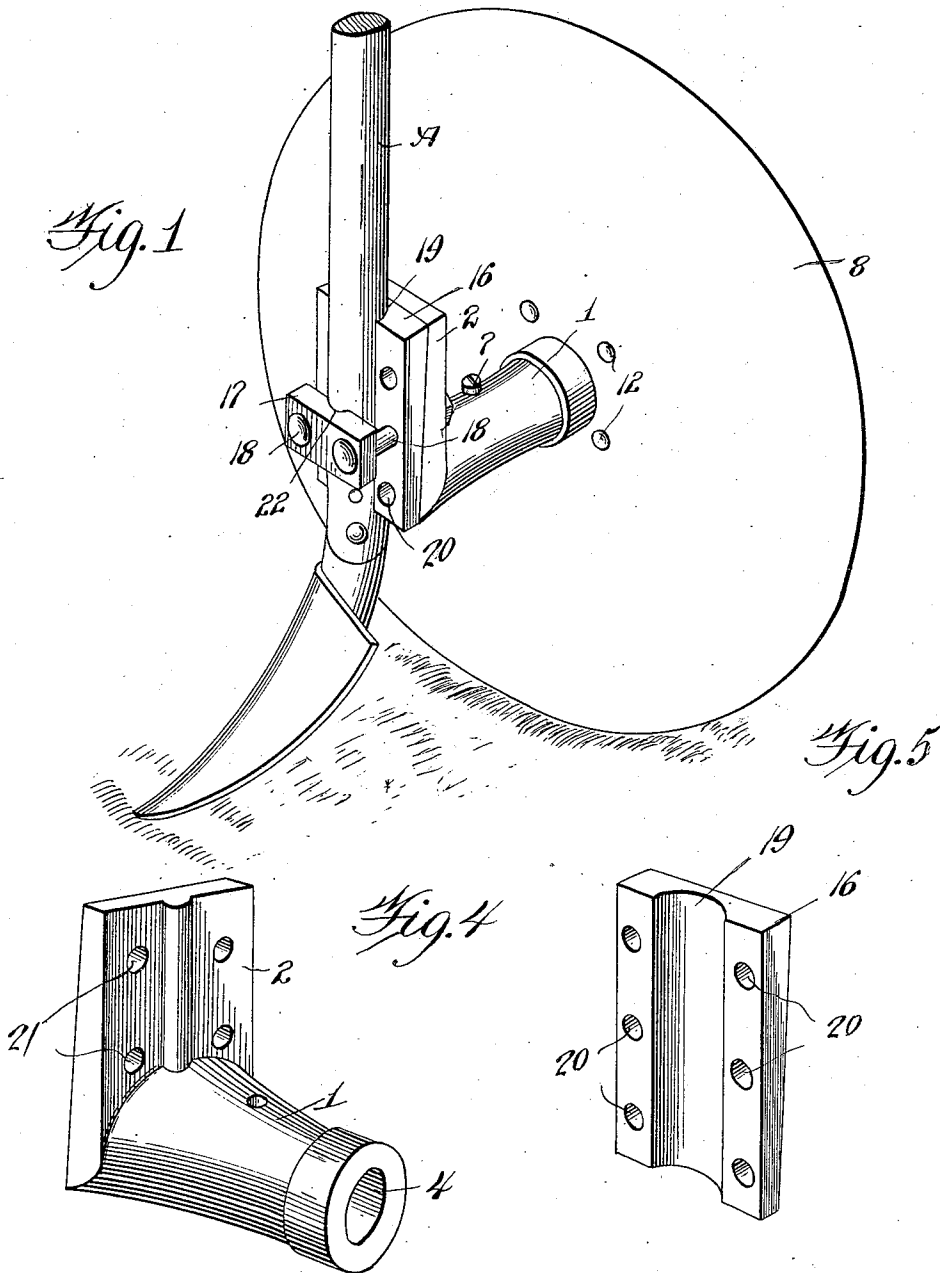


E. JONES.
DISK ATTACHMENT FOR CULTIVATORS.
APPLICATION FILED FEB. 28, 1912.

1,060,905.

Patented May 6, 1913.

2 SHEETS—SHEET 1.



Witnesses

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K. Delabar

Inventor

Edwin Jones

By Victor J. Evans

Attorney

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2 SHEETS—SHEET 2.

Fig. 2

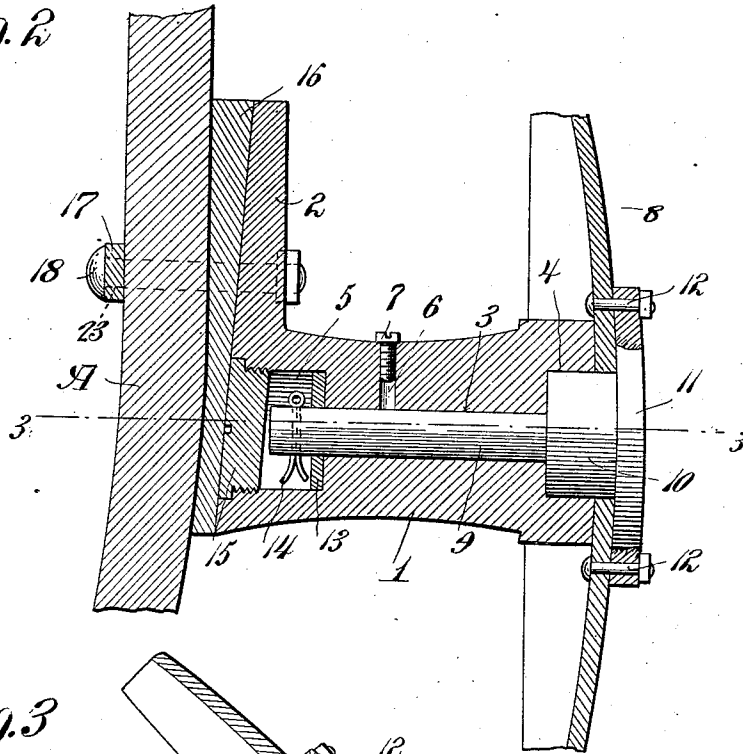
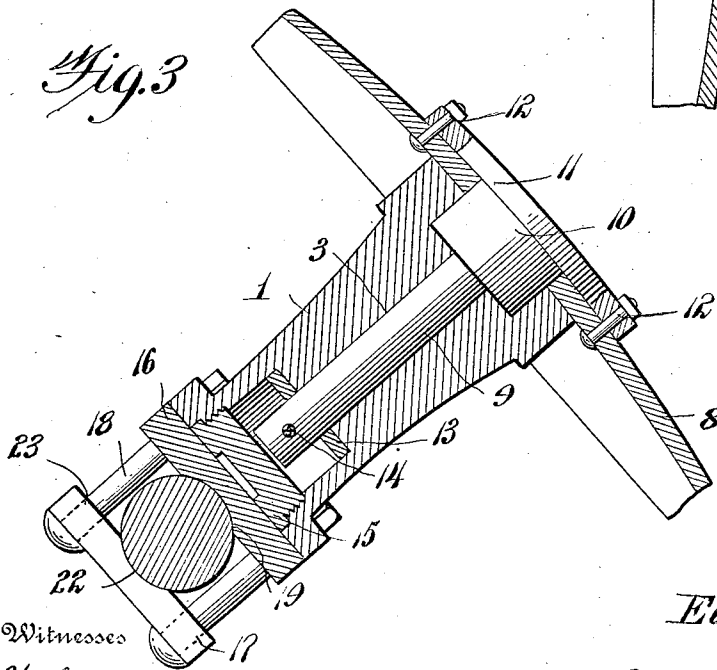


Fig. 3



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UNITED STATES PATENT OFFICE.

EDWIN JONES, OF TROY, KANSAS.

DISK ATTACHMENT FOR CULTIVATORS.

1,060,905.

Specification of Letters Patent.

Patented May 6, 1913.

Application filed February 28, 1912. Serial No. 680,381.

To all whom it may concern:

Be it known that I, EDWIN JONES, a citizen of the United States, residing at Troy, in the county of Doniphan and State of Kansas, have invented new and useful Improvements in Disk Attachments for Cultivators, of which the following is a specification.

This invention is an improved disk attachment for cultivators, especially adapted for use on wheeled cultivators but also adapted for use on walking cultivators and other like machines, the object of the invention being to provide an improved device of this kind by means of which a disk may be connected to the shank or standard of a cultivator and arranged at any required angle for operation, according to whether it is desired that the disk shall throw the earth toward the row of plants or from the same, the invention consisting in the construction, combination and arrangement of devices, hereinafter described and claimed.

In the accompanying drawings:—Figure 1 is a perspective view of a disk attachment constructed in accordance with my invention, showing the same connected to the shank or standard of a cultivator. Fig. 2 is a vertical sectional central view of the same. Fig. 3 is a horizontal sectional view of the same on the plane indicated by the line *a—a* of Fig. 2. Fig. 4 is a detail perspective view of the bearing. Fig. 5 is a similar view of the wedge plate.

In accordance with my invention, I provide a bearing or boxing 1 which is formed at its inner end with an upstanding attaching arm 2, the said arm being arranged at an angle other than a right angle to the said boxing or bearing. The bore 3 of the bearing has an enlarged counterbore 4 at its outer end and also an enlarged counterbore 5 at its inner end. An opening 6 is formed in the upper side of the bearing and leads to the bore thereof, the said opening serving to convey lubricant to the bearing and being, in practice, provided with a screw cap or plug 7 to exclude dirt.

The disk 8, which may be of any suitable size, and is of the usual construction is mounted on an axle spindle 9 which has an enlarged portion 10 that passes through the central opening of the disk and is arranged in the counterbore 4, the axle spindle having a head 11 at its outer end which bears against the outer side of the central portion of the

disk and is secured thereto as by means of bolts 12. The central portion of the disk fits between the said head 11 and the outer end of the bearing 1, as shown in Fig. 2. The inner end of the spindle 9 is provided with a washer 13 which bears against the bottom of the counterbore or recess 5 and is held in place by means of a split pin 14 or other suitable device.

A cap 15 is provided to form a closure for the inner end of the counterbore or recess 5 so as to exclude dirt from the bearing and this cap is here shown as threaded in place. The cap may be of any suitable construction within the scope of my invention.

In connection with my improved bearing, I provide a longitudinally curved wedge plate 16, a yoke bar 17 and bolts 18 to secure the bearing to the shank or standard A of a cultivator. The shank or standard is also longitudinally curved. This wedge plate bears against the inner side of the attaching arm 2 and is recessed on its inner side, or grooved, as at 19, to receive one side of the cultivator shank, and the said wedge plate is provided with a series of adjusting openings 20 on opposite sides for the reception of the bolts 18, the attaching arm 2 of the bearing being also provided with openings 21 for the reception of said bolts. The yoke bar is recessed on its inner side as at 22 to receive the opposite side of the cultivator shank or standard and has openings 23 through which the bolts 18 extend. By appropriately adjusting the wedge plate vertically, the wedge plate, in coaction with the longitudinally curved cultivator shank or standard will adjust the bearing 1 and, hence, the axle spindle of the disk to any desired inclination. The bearing, which extends obliquely to the line of draft and projects rearwardly from the cultivator shank or standard may be arranged on either side of the standard as may be required to cause the disk to throw the earth toward or from the row of plants.

It will be understood that my improved attachment may be used in connection with any form of cultivator, that it may be readily applied thereto or detached therefrom and that its use greatly promotes the growth of the crop and effects a material economy in the cultivation of the same.

I claim:—

A disk attachment comprising a bearing having counterbores in its outer and inner

ends and a detachable cap covering the said counterbore of the inner end, a disk axle spindle mounted in the bearing, having an enlarged portion arranged in the outer
5 counterbore and also having an enlarged head, a disk attached to the inner side of the said head and arranged at the outer end of said bearing, securing means for the axle spindle arranged in the inner counterbore
10 to prevent endwise movement of said spindle, a wedge plate at the inner end of the bearing and covering the said cap and a standard to which the bearing is secured, the said wedge plate being arranged between the standard and the inner end of the bearing. 15

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

EDWIN JONES.

Witnesses:

SALEM G. JONES,
W. H. MYERS, Jr.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
