

and cultivator frequently during the summer to prevent the growth of weeds, but not to plough again till sowing the wheat. The sod would then turn up perfectly killed, would readily crumble to pieces, and would give the soil that rough, turfy, soddy texture, which would furnish the wheat plant with the protection it requires against the winter and spring frosts. We know that the frequent ploughings ordinarily given the summer fallow have a very beneficial effect, especially on strong lands, from exposing the soil to the disintegrating and other fertilizing influences of the atmosphere, but at the same time unluckily, they are apt to reduce it to that exact state of fine subdivision which, in the absence of thorough drainage, favours the heaving out of the wheat plant by the frost.

Hay making will commence in some parts of the Province, in fields where the crop consists chiefly of clover, before the close of the present month. Clover should be cut as soon as it has fully blossomed, and begun to assume a brownish hue.— There is more lost by letting it remain too long upon the ground than by cutting it a little too soon. Clover should not be too much exposed to the wind and sun. Unless very heavy, or unless it has been exposed to rain, a single turning, after it has wilted a little on the top of the swath, will be enough. It may then be placed in cocks till sufficiently dry to go into the barn. A sprinkling of salt, say 4 or 5 quarts to each load, will aid in preserving the hay, and will make it more palatable to the cattle.

HAY TEDDING MACHINES.

The operation of shaking out the swaths of newly mown grass, either by the hand or fork, is necessarily slow, and not unfrequently the work is but imperfectly done. This was particularly felt in England,

where the hay crop is usually heavy, and consists of a number of fine, juicy grasses, which require to be evenly spread and exposed to the action of the sun and air, in order to make them into hay of the finest quality. Hence several years ago a machine was invented for spreading the grass, drawn by a horse, and performing ten or a dozen acres a day; that is a hay-making day; for hay should not be moved till after the dew is off in the morning, nor after it has fallen in the evening.

Within the last half dozen years great improvements have been effected in these machines, which now consist of two cylindrical sets of rakes, side by side, in the same length formerly occupied by one; each being worked by cog-work from the wheel next it. In turning, the outer wheel will thus always give motion to that half next it, and the liability to miss its work on turning, prevented. Another important improvement consists in the means now furnished for reversing the direction of its revolution. On first being used in the hay field, it is drawn across the swath, the cylindrical frames revolving contrary to the wheels, as the machine proceeds; the grass is thus carried under and over the machine, and tossed high into the air. After this first tedding, the motion of the machine may be reversed, and the grass is thrown from behind it, with much less labor, but with almost equal efficiency, now that it is already lying evenly spread, and it is thus turned and winnowed. The rakes attached to the cylindrical framework are held stiffly, but not rigidly to their position by suitable springs.

The accompanying engraving represents the latest improvements in NICHOLSON'S PATENT DOUBLE-ACTION HAY MAKING MACHINE, as manufactured by the old and celebrated firm of RANSOMES & SIMS, of Ipswich, England. Its principal feature is the substitution of annular gearing, by which the reverse motion of the fork-barrel or frame is obtained in place of the intermediate pinion as used in the machines