cutter-bar and the connecting-rod always in perfect alignment. The hanger connection must also allow the cutter-bar to accommodate itself automatically to the most uneven surface, so that it may float easily up and down over all irregularities of the ground without interfering with the action of the knife. Convenient to the operator on the seat there are several levers, Fig. 6, one for throwing the machine in and out of gear, one for tilting the cutter-bar to any angle to suit the nature of the ground or condition of crop, a foot lever for raising the bar from the ground, temporarily, while turning corners or passing an obstruction, leaving both hands free to handle the reins, and a hand lever for raising the bar higher and locking it in the raised position. A coiled spring assists the action of both of these raising levers. On the outer shoe of the cutter-bar is a track clearer, which deflects the grass sufficiently to leave a clear track for the inner wheel on the succeeding round of the machine. It works against a pressure spring that allows it to give freely before all obstructions. The horses draw the machine from below the pole, the draft being applied directly to the hanger, and the weight of the pole is counterbalanced by the driver on the seat, thus relieving all weight from the horses' necks while drawing the machine.

Hay Tedder.—This implement is used for tossing and turning the grass for drying. It can turn as much grass in one day as ten people can by hand, and by its use a much better quality of hay is secured than by hand turning, for the reason that it permits the grass to be more quickly and uniformly dried, instead of being sun-scorched on the top by being left too long on the ground and imperfectly turned. It is strongly and lightly constructed and is drawn by one horse. The frame is of angle steel, well braced to give rigidity, the wheels are of channel steel and about four feet high. There are six four-pronged forks, mounted on a zigzag steel shaft at the rear of the machine, giving the forks three positions, and they are pivoted about one-third their length above this shaft. The shaft is operated directly from the centre by a chain, the power coming from the drive wheels through an internal spur gear near