(No Model.)

D. E. McSHERRY.

DISK HARROW.

No. 357,724. Patented Feb. 15, 1887.

Fig. 1.

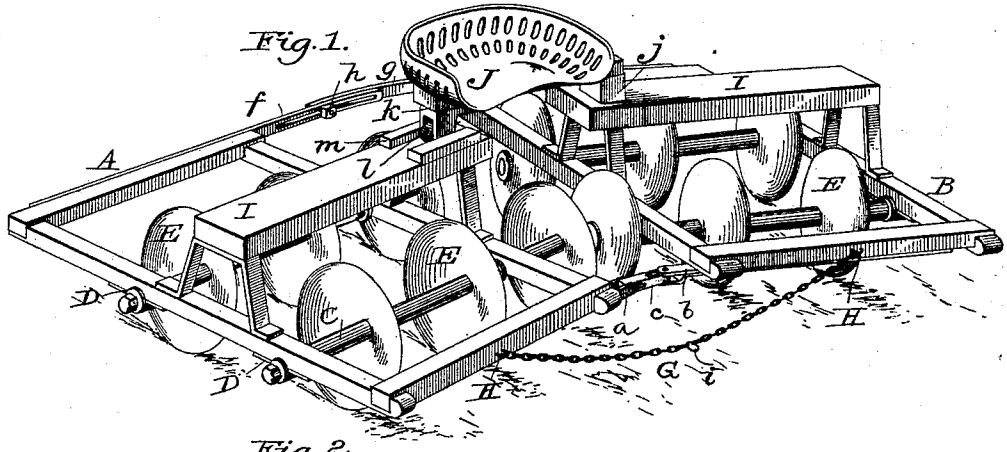
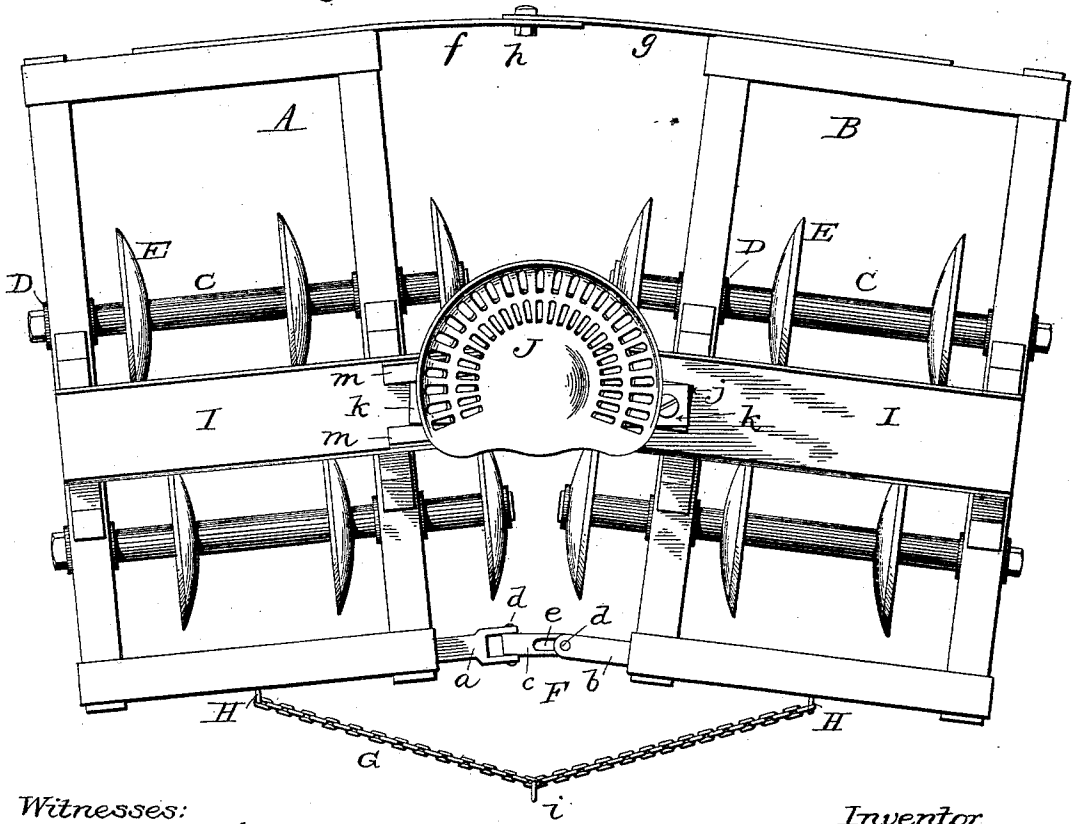


Fig. 2.

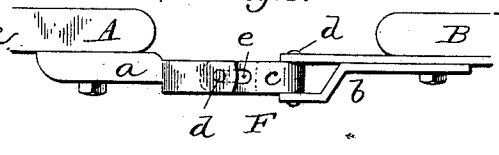


Witnesses:

James L. Dufland

Walter S. Dodge.

Fig. 3.



Inventor,

Daniel E. McSherry,

by Dodger & Son.

his Attys.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

DANIEL E. McSHERRY, OF DAYTON, OHIO.

DISK-HARROW.

SPECIFICATION forming part of Letters Patent No. 357,724, dated February 15, 1887.

Application filed June 17, 1886. Serial No. 205,488. (No model.)

To all whom it may concern:

Be it known that I, DANIEL E. McSHERRY, of Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Disk-Harrows, of which the following is a specification.

My invention relates to that class of harrows in which two groups or sets of disks are mounted in two separate frames, and the frames are connected in such manner as to permit each to rise and fall independently of the other.

In the drawings, Figure 1 is a perspective view of the improved harrow; Fig. 2, a top plan view of the same; Fig. 3, a view of the joint connecting the frames at the front of the harrow.

In said figures, A and B indicate two rigid frames, each provided with one or more shafts or axles, C, two being preferably employed for each frame. These shafts or axles may be fixed or journaled in boxes D, the latter arrangement being indicated in the drawings and preferred in practice.

E indicates a concavo-convex disk, of which there are several upon each shaft or axle C, the disks being fixed upon said shafts or axles when the latter are free to turn in their bearings, or placed loosely upon said shafts or axles if the latter be fixed.

The frames A and B are connected at their forward inner corners by a coupling, F, of the construction shown in the several figures, consisting of two bifurcated heads or blocks, *a b*, bolted or otherwise secured to the respective frames, and a block or connecting-piece, *c*, connected with the heads or blocks *a b* by pins *d d*.

The openings *e* in the block or coupling-piece *c*, through which the pins pass, are elongated, as shown in all the figures, to permit the frames to separate from or approach each other and to rise and fall unevenly.

The rear ends of the frames may be brought as close together as the forward ends, or separated, as shown in Fig. 2, the latter being the proper adjustment for work, and the former permitting the harrow to be drawn from place to place without cutting into the soil to any considerable extent.

To limit and make constant the separation of the rear ends of the frames A B, said frames are furnished with slotted metal straps *f g*, through which is passed a clamping-bolt, *h*, by which they may be firmly clamped together and caused to hold the frames fixed at any relative position, yet allowing said frames to rise and fall or tip independently of each other.

The harrow is drawn by a chain, G, attached at its ends to eyes or staples H, secured in the front bars of frames A B at or about their mid-length, and furnished with an eye or ring, *i*, at its middle, to which to attach the whiffletree.

Upon each frame A B is mounted a raised platform, I, upon one of which is a raised block, *j*, to which is hinged or pivoted a driver's seat, J. The other side of the seat is supported by a foot or block, *k*, carrying a swiveled roller, *l*, which rests upon the platform of the second frame and travels between two strips or guiding-ribs, *m*, thereon. This construction and arrangement permits the frames to come and go, to rise and fall, and to move in any and all directions required without destroying the support of the seat. The disks are offset, so that those of one shaft shall fall midway between those of the next when in working position.

I am aware that two frames have before been connected so as to permit the frames to rise and fall, to approach and recede from each other, and to sustain the driver's seat under all such adjustments. My construction is, however, believed to be new, and in practice it gives excellent results. It is cheap, simple, and efficient.

Having thus described my invention, what I claim is—

1. The herein-described harrow, consisting of frames A B, provided with shafts C, bearing-disks E, coupling F, consisting of heads or blocks *a b*, slotted connecting-piece *c*, and pins *d d*, and slotted straps or bars *f g*, provided with clamping-bolts *h*.

2. In a harrow substantially such as described, the combination of the frames A B and coupling F, consisting of heads *a b*, slotted block *c*, and pins *d d*.

3. In combination with frames A B, connected by loose coupling, substantially as shown and described, and provided with platform I, seat J, pivotally attached to one of said platforms and provided with a foot or block, *k*, having a roller, *l*, resting upon the second platform and traveling between guiding ribs or blocks thereon.

DANIEL E. McSHERRY.

Witnesses:
GEO. R. YOUNG,
WM. H. YOUNG.

Corrections in Letters Patent No. 357,724.

It is hereby certified that in Letters Patent No. 357,724, granted February 15, 1887, upon the application of Daniel E. McSherry, of Dayton, Ohio, for an improvement in "Disk-Harrows," errors appear in the printed specification requiring correction, as follows: On page 1, in lines 92–93, the comma after the reference letter "C" and the hyphen between the words "bearing" and "disks" should be stricken out; and that the Letters Patent should be read with these corrections therein that the same may conform to the record of the case in the Patent Office.

Signed, countersigned, and sealed this 22d day of February, A. D. 1887.

[SEAL.]

D. L. HAWKINS,
Acting Secretary of the Interior.

Countersigned:

R. B. VANCE,
Acting Commissioner of Patents.