

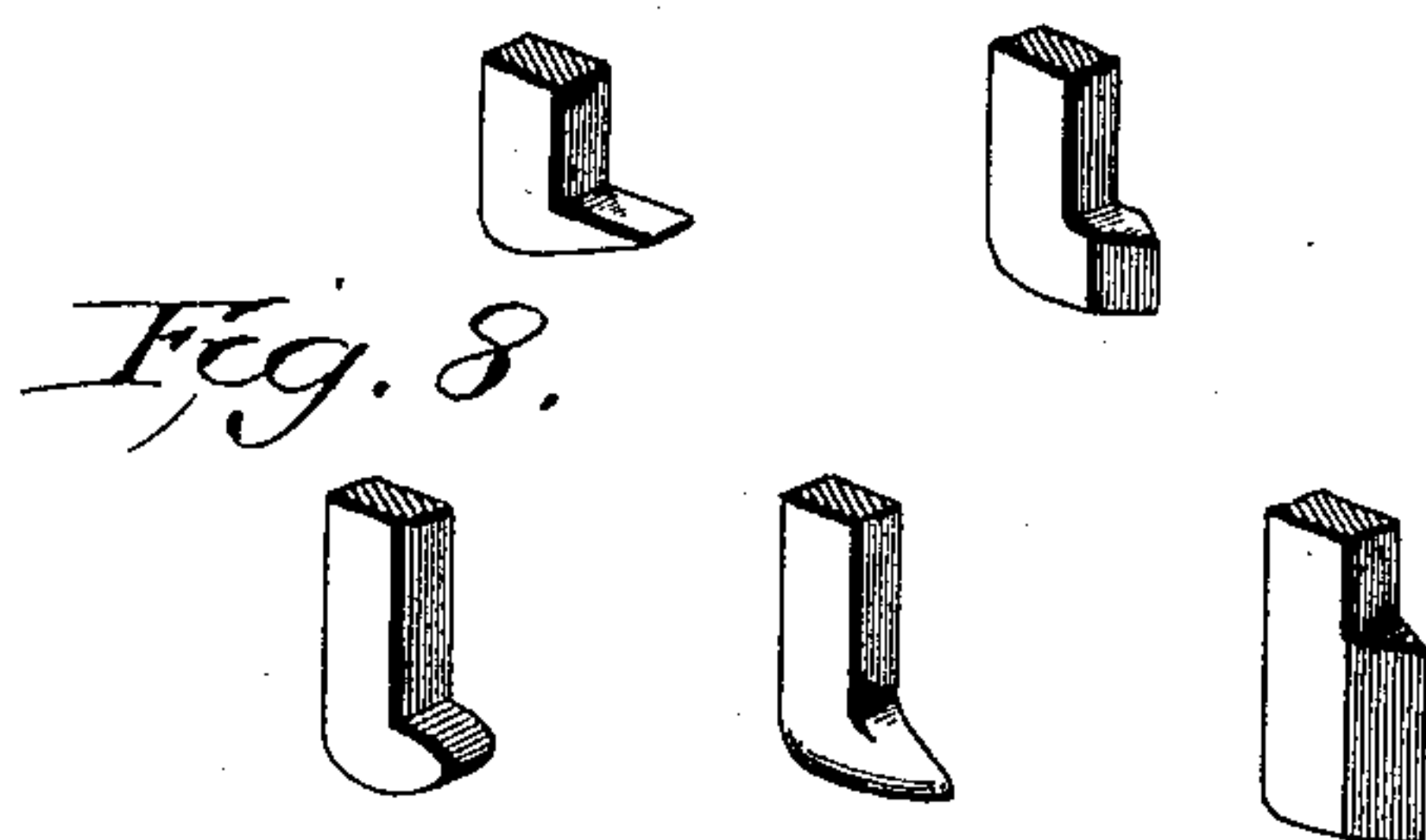
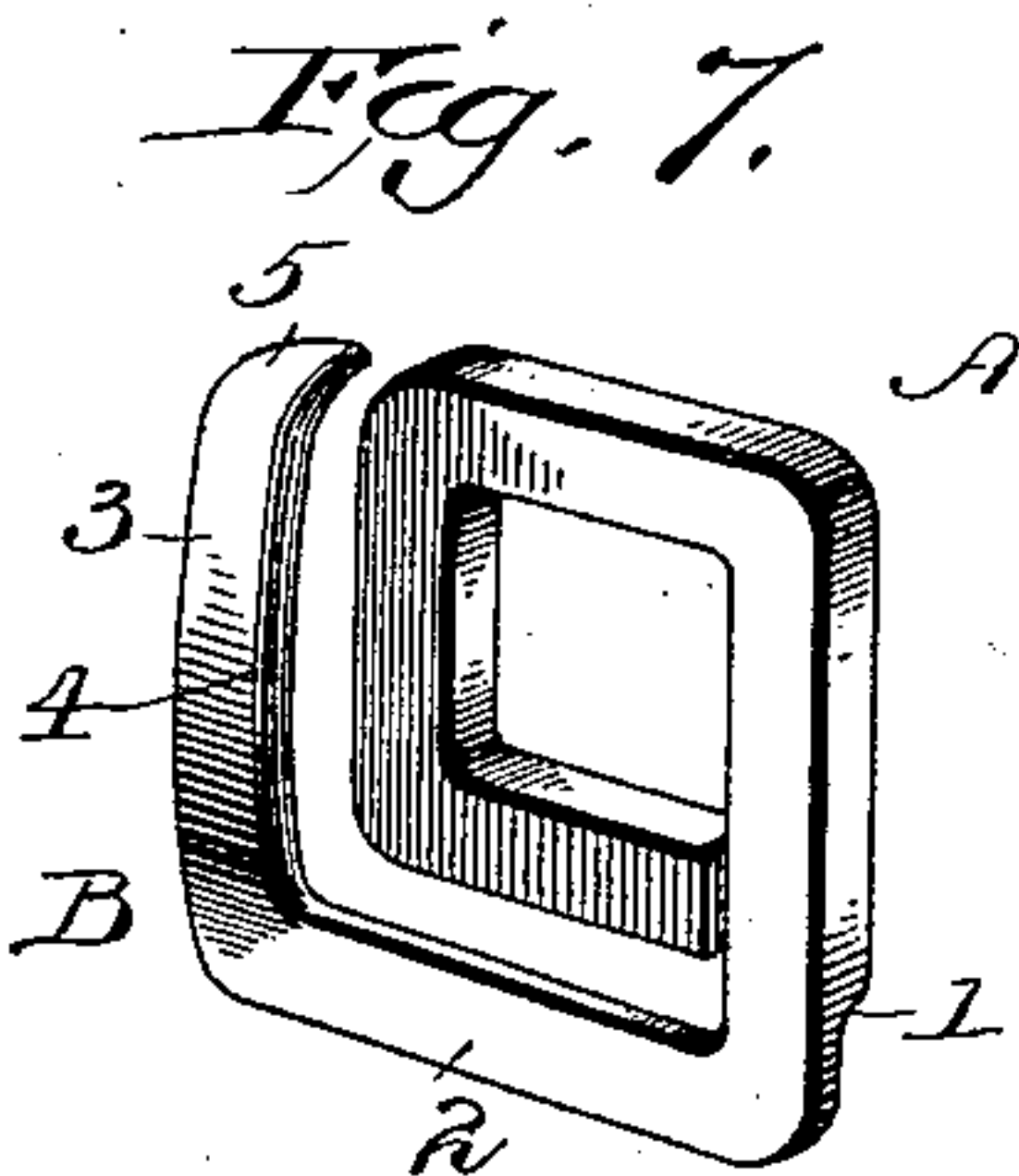
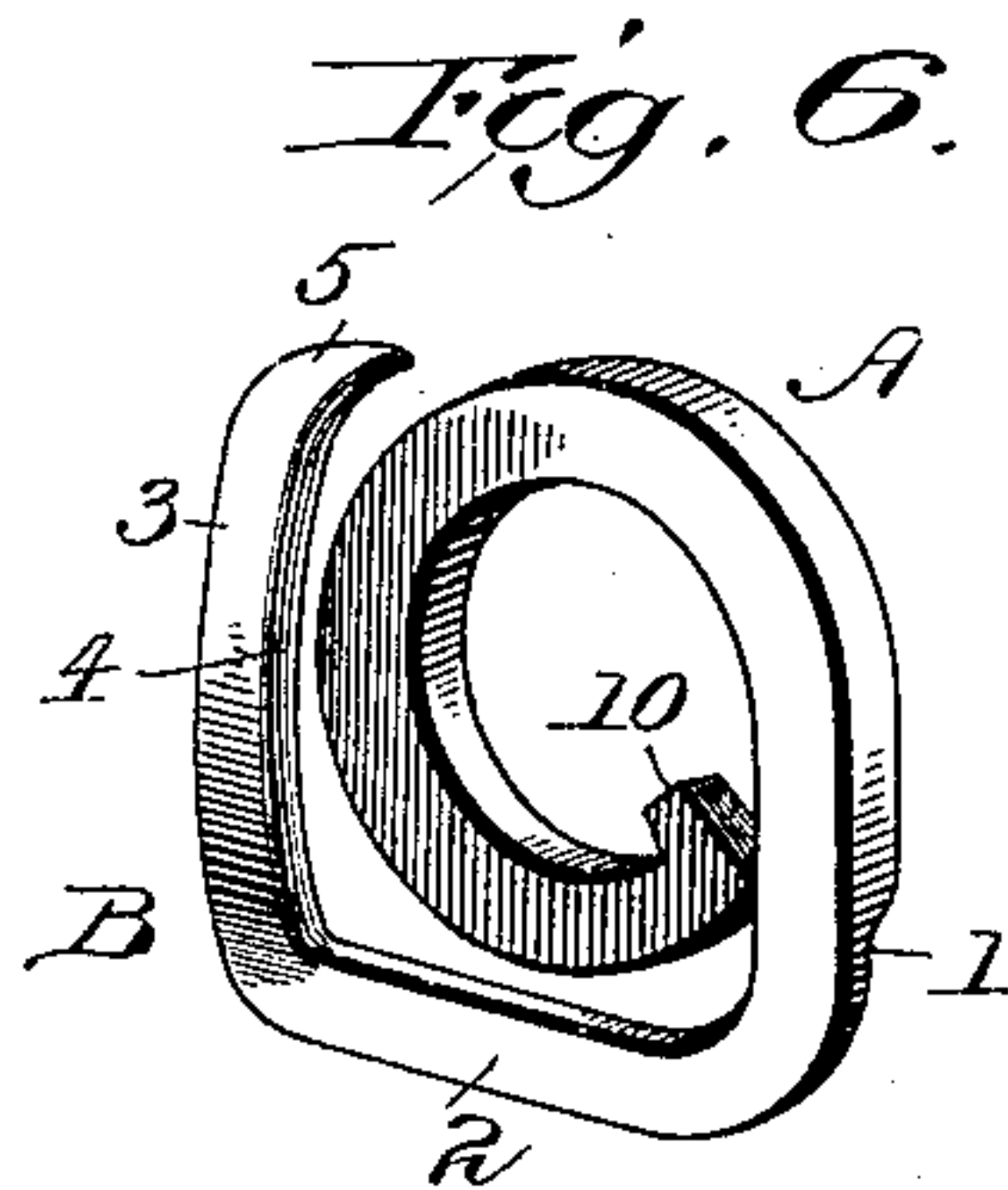
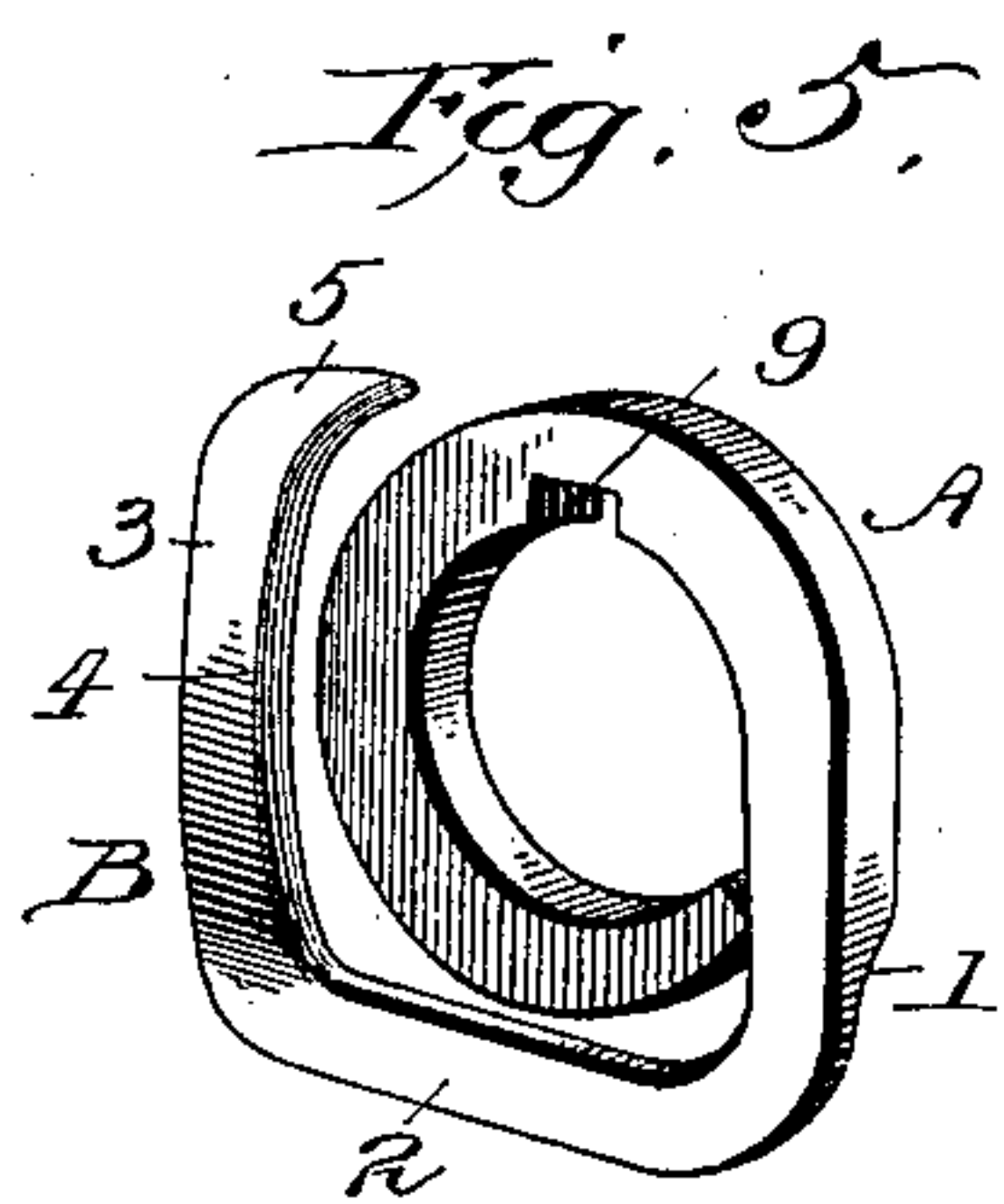
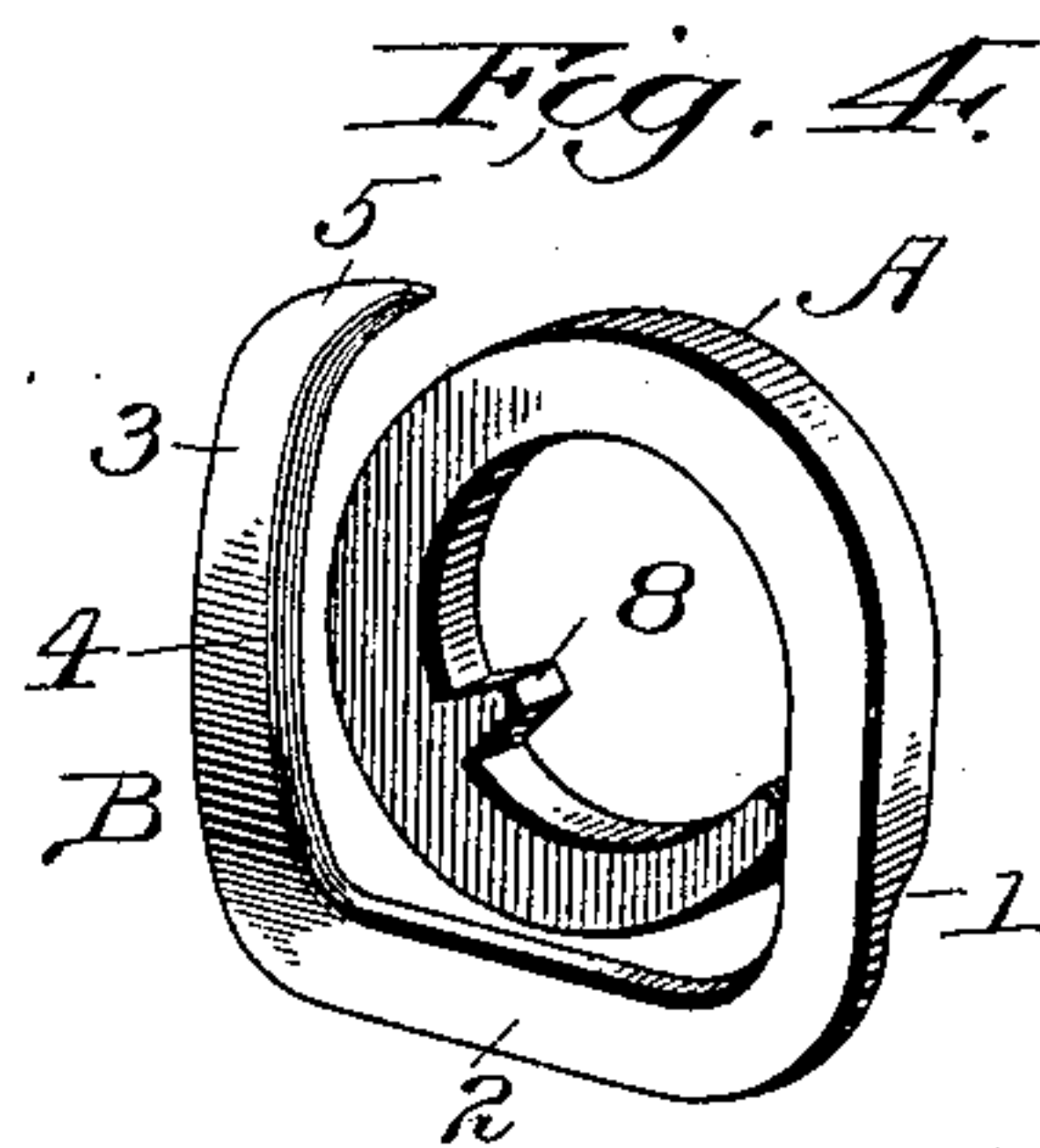
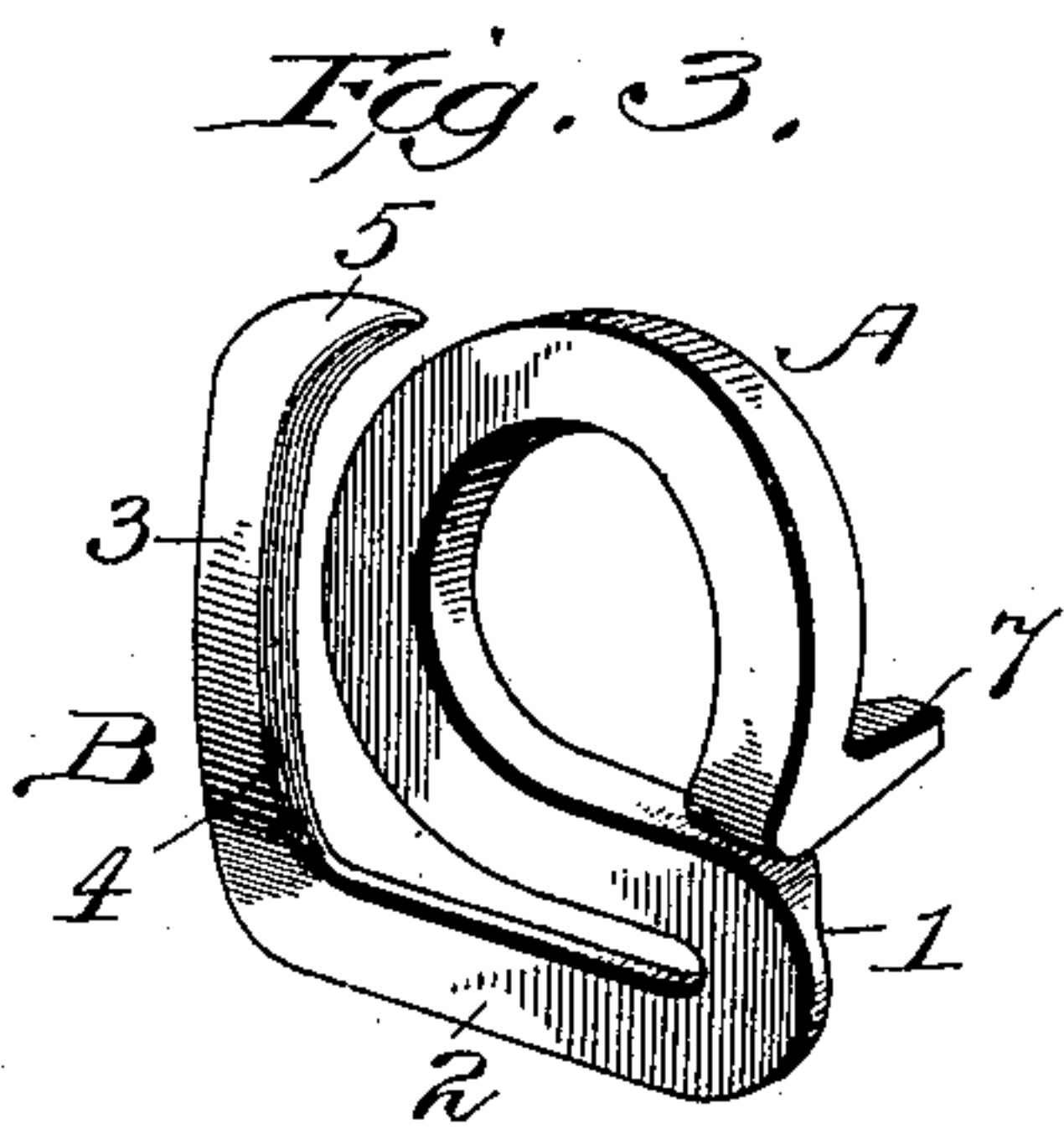
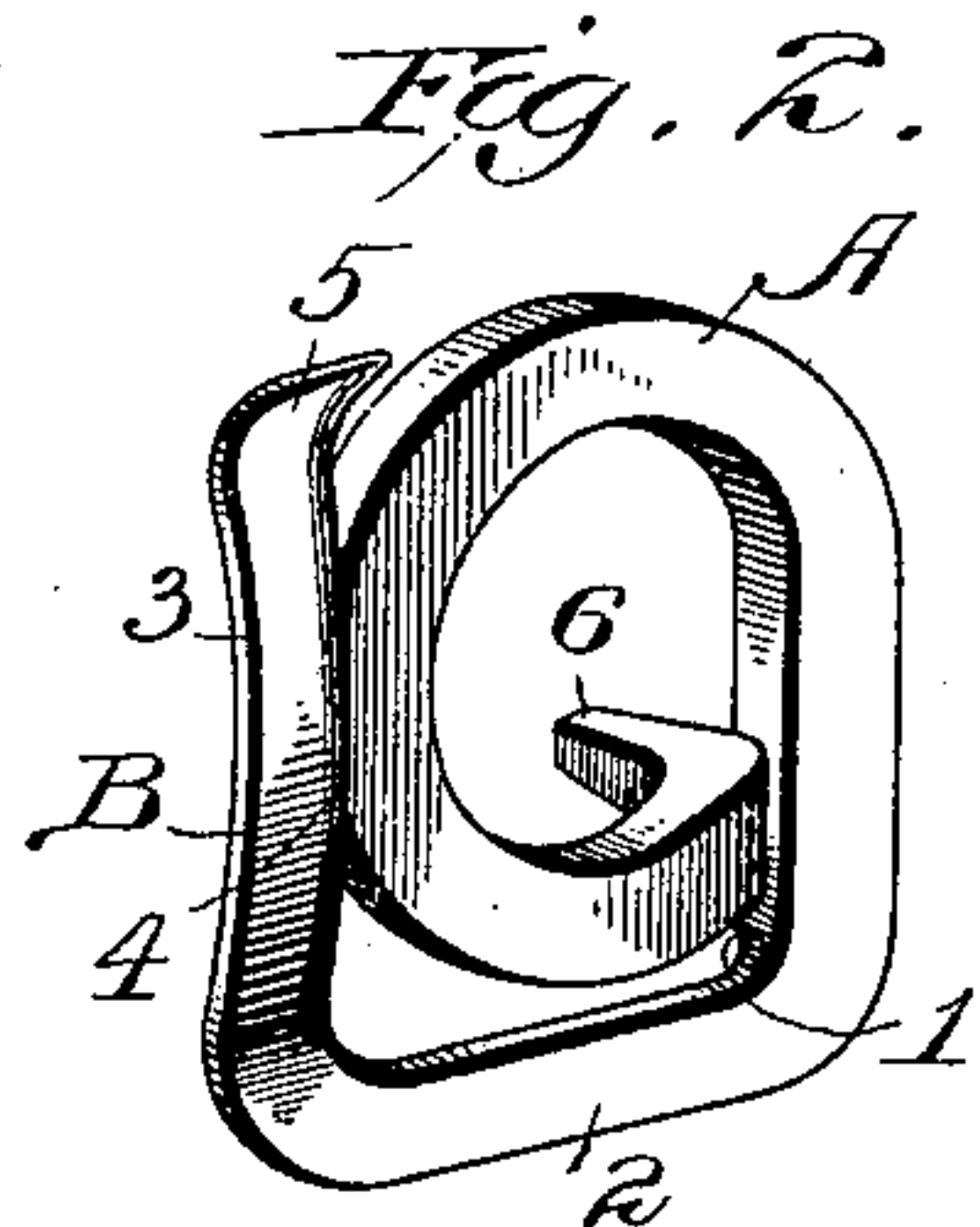
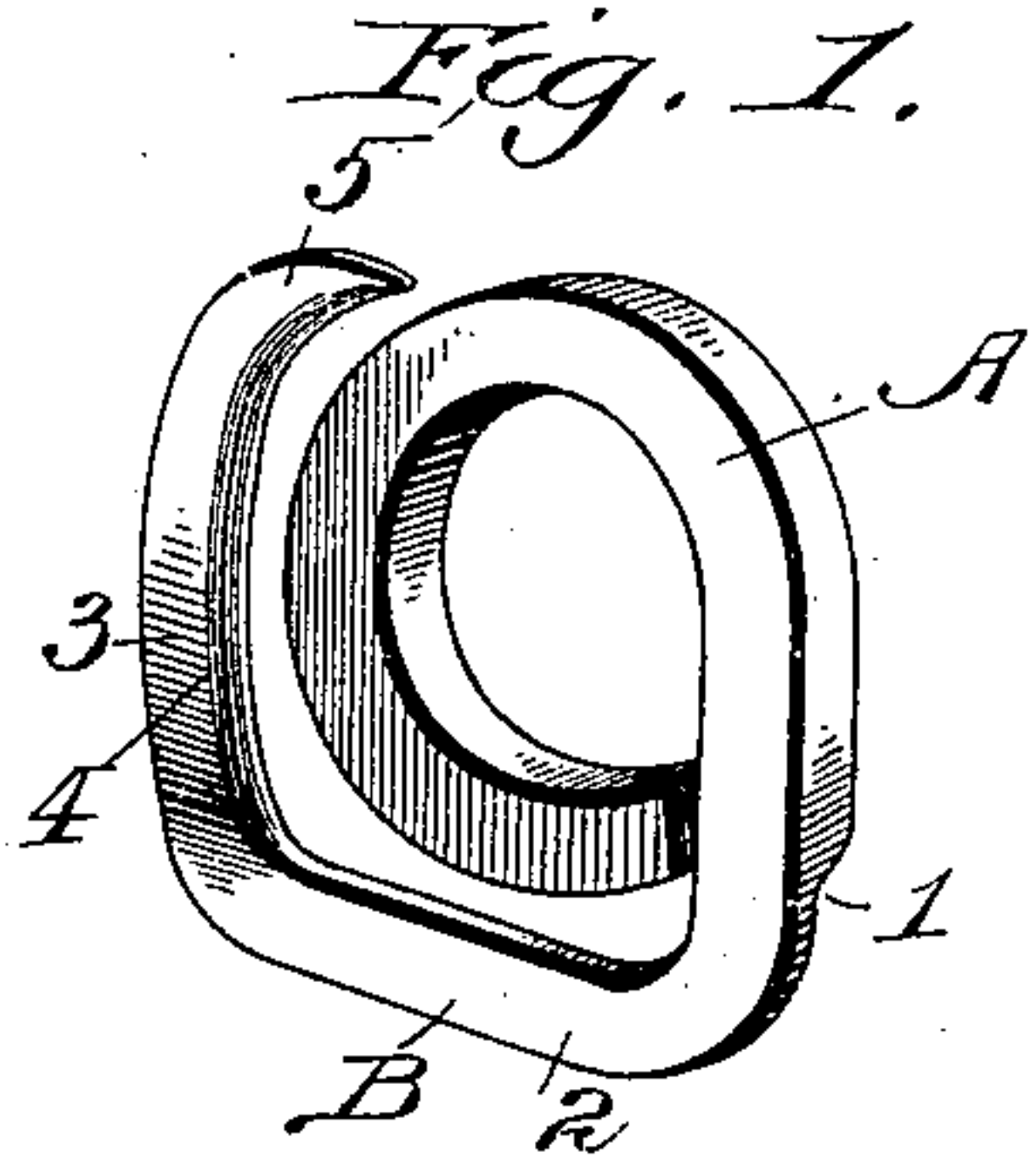
No. 614,672.

Patented Nov. 22, 1898.

W. W. SWEIGART.
NUT LOCK.

(Application filed May 4, 1898.)

(No Model.)



Witnesses
John H. Reid
Ralph H. Warfield

Inventor
Webster W. Sweigart
By *Phesa G. & Sons Co.*
his Attorneys

UNITED STATES PATENT OFFICE.

WEBSTER W. SWEIGART, OF YORK ROAD, MARYLAND.

NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 614,672, dated November 22, 1898.

Application filed May 4, 1898. Serial No. 679,664. (No model.)

To all whom it may concern:

Be it known that I, WEBSTER WARFEL SWEIGART, a citizen of the United States, residing at York Road, in the county of Carroll and State of Maryland, have invented certain new and useful Improvements in Nut-Locks; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to an improvement in nut-locks, and pertains more especially to that class known as "base-washers," and is an improvement on the construction disclosed in my application for Letters Patent, Serial No. 673,216, filed in the United States Patent Office March 9, 1898.

The object of the present invention is to provide a nut-lock having the main features disclosed in the invention referred to and in addition thereto means for preventing the turning and displacement of the nut-lock irrespective of the base with reference to which the former nut-lock was designed; and it consists in the main of a projection or similar device on or adjacent to the washer portion for engaging some contiguous device to prevent the nut-lock from turning with the turning of the nut.

It still further consists in certain novel features of construction and combinations of parts, which will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view of a form of my improved nut-lock in which the spring of the locking-arm begins at the point where the metal forming the washer portion ends. Fig. 2 is a view of a form of nut-lock corresponding to Fig. 1, but having a projection for locking it against turning. Fig. 3 is another form of nut-lock in which the locking-arm is bent in a slightly-different direction relative to the washer portion. Fig. 4 is a slightly-different form showing a lug on the interior of the washer portion adapted to enter a groove in the bolt. Fig. 5 is a view of a construction similar to the one shown in Fig. 4 with a notch in lieu of the lug to receive a

rib on the bolt. Fig. 6 shows the lug on the washer formed at the extreme inner end of the metal composing the washer. Fig. 7 illustrates a construction adapted for use with a square bolt. Fig. 8 shows several forms of projections adapted to suit the different kinds of wood or metal to which the nut-lock is to be secured.

In Fig. 1, A represents the washer portion. This is bent into circular form and is adapted like any other washer to lie flat against a plate, block, or other object through which the bolt passes, its inner face preferably being flat and in one and the same plane for this purpose. The metal strip extending outward from the washer is preferably made thinner than the washer A or hollowed out or offset, as at 1, and from this point the spring of the locking-arm B commences, the object of this thinned or hollowed-out portion being to afford a clearance for the locking-arm throughout its entire length and to give it the greatest length possible, so that a spring action is felt throughout this entire length. From this point 1 the arm is bent substantially at right angles, forming the base portion 2, adapted to engage the base in this particular form of construction to prevent turning, and from the end of this base portion the arm is bent at right angles alongside the washer, and this portion is curved outwardly, as at 3, from the outer plane of the washer, it having a beveled inner edge at 4 to facilitate the riding of the corner of the nut thereupon, and the extreme end 5 of this arm is bent inwardly and below the outer plane of the washer and beveled, as at 4, to facilitate the reverse movement of the nut when the latter is to be unscrewed. This construction is very similar to that shown in the former application, with two exceptions—namely, first, that a little less metal is required by the metal in the washer portion being bent in the opposite direction, and, secondly, the hollowed-out portion commencing at 1.

In Fig. 2, A represents the washer, and B the locking-arm. This construction is to all intents and purposes similar to the one disclosed in Fig. 1, with the addition of the lug 6 on the inner end of the metal forming the washer A. This lug is adapted to be driven

into the wood or other contiguous object through which the bolt passes for preventing the nut-lock from turning.

In Fig. 3 a construction is shown resembling very closely the main form disclosed in my former application, in which the metal in the washer is bent in the reverse direction from that in Figs. 1 and 2 of the present application and the lug 7 is formed on the extreme end of the metal in the washer, as in the construction shown in Fig. 2.

In Fig. 4 in lieu of an inwardly-projecting lug at the end of the metal in the washer a radial lug 8 is formed, it being adapted to enter a longitudinal groove formed for it in the bolt.

In Fig. 5 a recess 9 is formed in a corresponding position and serving a similar function to receive a rib or key on the surface of the bolt.

In Fig. 6 the lug 10 extends from the end of the metal in the washer into the washer in a general direction tangential rather than radial.

In Fig. 7 the washer is made square instead of round to fit a square bolt, and in Fig. 8 different formations of lugs are shown to adapt the nut-lock for application to different kinds of material, the point serving for wood and the blunter lug for iron plates, in which a recess is formed to receive it, the object in every case being to prevent the lug from turning when the nut is removed or screwed on the bolt.

From the foregoing the invention is clear and the application to any plate, whether for base-washer or not, is evident.

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

1. A nut-lock consisting of a washer and a spring-arm, extending tangentially therefrom around the outside of the washer, said arm being bent into two parts at right angles to each other one having an outwardly-curved portion which extends yieldingly beyond the outer plane of the washer, the entire arm from the point where it leaves the washer being thinned, offset or hollowed out on its inside face, whereby it is rendered resilient throughout its entire length, whereas the inner face of the washer is flat and in one plane.

2. A nut-lock consisting of a washer having means for preventing it from turning, the inner face of the washer being flat and in one plane, and a spring locking-arm offset from the inner surface of the washer and of thinner material, said spring locking-arm tangentially disposed with respect to the washer and bent at or near its middle to constitute two members approximately at right angles to each other, the extreme outer end of the arm extending inward beyond the plane of the outer surface of the washer.

3. A nut-lock comprising a washer, and an integral spring-arm composed of an end of the metal forming the washer continued around outside of the washer in the same general direction that it takes in forming the washer, said arm bent edgewise at right angles at or near the middle to form two members one of which members is bent into the plane of the nut.

In witness whereof I affix my signature in presence of two witnesses.

WEBSTER W. SWEIGART.

Witnesses:

ELI HILTABIDLE,
DANIEL T. UTZ.