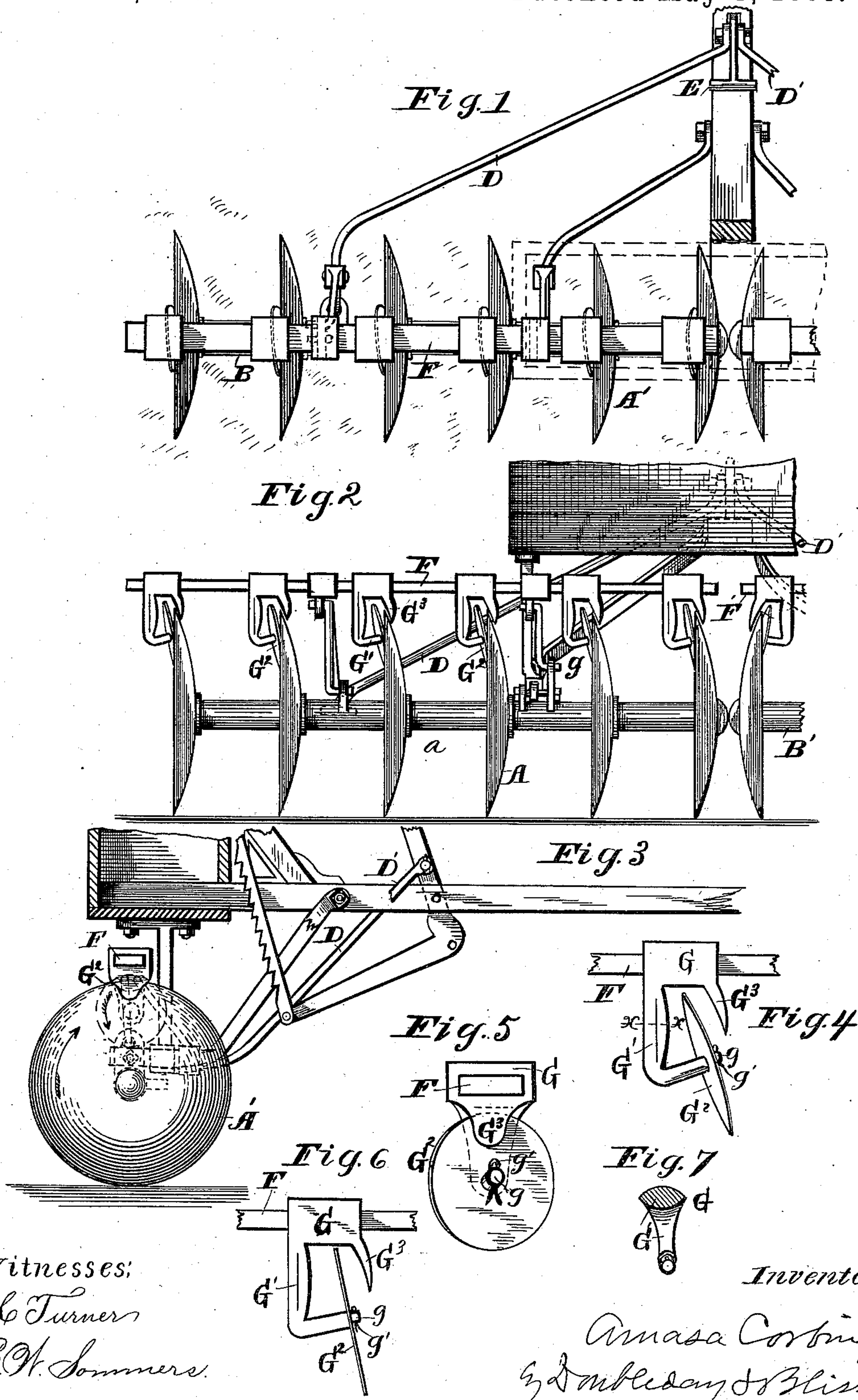


(No Model.)

A. CORBIN, Jr.
DISK HARROW.

No. 381,908.

Patented May 1, 1888.



UNITED STATES PATENT OFFICE.

AMASA CORBIN, JR., OF GOUVERNEUR, NEW YORK.

DISK HARROW.

SPECIFICATION forming part of Letters Patent No. 381,908, dated May 1, 1888.

Application filed February 24, 1888. Serial No 265,137. (No model.)

To all whom it may concern:

Be it known that I, AMASA CORBIN, Jr., a citizen of the United States, residing at Gouverneur, in the county of St. Lawrence and State of New York, have invented certain new and useful Improvements in Disk Harrows, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements in disk harrows, it pertaining more particularly to the devices used in connection with such machines for keeping the disks free from earth and trash.

One of the objects of the invention is to provide a disk scraper or cleaner of such character that it shall operate with the least resistance possible to the movements of the disks and shall be of such construction that the disks can be allowed to move more or less out of their normal position without affecting the working relation of the scrapers and disks.

Another object is to provide a device of such nature that it can be utilized both to thus remove dirt and trash from the disks and at the same time can be depended upon to more or less sharpen the operative edges of the disks.

Another object is to provide a scraper or cleaner which can be reversed, so that it can be used in connection with either a disk on the right-hand gang or one on the left hand.

The invention also comprises other matters, which will be readily understood from the drawings and the description below.

Figure 1 is a plan view of a portion of a disk-harrow sufficient to illustrate the invention. Fig 2 is a rear elevation. Fig. 3 is a section on the line *x x*.

In the drawings I have shown some of the parts of a disk-harrow of a now well-known construction, and it is not necessary here to describe in detail all of the parts of such a machine. General reference, however, will be made as follows:

A A' represent the concavo-convex disks, those at A being upon the right-hand gang, and those at A' upon the left hand. These are mounted upon gang-axes *a a*, those upon each axle being spaced apart by means of thimbles B B'. The gang-axes are connected to the draft-frame C C' by means of draw-bars

D D'. An adjusting mechanism is generally indicated at E, it being adapted to change the positions of the gangs of disks as may be desired.

It will be understood that each and all of the parts above recited may be varied and one or another may be omitted and others substituted without departing from the invention to which this case more particularly relates. Said invention can be readily embodied in any of several forms of devices, of which I have selected one for illustration.

F F' represent supporting-bars, respectively carried upon the gang-frames of the machine in any suitable way, as by hangers. There is one of these upon each side of the machine. They are adapted to support the cleaner or scraper devices. Each of the latter comprises a socket-piece, G, a depending shank or arm, G', a laterally-projecting stud or pin, *g*, a revolving scraping-wheel, G², and a cleaning and sharpening arm or projection, G³. By preference, I cast the parts G G' *g* G³ integral; but they may be made in several parts initially and secured together. The wheel G² is mounted upon a pin, *g*, and secured thereon in any suitable way, as by a nut or washer or spring-pin, *g'*.

The cleaning and sharpening arm G³ is of such length and is so shaped relatively to the parts G' and to the disk A adjacent to it that it shall extend down somewhat beyond the edge of the disk A and lie adjacent to the convex face thereof. The cleaning-wheel G² is situated upon the opposite side of the disk A, so that its edge revolves in contact with or in proximity to that of said disk A, which is caused to revolve by the disk or the earth adhering thereto. The latter is thrown by the cleaning-wheel G² away from the disk, and the shank portion G' of the hanger is sharpened relatively, so as to allow the earth that is thrown off from the disk to readily pass it.

The hanger G G' *g* is supported loosely upon the bar F—that is to say, so that it is free to slide longitudinally of said bar; but inasmuch as the wheel G² is situated upon one side of the disk and the arm G³ upon the other, the cleaning device as a whole is held in place in relation to its disk. It is well known that from one or another of several causes there is

liability for these disks to revolve in planes away from the normal. If the cleaners were fastened in place rigidly relatively to their disks, there would be undesirable cramping or binding at some part of the revolution of the disk. This I obviate by having each cleaner fitted loosely upon its supporting-bar, so that it can compensate for any variation of the disk from the normal plane of revolution. The arm G^3 is, as abovesaid, arranged in comparatively close proximity to the convex side of the edge of the disk A. As a result, there is such frequent contact between said arm and the disk edge that the latter is kept not only clean, but sharp.

I do not limit all of the features of the present invention to a scraping-wheel such as shown at G^2 , as some of the matters which I aim at can be attained if the scraper be one of the other well-known sorts—to wit, one which is non-rotary and more or less of the form of a knife or stationary bar.

It will be seen that the scrapers and their

supports are reversible—that is to say, are so constructed that each can be applied to a disk upon the right-hand gang or upon the left-hand gang. The hanger is constructed so that the front side thereof is similar to the rear side, and the cleaning-wheel is mounted thereon centrally and so that it in either position keeps the same angle to the normal plane of the disk.

What I claim is—

The combination, with the concavo convex disk, of the arm G^3 , situated upon the convex side of the disk and adjacent to the edge, the sliding socket G, the depending shank, and the scraper supported upon the shank, substantially as described.

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

AMASA CORBIN, JR.

Witnesses:

LYDIA M. FOX,
H. H. BLISS.