

Nov. 18, 1924.

1,516,438

F. R. INSKIP

IMPLEMENT FOR SCOURING RIFLED FIREARMS

Filed April 28. 1923

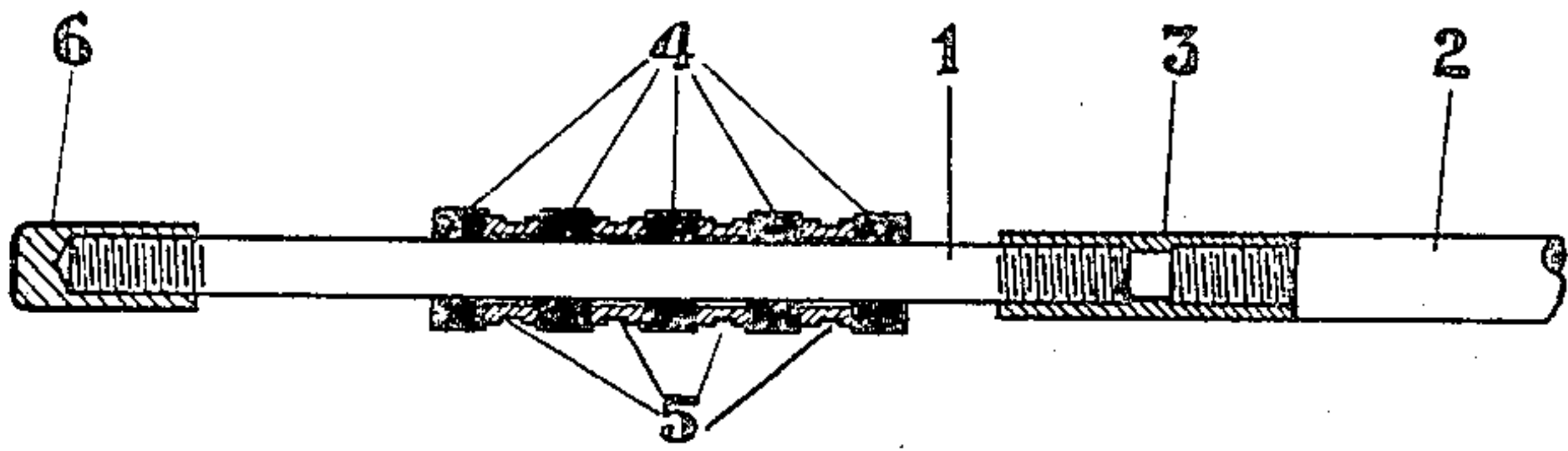


Fig 1.

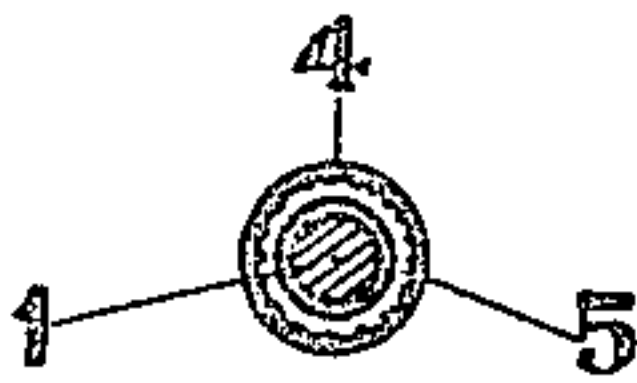


Fig 2.

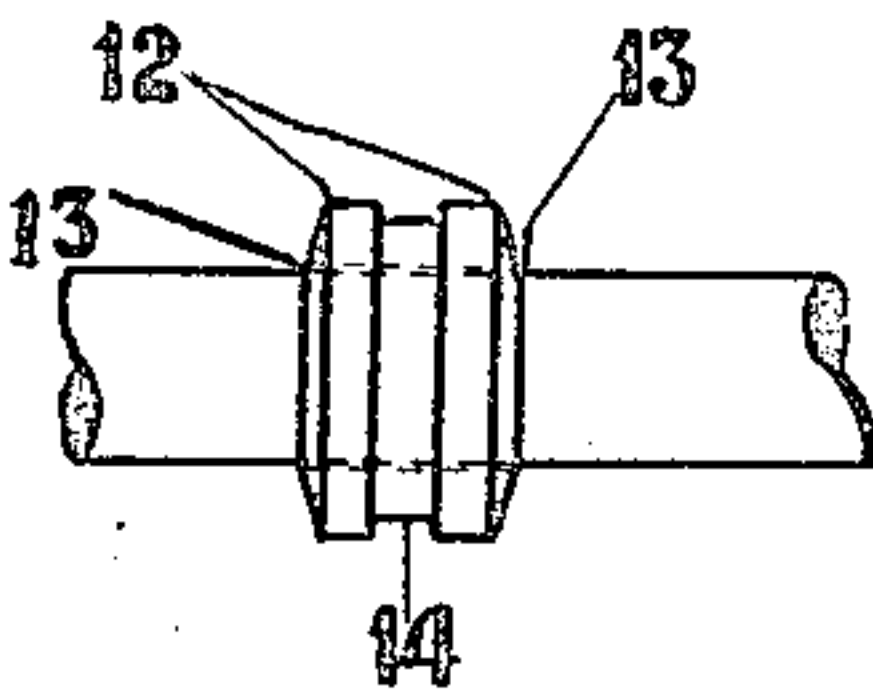


Fig 3.



Fig 4.

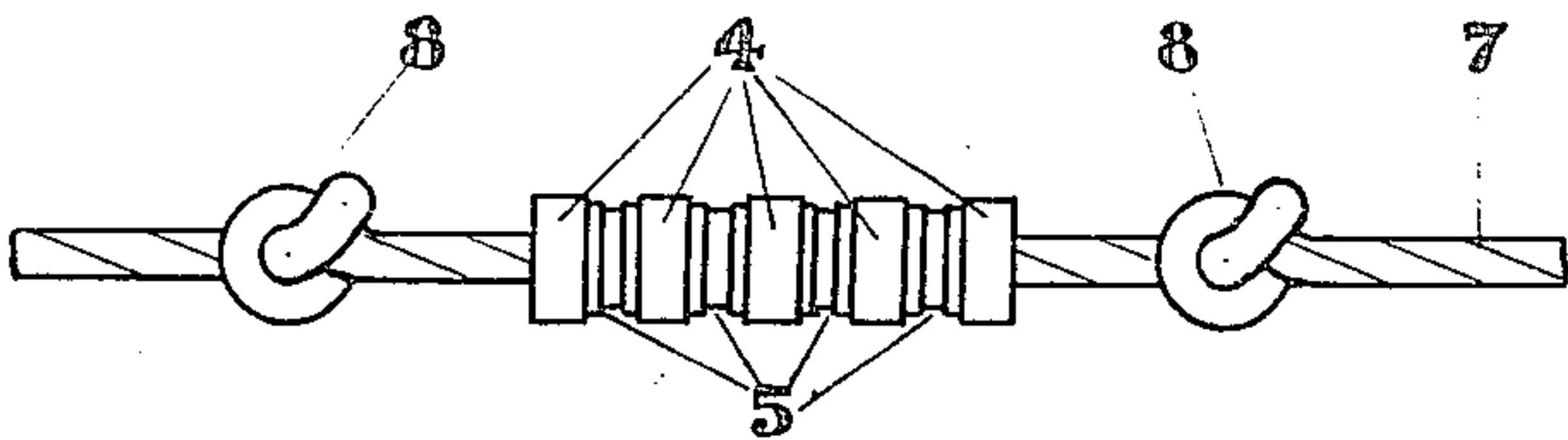


Fig 5.

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FRANCIS REGINALD INSKIP, OF MELBOURNE, VICTORIA, AUSTRALIA, ASSIGNOR OF ONE-HALF TO STANLEY EDWARDS, OF MELBOURNE, VICTORIA, AUSTRALIA.

IMPLEMENT FOR SCOURING RIFLED FIREARMS.

Application filed April 28, 1923. Serial No. 635,315.

To all whom it may concern:

Be it known that I, FRANCIS REGINALD INSKIP, subject of the King of Great Britain, residing at Melbourne, Victoria, Australia, have invented certain new and useful Improvements in Implements for Scouring Rifled Firearms, of which the following is a specification.

My invention relates to improvements in implements for removing metal and other fouling from rifled firearms and for simultaneously burnishing the bore of the firearms. These purposes are herein referred to as scouring rifled firearms. The objects of my improvements are first to provide scouring means which will be firmly and uniformly pressed into the grooving of the rifle and which will rotate and follow the grooving as the implement is forced along the bore and second to enable an axial blow to be struck upon the scouring means when such means become jammed in the bore.

I attain these objects by the mechanism illustrated in the accompanying drawing, in which:—

Fig. 1 is a longitudinal section of the implement;

Fig. 2 is an end view showing the rod in section;

Fig. 3 is an enlarged side view of a beveled washer collar;

Fig. 4 is a side view of a modified detail; and

Fig. 5 is a side view of a modified form of the implement.

Similar numerals refer to similar parts throughout the several views.

A rod of metal 1 adapted to be attached to the end of a cleaning rod 2 by a screw threaded union 3 or otherwise, is provided, (1) with a series of short sliding scouring collars 4 of leather, or other known material suitable for such scouring and (2) with a series of loosely fitting washer collars 5 of metal, or other known suitable hard material, placed between these scouring collars. To retain the scouring collars and washer collars on the rod and to limit their sliding movement, the union 3, or the inner end of the rod itself, is made of larger diameter than the main portion of the rod while a retaining cap 6 of larger diameter than the rod is screwed, or otherwise firmly attached, to the outer end of the rod. If preferred other known suitable forms of abutments

may be used in place of the cap and the union or enlarged inner end of the rod. The rod is constructed of brass, or other metal or strong rigid material known to be suitable for this class of manufacture. The washer collars are preferably slightly beveled at their ends from their outer edges 12 (Fig. 3) to their inner edges 13. A peripheral groove 14 is preferably provided on each washer collar.

The washer collars are made of smaller diameter than the inner bore of the firearm and the scouring collars are made of such diameter as to expand radially under axial pressure to a diameter greater than the inner diameter of the bore. Preferably, the scouring collars fit tightly within the bore when unexpanded. Normally each scouring collar is one eighth to one quarter of an inch ($\frac{1}{8}$ "— $\frac{1}{4}$ ") in length while the corresponding dimension of the washers is approximately one eighth of an inch ($\frac{1}{8}$ "). Preferably five (5) or six (6) scouring collars and four (4) or five (5) washer collars are used in practice and their total combined length is about half the length of the slide portion of the rod.

These preferred dimensions relates to an implement for use with an ordinary service rifle, but the diameter and other dimensions of the parts of the implement may be varied to suit different types of rifle firearms.

In operation of the invention, the cleaning rod with the implement attached is forced along the bore of the firearm and, more especially when the outermost scouring collar strikes an obstruction, the scouring and washer collars are forced back against the abutment formed by the union or the enlarged inner end of the rod. Both the force of the impact and the steady axial pressure cause the scouring collars to be compressed longitudinally between the washer collars with the result that they are expanded radially and forced under considerable pressure into the grooving of the firearm. When the cleaning rod is withdrawn along the bore, the scouring and washer collars are correspondingly forced against the outer abutment formed by the cap. It will thus be seen that the more firmly seated the obstruction may be, the greater will be the radial pressure of the scouring collars on the rifle grooving and, if the collars become jammed, a backward and/or forward blow may be

delivered with the cleaning rod. The radial expansion of the scouring collars is increased if the washer collars are beveled as described in relation to Figure 3. The groove 14 as-
 5 sists to accommodate fouling removed by the scouring collars and to facilitate clearance if the scouring material should tend to work over onto the edges of the washers.

The construction of the scouring material
 10 in separate short lengths enables it to rotate and follow the grooving much more readily than would be the case with a single long length and with this object the surface of the rod as well as the inner, outer,
 15 peripheral and axial surfaces of the washers and scouring collars are made substantially smooth and uniform.

In the modification shown in Fig. 4, the union and cap abutments 3, 6 are replaced
 20 by cap hook abutments 9 on which a hook 10 is provided so that, instead of utilizing a cleaning rod, a loop on a pull-through cord or wire may be attached to the imple-
 25 ment—preferably one to each end of the imple-

In the modification shown in Fig. 5 the rod 1 and abutments 3, 6 are replaced by a cord or wire 7 having knots or other abut-
 30 ments 8.

As a further modification, it will be ob-
 35 vious that, while a series of collars is preferred, some of the advantages of the invention could be obtained with a single length of scouring material—either slidable
 5 or partially fixed in position—in combination with an abutment, or abutments, and one or more slidable washer collars.

Such modifications, however, would nor-
 40 mally be attended by greatly decreased ef-

The term "automatically slidable" is used hereafter to mean: substantially slidable under the combined action of the axial thrust of the implement and the friction of the
 45 scouring material on the inner surface of the barrel of the fire-arm.

I claim:

1. An implement, for scouring firearms, comprising a rod, stop faces thereon, a plu-
 5 rality of radially expansible scouring elements and a plurality of automatically slidable compression members axially alined on said rod, the said members being alternately disposed with said elements and between
 10 said stop faces.

2. An implement, for scouring firearms,

comprising a slide-rod having end abut-
 60 ments, concentrically apertured slidable scouring collars positioned thereon and between automatically slidable washer collars, the rod and washer collars being axially
 65 alined.

3. The combination in an implement for scouring rifled firearms, of a slide rod hav-
 70 ing end abutments, with slidable scouring collars positioned on the rod between slid-
 75 able beveled washer collars.

4. An implement for scouring rifled fire-
 80 arms provided with a slide rod having a union at one end for attachment to a clean-
 85 ing rod, an abutment formed by one end of the union, a second abutment formed by a cap on the outer end of the rod, a series of
 90 slidable washer collars, and a series of slid-
 95 able scouring collars each positioned alter-
 100 nately with a series of washer collars and of such dimensions that the scouring collars will expand radially under axial pressure to a diameter greater than that of the washer
 105 collars.

5. An implement for scouring rifled fire-
 110 arms provided with a slide rod having an abutment at one end and means for attach-
 115 ment to a cleaning rod, an abutment at the other end formed by a removable cap, a se-
 120 ries of slidable scouring collars and a se-
 125 ries of slidable washer collars interposed between the scouring collars.

6. An implement for scouring rifled fire-
 130 arms provided with a metal slide rod, abut-
 135 ments on the ends of the slide rod, and a series of slidable leather scouring collars in-
 140 terposed between slidable metal washer col-
 145 lars.

7. An implement for scouring rifled fire-
 150 arms provided with a metal slide rod, abut-
 155 ments on the ends of the slide rod, and a series of slidable leather scouring collars in-
 160 terposed between slidable beveled metal
 165 washer collars.

8. An implement, for scouring firearms, provided with elastic scouring elements in-
 170 terposed between compression elements, both the scouring and compression elements be-
 175 ing free to slide and rotate upon a cylin-
 180 drical section of said implement.

In testimony whereof he affixes his signa-
 185 ture.

FRANCIS REGINALD INSKIP.

Witnesses:

L. B. DAVIES,
 JOHN COOK.