L. E. WATERMAN.

DISK SUPPORT.

APPLICATION FILED JAN. 15, 1909.

990,934. **Patented May 2, 1911.**

Fig. 2.

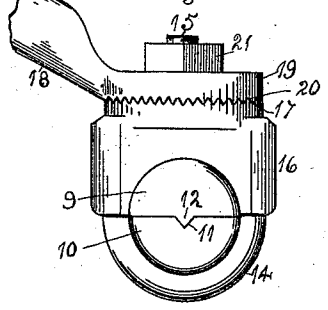


Fig. 1.

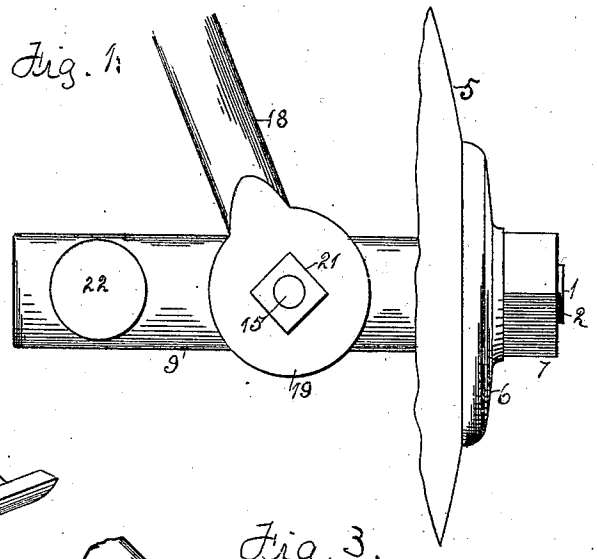


Fig. 4.

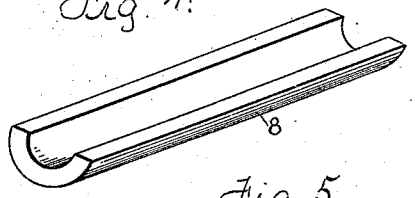


Fig. 3.

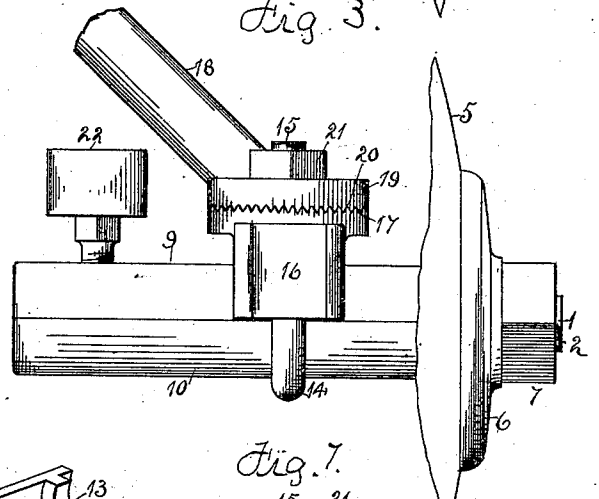


Fig. 5.

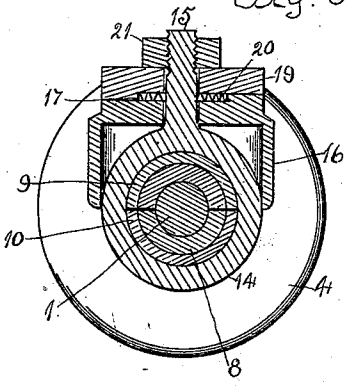


Fig. 6.

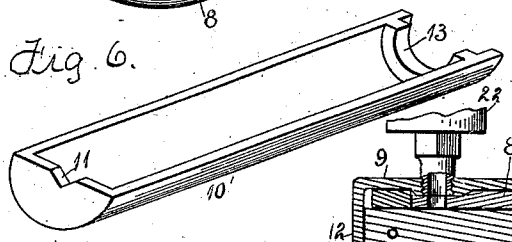


Fig. 7.

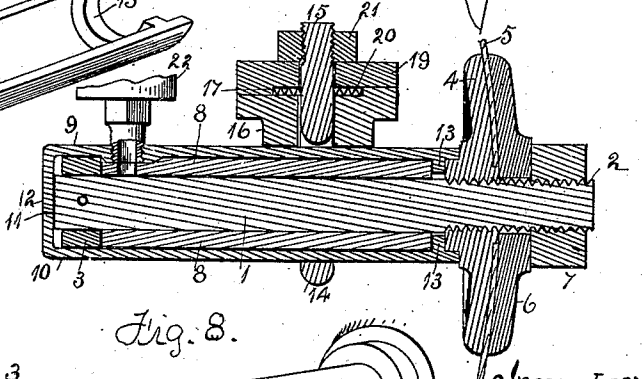
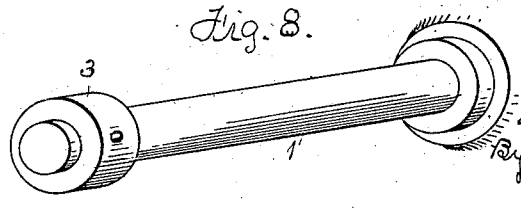


Fig. 8.



Witnesses:
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E. Behel.

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By A. O. Behel
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UNITED STATES PATENT OFFICE.

LEWIS E. WATERMAN, OF ROCKFORD, ILLINOIS, ASSIGNOR TO EMERSON-BRANTINGHAM CO., OF ROCKFORD, ILLINOIS, A CORPORATION OF ILLINOIS.

DISK-SUPPORT.

990,934. Specification of Letters Patent. Patented May 2, 1911.

Application filed January 15, 1909. Serial No. 472,550.

To all whom it may concern:

Be it known that I, LEWIS E. WATERMAN, a citizen of the United States, residing at Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Disk-Supports, of which the following is a specification.

The object of this invention is to construct a bearing or support for disks used in turning the soil and especially employed in lister cultivators.

In the accompanying drawings, Figure 1 is a plan view of a portion of a disk and its support. Fig. 2 is an end view of the support in which the grease-cup is removed. Fig. 3 is a side elevation. Fig. 4 is a perspective view of one half of the wood bushing. Fig. 5 is a transverse section through the support. Fig. 6 is a perspective view of one-half of the box. Fig. 7 is a lengthwise section through the support. Fig. 8 is a perspective view of the spindle.

The spindle 1 is cylindrical in cross-section and has one end formed with the screw-threads 2. To the other end of the spindle is pinned a collar 3. A section 4 as a bearing for the concave face of the disk 5 has a screw-thread connection with the screw-thread end 2 of the spindle, and a collar 6 is placed against the convex face of the disk and clamped thereto by the nut 7 turned in connection with the spindle. Around the spindle 1 is located a wood bushing comprising the two like halves 8, one end resting against the collar 3 and the other end stopping short of the section 4 of the bearing for the disk 5.

A two part box comprising two sections 9 and 10 are placed around the wood bushing and have closed ends, one section has a notch 11 which receives a projection 12 extending from the end of the other section. Each section has a half ring 13 near its open end which, when the sections are placed together are located between the ends of the wood bushings 8, and the bearing 4 for the concave face of the disk. An eye 14 is placed over the box sections and is provided with a screw-threaded shank 15. A yoke 16 is placed over the shank 15 and rests in contact with the upper face of the box section 9. The upper surface of this yoke is formed with radial serrations 17. An arm 18 has an enlarged end 19, the underface of which is formed with radial serrations 20, fitted to the serrated face 17 of the yoke 16. The shank 15 of the eye 14 passes through the end 19 and a nut 21 turned on the projecting end of the shank serves to clamp the yoke against the upper face of the box section 9, draws the eye against the underface of the box section 10, thereby clamping the box sections together, and finally clamp the end 19 of the arm 18 to the upper serrated face of the yoke 16.

The wood bushings 8 and the box sections 9 and 10 are held stationary by the clamping action of the yoke and eye, while the spindle with the disk connected thereto is free to rotate within the wood bushings. The collar 3 secured to the spindle in engagement with the end of the wood bushing, prevents the withdrawal of the spindle, and the section 4 resting against the ends of the box sections prevents the inward thrust of the spindle. A grease-cup 22 communicates with the spindle through the upper box section 9, and upper wood bushing 8.

The arm 18 is intended to be connected to the frame of a lister cultivator or other soil turning or agitating implement, and by the employment of the serrations 17 and 19 the disk 5 can be turned into different positions, and by loosening the nut 15, the bearing as a whole can be moved through the eye 14 to extend the disk more or less therefrom.

I claim as my invention.

1. A journal bearing comprising a spindle, a rotary member connected to one end of the spindle, and a collar fixedly connected to the other end of the spindle, a two part bushing, a two part box encircling the bushing, each part formed with a closed end and a half ring near its open end, and means connecting the box parts the collar located between the closed ends of the box and the bushing, and the bushing located between the collar and the sectional ring.

2. A support of the character set forth, comprising a sectional box having an open and a closed end, a fastening clamp including a member surrounding the box and securing the sections thereof together, a shaft extending longitudinally within the box, terminating at the closed end thereof and projecting beyond the open end, and a rotary member mounted on the projecting end and having a hub portion projecting into and closing the open end of the box.

3. A support of the character set forth,

comprising a sectional box having a closed end and an open end, the latter being provided with an internal flange, a fastening clamp including a member surrounding the box and securing the sections thereof together, a shaft extending longitudinally within the box and terminating at the closed end thereof, a collar carried by the inner end of the shaft, a sectional bushing interposed between the collar and the internal flange, a rotary member mounted on the projecting end of the shaft, and clamping elements for the members mounted on the shaft, one of said clamping elements including a hub portion that fits within the open end of the box and terminates at the internal flange.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

LEWIS E. WATERMAN.

Witnesses:
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E. D. E. N. BEHEL.