

ARTICLES ON REAPING from the *Encyclopaedia Britannica*, 9th Edition (1875)

The common scythe, especially with that form of handle known as the Aberdeen handle or sned, is very extensively used for reaping grain in all parts of the kingdom. Indeed, the practice of mowing grain has been increasing of late years, and would extend more rapidly but for the greater difficulty of finding good mowers than good reapers. A greater amount of dexterity is required to cut grain well by the scythe than by the sickle. The difficulty lies not in making smooth and clean stubble, but in so laying the swathe as to admit of the corn being sheaved accurately. When the mower lays his swathe at right angles to his line of progress, and the gatherer is skilful and careful, corn may be handled as neatly in reaping by the scythe as by the sickle. When the crops are not much laid or twisted, mowing is somewhat the cheapest of these modes of reaping. Its chief recommendation, however, is that mown sheaves dry most quickly, and suffer least from a drenching rain. This arises from the stalks being less handled, and so forming an open sheaf, through which the wind penetrates freely. Tightly bound sheaves are always difficult to dry.

In Berwickshire and adjoining counties the reaping of the crops has hitherto been accomplished by employing, at day's wages, such a number of reapers as suffices to cut down the crops on each farm in from twelve to twenty days. The rate of wages paid to reapers for a number of years has ranged from 2s. 6d. to 3s. 6d. each per diem, with victuals in addition, costing about eightpence for each person. In marshalling the band, two reapers are placed on each ridge of 15 or 18 feet in breadth, with a binder to each four reapers, and a steward, or the farmer in person, to superintend the whole. When the crop is of average bulk, and lies favourably for reaping, each bandwin, or set of four reapers and a binder, clear two acres in a day of ten hours, but $1\frac{1}{4}$ to $1\frac{1}{2}$ acre only, if it is bulky and lodged. The cost of reaping by this method is therefore from 10s. to 15s. per acre.

With a reaping-machine cutting six acres per diem, and requiring in all ten persons (five men and five women or stout lads) to attend to and clear up after it, at an average wage, including victuals, of 3s each, and allowing 3s. per diem to cover tear and wear, and interest on its prime cost, there seems a reasonable prospect of a goodly portion of our future crops being reaped for about 6s. per acre. The labour of the horses employed in working the reaper is not included in this estimate, as at this season they would otherwise be idle, and yet eating nearly as much food as when at work. There would thus be a saving in actual outlay of about 5s. per acre. But this is the least important view of the matter.

On a Berwickshire farm producing 200 acres of crop, there are usually at least six pairs of horses kept, with a resident population sufficient to yield about thirty persons (including women and youths) available for harvest labour. The stated forces of such a farm will therefore suffice to man three reaping-machines, which, if the weather is favourable, and the crops standing erect or lying in one direction, will cut down the crop in about ten days. When portions of the crop are much lodged and twisted, it becomes necessary to employ part of the labourers in clearing out such portions by the scythe or sickle. It is often possible to manage these awkward-lying portions by setting one or more men, each with a stout staff, to raise up the crop and lay it towards the machine.

When two or more machines are used on the same farm, it is best to work them together by cutting the whole length or width of the field in whichever direction the general lay of the crop admits of them working to most advantage. As each machine completes its cut, it returns empty to the side from which it started; and they follow each other at such an interval as gives time to the lifters and binders, who are placed equidistant along the whole line, to keep

the course clear. In such cases a man is usually employed to sharpen the spare knives, to assist in changing them from time to time, and to attend to the oiling and trimming of the whole machinery. It is good economy to have a spare machine at hand ready to put in the place of one that may be disabled by some breakage, and thus avoid interruption to the urgent work of reaping while the damage is being repaired.

Great progress has been made in recent years in working these machines skillfully and systematically; they are in general use in all well-cultivated districts, and the time appears to be at hand when the whole grain crops of the country will be reaped by means of them. It is now agreed on all hands that grain should be reaped before it becomes what is called dead ripe. In the case of wheat and oats, when the grains have ceased to yield a milky fluid on being pressed under the thumb-nail, and when the ears and a few inches of the stem immediately under them have become yellow, the sooner they are reaped the better.

Barley requires to be somewhat more matured. Unless the pink stripes on the husk have disappeared, and the grain has acquired a firm substance, it will shrink in drying, and be deficient both in weight and colour. When allowed to stand till it gets curved in the neck, the straw of barley becomes so brittle that many ears break short off in the reaping, and it then suffers even more than other grain crops under a shaking wind.