

No. 630,367.

Patented Aug. 8, 1899.

J. I. LOVETT.
DISK PLOW ATTACHMENT.

(Application filed Oct. 17, 1898.)

(No Model.)

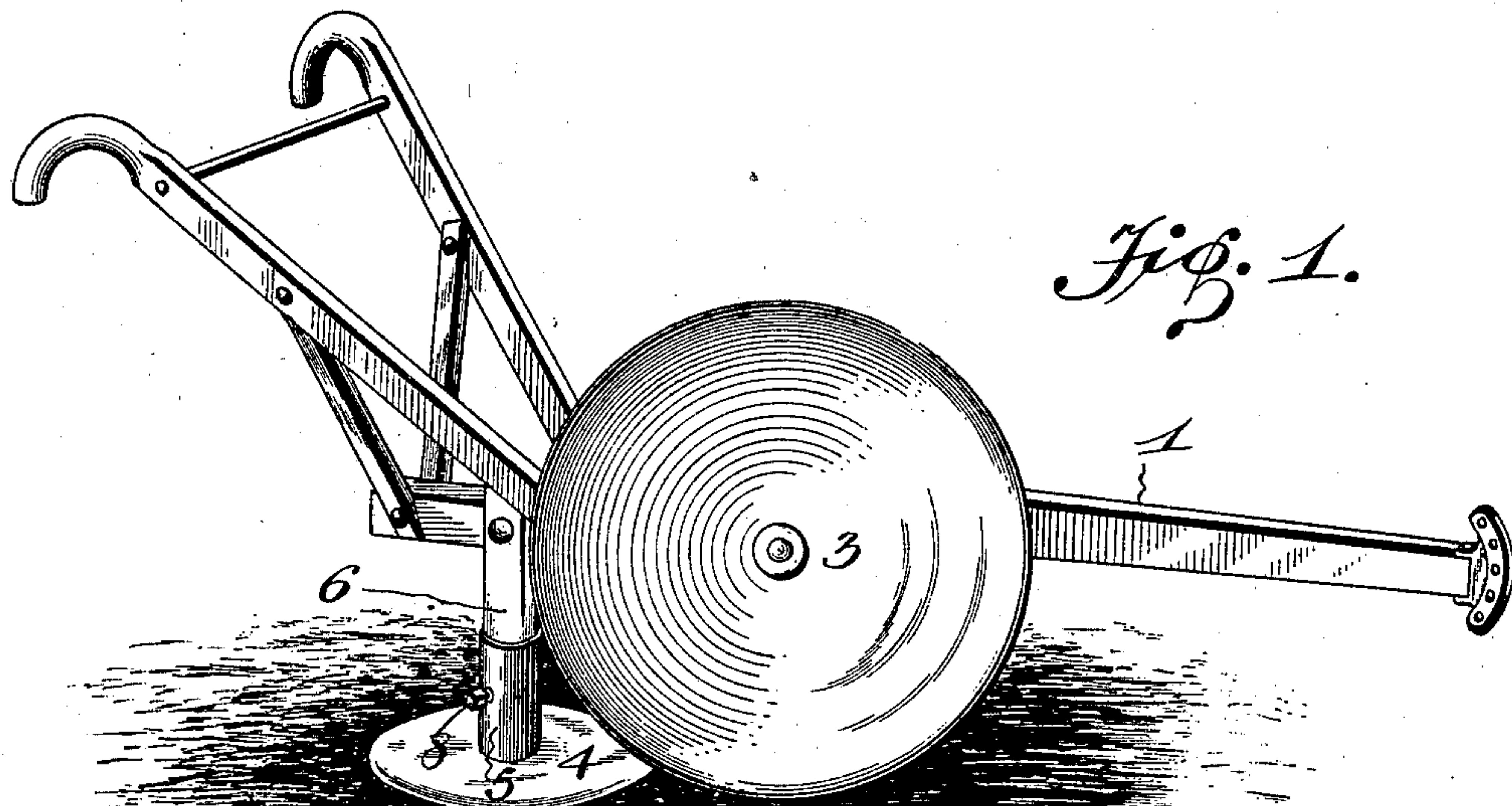


Fig. 1.

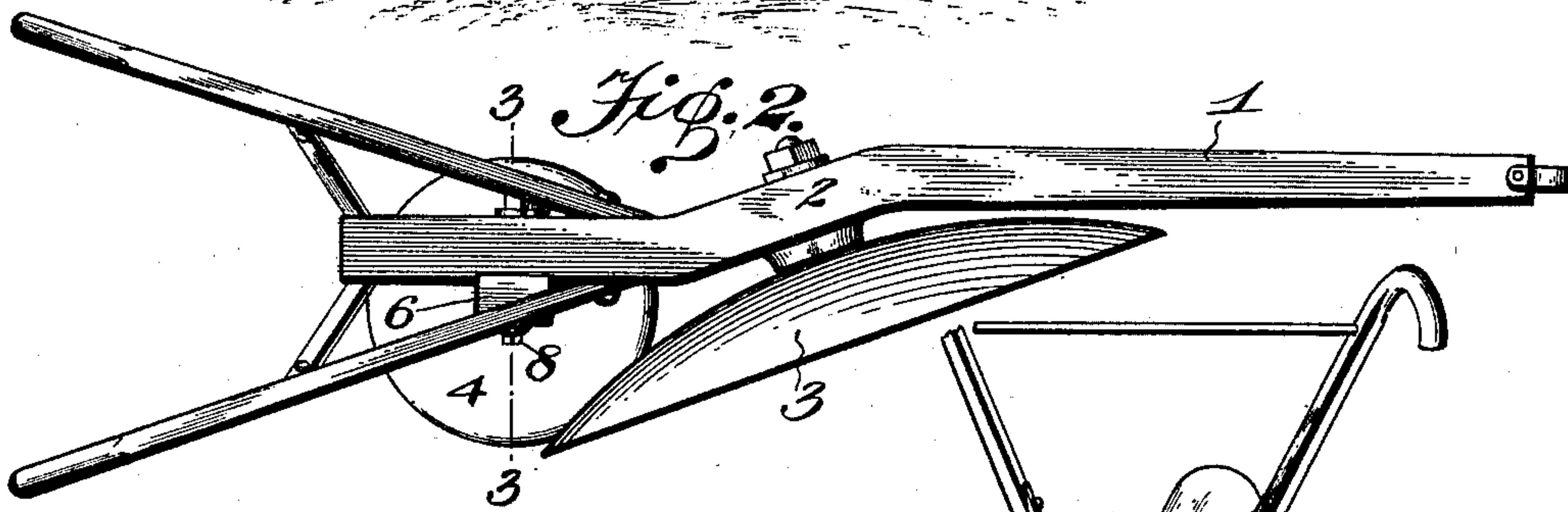


Fig. 2.

Fig. 3.

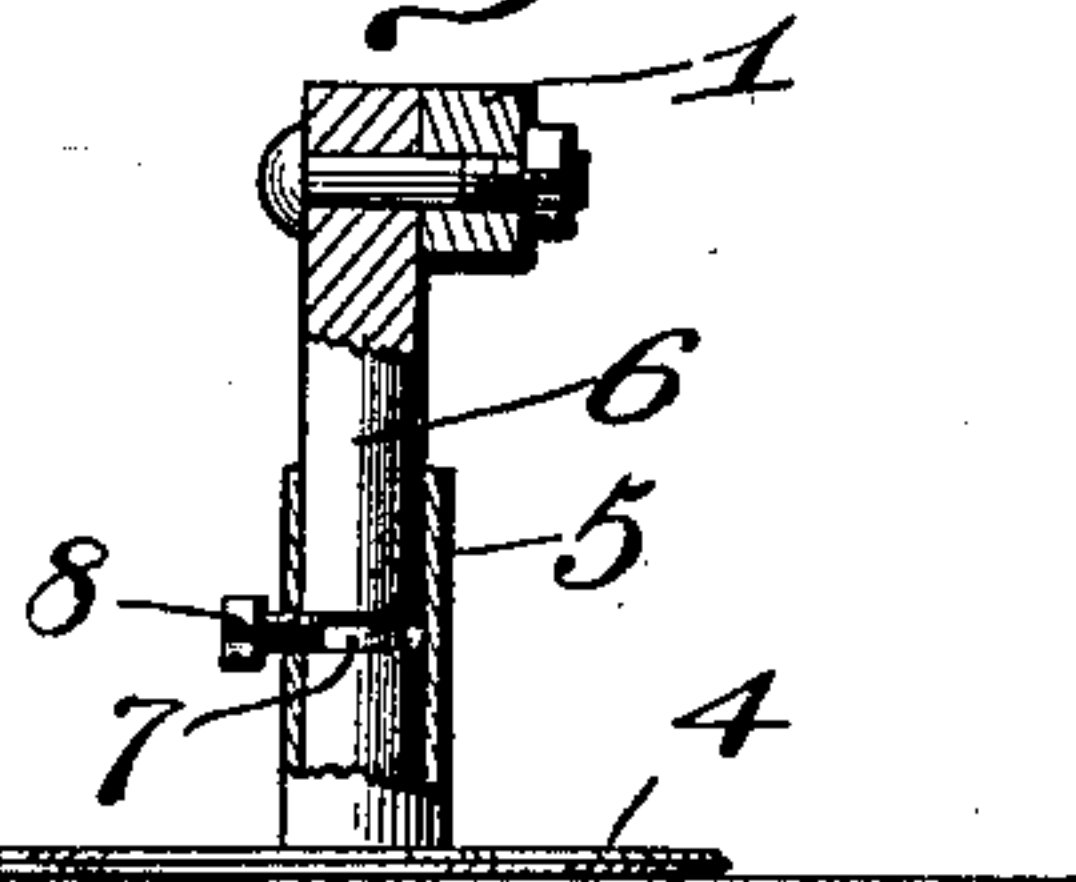
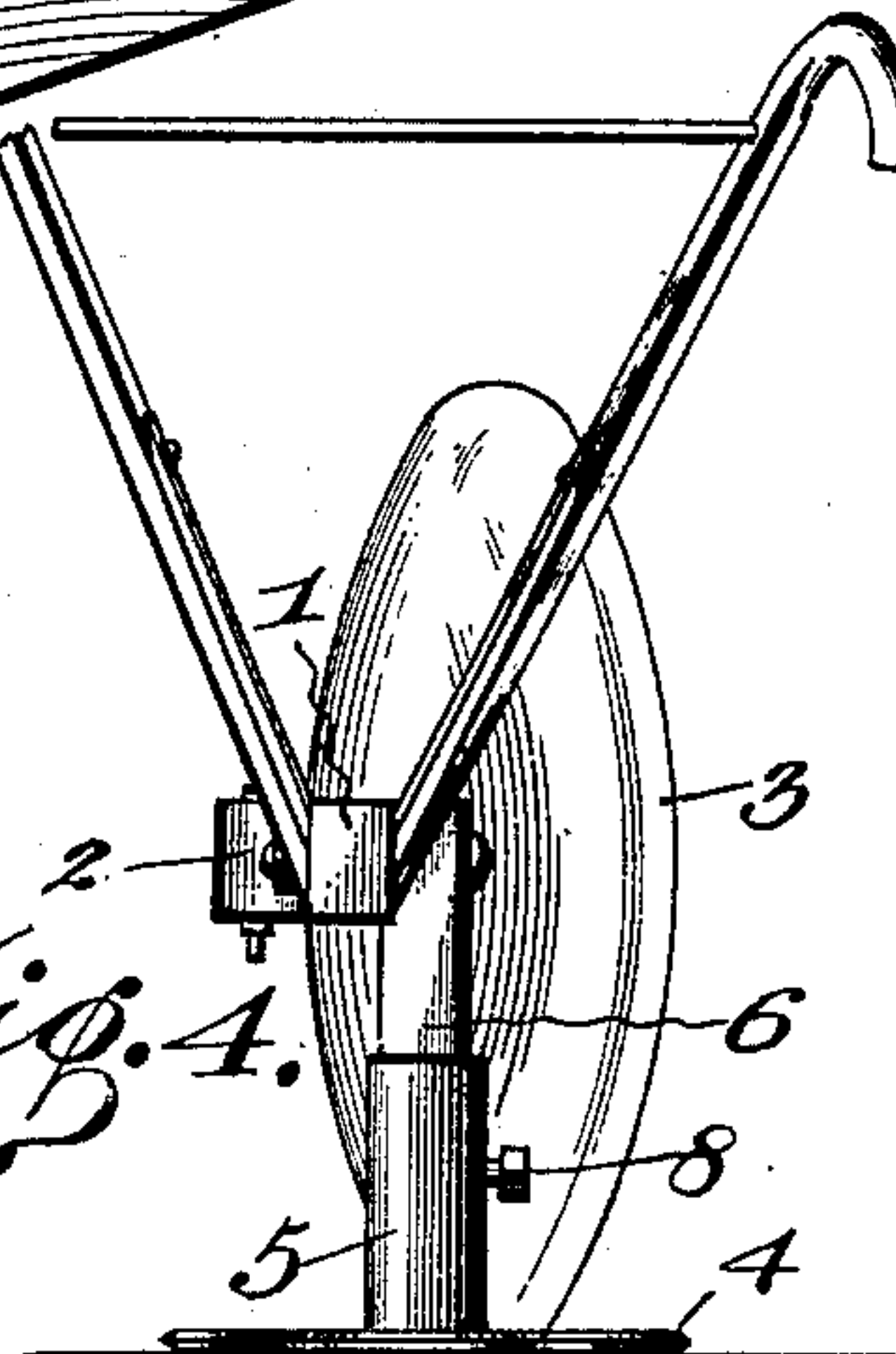


Fig. 4.



Witnesses

A. Roy Appleman Jr.
S. F. Holthaupt.

By *his* Attorneys,

John I. Lovett, Inventor.

Cashnow & Co.

UNITED STATES PATENT OFFICE.

JOHN I. LOVETT, OF MIDLOTHIAN, TEXAS.

DISK-PLOW ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 630,367, dated August 8, 1899.

Application filed October 17, 1898. Serial No. 693,793. (No model.)

To all whom it may concern:

Be it known that I, JOHN I. LOVETT, a citizen of the United States, residing at Midlothian, in the county of Ellis and State of Texas, have invented a new and useful Disk-Plow Attachment, of which the following is a specification.

This invention relates to disk plows of that type which employ an upright concavo-convex furrow-opening disk; and it has for its object to provide a new and useful cutter attachment cooperating with said furrow-opening disk to increase the cutting area thereof and at the same time forming a rolling anchor for the plow to properly hold the furrow-opening disk in the ground without in any way impeding the progress of the implement.

With these and other objects in view, which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination, and arrangement of parts hereinafter more fully described, illustrated, and claimed.

In the drawings, Figure 1 is a perspective view of a disk plow equipped with the cutter attachment contemplated by the present invention. Fig. 2 is a top plan view of the plow with the attachment. Fig. 3 is a vertical sectional view on the line 3 3 of Fig. 2. Fig. 4 is a rear end view of the plow.

Referring to the accompanying drawings, the numeral 1 designates the beam of an ordinary disk plow, which beam is provided intermediate its ends with the usual lateral offset 2, carrying the supporting-journal for the rotary upright concavo-convex furrow-opening disk 3. The furrow-opening disk extends above and below the plow-beam and by reason of the lateral offset 2 thereof is disposed obliquely to the line of draft, so that as the implement is drawn forward the said disk 2 will open up the furrow in the usual manner.

In connection with the furrow-opening disk 3 of the plow the present invention contemplates the employment of a separate flat rolling cutter-disk 4. The flat rolling cutter-disk 4 is arranged to operate in a horizontal position and is provided at its upper side with a central upwardly-projecting tubular bearing-stem 5, loosely receiving the lower end of a supporting-standard 6, the upper end of which standard is fastened to the plow-beam 1 in

any suitable manner. To provide for the revoluble support of the cutter-disk at the lower end of the standard 6, the latter is preferably provided therein with an annular groove 7, receiving the inner end of a set-screw or pin 8, fitted in the side of the tubular stem 5. This connection provides for holding the horizontal cutter-disk 4 on the lower end of the standard 6, while at the same time permitting such disk to freely revolve, and it will be observed that the tubular stem 5 also acts in the capacity of a grease-cup, which is practically dust-proof and will hold sufficient lubricant to provide for lubricating the bearing of the cutter-disk. The horizontal flat cutter-disk is preferably arranged in rear of the furrow-opening disk 3 and lies in substantially the same horizontal plane as the lowermost point or edge of the furrow-opening disk 3, so that the cutter-disk will run directly in the bottom of the furrow. While it is preferable to locate the cutter-disk in rear of the furrow-opening disk, still it will be obvious that practically the same result would be secured by arranging the cutter-disk in advance of the furrow-opening disk; but in either position the cutter-disk will travel at a depth equal to the depth of the furrow cut by the disk 3 when located in rear of the furrow-opening disk will cut into the bank on the land side of the furrow, and thereby assist in loosening up the soil and increasing the cutting area of the opening-disk. Furthermore, by reason of the cutter-disk cutting into the ground not affected by the opening-disk the former necessarily acts in the capacity of an anchor for holding the implement properly in the ground, and the rolling or revolving action of the cutter-disk prevents the same from becoming entangled with roots and the like.

Changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. The plow-beam, provided with a lateral offset, combined with the furrow-opening disk, the journal of which passes through the offset of the beam, whereby the disk 3 is ar-

ranged at an angle to the beam, substantially as shown.

2. The plow-beam provided with an offset, and the furrow-opening disk which has its
5 journal passed through the offset of the beam so that the disk is placed at an angle to the length of the beam, combined with a standard attached to the beam, a horizontal flat
cutter-disk arranged at one side of the furrow-opening disk and having a central upwardly-disposed tubular stem revolubly fitting the lower end of the standard; the disk
10 being disposed in substantially the same plane as the lower edge of the furrow-opening disk,
15 and a fastening connection on the stem and

removably engaging the standard to prevent relative displacement thereof while permitting of a free rotation of the cutter-disk, whereby the center of the cutter-disk is brought almost into line with the lower edge of the furrow-opening disk, where it comes in contact with the earth, substantially as shown and described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN I. LOVETT.

Witnesses:

R. MARTIN,

S. J. MARTIN.