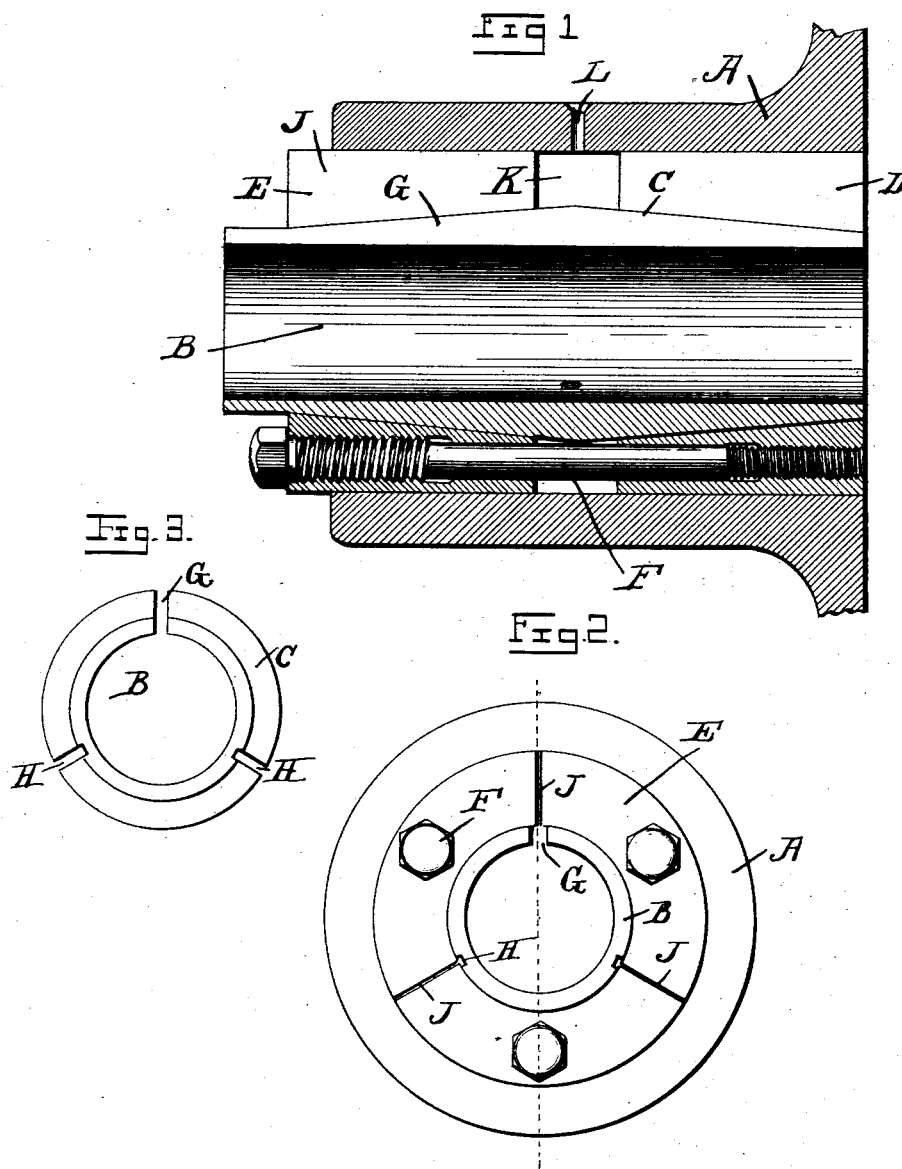


(No Model.)

W. W. WAINWRIGHT.
JOURNAL BOX.

No. 525,775.

Patented Sept. 11, 1894.



Witnesses:
E. R. Shipley
C. M. Sheehan

William W. Wainwright
Inventor
by *James W. See*
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM W. WAINWRIGHT, OF CONNERSVILLE, INDIANA, ASSIGNOR TO
P. H. & F. M. ROOTS CO., OF SAME PLACE.

JOURNAL-BOX.

SPECIFICATION forming part of Letters Patent No. 525,775, dated September 11, 1894.

Application filed April 30, 1894. Serial No. 509,448. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM W. WAINWRIGHT, of Connorsville, Fayette county, Indiana, have invented certain new and useful
5 Improvements in Journal-Boxes, (Case A,) of which the following is a specification.

This invention pertains to improvements in journal boxes designed for adjustment for the purpose of taking up the wear of the box and shaft and also for the purpose of adjusting the shaft transversely to maintain its axis in a constant position in case of tendency to wear the most in any particular direction.

My improvements will be readily understood
15 from the following description taken in connection with the accompanying drawings, in which—

Figure 1, is a vertical longitudinal section of a journal-box exemplifying my invention;
20 Fig. 2, an end view of the same, corresponding with the left-hand end of Fig. 1, and Fig. 3, an end view of the bearing-sleeve.

In the drawings:—A, indicates the fixed support for the journal-box, be it housing,
25 hanger, pedestal or what not, this support having a cylindrical bore; B, the bearing-sleeve disposed within the bore of the support and having itself a bore to fit its shaft; C, a taper upon the outside of the bearing-sleeve each way from about the center thereof, the bearing-sleeve being the larger at about its center of length; D, an adjusting sleeve having a length somewhat less than half that of the bearing-sleeve, the outside of this adjusting-sleeve being turned cylindrically to
35 fit the bore of the support and the inside of the adjusting-sleeve being bored to fit the taper upon the bearing-sleeve; E, a second similar adjusting-sleeve at the other end of the bearing-sleeve; F, bolts engaging the two bearing-sleeves and serving to forcibly draw them endwise toward each other, these bolts or screws being shown as right and left-hand threaded, engaging one of the adjusting
45 sleeves by a right-hand thread and the other adjusting-sleeve by a left-hand thread whereby the turning of the screw causes the two adjusting-sleeves to approach or separate; G, a longitudinal cut in the bearing-sleeve B, extending entirely through the wall of the sleeve so that the sleeve may be closed in-

ward upon the shaft; H, other longitudinal cuts in the bearing-sleeve extending inwardly but not entirely through the wall of the sleeve, these cuts H serving to weaken the bearing-sleeve so that it will more readily yield inwardly; J, longitudinal cuts entirely through the walls of the adjusting-sleeves D and E, serving to separate each of those sleeves into a number of segmental sections each pair of which is provided with its adjusting-screw F; K, the annular cavity formed around the bearing-sleeve within the bore of the support and between the inner ends of the adjusting-sleeves; and L, an oil hole leading to this
65 cavity.

Assume the parts as seen in Fig. 1 to be in proper condition to cause the bearing-sleeve to fit its shaft and hold the shaft in desired axial position. As the shaft and bearing-sleeve wear
70 loose the screws F may be turned, drawing the adjusting-sleeves toward each other, their wedging action compressing the bearing-sleeve inwardly upon the shaft. This adjustment may be continued from time to time until the inner ends of the adjusting-sleeves meet.

Should superior wear of the bearing-sleeve take place in one particular direction, as, for instance, downwardly, owing to the weight or strain of the shaft, then the lower sections of the adjusting-sleeves may be adjusted to a superior degree to restore the axis of the box and shaft to normal position.

By slacking up the screws the parts are
85 loosened and the box may be withdrawn endwise from the support. When the parts are in working position the expansive tendency of the bearing-sleeve holds the sections of the adjusting-sleeves firmly out against the bore of the support rendering the box at all times firm and solid. The longitudinal cuts in the sleeves, may, if desired, be filled by suitable packing pieces, as leather for instance, and the annular chamber K may be utilized as an
95 oil chamber.

This journal-box will be found of special utility in connection with rotary blowers which require the accurate maintenance of the axes of the shafts in certain positions
100 and in which whatever adjustment is made to the box must be made from one end of the

box, the other end of the box being inaccessible.

I claim as my invention—

1. In a journal-box, the combination, substantially as set forth, of a support having a cylindrical bore, a longitudinally cut bearing-sleeve disposed therein and having an exterior taper at each end, a pair of adjusting-sleeves bored to fit said tapers and having their exteriors fitting the bore in said support and formed in segmental sections, and means for moving said segmental sections endwise independently.

2. In a journal-box, the combination, substantially as set forth, of a support having a cylindrical bore, a longitudinally cut bearing-sleeve disposed therein and provided with an exterior taper at each end, a pair of adjusting-sleeves divided into segmental sections and bored to fit said tapers and having their exteriors fitting the bore of said support, and a screw at each of the segmental sections of one of said adjusting-sleeves and engaging its section of that sleeve and the corresponding section of the other adjusting sleeve.

3. In a journal-box, the combination, substantially as set forth, of a support having a cylindrical bore, a longitudinally cut bearing-sleeve disposed therein and having an exterior taper at each end, a pair of adjusting-sleeves fitting said tapers and the bore of said support and divided into segmental sections, and an adjusting screw at each of the segmental sections of one of said adjusting-sleeves and engaging its section of said sleeve by a thread and engaging the corresponding

section of the other adjusting-sleeve by a thread of opposite direction of spirality.

4. In a journal-box, the combination, substantially as set forth, of a support having a cylindrical bore, a longitudinally cut bearing-sleeve having an exterior taper at each end, a pair of segmentally divided adjusting-sleeves fitting said tapers and fitting the bore in said support and having their inner ends separated to form an oil chamber, and means for moving the sections of said adjusting-sleeves endwise in the bore of said support.

5. In a journal-box, the combination, substantially as set forth, of a support having a cylindrical bore, a bearing-sleeve provided with an exterior taper at each end and having a longitudinal cut entirely through its wall and having other longitudinal cuts extending inwardly partly through its wall, a pair of segmentally divided adjusting-sleeves fitting said tapers and fitting the bore of said support, and means for moving the sections of said adjusting sleeves endwise in the bore of said support.

6. In a journal-box, the combination, substantially as set forth, of a support having a cylindrical bore, a longitudinally cut bearing-sleeve disposed therein, and segments surrounding said bearing-sleeve and fitting the bore of said support and held outwardly against the bore of said support by the expansive force of said bearing-sleeve.

WILLIAM W. WAINWRIGHT.

Witnesses:

GEO. H. FULLERTON, Jr.,
LOU R. CONNER.