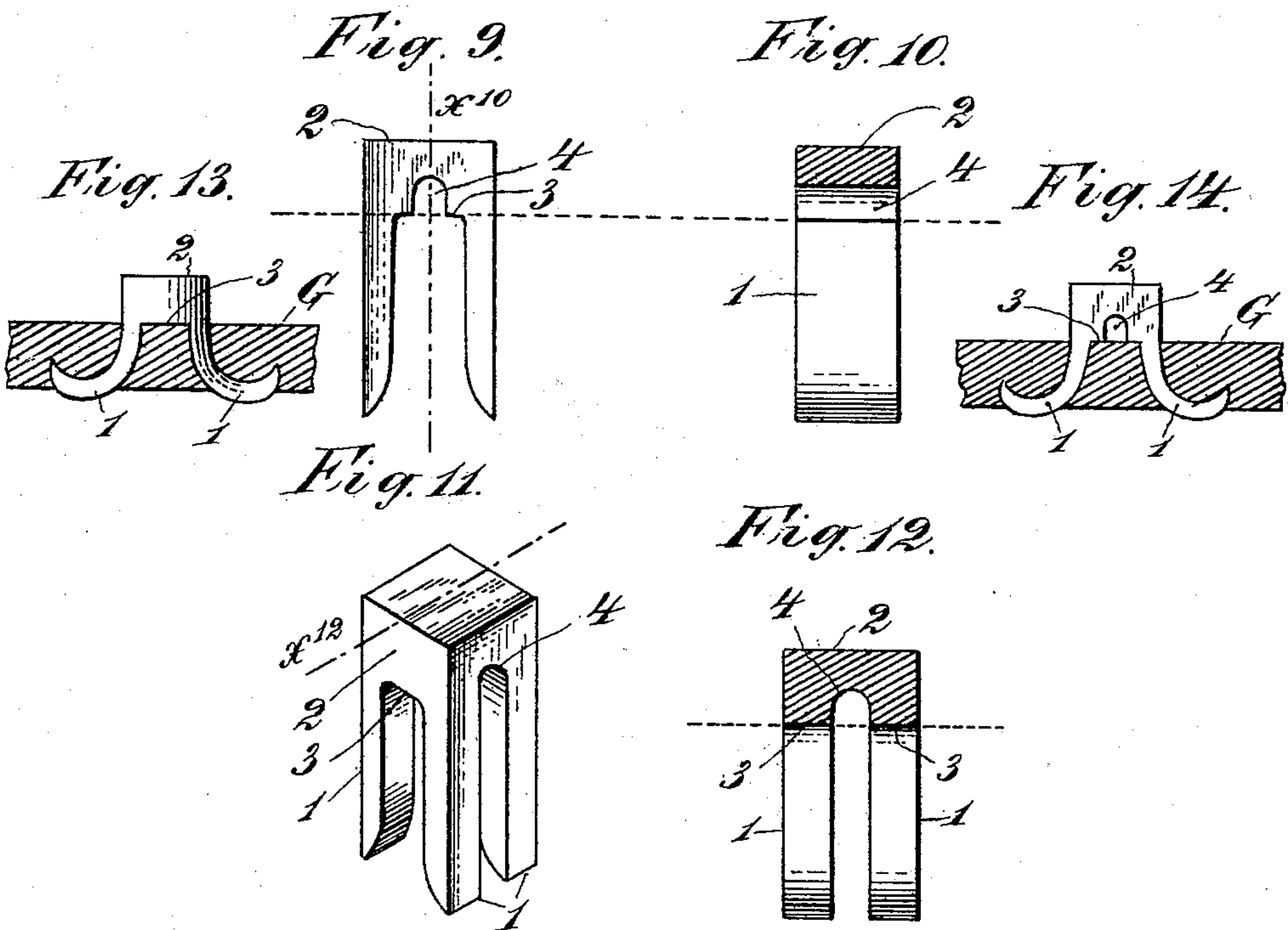
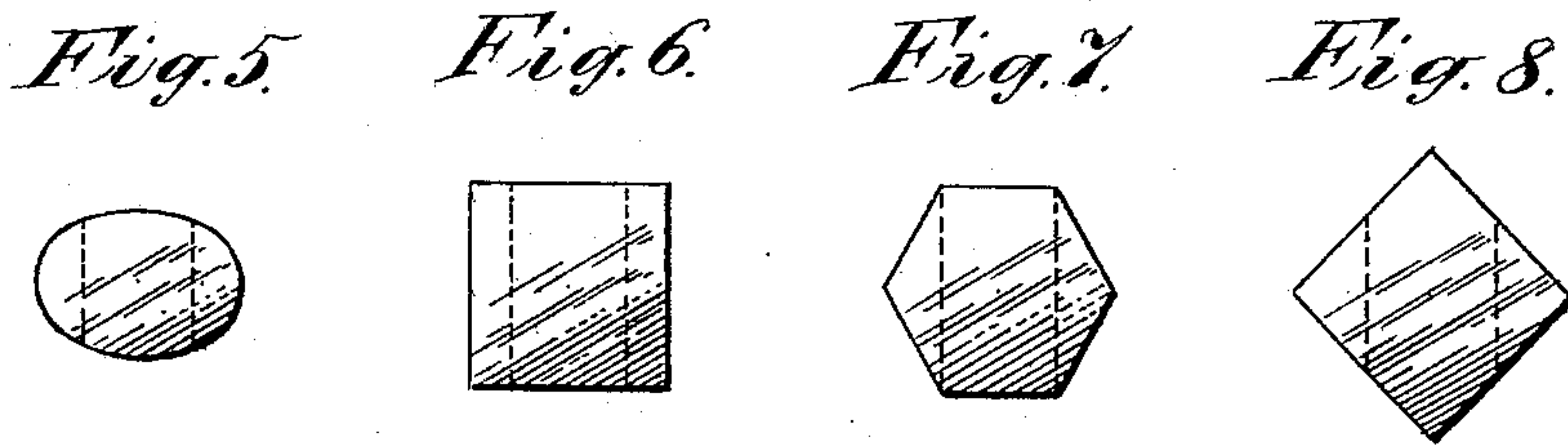
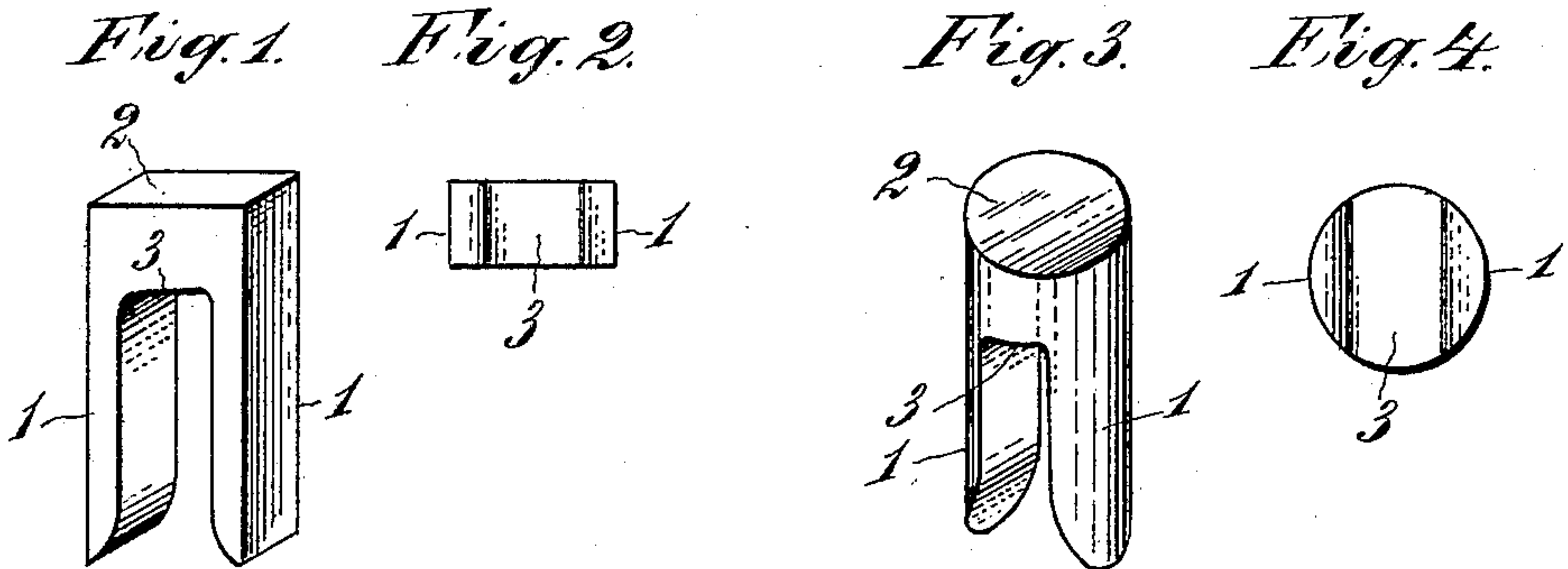


No. 863,330.

PATENTED AUG. 13, 1907.

E. B. STIMPSON.
HEADLESS RIVET.

APPLICATION FILED OCT. 2, 1906.



Witnesses
F. H. Kline
A. J. [Signature]

Inventor
Edwin Ball Stimpson
By his Attorney *Henry Corbett*

UNITED STATES PATENT OFFICE.

EDWIN BALL STIMPSON, OF NEW YORK, N. Y.

HEADLESS RIVET.

No. 863,330.

Specification of Letters Patent.

Patented Aug. 13, 1907.

Application filed October 2, 1906. Serial No. 337,041.

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 Kings, city and State of New York, have
5 invented certain new and useful Improvements in Headless Rivets, of which the following is a specification.

This invention relates to split rivets formed integrally from the solid metal. In this class of rivets there has
10 been on the rivet a head which projects laterally and overhangs the material in which the rivet is set, this overhang being exterior to the rivet-shank or prongs.

In the rivet which forms the object of the present invention there is no laterally projecting overhanging
15 head or portion to rest upon the material in which the rivet is set, the end-part or portion of the rivet which is exterior to the material when the rivet is set, having its lateral surface flush with the exterior surfaces of the prongs, which set relatively wide apart. The only part
20 of the rivet which rests on the surface of the material is that surface between the bases of the prongs.

Another feature of the rivet is the formation of a transverse way or aperture in the end-portion of the rivet which is to be above or exterior to the material,
25 by means of a slit or cut, as will be hereinafter explained. The rivet-blank may have any suitable or desired form in cross-section; that is to say, round, square, oblong, rectangular, elliptical, or polygonal.

In the accompanying drawings, which serve to illustrate embodiments of the invention—Figure 1 is a perspective view of the rivet made from a blank of oblong rectangular cross-section, and Fig. 2 is an end-view of the same. Figs. 3 and 4 are similar views to Figs. 1 and 2, showing the rivet made from a blank of circular
35 cross-section. Figs. 5, 6, 7 and 8 show end-views of various shaped metals that may be employed in making the rivet. Figs. 9 and 10 illustrate the rivet with an additional feature, the former being a side view and the latter a section at x^{10} in Fig. 9. Figs. 11 and 12 illustrate a slight variant of the construction seen in Figs. 9 and 10, the former being a perspective and the latter a section at x^{12} in Fig. 11. Figs. 13 and 14 are illustrative views showing the rivet set in the material.

Referring primarily to Figs. 1 to 8 and Fig. 13—a
45 blank of solid metal of the desired cross-section and length, is milled out longitudinally for a part of its length to form or leave clenching prongs 1, 1, which are integral with an end-portion or part 2 of the blank that will be above the material G, (Fig. 13) the only portion

of the rivet which bears upon the material when the
50 rivet is set being the surface 3 of the end portion 2 which is between the prongs at their bases. There are no laterally projecting parts on the rivet.

It is sometimes desirable that there shall be in the end-piece 2, which is exterior to the surface of the material G, or above the same, a transverse aperture or
55 passage 4, as shown in Fig. 14. Figs. 9 and 10 illustrate one mode of producing this aperture 4, namely, by first milling out the metal to form the prongs 1 and the face 3, and then cutting a slot in the face 3 to form
60 the aperture or passage 4, the slot extending, of course, into the end-portion 2. This aperture 4 has for its object to form a keeper to receive a rod or wire in certain structures. Another way of forming the aperture 4, where it is desired that it shall extend in a direction at
65 right-angles to that seen in Figs. 9 and 10, is illustrated in Figs. 11 and 12. This is effected by splitting the spurs 1 and extending the slit up into the part 2, as these views clearly show. It will be noted that the two prongs 1 spring integrally from the part 2, and that
70 the outer lateral faces of the prongs are flush with and form continuous of the lateral face or faces of the said part 2; and also that the rivet has no part bearing on the material G but the face 3 on the part 2, between the prongs; this surface alone rests on the material in which
75 the rivet is set.

Having thus described my invention, I claim—

1. A headless split rivet made from a solid metal blank, said rivet having an end-portion or part, clenching prongs integral with said end-part, the outer lateral faces of said
80 prongs being flush with and forming continuations of the respective opposite sides of the said end-part, the latter having a thickness, measured longitudinally of the rivet, which is greater than the thickness of the prongs.

2. A split rivet having an end-portion or part, and two
85 clenching prongs integral with said end-portion, the surface 3 between the bases of said prongs being slitted to form an aperture 4.

3. A split rivet comprising an end-portion or part 2, and two clenching prongs 1 integral with said end-portion and having outer lateral surfaces which are continuous with the lateral surfaces of the end-portion, the latter having a flat under surface 3 between the bases of the prongs and a slot in said surface extending into the end-portion to form an aperture 4 through the latter.
90

In witness whereof I have hereunto signed my name this 1st day of October, 1906, in the presence of two subscribing witnesses.

EDWIN BALL STIMPSON.

Witnesses:

H. G. ROSE,

WILLIAM J. FIRTH.