (from which excellent paper most of the following notices are taken,) the first notice we find is in the August number for 1835, where it is stated that “two implements have lately been patented; one we believe in Columbia, the other Montgomery County, for cutting grass by horsepower; we have seen the latter, but as we did not witness its operation, we are not prepared to speak of its merits.” In the April number for 1836 there is an engraving and description of Ambler's mowing machine, in which it is stated that the grass is cut by a scythe extending along above the teeth or comb, $6\frac{1}{2}$ feet wide, with an alternate movement to right and left when the machine is in motion—it cuts five feet wide, and about an inch and a half above the surface of the ground,—the grass is left upright where it grew, which facilitates its drying, saves the labour of spreading,—it is furnished with three spare scythes, and can be fixed at pleasure in three minutes; it is stated further that about 100 acres of grass were cut

with the model machine in 1835, in Columbia County, at the rate of an acre in two hours. The machine was drawn by two horses, which travel on the mown grass. The editor states “that he had not seen the machine, but that gentlemen, in whose opinion he reposed confidence, assured him that the machine was a valuable acquisition to our husbandry. It was further stated in the May number for 1837, that this machine would cut from fifteen to twenty acres of grass per day—that it might be used in lodged grain with advantage—that it required but one person to tend it—that it weighed about 500 lbs.—that it was not more liable to get out of repair than a common horse-power—and that it would operate better on stony or uneven ground than the revolving horse-rake, and would cost \$130. In the September number of the *Cultivator* for the same year is a cut and description of “Wilson's reaping and mowing machine,” invented by Captain Alex. M. Wilson, Rhinebeck. It is noticed thus: “this machine consists of a carriage on two wheels, propelled by one or two horses or oxen travelling in the rear and pushing it forward. In front, at the bottom, is a horizontal wheel upon an upright shaft; which shaft and wheel receive a rotating motion, communicated by gear from the main axle which revolves with the wheels as the machine moves forward; the diameter of this horizontal wheel, with the addition of the knives projecting from its edge, measures the width of the swath, which is cut with the knives, as the wheel goes forward, rotating rapidly, and lying close on the ground. The apparatus that sustains the cutting wheel is so constructed as to accommodate its height to any inequality of the ground, and to give it any inclination required. The knives are sharpened by their own operation, without stopping the machine. There is also attached to the upper side of the cutting wheel, a rim which gathers the grass as it is cut, and lays it in a swath more regularly than can be done with a scythe. The editor states that he had seen the machine in operation, and that he thought it well adapted to economize labour on large smooth meadows. In the September number for 1837, there is a certificate signed by eight names, (J. Buel, publisher of the *Cultivator*, being one of them) stating that he had witnessed the operation of this machine, propelled by one horse, on a brisk walk, through a thick meadow of timothy and red-top, somewhat tangled—that it cut a swath from 2½ to 3 feet broad in handsome style—that they were of opinion that with a double team, the machine would operate well on smooth bottoms free from stones, and would effect a great saving in manual labour.

The next machine noticed is Hussey's, now well known, which is thus noticed by a Maryland correspondent in the August number for 1839; “I know not whether the news may not