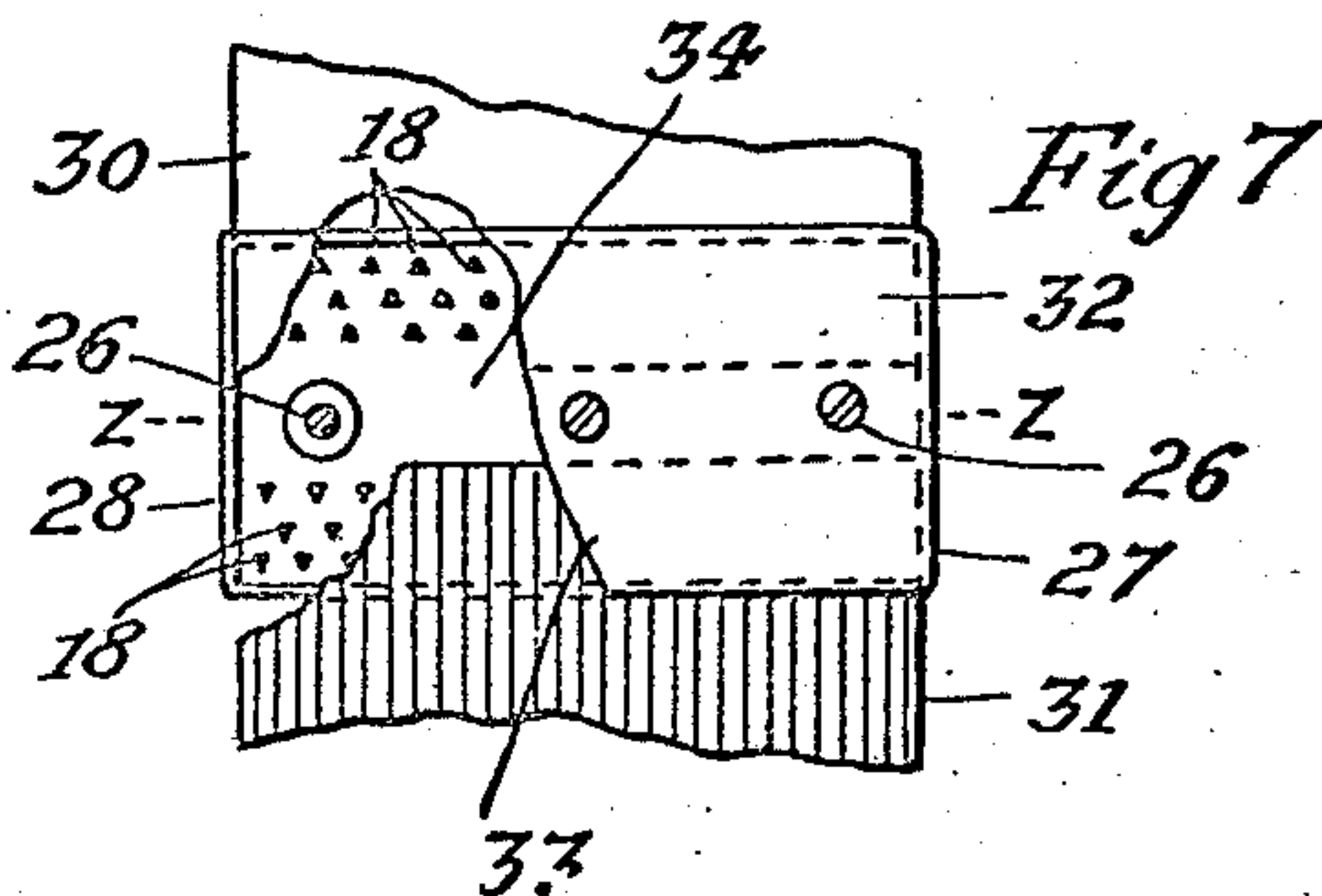
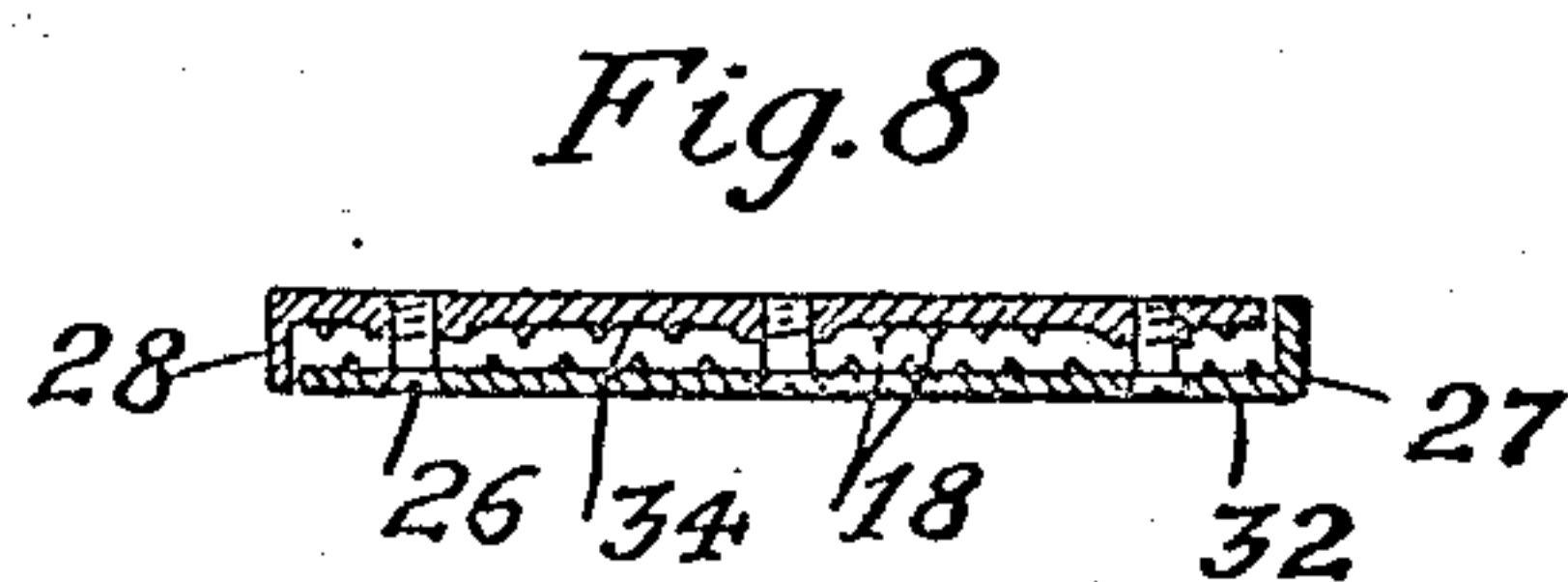
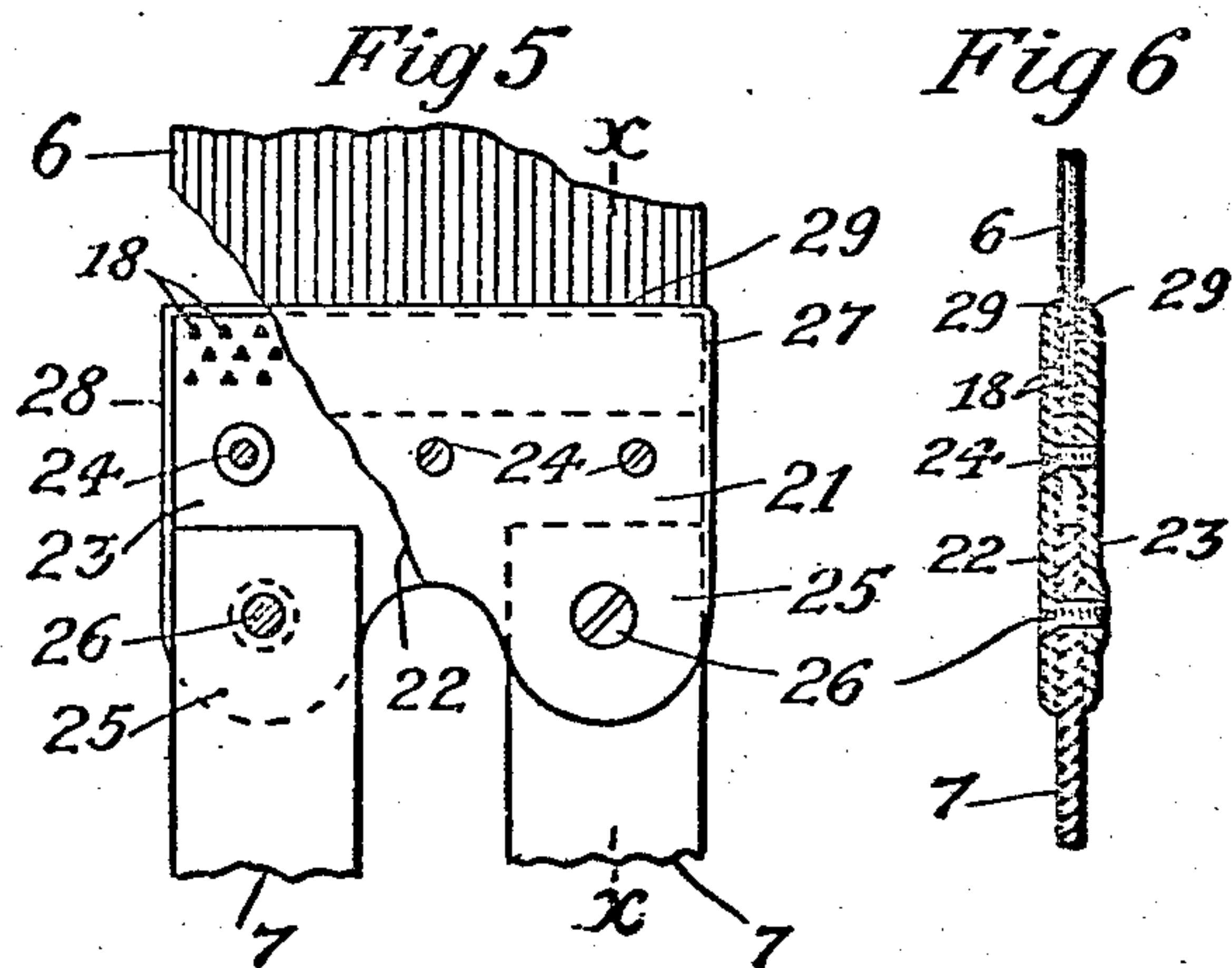
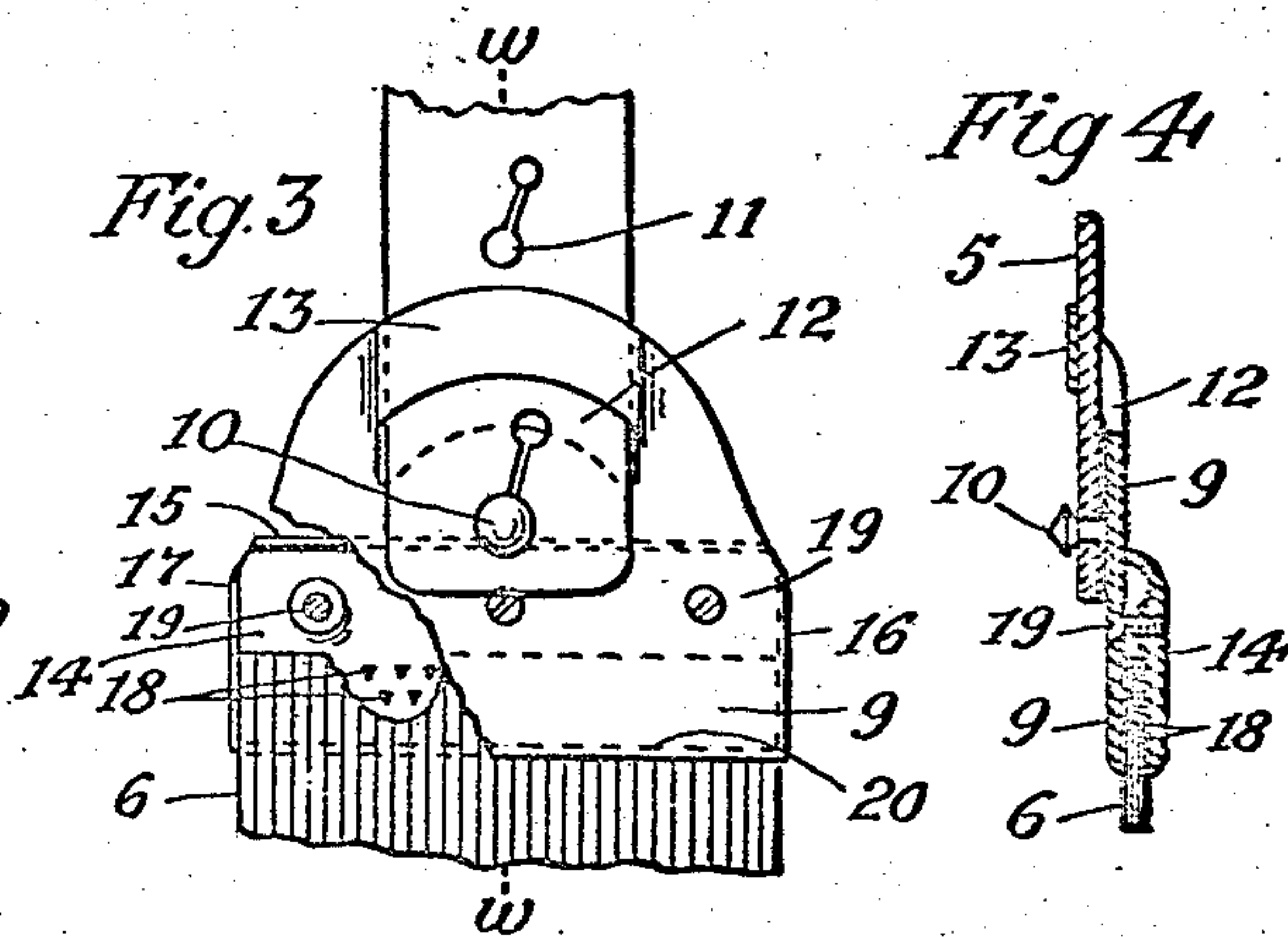
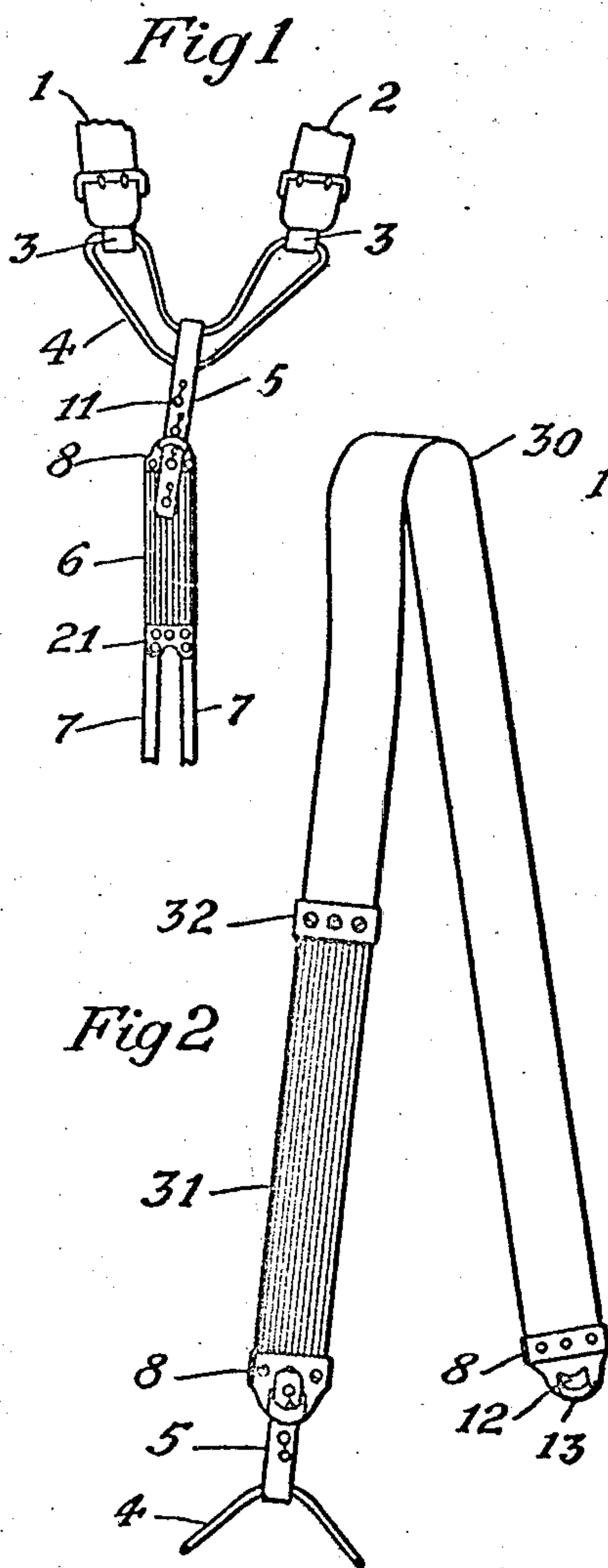


E. H. ERICKSON.
CLAMP AND BUCKLE FOR JOINING WEBBING.
APPLICATION FILED APR. 25, 1907.

899,105.

Patented Sept. 22, 1908.



Witnesses:
Thos. Lacyard.
H. J. Bowman.

Inventor:
Erick H. Erickson.
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UNITED STATES PATENT OFFICE.

ERICK H. ERICKSON, OF MINNEAPOLIS, MINNESOTA.

CLAMP AND BUCKLE FOR JOINING WEBBING.

No. 899,105.

Specification of Letters Patent. Patented Sept. 22, 1908.

Application filed April 25, 1907. Serial No. 370,318.

To all whom it may concern:

Be it known that I, ERICK H. ERICKSON, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Clamps and Buckles for Joining Webbing, of which the following is a specification.

My invention relates to devices for clamping and joining the ends of strips of webbing and especially the elastic and inelastic webbing used in supporters for artificial limbs.

The principal object of the invention is to provide practical devices in substitution for the customary union formed by sewing with thread.

My improvements comprise clamping members and also devices which serve in the manner of buckles.

My improvements are illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of portions of an artificial limb supporter connected by my improved clamp and buckle; Fig. 2 is an elevation of such supporter showing my devices applied in another way; Fig. 3 is an enlarged view of the clamp and buckle of Figs. 1 and 2; Fig. 4 is a longitudinal section on the line *w-w* of Fig. 3; Fig. 5 is an enlarged view of the clamp shown at the lower portion of Fig. 1; Fig. 6 is a section of the same on the line *x-x* of Fig. 5; Fig. 7 is an enlarged view of the clamp shown at the middle of Fig. 2; and Fig. 8 is a sectional view of the same on the line *z-z* of Fig. 7.

In the drawings 1 and 2 designate portions of the inelastic shoulder straps of a supporter for an artificial limb; 3 the loops at the ends of these straps; 4 the cord extending through the loops 3; and 5 the leather or other strap for adjustably and detachably connecting the shoulder straps with the strap 6 of elastic webbing that is attached by means of the leather straps 7 to the artificial limb.

For connecting the leather strap 5 to the elastic strip 6 I provide the combined buckle and clamp 8. The device 8 comprises a front portion 9 with a stud or tongue 10 for engaging in a hole 11 in the strap 5, and the body 9 is also provided in its outer portion with a transverse slot 12 to receive the end of the strap 5 and a bridge or cross-bar 13 for holding the strap end down to engagement with the stud; and comprises also an independent back member 14 which is shorter than the front member, and has its front end

15 bent inward toward the latter. Each of these members has a flange, 16 and 17, respectively, extending toward the other along one edge, and both members have their inner surfaces roughened, as by corrugations or teeth 18, for firmly engaging the strip of elastic webbing 6; and the two members are clamped to the strip 6 by screws 19. The adjacent or lower ends 20 of both plates are beveled to afford a smooth joint with the strap. When the two plates are clamped by the screws to the elastic strip 6 the flanges 16 and 17 cover the edges of the strip and the flange or bend 15 covers its end. The other end of the strap 6 is attached to the two leather straps 7 by a clamping device 21 formed of two corresponding flat plates 22 and 23 provided with serrations 18 on the portions that clamp the webbing strip 6, and are clamped to the strip by screws 24. The projecting lower portions 25 are clamped to the respective straps 7 by screws 26. The plates 22 and 23, respectively, have side flanges 27 and 28 for inclosing the edges of the straps 6 and 7, and have their ends 29 beveled to provide smooth surfaces.

In Fig. 2 is shown a single shoulder strap consisting of a body portion composed of inelastic fabric 30, and an elastic end portion 31. The lower ends of the strap are provided with combined clamps and buckles 8 like those above described. The body strap 30 is united to the elastic portion 31 by a clamp 32, composed of plates 33 and 34 provided with serrations 18 and flanges 27 and 28, like those above described, and the plates are clamped to the ends of the webbing by screws 26.

The advantage in using the clamping devices 8, 21, and 32 is in increasing the durability of the elastic straps and in making a better and more readily adjusted union of the elastic and non-elastic portions of the straps. Heretofore it has been customary to unite these parts by sewing; but this has been found objectionable in that it cuts portions of the rubber and thus injuriously affects the elasticity of the strap, and the threads used in sewing usually give way before other parts of the supporter are worn out and it is then a difficult matter to properly again unite the parted straps. But in employing the clamping devices described there is no material injury to the rubber and the clamps can be readily placed and removed and adjusted by operating the screws.

While I have referred to my improvements as used in connection with the straps of artificial leg supporters, it will be apparent that similar devices can be used to advantage in
5 uniting straps or strips of webbing for other purposes.

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

10 A clamp for connecting the ends of straps, comprising two flat plates of unequal length having their adjacent faces roughened and their edges flanged, the shorter plate having its front end bent inward to contact with the
15 longer plate, the latter having its front end

bent outward and providing a slot for receiving a strap and a tongue projecting outward for engaging said strap, and screws for clamping the adjacent bodies of the plates to the end of the other strap, substantially as 20 set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses this 20th day of April, 1907.

ERICK H. ERICKSON.

Witnesses:

P. H. GUNCKEL,
H. A. BOWMAN.