T. J. CORRIGAN.

BUSHING REMOVING DEVICE.

APPLICATION FILED JUNE 5, 1920.

1,403,546. Patented Jan. 17, 1922.

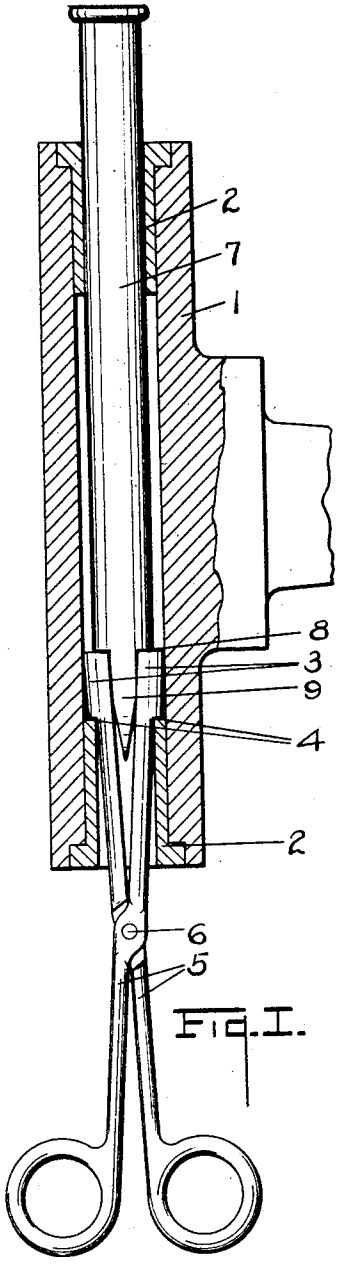


FIG. I.

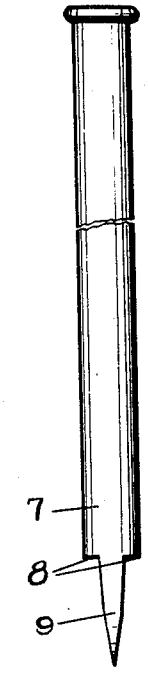


FIG. II.

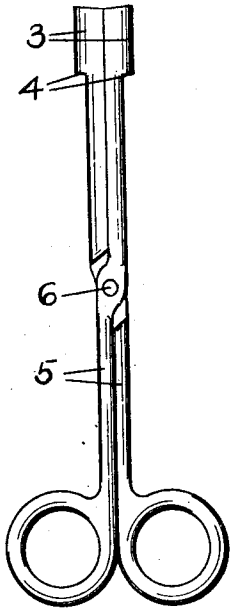


FIG. III.

Inventor

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Witnesses

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UNITED STATES PATENT OFFICE.

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BUSHING-REMOVING DEVICE.

1,403,546. Specification of Letters Patent. **Patented Jan. 17, 1922.**

Application filed June 5, 1920. Serial No. 386,747.

To all whom it may concern:

Be it known that I, THOMAS J. CORRIGAN, a citizen of the United States, residing at Houghton Lake, county of Roscommon, State of Michigan, have invented certain new and useful Improvements in Bushing-Removing Devices, of which the following is a specification.

This invention relates to improvements in bushing removing devices.

Repair shops and garages have experienced a good deal of difficulty in removing worn bushings from bearings such as the spindle bearings of motor vehicles.

It is the main object of my invention to provide:

First, an improved device for removing bushings which is very efficient.

Second, an improved device for removing bushings which is simple and compact in structure and easily manipulated.

Further objects and objects relating to structural details will definitely appear from the detailed description to follow.

I accomplish the objects of my invention by the devices and means described in the following specification. The invention is clearly defined and pointed out in the claim.

A structure which is a preferred embodiment of my invention is clearly illustrated in the accompanying drawing forming a part of this specification, in which:

Fig. I is a vertical central section through a spindle bearing in which my improved bushing removing device is arranged as in use.

Fig. II is a detail side elevation of my improved device.

Fig. III is a side elevation of the impact member.

Referring to the drawing, 1 represents the knuckle of a motor vehicle spindle and 2 the bushing therein. In Fig. I, I illustrate the manner of using my device. The impact members 3 are shouldered at 4 to engage or rest upon the inner end of the bushing. The impact members have handles 5 which in the structure illustrated are crossed and pivoted at 6 so that the impact members may be collapsed together as shown in Fig. III, introduced through the bushing and spread out so that their driving shoulders 4 engage the inner end of the bushing.

The driving member 7 has driving shoulders 8 adapted to engage the inner ends of the impact members. The driving member has a wedge-like supporting member 9 which extends between the impact members holding them in driving engagement with the bushing. With the parts arranged as in Fig. I, the impact members can not slip from the bushing but are held therein so that the bushing may be driven out by blows upon the driving member.

Experience has demonstrated that even badly worn bushings are effectively engaged by the impact members and may be driven out without any injury whatever to the bearing. The bushings are removed without injuring them which is of advantage in the event that the bushings removed are capable of further use as bushings.

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

In a device of the class described, the combination of a pair of impact members provided with handles pivotally connected intermediate their ends and provided with grip portions at their outer ends so that the handles may be swung on their pivot to bring the impact members together, permitting their introduction through a bushing and spread and manipulated to engage the inner end of a bushing, and a driving member adapted to engage the inner ends of the impact members and having a wedge-like supporting member projecting between the impact members to retain them in driving engagement with the bushing.

In witness whereof, I have hereunto set my hand and seal in the presence of two witnesses.

THOMAS J. CORRIGAN. [L. S.]

Witnesses:
H. J. CROZIERA,
R. R. CHAMBERS.