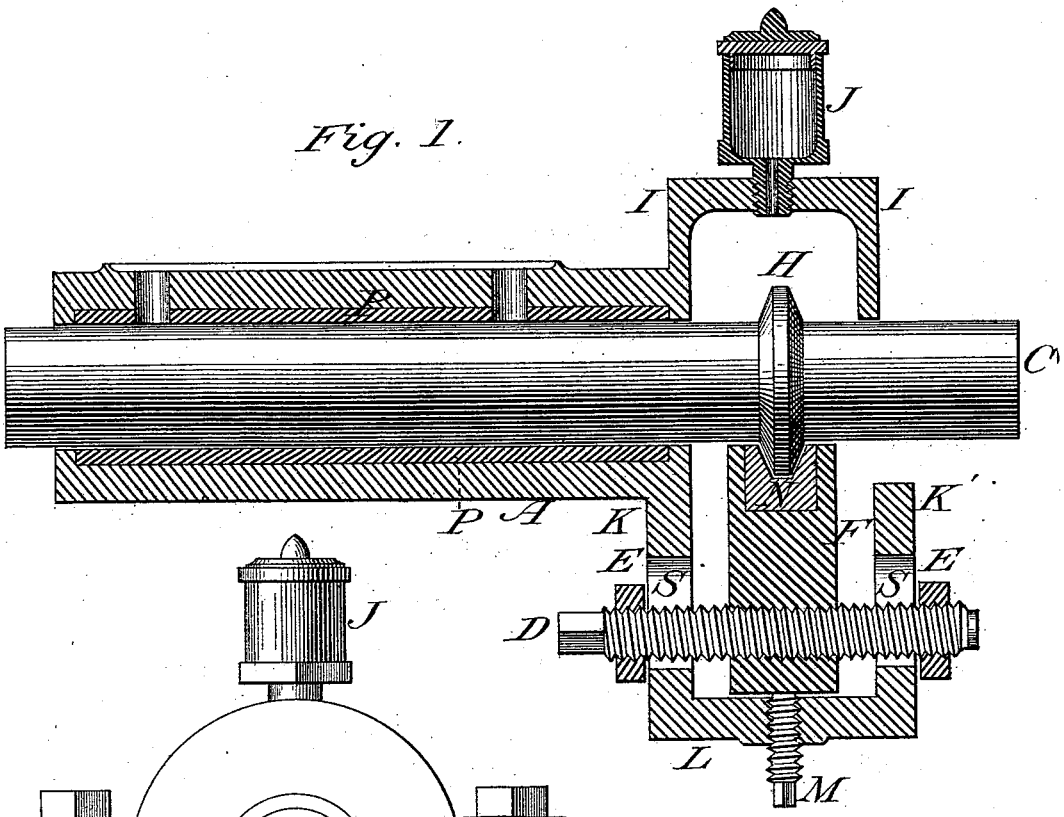
J. W. YEO.

Device for the Lateral Adjustment of Shafts.

No. 213,310. Patented Mar. 18, 1879.

Fig. 1.



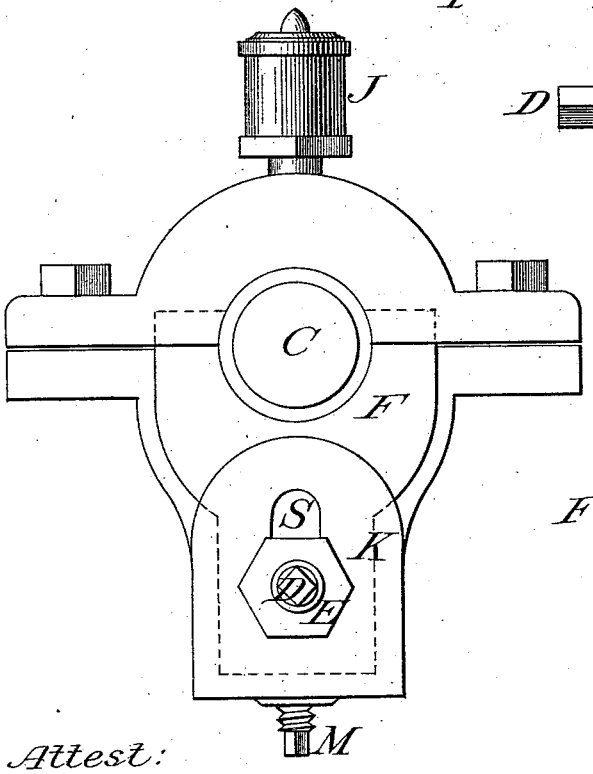


Fig. 2.

Attest:

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JONAS W. YEO, OF RICHMOND, INDIANA.

IMPROVEMENT IN DEVICES FOR THE LATERAL ADJUSTMENT OF SHAFTS.

Specification forming part of Letters Patent No. **213,310**, dated March 18, 1879; application filed November 7, 1878.

To all whom it may concern:

Be it known that I, JONAS W. YEO, of Richmond, in the county of Wayne and State of Indiana, have invented certain Improvements in the Lateral Adjustment of Shafts, of which the following is a specification:

This improvement or invention relates to the lateral adjustment of shafts in all classes of machinery where such adjustment may be desirable, but for the use of thrashing-machines especially, as hereinafter fully described and set forth in the specification and claims.

Figure 1 is a longitudinal vertical section of the journal-box and cap with the adjusting device attached and showing the shaft in place. Fig. 2 is an end elevation of the adjusting device.

A is the journal-box, and P is the Babbitt metal in which the shaft C revolves. I is the cap, and J an oil-cup attached thereto. The journal-box A has the drop or hanger consisting of the parts K, L, and K′ attached thereto and forming the support for the cup F, which cup carries the Babbitt N, in which the tapering collar H, attached to the shaft C, runs. The lower end of the cup F is tapped, and the screw D passes through it and through the slots S S in the uprights K K′. The screw D has one end squared, by means of which it may be turned to adjust the cup F laterally, and when adjusted the whole is held firmly in its lateral position by means of the nuts E E. The collar H may be shrunk onto the shaft C, or otherwise suitably attached. This collar is made tapering, so that its beveled sides may have much more wearing-surface than its face. The cup F has also a vertical or upward adjustment through the means of the set-screw M in the part L of the hanger to take up all slack occasioned by wear.

The cap I, as well as the uprights K K′, is made wider than the cup to allow of lateral adjustment. The cup also passes up into the cap, as shown in Fig. 2. The hanger K L K′ is cast to the journal-box A, and forms an integral part thereof, but is not necessary to the successful operation of the adjustment, as a bracket may be attached to the side of the machine and carry the cup F and adjusting-screws. The cup may be made stationary and the collar H made adjustable on the shaft by any suitable means; but I prefer the construction substantially as shown and described, for it is readily attached to all journal-boxes, without regard to the class of machinery, wherever lateral adjustment of a shaft is desirable.

The cap of the journal-box has the cap I, covering the collar H, cast thereto, and forming an integral part thereof, in like manner as the hanger is cast to the journal-box A. This device is especially adapted to thrashing-machines, where a very nice lateral adjustment is required to avoid breaking the grain.

Heretofore set-screws have been used against the ends of the cylinder-shaft, which device is very defective, it being almost impossible to keep oil on the parts in contact; but in my construction it will be seen the cup is entirely below the center of the shaft; hence there is no difficulty in keeping the collar thoroughly lubricated.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In combination with the shaft C and collar H, a laterally-adjustable cup, whereby the shaft is held in place laterally when adjusted, substantially as set forth.

2. In combination with the shaft C and collar H, the cup F, arranged to be adjusted laterally and vertically by means of the screws D and M, substantially as shown and described.

3. The laterally-adjustable cup F, carrying the Babbitt N, in combination with the collar H, attached to the shaft C, substantially as set forth.

4. The hanger K L K′, attached to the journal-box A, and having the slots S S, in combination with the set-screw M for the vertical adjustment of the cup F, substantially as set forth.

5. The cap I, cast with the cap of the journal-box and covering the collar H, and carrying the oil-cup J, substantially as shown and described.

6. The hanger K L K′ and cap I, cast to the

journal-box and cap respectively, in combination with the collar H and cup F, substantially as shown and described.

7. The combination and arrangement, with the shaft C and collar H, of the hanger K L K′, cup F, adjusting-screws D M, and cap I, substantially as set forth.

8. The collar H, made tapering for the purpose of giving greater wearing-surface, in combination with the Babbitt N, supported in the adjustable cup F, substantially as set forth.

JONAS W. YEO.

Witnesses:
E. C. KELLY,
C. C. DENNIS.