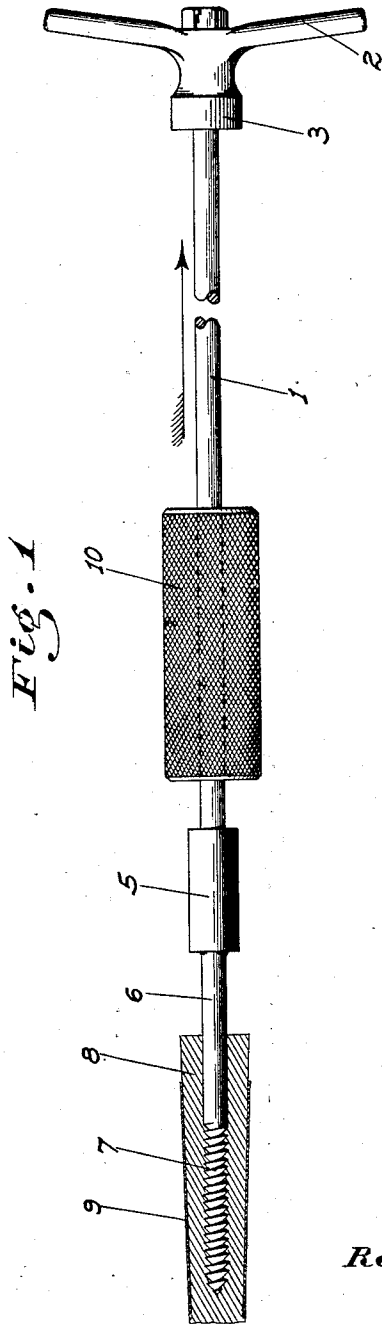
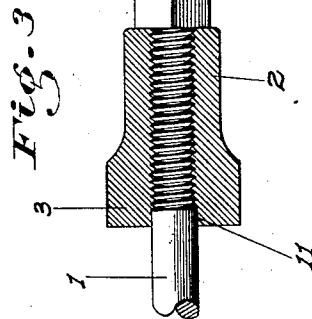
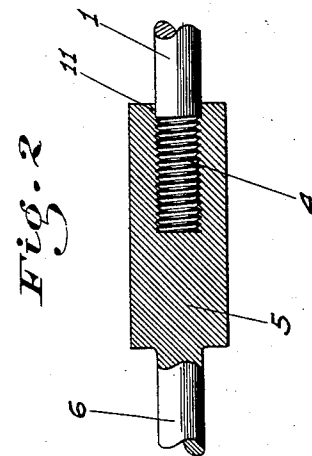


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R. B. RICHMOND ET AL
AUTO TOP SOCKET BOW PULLER

Filed Aug. 20, 1923



INVENTORS
*Rexford B. Richmond &
Richard H. Dodd*
BY *Benjamin Webster* ATTORNEY

UNITED STATES PATENT OFFICE.

REXFORD B. RICHMOND AND RICHARD H. DODD, OF STOCKTON, CALIFORNIA.

AUTO TOP SOCKET BOW PULLER.

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This invention relates to a device to be used in connection with the repair of automobile top-frames or supports.

These frames consist of the vertical tubular metal uprights attached to the sides of the car, and the wooden bows extending across the car on which the top is supported, the bows being attached to the uprights by tightly socketing the same therein.

When it is necessary to replace the wooden bows for any reason, it has heretofore been a hard matter to remove the portion of the wood remaining in the metal socket without considerable effort and time and possible damage to the metal members.

The principal object of our invention therefore is to provide a device by means of which the wooden stubs may be quickly and easily removed from their sockets, without the possibility of damage to the metal parts.

A further object of the invention is to produce a simple and inexpensive device and yet one which will be exceedingly effective for the purposes for which it is designed.

These objects we accomplish by means of such structure and relative arrangement of parts as will fully appear by a perusal of the following specification and claim.

In the drawings similar characters of reference indicate corresponding parts in the several views:

Fig. 1 is a side view, foreshortened, of the device as applied to extract a stub, and

Figs. 2 and 3 are enlarged fragmentary sections of different portions of the device.

Referring now more particularly to the characters of reference on the drawings, the numeral 1 denotes a straight rigid metal bar or rod, preferably circular and provided at one end with a suitable handle 2, whereby the rod may be turned or held preferably removably screwed onto the rod, the inner end of the handle being provided with an abrupt shoulder 3 which forms a stop-block for the purpose hereinafter set forth.

The other end of the rod is threaded as at 4 to removably screw into a block 5, also forming a stop member, on the opposite end of which block is provided a shank 6 having a screw 7 of suitable form at its outer end adapted to be turned into the wooden bow-stub 8 socketed into the tubular metal member 9 of a top-frame.

Freely slidably mounted on the rod 1 is

a heavy plunger 10, preferably of cylindrical form and nurlled as shown so as to provide a good gripping surface for the operator.

To prevent possible breakage of the rod at its threaded ends, where the strength is the least, the members 3 and 5 extend outwardly of the threads for a certain distance as shown at 11.

In operation the screw 7 is placed against the outer end of the wood portion 8, the socket member 9 being held in a suitable manner while the rod 1 is held in direct alinement with said socket member.

If desired and necessary, the initial entry of the screw into the wood is had by moving the weight or plunger 10 toward the handle end of the rod, and then giving it a swift impulse in the opposite direction, which will cause the plunger to sharply contact with the stop 5, which of course will have the same effect on the screw as if the latter were struck on the head with a hammer. The screw once started into the wood, it is then screwed into the same, the distance judged necessary by the operator by turning the handle 2. With the socket member still held in any suitable manner, the plunger is grasped in one hand, and after being moved to a point adjacent the block 5, is then moved sharply in the opposite direction so as to cause it to forcefully engage the stop 3. This operation, repeated as many times as may be necessary, will cause the wood to be withdrawn from its socket without any damage to or distortion of the latter, and with but very little physical exertion on the part of the operator being necessary.

The mass of the plunger is evenly distributed about the rod, so that the blow or shock imparted to the rod is taken by the latter in a truly axial direction, instead of part of the force being expended in a transverse or lateral direction which would tend to bend or twist both the rod and the parts being worked on.

The screw member being removable from the main rod member, permits of an assortment of varied sizes or types of screws being applied to the same instrument.

Also, the plunger being removable upon removing the screw member, said plunger may be left off in the event that its use on any particular job is not necessary.

From the foregoing description it will be

readily seen that we have produced such a device as substantially fulfills the objects of the invention as set forth herein.

5 While this specification sets forth in detail the present and preferred construction of the device, still in practice such deviations from such detail may be resorted to as do not form a departure from the spirit of the invention, as defined by the appended claim.

10 Having thus described our invention what we claim as new and useful and desire to secure by Letters Patent is:

15 A device for use in removing wooden elements from metal sockets, comprising the combination of a rod having a screw-thread at one terminal for entry into the wood

within the socket, a handle at the opposite terminal of the rod for use in screwing the threaded terminal into the wood, an abutment on the rod adjacent the handle terminal, and a sliding hammer weight on the rod between the screw-thread and the abutment whereby when the screw-threads have been embedded in the wood the hammer weight may be operated against the abutment to cause the rod to pull the wood from the socket. 20 25

In testimony whereof we affix our signatures.

REXFORD B. RICHMOND.
RICHARD H. DODD.