

by placing the notch of the lever in the highest notch of the quadrant. Over-haul all the nuts and see that none have worked loose. The chain should be quite slack when cutting, to enable the Cutter-bar to drop down into a furrow or other hollow ground. The height of stubble can be regulated by the Set-screw in the point of the main-shoe. When folding up the Cutter-bar place the small screw in its place in the main shoe, to prevent the Sickle from falling down.

To Change from a Mower to a Hand Rake Reaper.

Remove the Cutter-bar, Drag-bar, Extension-bar and Pitman. Take off the wooden Wheel and remove the Rail and Shaft on which it is hung. Bolt the Reaping Cutting-bar under the Beam of the frame. Bolt the backrail to the frame and to the corner post, with the iron brace in its place. Hang the wooden Wheel on the cast iron journal inside the frame. Attach the wooden pitman to the sickle, and secure it with the crank-pin in the outside hole of the crank. Hook the Platform to the back part of the Cutter-bar, and place it at the proper height by means of the chain rods behind. Set the Reel in the required position, being careful that it is set parallel with the Cutter-bar, and put on the belt. Place the seat in the casting over the Driving Wheel. The small shadeboard is fastened to the guide casting, with the point placed in the staple on the side of the tongue. Remove the gear wheel and pinion, and replace by the other pair. The machine can be set at any height, or raised and lowered by means of the lever. Should there be the least tendency to side draught, take up a link on the Draw-rod next the Cutter-bar.

To Change from a Hand Rake to a Self Discharger

Remove the platform, bolt the Dropper post to the Beam, and, having set the castings at the desired height to suit the grain, attach the Swing-bar, set the slatted platform in its place, shift the small crank shaft so that the square on the shaft will enter the socket on the platform casting, and secure with the set screw. The Long rod connects the crank next the platform with the ball on the Swing-bar, the short rod connects the other crank with the Treadle. Place the seat on the back rail immediately behind the Treadle. The Swing-bar can be made to take any desired sweep by shifting the ball on the Swing-bar iron, or by shifting the ball in the holes of the rod; and by shifting the short rod on the Treadle, the sweep of the platform may be increased or diminished. Should it be necessary to replace the Hand Rake platform, the Dropper Post and small Crank Shaft need not be removed, and if required the Swing-bar may be used when hand raking.