

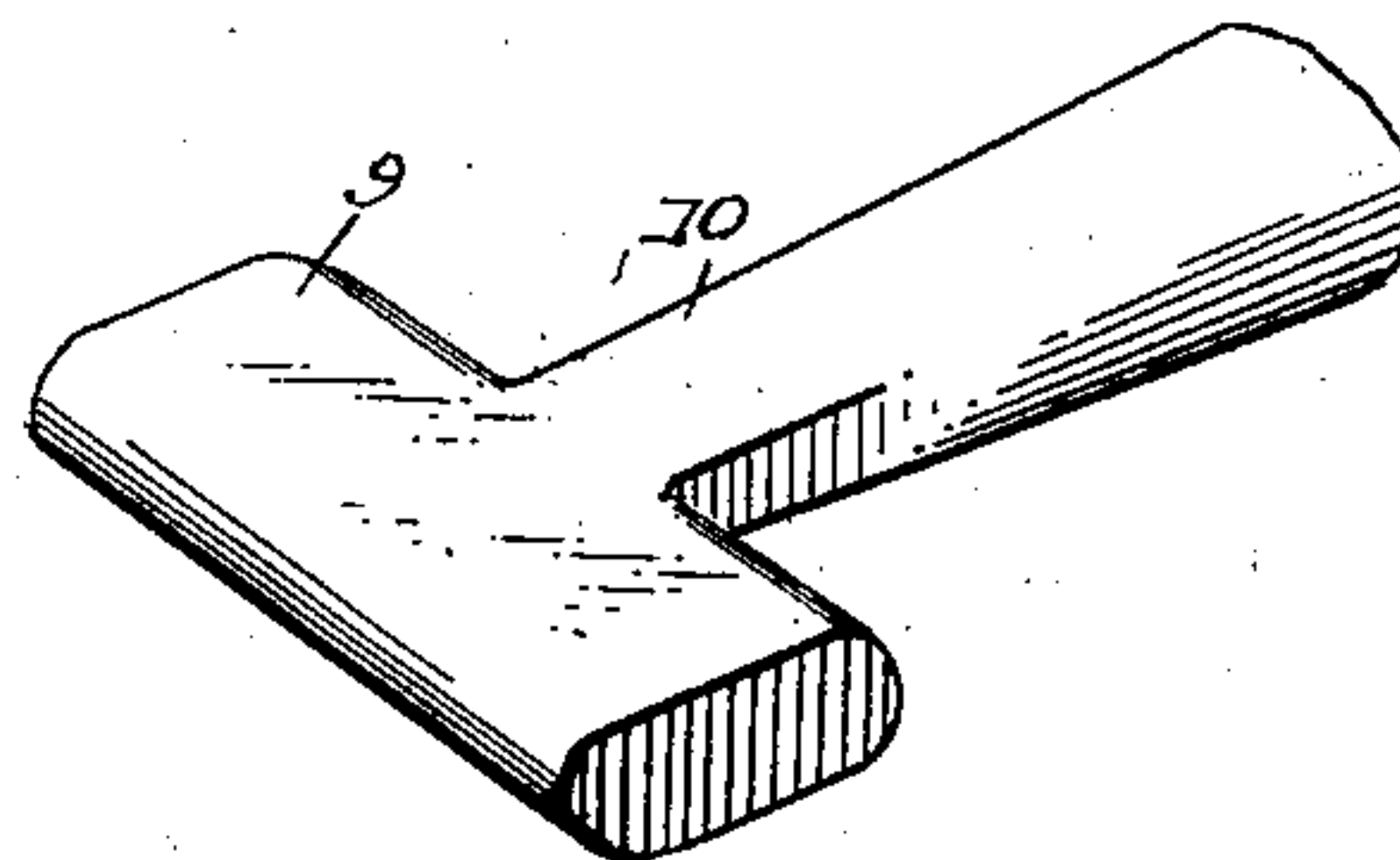
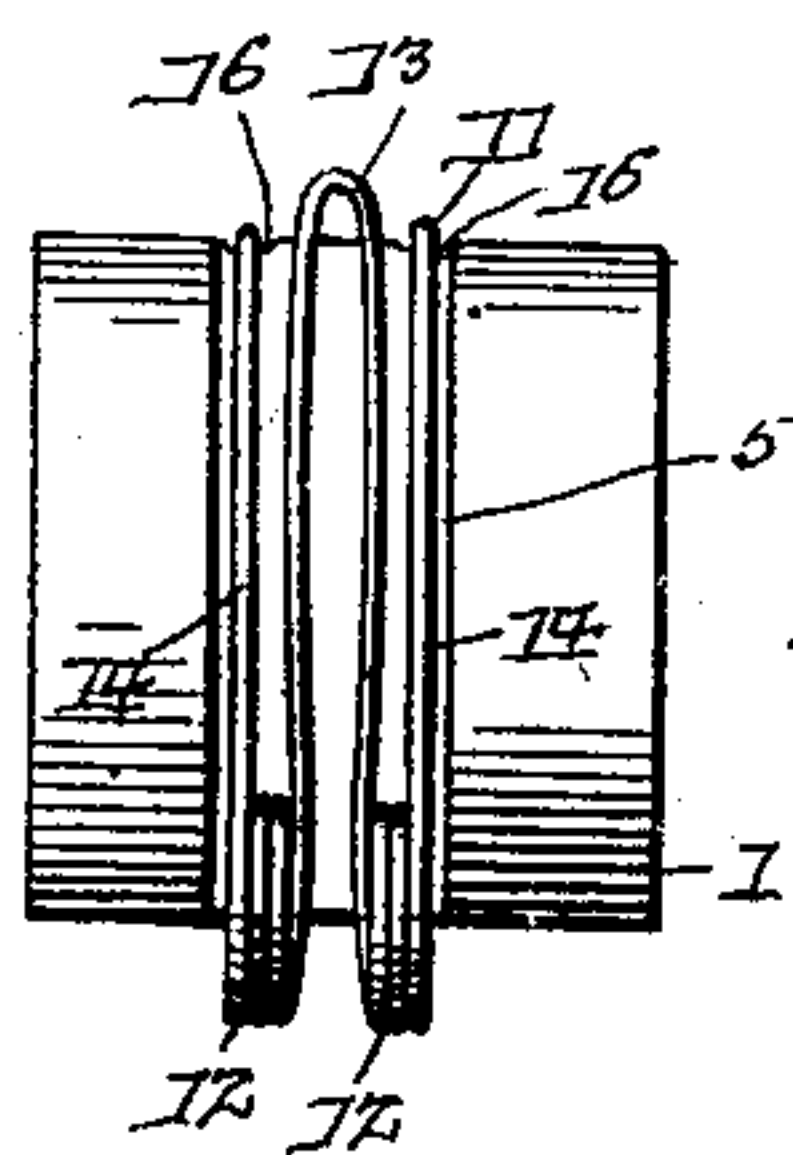
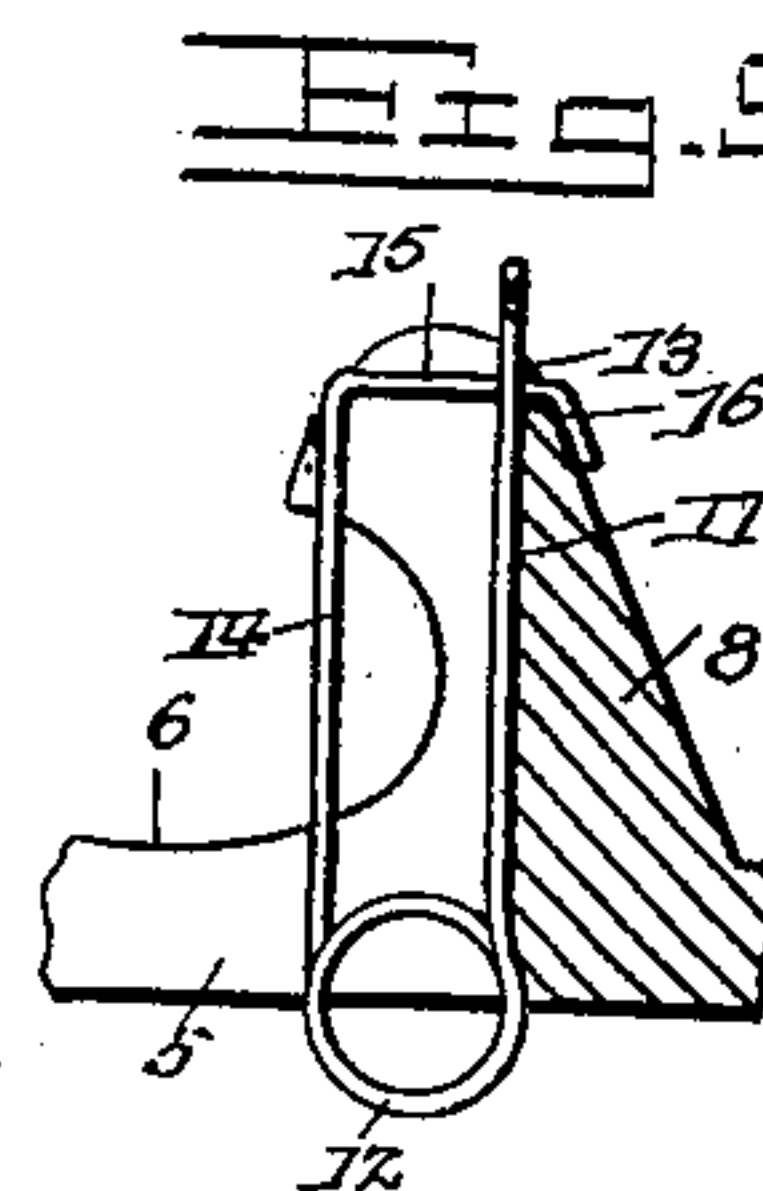
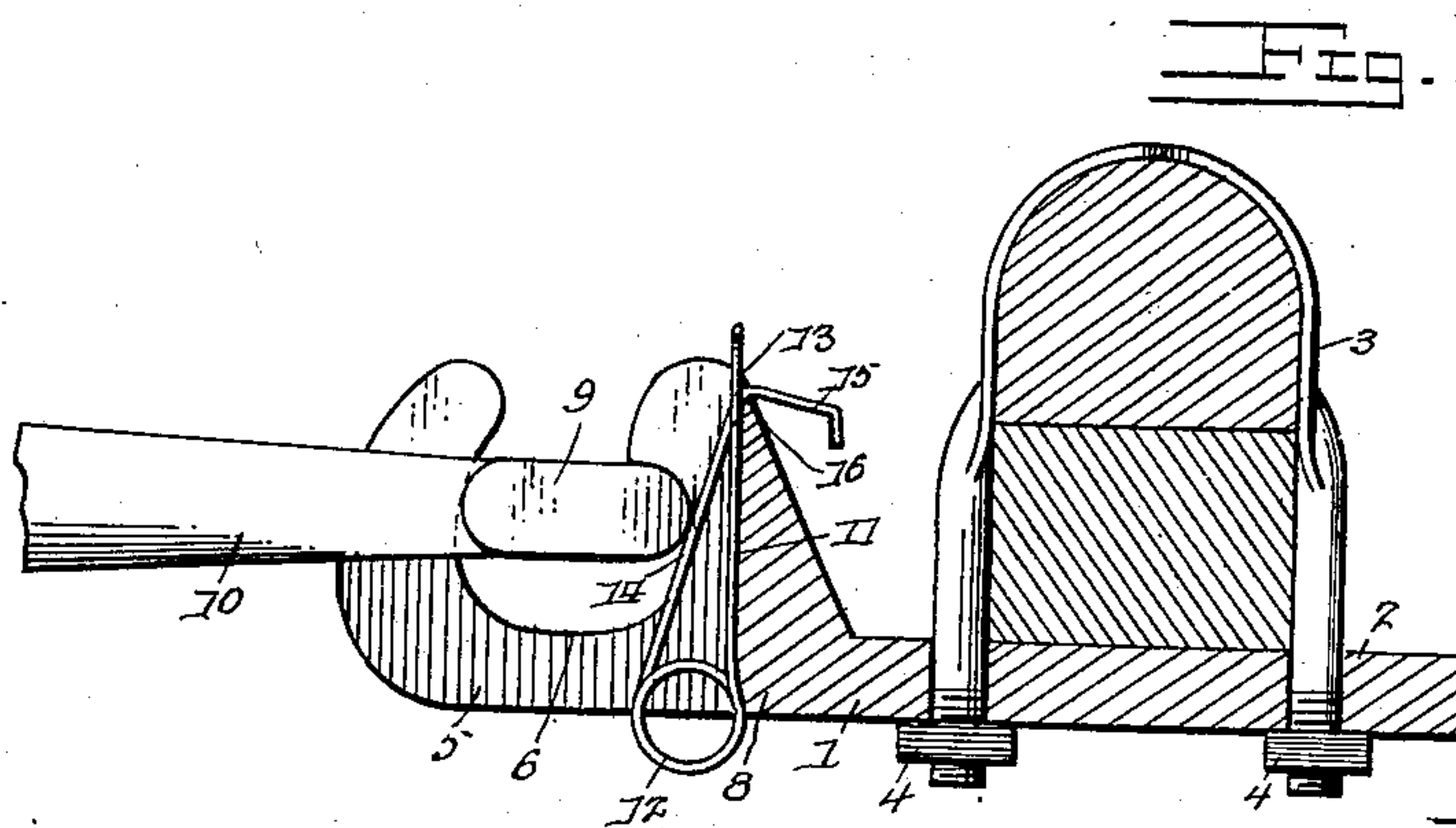
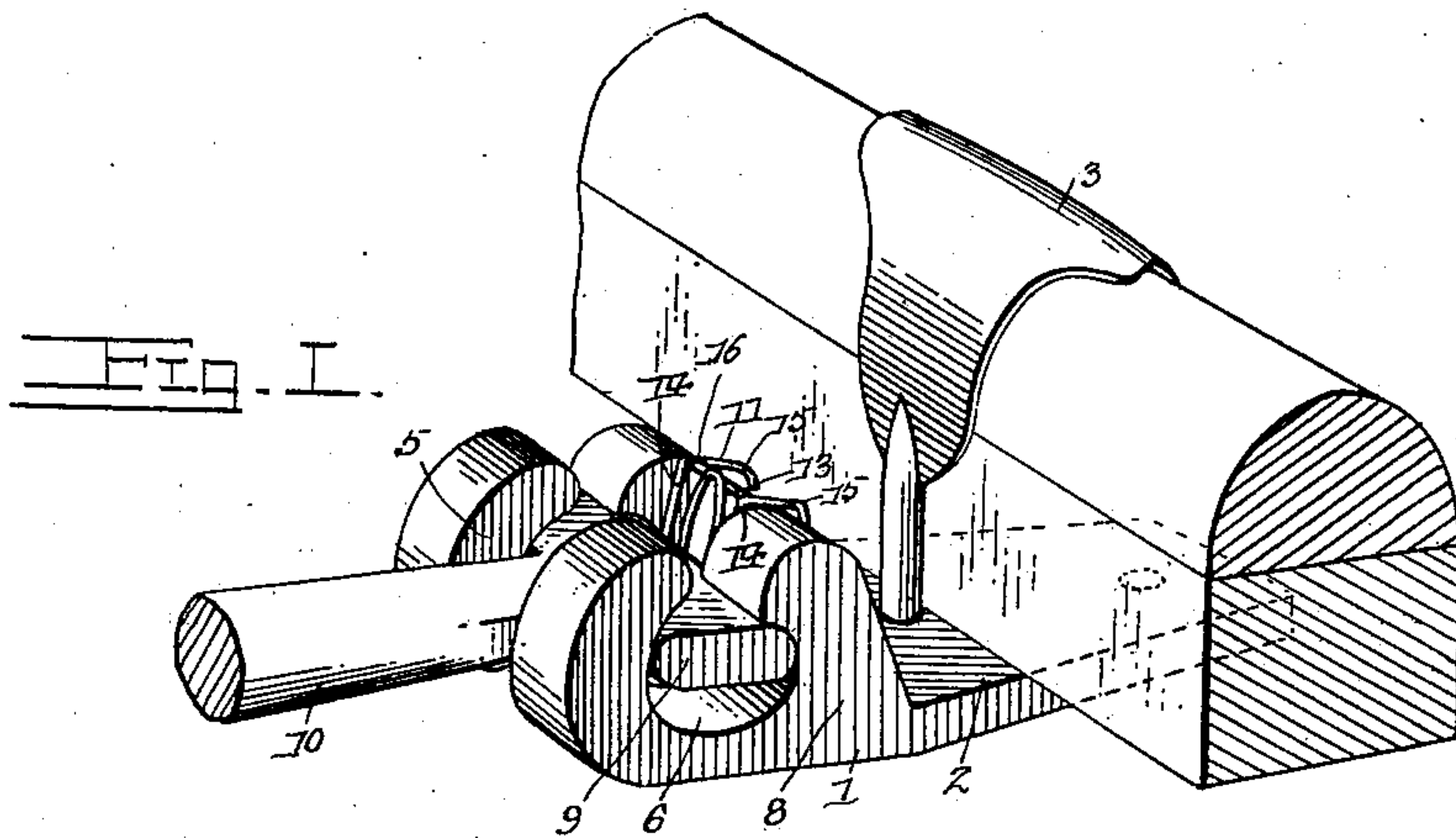
No. 685,412.

Patented Oct. 29, 1901.

G. L. SCHERMERHORN.  
COMBINED THILL COUPLING AND ANTIRATTLER.

(Application filed Jan. 15, 1901.)

(No Model.)



Witnesses:  
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# UNITED STATES PATENT OFFICE.

GORDON L. SCHERMERHORN, OF MEDFORD, OREGON.

## COMBINED THILL-COUPPLING AND ANTIRATTLER.

SPECIFICATION forming part of Letters Patent No. 685,412, dated October 29, 1901.

Application filed January 15, 1901. Serial No. 43,353. (No model.)

*To all whom it may concern:*

Be it known that I, GORDON L. SCHERMERHORN, a citizen of the United States, residing at Medford, in the county of Jackson and State of Oregon, have invented a new and useful Combined Thill-Coupling and Antirattler, of which the following is a specification.

The invention relates to improvements in combined thill-couplings and antirattlers.

The object of the present invention is to improve the construction of combined thill-couplings and antirattlers and to provide a simple, inexpensive, and efficient device adapted to enable poles and thills to be readily attached to and quickly removed from a vehicle without the use of a wrench or other tool and capable of effectually preventing the parts from rattling.

Another object of the invention is to provide for a device of this character an antirattler-spring adapted to retain its position on the bearing-plate when the coupling-iron is detached and capable of being readily removed when desired.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a combined thill-coupling and antirattler constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a detail perspective view of the antirattler-spring. Fig. 4 is a similar view of the coupling-iron. Fig. 5 is a vertical sectional view illustrating the arrangement of the antirattler-spring when the coupling-iron is removed.

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

1 designates a bearing-plate provided with an enlarged front portion and having a flat rear portion 2, forming a clip-plate and provided with perforations for the reception of the sides of an axle-clip 3, and the latter is provided with the usual nuts 4 for engaging the lower face of the bearing-plate. The enlarged front portion of the bearing-plate is provided with a longitudinal bifurcation or

opening 5, and it also has bearing-recesses 6 at opposite sides of the bifurcation or opening, and the sides of the front bearing portion or enlargement of the bearing-plate form substantially hook-shaped arms and extend forward from an upwardly-projecting rear portion or back 8. The bearing-recesses have narrow or contracted entrances at the top to receive a flattened head 9 of a coupling-iron 10, which is designed to be secured to a pole or a pair of thills, and the said head 9 is rounded at its front and rear edges, as clearly illustrated in Fig. 4 of the accompanying drawings, to fit the bearing-surfaces at the front and rear portions of the bearing-recesses of the bearing-plate. The coupling-irons are introduced into the bearing-recesses when they are in an upright position, and when the coupling-iron is swung downward to substantially the position illustrated in Figs. 1 and 2 of the drawings it is securely held in the bearing-recesses and it cannot become accidentally disengaged from the bearing-plate through horse motion. The rear face of the coupling-iron is engaged by an antirattler-spring 11, composed of a pair of spring-coils 12, a central vertical loop 13, extending upward from the inner ends of the coils, and a pair of upwardly-extending sides 14, arranged at the front of the coils, at the ends thereof, and provided at their upper terminals with hooks 15. The hooks 15 are adapted to engage over the back 8 of the enlargement of the bearing-plate, which is provided with notches 16 to receive the hooks, and the central loop bears against the front face of the upwardly-extending rear portion of the enlargement, and the spring is firmly held in position when the coupling-iron is removed, as illustrated in Fig. 5 of the accompanying drawings. The spring is held in this position for the reason that the hooks limit the forward movement of the engaging portions of the spring, and they permit said engaging portions to be readily forced backward, as clearly shown in Fig. 2. The antirattler-spring is placed within the longitudinal slot or bifurcation of the bearing-plate, and the upwardly-extending sides firmly engage the back of the coupling-iron and effectually prevent the parts from rattling. The upwardly-extending rear portion 8 of the



bearing-plate is spaced from the axle to provide a recess or opening to permit the arms or hooks 15 to move rearward when the coupling-iron 10 is introduced in the bearings.

5 It will be seen that the combined coupling and antirattler is simple and comparatively inexpensive in construction, that it will permit a pole or a pair of thills to be readily attached to and detached from a vehicle with-  
10 out the use of a wrench or other tool, and that it will effectually prevent the parts from rattling.

It will be understood, moreover, that the device embodying my invention may be ap-  
15 plied to poles as well as to thills, the construction being equally well adapted to both.

What I claim is—

1. A device of the class described comprising a bearing-plate having an upwardly-extending rear portion and provided in rear of  
20 the same with a recess or opening, a coupling-iron detachably mounted on the bearing-plate, an antirattler-spring interposed between the coupling-iron and the rear portion  
25 of the bearing-plate and composed of spring-coils, a central loop and sides terminating in hooks engaging the rear portion of the bearing-plate and limiting the forward movement of the sides when the coupling-iron is de-

tached and adapted to extend into the said 30 recess or opening, substantially as described.

2. A device of the class described comprising a bearing-plate having an enlarged upwardly-extending rear portion and provided  
35 in rear of the same with an open space or recess, said bearing-plate being also provided with open bearings, a coupling-iron arranged in the open bearing, and an antirattler-spring interposed between the coupling-iron and the  
40 back of the bearing-plate and composed of a central loop bearing against the rear portion of the said bearing-plate, and sides connected with the loop and engaging the coupling-iron and provided with rearwardly-extending  
45 hooks projecting over the rear portion of the bearing-plate and extending into the said open space or recess and arranged to engage the said rear portion of the bearing-plate to  
50 limit the forward movement of the sides when the coupling-iron is detached, substantially as described.

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

GORDON L. SCHIERMERHORN.

Witnesses:

S. S. PENTZ,

A. D. NAYLOR.