No. 737,404. PATENTED AUG. 25, 1903.

W. T. HARRISON.

CLAMP.

APPLICATION FILED FEB. 12, 1903.

NO MODEL.

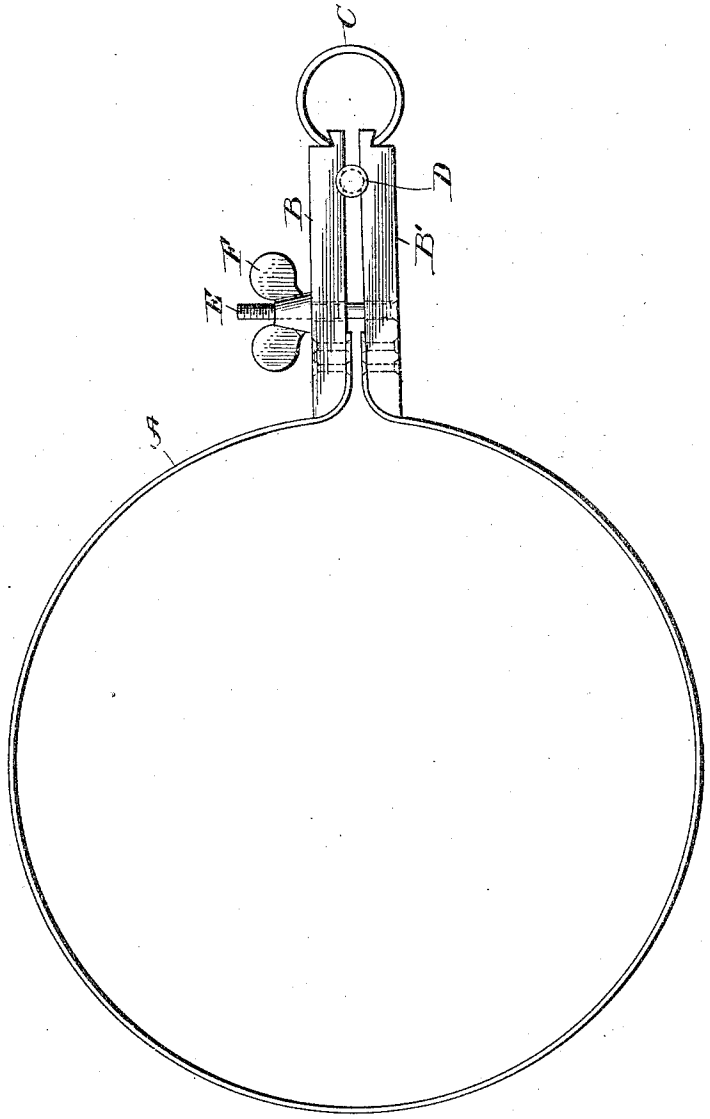


Fig. 1.



Fig. 2.

Witnesses
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No. 737,404. Patented August 25, 1903.

UNITED STATES PATENT OFFICE.

WILLIAM T. HARRISON, OF WOODLAWN, ALABAMA.

CLAMP.

SPECIFICATION forming part of Letters Patent No. 737,404, dated August 25, 1903.

Application filed February 12, 1903. Serial No. 143,117. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM T. HARRISON, a citizen of the United States, residing at Woodlawn, in the county of Jefferson and State of Alabama, have invented certain new and useful Improvements in Clamps, of which the following is a specification.

My present invention pertains to improvements in clamps designed more especially for holding packing-rings preparatory to their being placed in a lathe.

The invention will be best understood upon reference to the accompanying drawings, wherein—

Figure 1 is a side elevation of the clamp, and Fig. 2 a top plan or edge view thereof.

The object of my invention is to provide a suitable clamp in which a packing-ring may be properly held as it is inserted into the chuck of a lathe preparatory to turning the same.

After a packing-ring has been turned to a diameter slightly greater than that of the cylinder in which it is designed to work a gap is cut in the same. The ring is then placed within the clamp shown in the accompanying drawings and the ends drawn together, so that the gap is closed. The clamp being flexible allows the packing-ring to retain its natural shape, which is slightly elliptical or oblong, the greatest diameter being through the gap. The packing-ring thus held by the clamp in its natural shape is secured in a chuck, after which the clamp is removed and the ring re-turned. After re-turning to the diameter of the cylinder the periphery of the packing-ring will of course be a true circle, with the gap closed.

Referring to the drawings, A denotes a flexible band or strap, formed of flat spring-steel, wire, or other suitable material, the ends thereof being secured to the jaws or levers B B′ by rivets or in any other suitable manner. The jaws are normally held in their proper relation by a spring C. A pivotal fulcrum-block D is placed between the jaws near their outer ends, and a bolt E is secured to one jaw and passes through an opening in the opposite jaw, a nut F being mounted upon the outwardly-extending end thereof.

It is obvious, of course, that the construction of the clamp may be varied without departing from the spirit of my invention—for instance, the jaws or levers B B′ and the spring C might be made as one integral structure, thus dispensing with the pivotal fulcrum-block.

The use of the device is apparent from the foregoing description and explanation.

By employing a clamp constructed in accordance with my invention a ring is allowed to take its natural spring upon being closed preparatory to re-turning. When closed in this manner and turned to the exact diameter of the cylinder in which it is to work, a perfect fit is secured at the start, which is not the case when the ordinary method of manufacturing packing-rings is employed.

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

1. In a device of the character described, the combination of a flexible band or strap; a pair of levers secured to the ends thereof; a pivot for said levers intermediate their ends; a spring for rocking said levers about their pivotal point or fulcrum and normally expanding the band or strap; and means for drawing said levers together, whereby the diameter of the circle described by the band or strap may be reduced, substantially as and for the purpose set forth.

2. In a device of the character described, the combination of a flexible band or strap; a pair of levers B, B′ secured to the ends thereof; a pivot or fulcrum block D mounted intermediate the levers near their outer ends; a spring C acting upon the outer ends of the levers and tending to force the opposite ends apart; a bolt secured to one of said levers and passing loosely through the other; and a nut mounted upon the outer end of said bolt, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM T. HARRISON.

Witnesses:
H. W. COFFIN,
P. G. AULT.