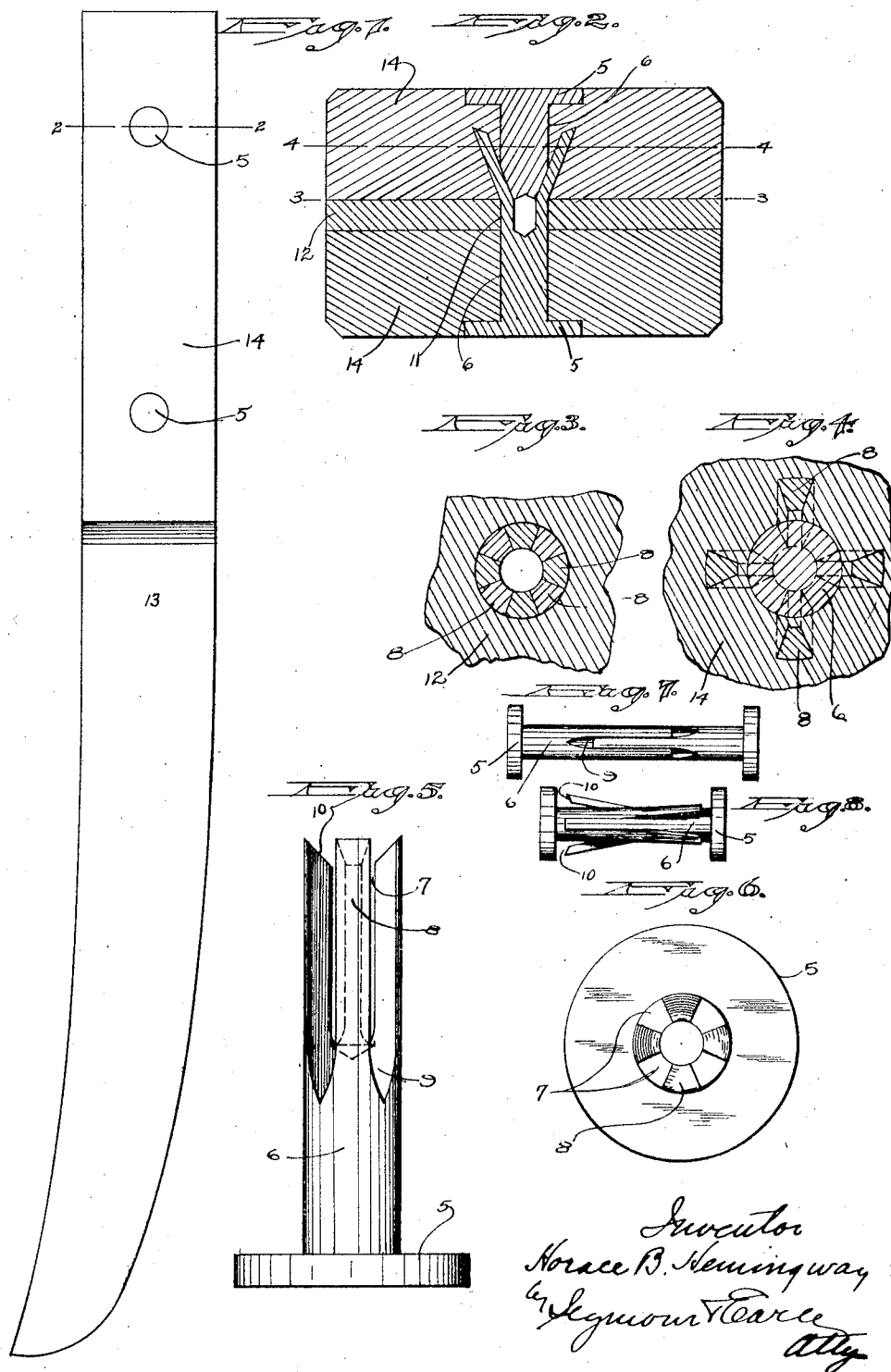


H. B. HEMINGWAY.
TWO-PART SELF LOCKING RIVET.
APPLICATION FILED AUG. 29, 1919.

1,339,197.

Patented May 4, 1920.



UNITED STATES PATENT OFFICE.

HORACE B. HEMINGWAY, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO WINCHESTER REPEATING ARMS CO., OF NEW HAVEN, CONNECTICUT, A CORPORATION.

TWO-PART SELF-LOCKING RIVET.

1,339,197.

Specification of Letters Patent.

Patented May 4, 1920.

Application filed August 29, 1919. Serial No. 320,547.

To all whom it may concern:

Be it known that I, HORACE B. HEMINGWAY, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Two-Part Self-Locking Rivets; and I do hereby declare the following, when taken in connection with the accompanying drawings and the characters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this application, and represent, in—

Figure 1 a plan view of a knife having its handle-scales secured to the blade-shank by means of my improved rivet.

Fig. 2 an enlarged view thereof in transverse section on the line 2—2 of Fig. 1.

Fig. 3 a broken view in horizontal section on the line 3—3 of Fig. 2.

Fig. 4 a broken view in horizontal section on the line 4—4 of Fig. 2.

Fig. 5 an enlarged view in side elevation of one of the two complementary parts of my improved rivet.

Fig. 6 a plan view thereof.

Fig. 7 a view in side elevation, showing the two complementary parts of my improved rivet as fitted together prior to being forced together for the upsetting of their prongs.

Fig. 8 a corresponding view showing the rivets as driven together with their prongs upset.

My invention relates to an improved two-part, self-locking rivet, particularly designed for securing the handle-scales of knives to the blade-shanks thereof, but also applicable for use in the manufacture of screw-drivers, wrenches, and kindred tools having handle-scales, the object being to provide simple and efficient means for the purpose indicated.

With these ends in view, my invention consists in a two-part self-locking rivet composed of two complementary slotted parts having certain details of construction as will be hereinafter described and pointed out in the claims.

In carrying out my invention, as herein shown, I produce a rivet of two complementary parts, each comprising a head 5 and a relatively long round shank 6, each

shank being formed with four equi-distant longitudinal slots 7, producing four corresponding equi-distant prongs 8, all corresponding in cross-sectional area. The inner end of each slot terminates in an outwardly inclined deflecting-surface or spreading-bevel 9, while the outer end of each prong is formed with an outwardly inclined deflecting-surface or bevel 10 initially co-acting with the bevel 9 of its complementary slot in starting the deflection of the prong. The bevels 10 at the ends of the prongs also facilitate their penetration of the handle-scales 14 whether the same are made of wood or composition. When the two parts are fitted together end to end, as shown in Fig. 7, the prongs of one part fit into the slots of the opposite part and vice versa. Then when the two parts are driven together, the bevels 9 at the inner ends of one part co-act with the bevels 10 at the outer ends of the prongs of the other part, and vice versa, to cause both sets of prongs to ride out of their complementary slots and effect their initial deflection which is completed by the continuing co-action of the spreading bevels 9 with the inner faces of the prongs which bend outwardly by turning, as it were, upon the edges of the rivet-holes 11 in the shank 12 of the blade 13, the shanks of the respective rivets being passed through these holes in opposite directions. As the parts of the rivets are thus driven together, the prongs are caused to penetrate the handle-scales 14 which are at this time clamped upon the opposite faces of the handle-shank 12 to which the scales are thus so firmly united that they cannot work loose, much less come off unless they are split off. As thus upset, the prongs of the respective parts of the rivets are on opposite sides of the blade-shank from their heads. When the rivet is fully upset, as shown in Fig. 8, it presents the picture of a rivet having two similar heads and a shank encircled at equi-distant points therefrom by a double band of prongs bending outward from its center to form, in effect, two truncated cones placed end to end. The number of slots and prongs may be varied, if desired, but to secure the best results they should be equi-distant and have the same cross-sectional area. In any event the prongs should intermesh so that when they are fitted together the two shanks will

virtually form one shank between the two rivet heads before the rivets are driven together and upset.

I claim:—

- 5 1. As a new article of manufacture, a two-part, self-locking rivet, consisting of two complementary parts, each part having a head, and a shank formed with a plurality of longitudinal slots producing correspond-
10 ing longitudinal prongs, and each slot being formed at its inner end with a deflecting-surface, whereby when the two parts are fitted and driven together the prongs are deflected outwardly.
- 15 2. As a new article of manufacture, a two-part, self-locking rivet, consisting of two complementary parts, each part having a head, and a shank formed with a plurality of longitudinal slots producing correspond-
20 ing longitudinal prongs, and each slot having an outwardly inclined deflecting-surface

at its inner end, and each prong having its outer end formed with a deflecting-surface.

3. As a new article of manufacture, a two-part, self-locking rivet, consisting of two 25 complementary parts each of which has a head, and a shank formed with four equidistant longitudinal slots producing four equidistant longitudinal prongs, all of the same cross-sectional area, and the inner end 30 of each slot having an outwardly inclined deflecting surface, and the outer end of each prong having an outwardly inclined deflecting-surface.

In testimony whereof I have signed this 35 specification in the presence of two subscribing witnesses.

HORACE B. HEMINGWAY.

Witnesses:

ERIK S. PALMER,
DANIEL H. VEADER.