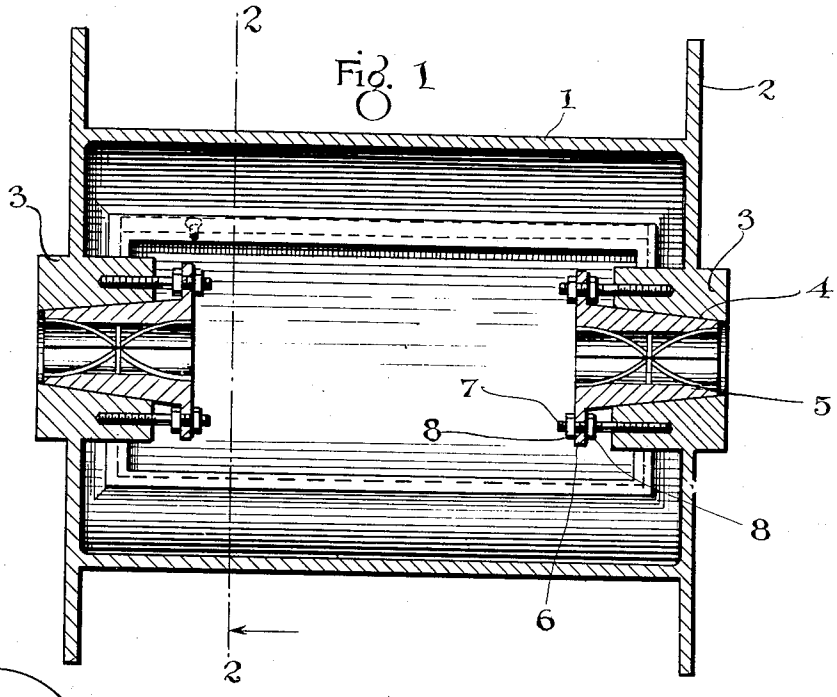
H. M. CLOSE AND H. G. TAYLOR.

ADJUSTABLE BUSHING.

APPLICATION FILED JULY 28, 1920.

1,371,666. Patented Mar. 15, 1921.

Fig. 1



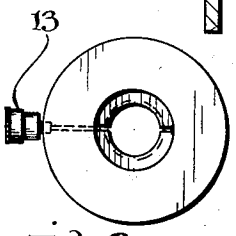


Fig. 3

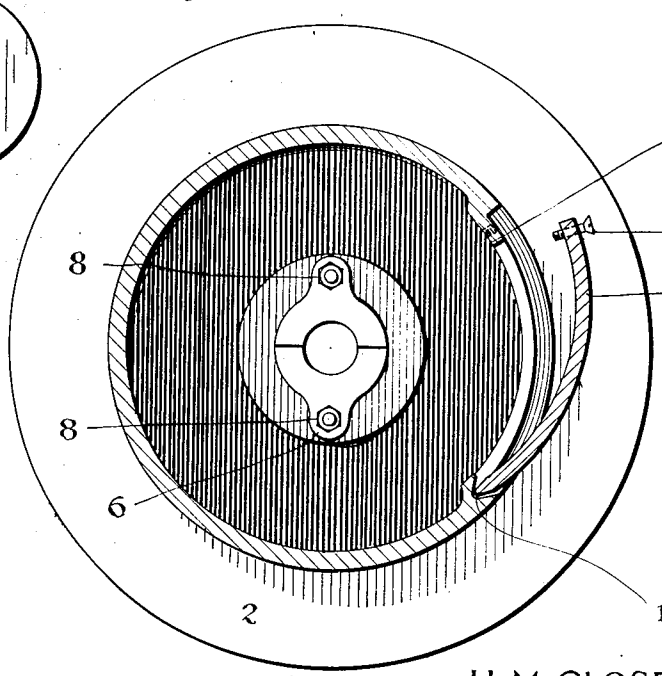


Fig. 2

WITNESSES

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HARRY MONROE CLOSE AND HARRY GRAY TAYLOR, OF CARTERVILLE, MISSOURI.

ADJUSTABLE BUSHING.

1,371,666. Specification of Letters Patent. Patented Mar. 15, 1921.

Application filed July 28, 1920. Serial No. 399,510.

To all whom it may concern:

Be it known that we, HARRY M. CLOSE and HARRY G. TAYLOR, citizens of the United States, and residents of Carterville, in the county of Jasper and State of Missouri, have invented certain new and useful Improvements in Adjustable Bushings, of which the following is a specification.

Our invention is an improvement in adjustable bushings, and has for its object to provide a bushing of the character specified especially adapted for use with hoisters, and which is capable of adjustment from the inside of the drum.

In the drawings:

Figure 1 is a longitudinal section of a drum having the improved bushing;

Fig. 2 is a section on the line 2—2 of Fig. 1;

Fig. 3 is an end view of the hub of the drum.

In the present embodiment of the invention the drum 1, which is a hollow cylindrical body provided with marginal flanges 2 at its ends, has hubs 3 at its ends, which have tapering bores 4, as shown, the bores tapering outwardly, that is, the large ends of the bores are inward. Each of these bushings, indicated at 5, tapers externally to fit the bore of the hub, and each bushing has oppositely extending perforated ears 6, for receiving stud bolts 7, which are threaded into the hub. Lock nuts 8 are arranged on the stud on opposite sides of the ears, and it will be evident that by turning the nuts the bushings may be adjusted with respect to the hubs.

In order to permit access to the interior of the drum, to permit the bushings to be adjusted, a door, indicated at 9, is provided. This door, as shown, has one end beveled, and the beveled end is received in a similarly shaped groove 10 in one side edge of the door opening. At the opposite ends screws 11 are threaded through the door, and these screws are adapted to engage threaded openings in the limiting flange 12, which limits the inward movement of the door.

An oil cup 13 is provided in connection with each hub for delivering to the bore and, referring to Fig. 1, it will be seen that the inner faces of the bushings are grooved, and each bushing has a radial opening at the grooves, to permit the oil to pass from the bore of the hub through the radial opening and grooves, to thoroughly lubricate the bushings.

The life of the usual bushing is from seven to nine months, and the time and expense necessary to change them is relatively great. With the present form of bushing, one set of bushings will last for several years, and no particular time is required to adjust them. In order to adjust the bushing, it is only necessary to open the door 9, which permits access to the studs. The door and the stud bolts are so arranged with respect to each other that the stud bolts are readily accessible from the opening door. When the door is opened, with the doorway in the same horizontal plane with the shaft on which the drum is mounted, one stud bolt at each end will be above and one below the shaft.

It will be understood that the bushing is split in halves, that is, it is sectional, so that it may be applied and removed without taking the drum from the shaft.

As indicated in Fig. 1, each half of the bushing has oil grooves extending from the edge where the oil cup 13 is arranged directly across the bushing, and toward each end of the bushing. The oil cups 13 are arranged at the junction between the bushing.

In inserting a new bushing it is only necessary to remove the nuts 8, after which the bushing may be removed and a new one placed.

We claim:

1. In combination, a hollow drum having hubs at its ends provided with tapering bores, and bushings fitting the bores, means in connection with the hubs and bushings for adjusting said bushings longitudinally said drum having a door opening and a door normally closing the opening and detachable to permit access to the bushings, the means for adjusting the bushings comprising bolts having threaded engagement with the hubs and having rotatable engagement with the bushings, the plane of the door being substantially parallel with a plane through the stud bolts.

2. In combination, a hollow drum having hubs at its ends provided with tapering bores, and bushings fitting the bores, means in connection with the hubs and bushings for adjusting said bushings longitudinally, said drum having a door opening and a door

normally closing the opening and detachable to permit access to the bushings, the means for adjusting the bushings comprising bolts having threaded engagement with the hubs and having rotatable engagement with the bushings.

3. In combination, a hollow drum having hubs at its ends provided with tapering bores, and bushings fitting the bores, means in connection with the hubs and bushings for adjusting said bushings longitudinally, said drum having a door opening and a door normally closing the opening and detachable to permit access to the bushings.

4. A pulley comprising a drum having hubs, bushings for said hubs, and adjusting devices for said bushings located within said drum, said drum being provided with means affording access to said adjusting devices.

5. A pulley comprising a drum having hubs, bushings for said hubs, and adjusting devices for said bushings located within said drum, a portion of said drum being detachable for affording access to said adjusting devices.

HARRY MONROE CLOSE.
HARRY GRAY TAYLOR.