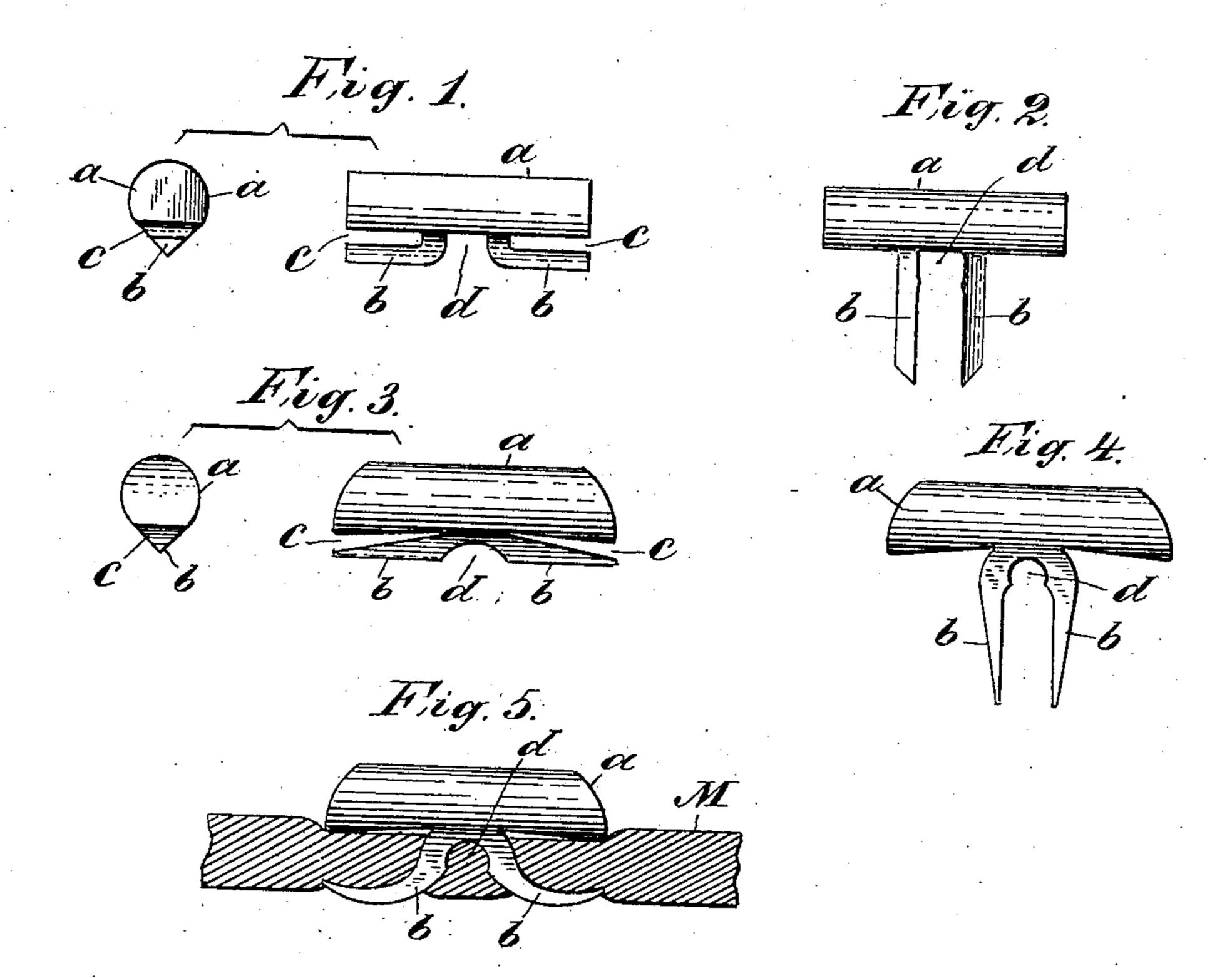
## E. B. STIMPSON.

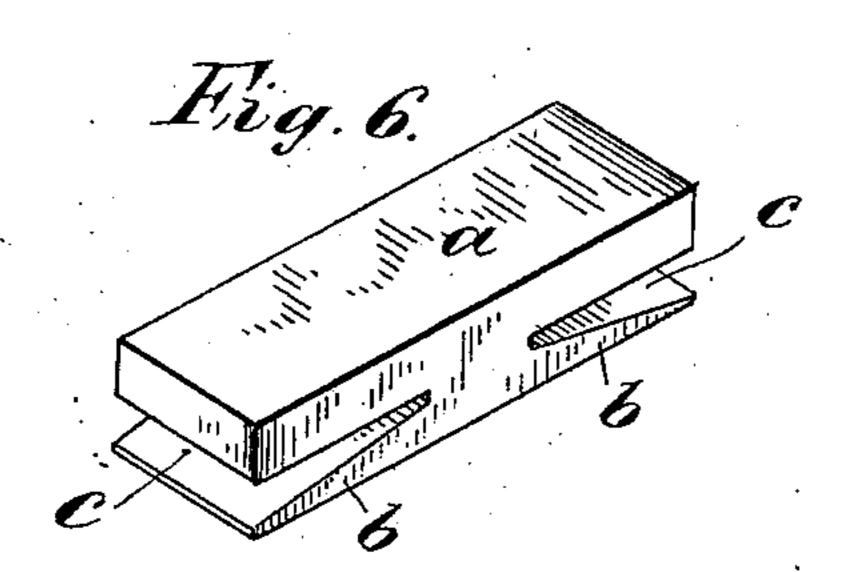
STUD OR RIVET.

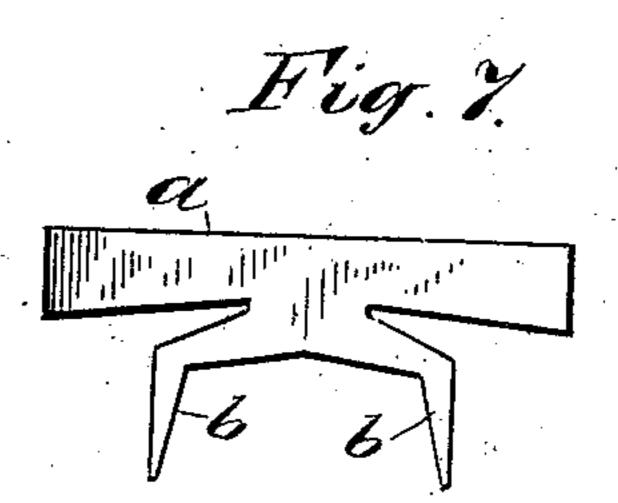
APPLICATION FILED DEC. 27, 1906.

940,083.

Patented Nov. 16, 1909.







William Firth

Edwin Ball Strupen 30 Jus Attorney Fran Councils

## UNITED STATES PATENT OFFICE.

EDWIN BALL STIMPSON, OF BROOKLYN, NEW YORK, ASSIGNOR TO EDWIN B. STIMPSON COMPANY, A CORPORATION OF NEW YORK.

## STUD OR RIVET.

940,083.

Specification of Letters Patent. Patented Nov. 16, 1909.

Application filed December 27, 1906. Serial No. 349,608.

To all whom it may concern:

Be it known that I, EDWIN BALL STIMPson, a citizen of the United States, residing in the borough of Brooklyn, county of 5 Kings, and State of New York, have invented certain new and useful Improvements in Studs or Rivets, of which the following is a specification.

This invention has for its object an im-10 proved solid-metal rivet and method of making same, said rivet being adapted to various uses including that of an anti-skidding device on automobile tires; also may be set in the bottom of a trunk or satchel to rest on

15 the floor and take the wear.

In the drawings which show only some of the forms which the devices within my present invention may take, Figure 1 includes an end view and a side view of one form; Fig. 2 20 is a side view of the same rivet after the prongs have been bent out at an angle from the body or head; Fig. 3 includes an end view and a side view of another form; Fig. 4 is a side elevation of the same with the prongs 25 bent out at an angle to the head; Fig. 5 shows the rivet of Fig. 4 set into the material; Fig. 6 is a perspective view of another form; and Fig. 7 is a side elevation of a form having prongs similar to those in Fig. 6, but 30 bent intermediate their length.

Describing now the rivet of my present invention together with the method of manufacture and confining said description to the devices illustrated, and in the first instance 35 referring more particularly to Figs. 1 and 2, a is the head of the rivet and  $b-\bar{b}$  the securing prongs. In producing the article shown in Fig. 1, a metal blank of the desired length and having a somewhat pear-shaped cross-40 section as shown is cut or milled from its opposite ends to make transverse slits c. A recess d is then cut into the bottom of the blank between the terminations of the slits c. This forms the article seen best at the right 45 in Fig. 1 and same may be made and sold in this form or condition.

In use the prongs b may be bent out at an angle to the head  $\bar{a}$  as seen in Fig. 2. These prongs owing to the pear-shaped cross-sec-50 tional form of the blank will be substantially triangular in cross-section and may be driven through and clenched in the material Mafter the manner illustrated in Fig. 5 for another form of rivet. The tips of the prongs may

be beveled or sharpened if desired as shown 55

in Fig. 2.

Figs. 3, 4 and 5 show the slits c cut into the blank in such a manner as to extend obliquely in upward directions from the ends of the blank. In this way the prongs b 60 can be made to taper in thickness toward their extremities as shown. In cutting the slit c, Fig. 3, the upper side of the slits may be left more or less inclined or may be made horizontal, so as to give either an inclined 65 or flat surface to the bottom of the head a. Fig. 4 shows the prongs of the rivet of Fig. 3 bent downwardly at right-angles to the head and Fig. 5 shows the rivet set and clenched in the material M.

Fig. 6 shows a third form of rivet made from a blank having a rectangular crosssection and slitted as before from the ends, to form prongs b adapted to be bent downwardly either at right angles to the head 75 for their whole length or as shown in Fig. 7

for only a part of their length.

It will be noted that the present invention and the annexed claims relate to a solidmetal rivet as distinguished from a rivet 80 bent up out of a piece of sheet metal. In other words the improved rivet is not made by bending up sheet metal like a McGill fastener, but by operating after the manner herein upon solid-metal blanks. The slit- 85 ting operation is such that the grain of the metal of the prong corresponds with that of the head when the prong is extended against the bottom of the head. This is not true of solid metal rivets made by the heretofore 90 used methods.

Having thus described my invention, what

I claim is: 1. A rivet consisting of a metal piece slitted from opposite ends toward the center, 95 the slits nearly meeting at said center, that portion of the metal piece on one side of the slits constituting flexible prongs and that portion on the opposite side of the slits constituting the rivet head.

2. A rivet consisting of a metal piece slitted from opposite ends toward the center, the slits nearly meeting at said center at which place the metal piece is cut away in transverse direction to the length of the 105 aforesaid slits, that portion of the metal piece on the same side with the aforesaid transverse cut constituting flexible prongs,

and that portion on the opposite side of the slit constituting the rivet head.

3. A rivet consisting of a metal piece provided with two slits which proceed from the corners of opposite ends of the piece and incline in opposite directions toward the center at which they nearly meet, that portion of the piece which has the taper extremities due to the aforesaid inclination of the slits constituting flexible prongs, and that por-

tion on the opposite side of the slits constituting the rivet head.

In witness whereof I have hereunto signed my name this 24th day of Dec. 1906, in the presence of two subscribing witnesses.

## EDWIN BALL STIMPSON.

Witnesses:

H. G. Hose, William J. Firth.