(No Model.)

A. W. GOODELL & L. T. PYOTT.

MEANS FOR LATERALLY ADJUSTING JOURNAL BEARINGS.

No. 566,166. Patented Aug. 18, 1896.

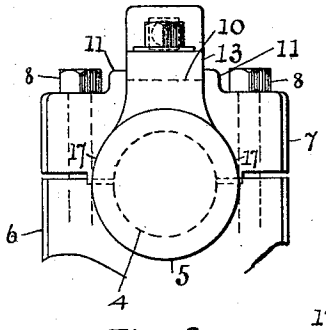

Fig. 3

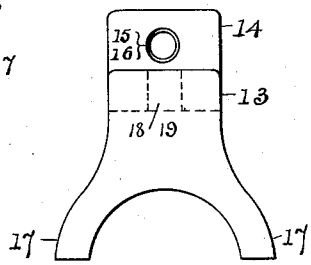

Fig. 4

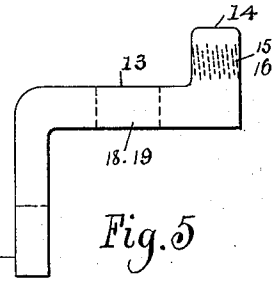

Fig. 5

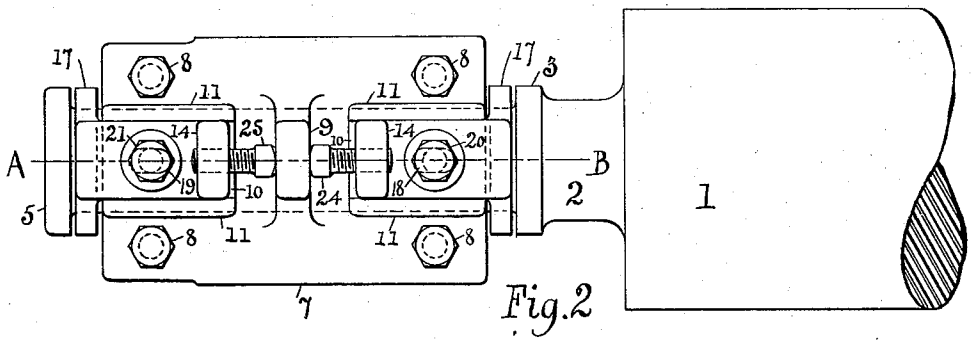

Fig. 2

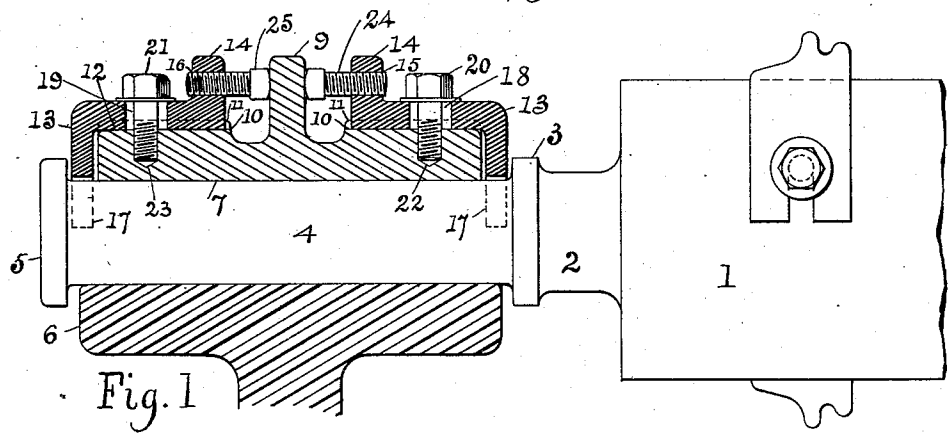

Fig. 1

WITNESSES.

J. M. W. Collat

Wm Henenrickson

INVENTORS

Austin W. Goodell

Louis T. Pyott

By their Attorney R. C. Bright

UNITED STATES PATENT OFFICE.

AUSTIN W. GOODELL AND LOUIS T. PYOTT, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNORS TO SAID GOODELL AND DANIEL A. WATERS, OF SAME PLACE.

MEANS FOR LATERALLY ADJUSTING JOURNAL-BEARINGS.

SPECIFICATION forming part of Letters Patent No. 566,166, dated August 18, 1896.

Application filed November 27, 1895. Serial No. 570,252. (No model.)

To all whom it may concern:

Be it known that we, AUSTIN W. GOODELL and LOUIS T. PYOTT, citizens of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Means for Lateral Adjustment of Journal-Bearings; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

Our invention relates to improvements in machines using revolving cutting-heads, such as planing-machines, having beading-cutters, which must be kept in perfect transverse alinement, and it is equally adapted to other forms of machines where perfect transverse alinement must be preserved.

The object of our improvement is to arrange on the journal at one end only of the cutting-head or roller a mechanism which shall govern the lateral position of the cutter-head or roll either toward or from the center of the machine, the journal at the other end of the cutter-head or roll being simply a carrier, but in no way a lateral guide. Large and long cutter-heads, revolving at high speed and doing heavy work, become heated and in consequence expand and become considerably elongated, so that if secured at each journal for lateral alinement when cold or not running they will, when heated, cut themselves free, or the cutter-heads or roll will be pinched and thereby be sprung or bowed, and its work will be imperfect, much friction will be caused, and a consequent loss of power as well as the danger of destroying the parts or doing them much damage.

The best forms we are now aware of for attaining the objects of our invention are illustrated in the following drawings, in which—

Figure 1 is a vertical section through the bearing and its cap on line A B, Fig. 2, the journal and roll or cutter-head being in elevation. Fig. 2 is a plan of the bearing-cap and adjusting mechanism. Fig. 3 is an end elevation of the bearing-caps. Fig. 4 is an end elevation of one of the adjusting-forks, and Fig. 5 is an elevation of the same.

Similar reference-figures refer to similar parts throughout the several views.

The cutter-head or roll 1 has a neck 2 at its outer end and beyond it a collar 3, the collar forming a shoulder for the inner end of the journal 4, and its outer end being defined by the collar 5 or in some cases by a pulley-hub.

The journal 4 is seated in a bearing 6, formed on or attached to the machine which uses the cutter-head, arbor, or roll, and as its form, construction, and attachment is no part of our invention it is deemed unnecessary to further illustrate or describe it. To the bearing is secured a cap 7 by bolts 8. The cap is shorter than the journal at each end, and has constructed on its upper side a central lug 9, reaching upward and extending partially across it. On the top of the cap 7, centrally, and reaching inward from each end are flat seats 10, having a raised ledge 11 along each side, thereby forming pockets 12, into which are placed the adjusting-forks 18. A lug 14 on each fork reaches upward from their inner ends, holes 15 16 being tapped therein, and at their outer ends 17 they extend downward and are bifurcated to embrace and fit around the journal nearly to its central horizontal line. Centrally through the body of the adjusting-forks 13 are vertical slotted holes 18 19, through which clamping tap-bolts 20 21 are inserted and which are screwed into tapped holes 22 23 in the cap 7. Adjusting-screws 24 25 enter the tapped holes 15 16, and the head of each screw 24 25 abuts the central lug 9, one on each side.

It will readily be seen that as the bearing 6 is rigidly secured to the machine and its cap 7 securely bolted to it the lug 9 is also rigidly secured. Now, such being the case, and the journal 4 revolving freely therein, and it being desired to move the cutter-head or roll 1 toward the right the clamping-screw 21 must be loosened and the screw 25 turned into the lug 14. This permits the adjusting-fork 13 on the left-hand side to move toward the center of the bearing 6. The loosening of the right-hand screw 20 and the unscrewing of

the screw 24 forces the adjusting-fork on the right-hand side away from the vertical center of the bearing, and thus by the bifurcations 17 being forced against the collar 3 the cutter-head or roll is moved to the right or to perfect alinement, and the work is accomplished while the machine is running and without going around the machine, which is objectionable for many reasons. The reverse operation, as described, for moving the roll or cutter-head inward will move and aline it outward, as will be very readily seen by a person skilled in the art.

Having now described a preferred form for accomplishing our invention, and not limiting ourselves to the precise construction described, we claim as our invention—

1. In means for lateral adjustment of journal-bearings, a cap having a central lug across its top, a longitudinal seat therefrom at each side toward each end of the bearing-cap and having guiding-strips, adjusting-forks seated upon the longitudinal seats, means to secure the adjusting-forks thereto, and means to adjust the forks from the central lug, substantially as described.

2. A bearing comprising a cap, having a lug across it and extending upward, a longitudinal seat therefrom at each side, guides for the seats, adjusting-forks seated thereon, means to adjust the forks toward or from the lug, and means to secure the forks after adjustment both laterally and vertically, substantially as described.

3. A bearing comprising a cap, two adjusting-forks seated thereon, the outer end of each fork extending downwardly over the journal-bearing within shoulders of the said journal, and said forks bifurcated to embrace and go over the journal and bear against the journal-shoulders, and means for adjustment on the cap for such purpose, substantially as described.

4. In means for regulating the position of the journal in its bearing laterally, a cap for the bearing, two overhanging adjusting-forks seated on the cap, and bifurcated at their outer ends, impinging shoulders of the journal, and at their inner ends extending upward, and means for adjustment either toward or from the shoulders aforesaid, and means to secure the forks when adjusted, substantially as described.

5. In mechanism for journal end adjustment, a cap for the bearing of the journal, a lug across the cap, slideways therefrom to each end, adjusting-forks seated and guided upon the cap, the outer end of each fork extending beyond and below the cap, bifurcated to partially embrace the journal and abut a shoulder thereof, and the inner end of each fork extending upward, means thereto attached to adjust the end movement of the fork and at its horizontal or body part means to secure it after adjustment, substantially as described.

6. A journal-bearing somewhat shorter than its journal, comprising a cap, adjusting-forks overhanging each end of the journal-bearing cap, and bearing against a shoulder of the journal, and means to adjust and secure the forks on the cap, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

AUSTIN W. GOODELL.
LOUIS T. PYOTT.

Witnesses:
GEO. W. REED,
R. C. WRIGHT.