

# Agricultural Implements.

## Hay Tedders and Rakes.

There are two crises, so to speak, in the haying period. The first is when the grass is in flower, and contains the greatest amount of nutritious elements, it should then be cut.

The second is the curing or drying period, the neglect of which means simply the partial or entire destruction of the crop. It is no uncommon thing therefore during the hay season, which by the way is a very changeable one with us, to observe a general turn-out of the entire rural population old and young of both sexes, armed with rakes and forks, turning, pitching and tossing from morning till night, under a broiling sun. This of course entails a vast amount of labor and in cases wherein the household is not sufficiently numerous for the occasion, the expense attending hired help is very considerable. In these days of mowers, too, when the work of former days can be condensed into one of as many hours, there is all the more need for an extensive supply of hands, as there is comparatively a much greater area exposed at one time.

Hay, when cut by the mower, is generally laid down in regular, compact masses which are non-con-

ducting and absorb largely if left unmoved. It therefore requires to be thoroughly stirred up so that its every surface may be exposed to the sun and air, and this should be done over and over again so quickly, that no undue waste of strength may arise from over-evaporation. Indeed the best-cured hay is that which is ready to put under cover the day on which it is cut. Every rain shower injures the yield, and a succession of them ruins it.

From these facts, then, comment upon the advantages of a good Hay-Tedder, would be superfluous.

# Grasses and Forage Crops.

## Gaps Among Turnips.

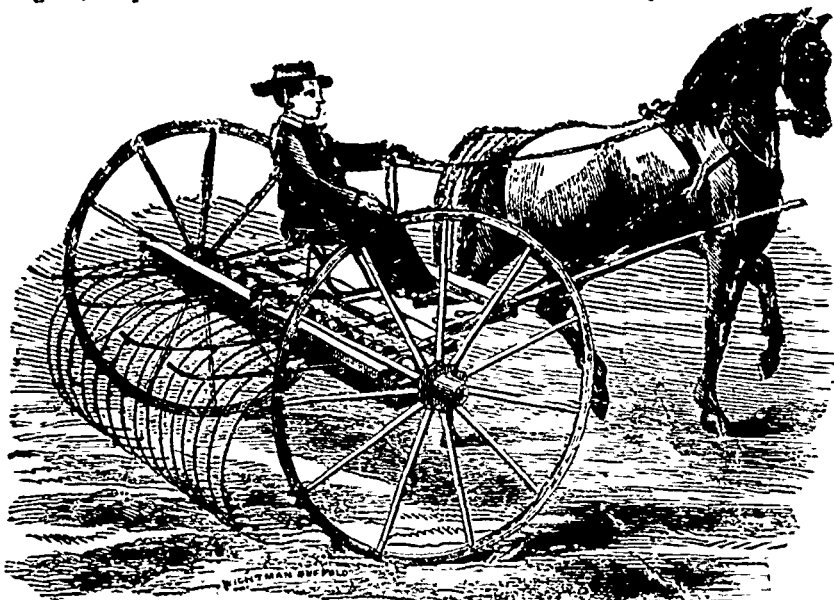
From various causes, there will always be more or less of blank places in the turnip rows. Unscrupulous dealers in seeds are known to mix old and new seed, bad and good, in such proportion that while it cannot as a whole be condemned and rejected, there is considerable failure to grow. When the seed is good, some defect in the drill, or want of right management on the part of the sower, leaves many places without plants. Or a similar state of things results from the ravages of the fly.

These gaps, however occasioned, are very properly a cause of annoyance to the neat and thrifty farmer. They look bad, to begin with, and we have no sympathy whatever with the slovenly nature that doesn't care for looks. We like a bit of ploughing to look well, even though the furrows are soon to be harrowed out of sight. And we like the turnip rows to look well, even if the crop were no better for it. But these blank places of which we are speaking involve waste of good land, valuable manures, and costly labor. Sometimes they amount to so large a proportion of the field, as to occasion a serious loss of crop. It is well, therefore, that they should if possible be filled up.

In Britain, it is quite common to fill these vacancies by transplanting from parts of rows where there is an excess of plants. This, when practicable, is no doubt the best course to adopt. But it may admit of question whether transplanting is practicable in this country. To be successful, it needs a moister climate than ours. Our torrid July sun would quickly burn up the transferred plants. Now and then, in a very exceptional season, the thing might succeed. We sometimes have a few days of cloud and rain, such as would suffice to root a lot of transplanted turnips, but such opportunities are very infrequent in this country. Not that ours is an unfavorable climate for turnip-growing by any means, but, though we have summer showers, which bring the young plants forward with a rapidity often marvellous to behold, it is not a favorable climate for summer transplanting. And then the labor market is high here. We must dispense, as far as possible, with slow-coach operations in the field. Transplanting is a slow process. It may answer where labor is cheap, or where it is only required to be done on a small scale, and to a limited extent, but it will hardly pay in our circumstances.

Filling these vacant places with cabbages, has been strongly recommended by some. They are much easier of transplantation than turnips, and make an excellent winter food for cattle, especially for milch cows. But it is, after all, no easy matter to transplant cabbages even successfully in our climate. It is a job that must be done just in the nick of time, or it will fail. The beginning of a cloudy spell, or when a fall of rain threatens, is the golden opportunity that must be seized and improved. This cannot always be done. And then it is nearly if not quite as slow a process, to transplant cabbages, as it is to transplant turnips. We believe cabbages might and ought to be more largely cultivated as a field crop, but to pay well, they should be sown, like turnips, to mature where the seed is dropped, being thinned and hoed as turnips are. Hand-labor, in all our farm operations, must be reduced to the minimum, if our agriculture is to be remunerative.

Gaps in the turnip field, may, in our opinion, be best filled up by sowing other and more quickly-maturing varieties of turnips. Of these, there are several, viz. :—Yellow Aberdeens, White Globes, Stubble or White Stone turnips. The kinds just named are of more rapid growth than the Swedes, and though not so valuable for feeding purposes, are by

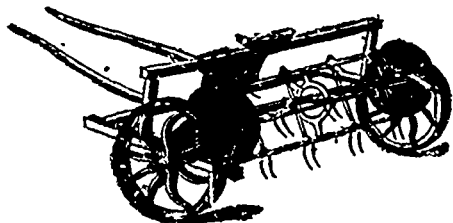


SULKY HAY RAKE.

and needs discharging the driver has simply to lower the handles until their hooks catch on a pair of teeth; then he lifts slightly until the front points catch in the ground, when the horse does the rest, that is, simply turns the implement over thus emptying it, wherever required. There are several varieties of rakes used both in this country and the States, all of them pretty good. Amongst these we might notice the wheel-rake (Ithaca) with 20 or more teeth of tempered spring steel and the sulky wood horse rake with a spring over each separate tooth, but we presume there is no other manufactured which will surpass the lock-lever sulky hay rake which works so perfectly as to pay for itself usually in a single season.

Its construction is exceedingly simple. The teeth are made of the best quality of steel and well tempered. The operator rides comfortably during his work, and raises or lowers the teeth by means of a lever close by his hand. The lever is likewise so arranged that when the teeth are lowered it locks itself and remains so until operated by the driver.

TEMPER OF TOOLS.—A correspondent of the Detroit Tribune says—If an edged tool is so hard as to crumble, grind it on a dry stone until the edge turns blue—it will then cease to break and the temper will generally prove to be about right. Scythes and axes are sometimes too hard at the edge, but if treated in this way will give no further trouble.



HAY-TEDDER.

The American Tedder, the one also used mostly in Canada, consists of a series of iron forks attached to a set of jointed wooden spindles, and so adjusted that when the machine is put in operation they pitch outwards, backwards and sideways, thus turning the grass over and over in every direction. Viewed from