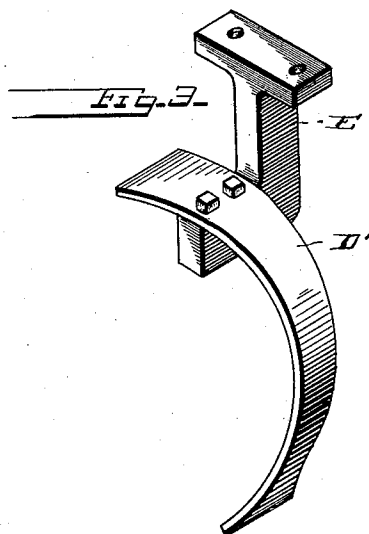
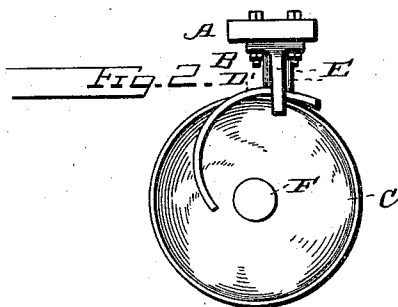
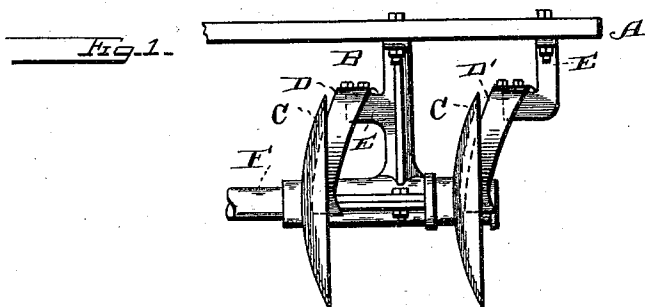


(No Model.)

W. A. DALEY.
CLEANER FOR DISK HARROWS.

No. 507,312.

Patented Oct. 24, 1893.



WITNESSES

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WALTER A. DALEY, OF CHARLES CITY, IOWA.

CLEANER FOR DISK HARROWS.

SPECIFICATION forming part of Letters Patent No. 507,312, dated October 24, 1893.

Application filed December 6, 1892. Serial No. 454,213. (No model.)

To all whom it may concern:

Be it known that I, WALTER A. DALEY, a citizen of the United States, and a resident of Charles City, in the county of Floyd and State of Iowa, have invented certain new and useful Improvements in Cleaners for Disk Harrows; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a rear view of the harrow. Fig. 2 is an end view; and Fig. 3 is an enlarged perspective view of hanger and scraper.

This invention has relation to certain new and useful improvements in cleaners for disk harrows, and it consists in the novel construction and combination of parts, all as hereinafter described and pointed out in the accompanying claims.

Heretofore, there has been great difficulty in applying constantly acting and permanent scrapers or cleaners to disk harrows, for the reason that in clayey or moist soils, the dirt and rubbish gather between the cleaner and the disk, acting as a brake thereon, and clogging and jamming until the disks become loaded to such an extent as to prevent their proper action; while in soddy ground, the roots and sods gather at the edges of the disk blades, and prevent their cutting.

The object of this invention is therefore to provide a scraper of peculiar form, so arranged with relation to the disks, that the earth, roots, and rubbish will be carried or forced outward nearer the edge of the disk as it is revolved upward and forward, and will finally fall off the forward end of the cleaner in front of the machine, the centrifugal force of the dirt and rubbish itself tending to push off all roots and rubbish that cling to the edge of the disk, there being no chance for the disk to roll up full, nor for the scrapers to wedge up and form brakes, as with the old styles.

Referring to the accompanying drawings, the letter A designates a portion of a harrow frame, and B one of the gang sections secured thereto and carrying the usual disks C, C.

D, D', designate the scrapers, which may be of any suitable metal, such as steel, wrought iron, or cast iron, and which at their upper

ends are secured each to a shank or hanger E, extending down from the frame A, and bent at right angles laterally with relation to the disks. The lower end of each cleaner is in proximity to and to the rear of the axle F, being bent in the form of a scroll, as it extends forwardly and upwardly, so that it gets nearer to the edge of its disk, but farther from the face thereof, passing up over and forward of the axle. The upper portion of the cleaner being farther from the disk than the inner end, all dirt and rubbish that may gather between the cleaner and the disk is allowed to readily pass out in front, it being scraped outward nearer the edge of the disk as the latter revolves, getting looser as it is carried upward and forward, and finally falling off the forward end of the cleaner. The form of the shank or hanger above described, and illustrated, leaves the cleaner free to extend forward as far as desired, bringing the line of travel of the disk more nearly parallel with the cleaner, which is also longer. It will also be obvious that the centrifugal force of the dirt and rubbish will aid the cleaning, forcing said matter off forward of the disk at a tangent from the end of the cleaner.

Having described this invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The herein described cleaner for disk harrows, comprising a scroll-shaped blade, having its lower end portion near the axle but to the rear thereof, and near the concave face of the disk at its scraping edge, said edge being shaped so as to gradually recede from the disk as it extends upwardly and forwardly, and a shank or hanger E rigidly secured to the frame and having a lateral arm to which said scraper is rigidly secured, substantially as specified.

2. The herein described cleaner for disk harrows, comprising a curved blade rigidly secured to the frame at its upper portion, said upper portion being extended forwardly of the axle, said blade gradually approaching the concave face of the disk as it extends toward the axle, and terminating to the rear of the axle, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

WALTER A. DALEY.

Witnesses:

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M. H. DALEY.