No. 832,816.

PATENTED OCT. 9, 1906.

O. Q. SELLERS.

PACKING RING.

APPLICATION FILED APR. 19, 1906.

Fig. 1.

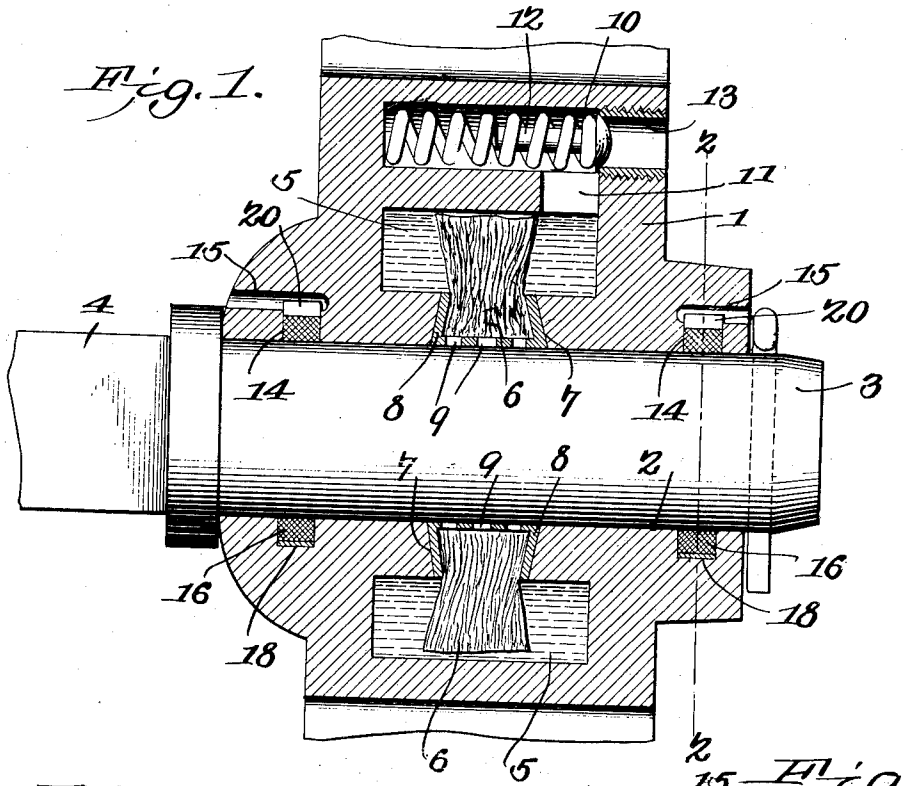


Fig. 3.

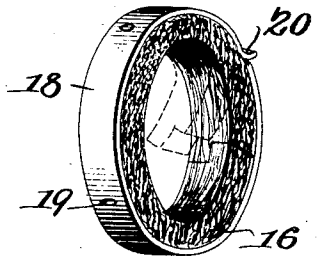
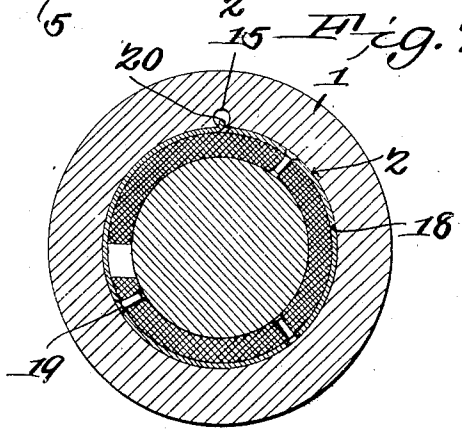


Fig. 2.



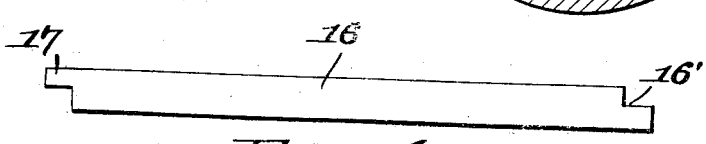


Fig. 4.

WITNESSES:

E. H. Stewart

H. S. Shepard.

Otis Q. Sellers,
INVENTOR.

By C. A. Snow & Co.
ATTORNEY.

UNITED STATES PATENT OFFICE.

OTIS Q. SELLERS, OF WELLSTON, OHIO.

PACKING-RING.

No. 832,816. Specification of Letters Patent. Patented Oct. 9, 1906.

Application filed April 19, 1906. Serial No. 312,625.

To all whom it may concern:

Be it known that I, OTIS Q. SELLERS, a citizen of the United States, residing at Wellston, in the county of Jackson and State of Ohio, have invented a new and useful Packing-Ring, of which the following is a specification.

This invention relates to journal-bearings and the like, and has for its object to provide for the convenient introduction of a packing-ring into a journal-bearing and to provide for preventing creeping of the packing under the influence of the rotary movement of the journal.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claim.

In the drawings, Figure 1 is a longitudinal sectional view of a car-wheel hub equipped with packing-rings of the present invention. Fig. 2 is a cross-sectional view on the line 2 2 of Fig. 1. Fig. 3 is a detail perspective view of the packing-ring embodying the features of the present invention. Fig. 4 is a plan view of the liner member of the packing-ring.

Like characters of reference designate corresponding parts in all of the figures of the drawings.

While the present invention is useful in many relations, it has been shown in connection with a mine-car wheel, a conventional form of hub being shown at 1 in Fig. 1 and provided with the usual spindle-receiving opening 2 for the reception of the spindle 3 of a car-axle 4. Lubricant may be fed to the bearing in any suitable manner—say, for instance, from an annular oil-chamber 5 in the hub—by means of an absorbent 6, seated in an opening 7, extending from the oil-chamber to the spindle-opening of the hub. If desired, the inner end of the absorbent may be held in a cap or case 8, snugly fitted in the opening 7 and provided with perforations 9, through which the lubricant is adapted to have access to the spindle. The oil-chamber is capable of being filled through an opening 10, which pierces one face of the hub and has a branch 11 communicating with the oil-chamber. A spring-pressed valve or closure 12 is employed in the opening 10, there being an open-ended thimble or bushing 13 threaded into the outer end of the opening 10, so as to form a valve-seat for the valve 11. Although a specific means for feeding oil to the bearing has been shown, it will of course be understood that any approved means may be employed.

In carrying out the present invention an annular channel 14 is formed in the walls of the spindle-opening 2, and an opening 15 is drilled through the adjacent end of the hub so as to intersect the back of the channel. The packing-ring for introduction into the channel consists of a yieldable strip 16, preferably of leather, which has its ends reversely notched, as at 16′ and 17, so as to form a break-joint engagement between the ends of the strip when the leather is folded into the form of a ring. When folded into a ring, the leather element is introduced into a split metallic band 18, to which it is connected in any suitable manner—for instance, by fastenings, such as rivets 19—care being taken to have the joint of the leather liner element 16 disposed somewhat remote from the joint or space between the ends of the metal band. One end of the metallic band is directed outwardly so as to form an ear or projection 20.

In practice the free end of the liner element is sprung out of engagement with the other end, as indicated by dotted lines in Fig. 3 of the drawings, whereupon the entire packing element may be compressed and forced into the open end of the spindle-opening 2 until it comes into alinement with the channel 14, whereupon the ring will spring out and fit snugly within the channel. In introducing the packing-ring into the spindle-opening care should be taken to have the projection 20 in alinement with the opening 15 in order that said projection may be received within the seat or recess formed by this opening, and thereby prevent creeping of the packing-ring under the influence of the rotary movement of the spindle. The preventing of creeping of the packing-ring is a very important feature of the present invention, as it prevents wearing of the sides of the ring against the sides of the channel.

Having thus described the invention, what is claimed is—

A journal-bearing having an internal annular channel provided with a seat extending at right angles thereto, a flat spring-band having one end provided with an external projection, and a split liner element connect-

ed to the band and having one end projecting beyond that end of the band having the projection thereon, the other end of said liner terminating short of the other end of the band, the projecting portion of the liner being disposed beneath the projecting end of the band and the band and liner being located within the channel, the projection on the band being sprung into the seat and said band and its projection being entirely surrounded by the bearing.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

OTIS Q. SELLERS.

Witnesses:

C. F. CARTWRIGHT,

BARNEY SCHAVEL.