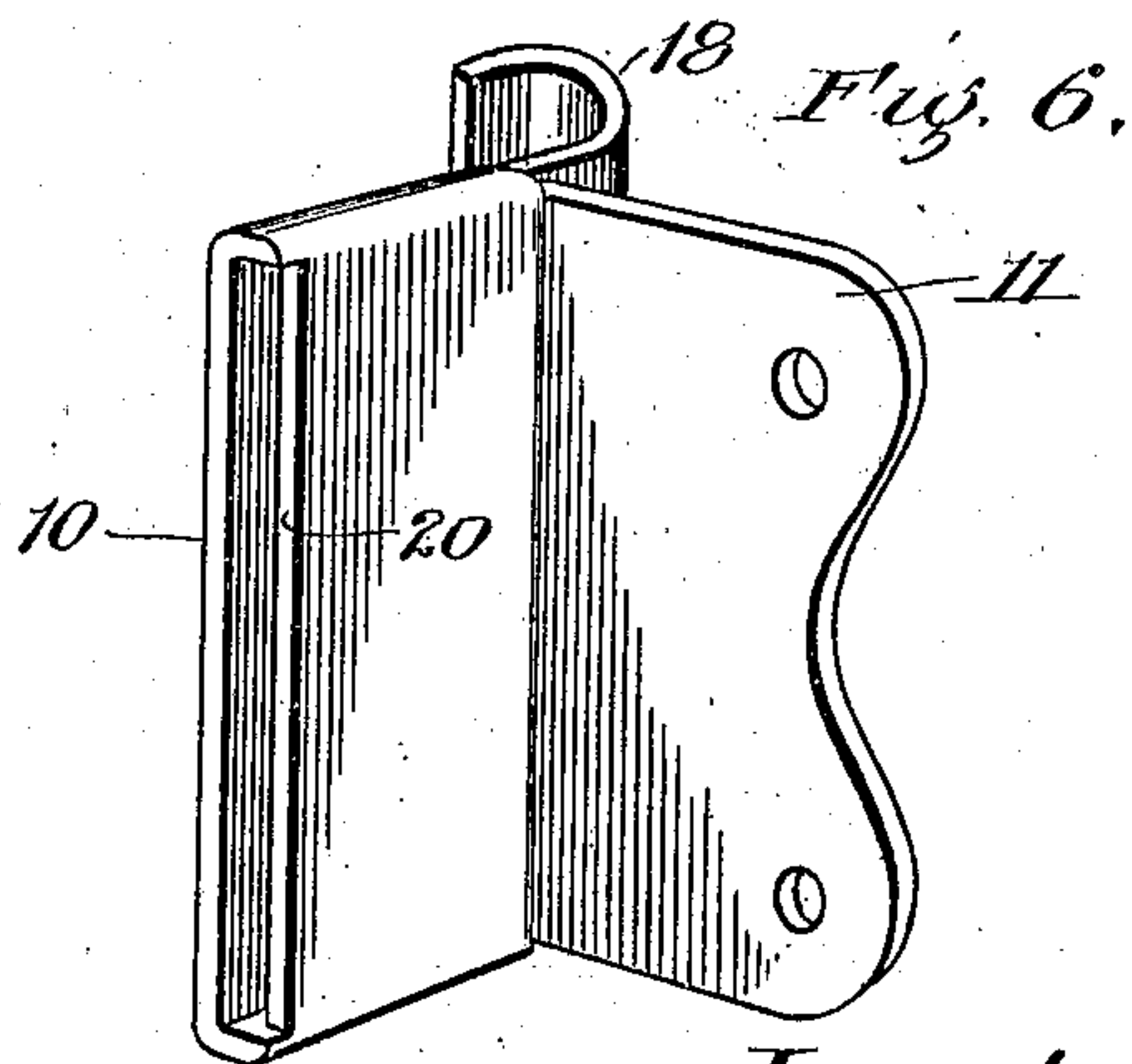
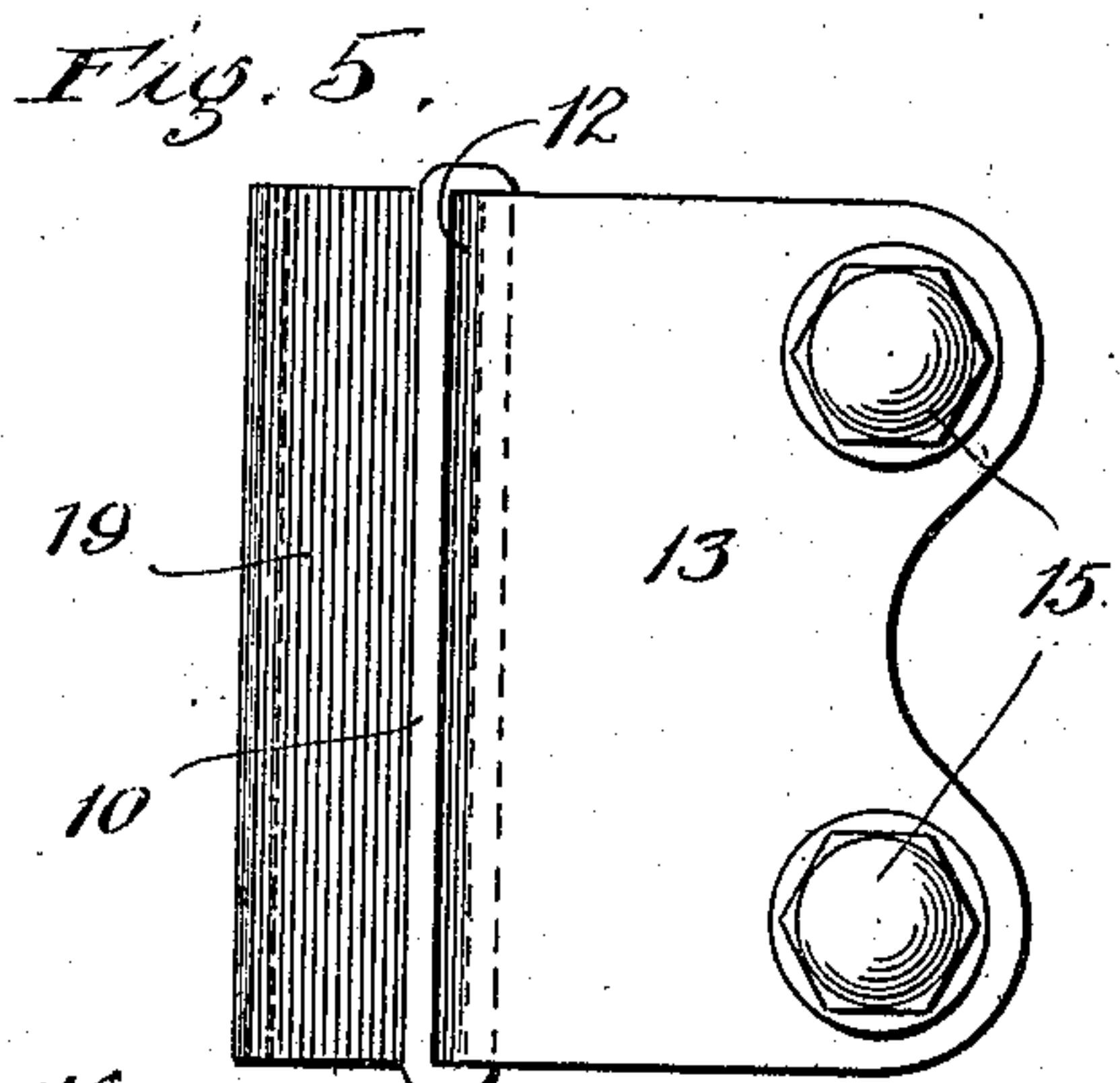
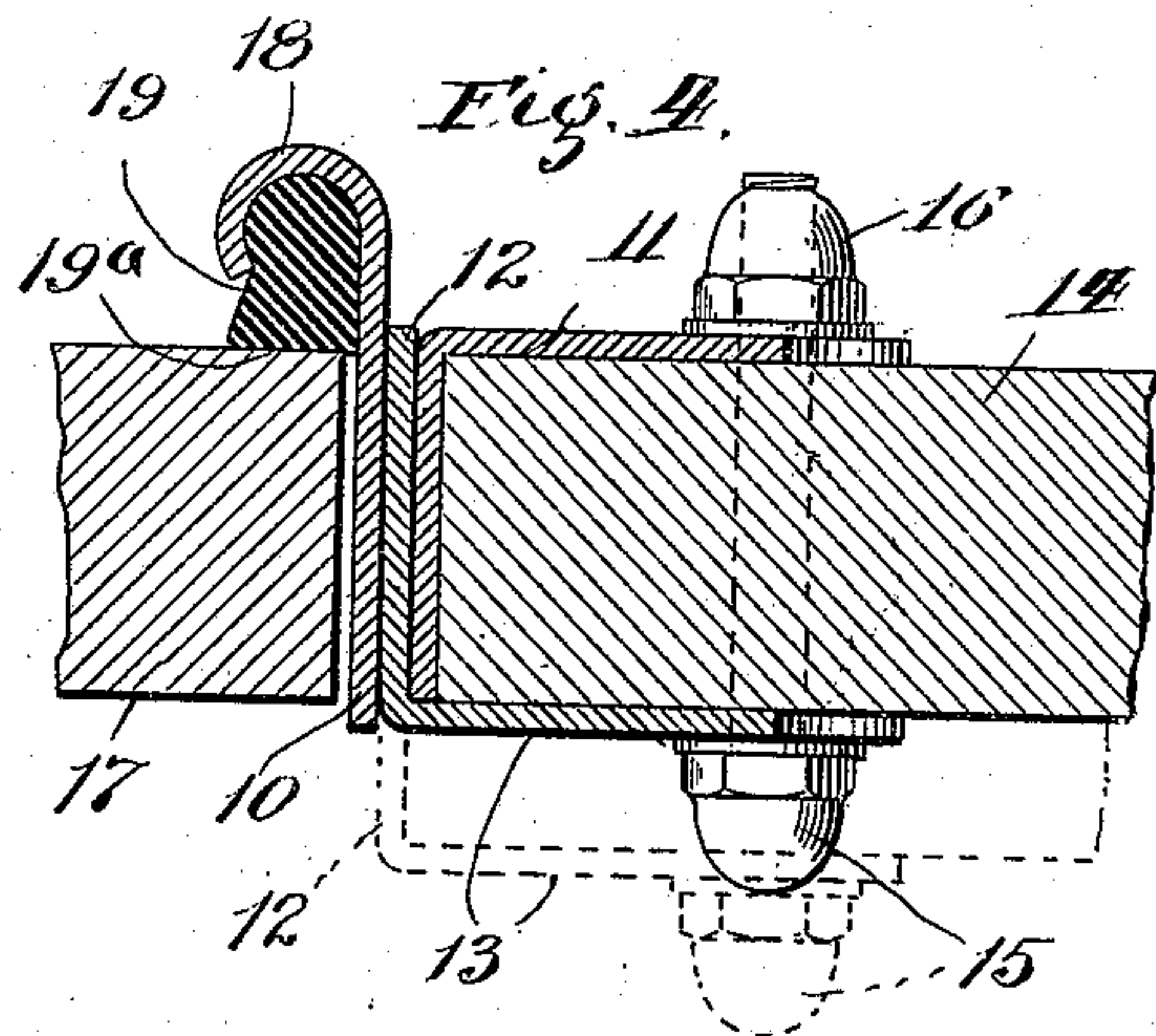
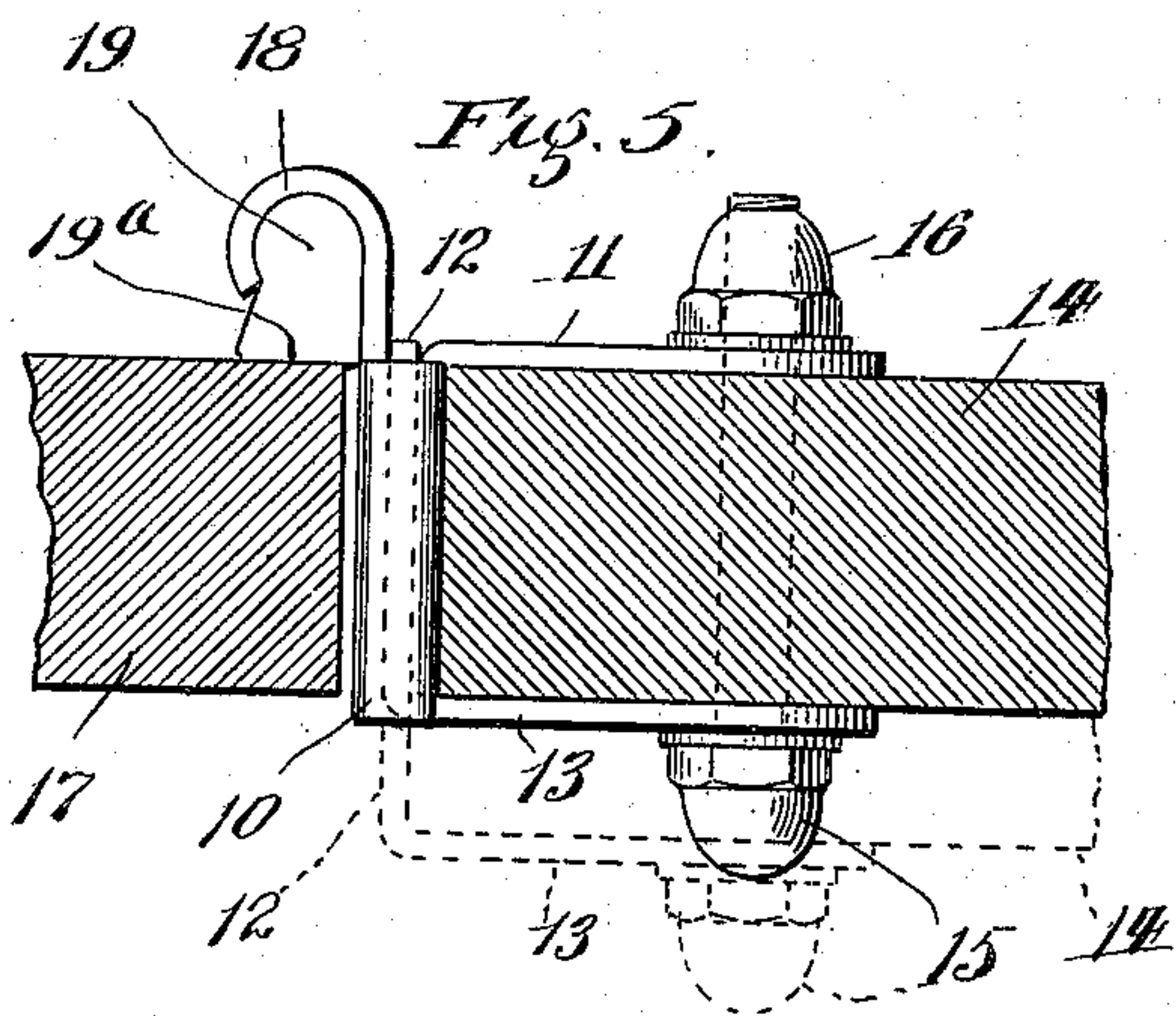
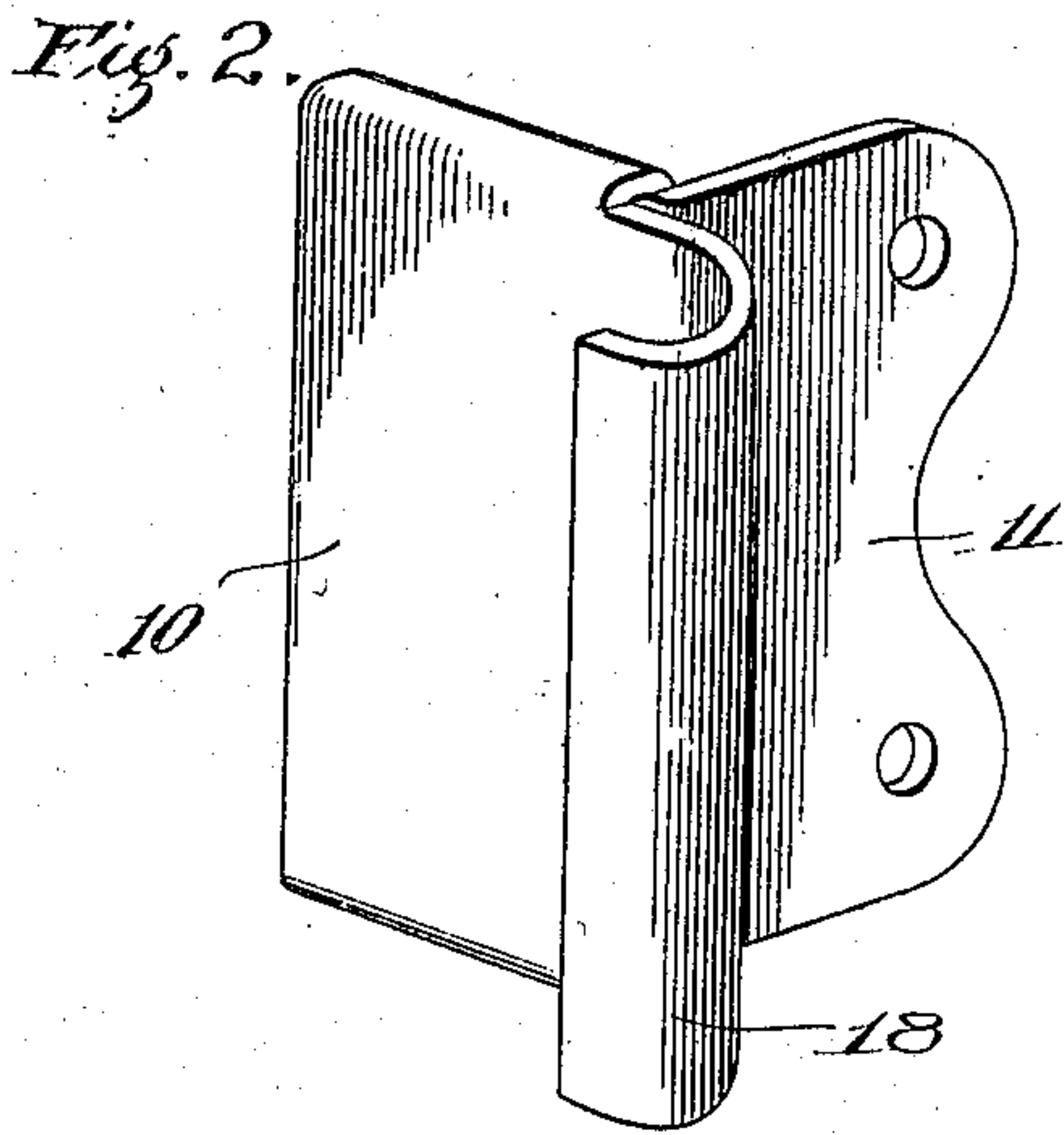
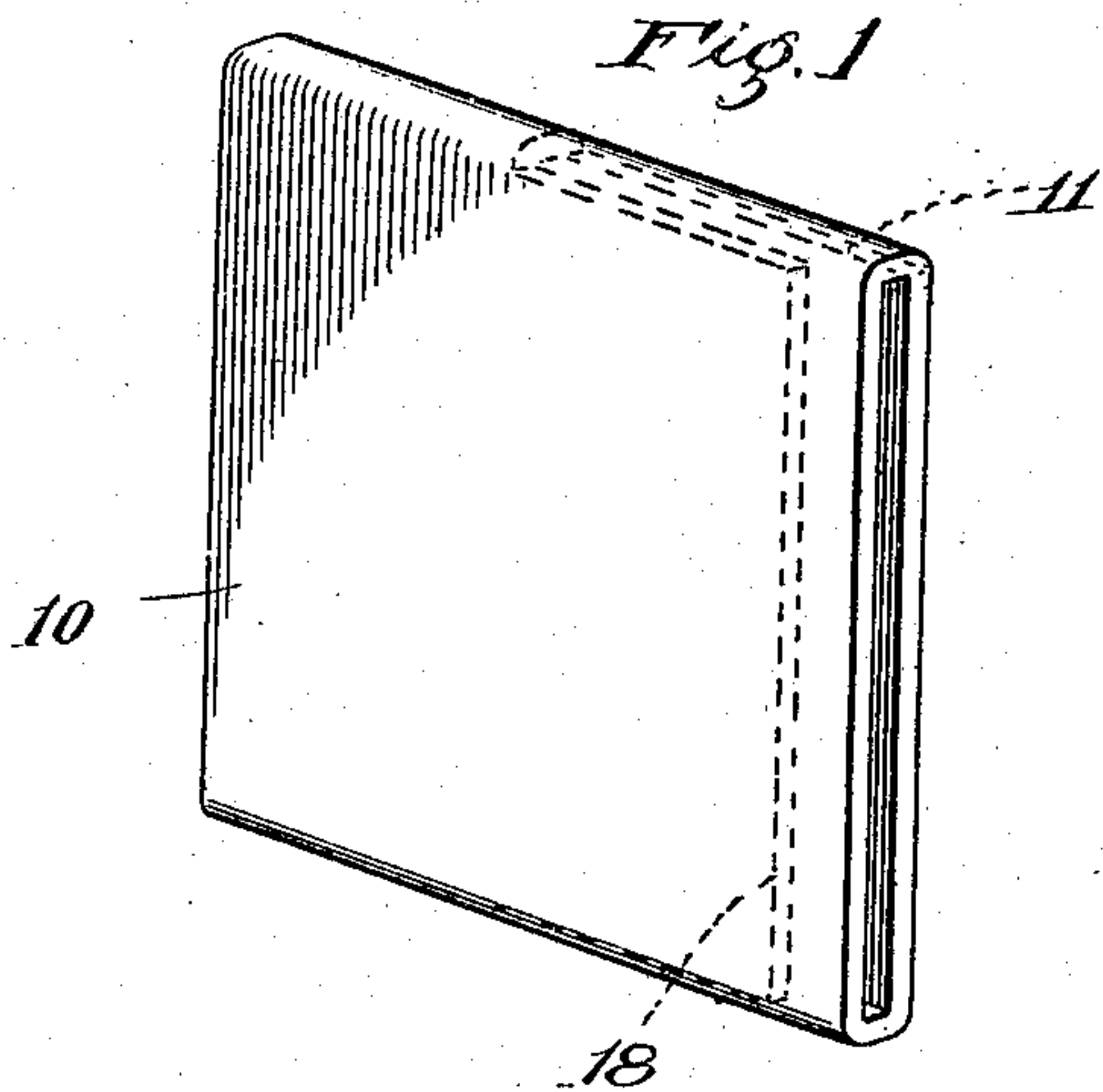


W. J. KEENE & G. W. SCHUSTER.
DOOR STOP AND SUPPORTING BOX FLANGE.
APPLICATION FILED JAN. 13, 1908.

919,727.

Patented Apr. 27, 1909.



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UNITED STATES PATENT OFFICE.

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DOOR-STOP AND SUPPORTING BOX-FLANGE.

No. 919,727.

Specification of Letters Patent.

Patented April 27, 1909.

Application filed January 13, 1908. Serial No. 410,530.

To all whom it may concern:

Be it known that we, WILLIAM J. KEENE and GEORGE W. SCHUSTER, citizens of the United States, and residents of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Door-Stops and Supporting Box-Flanges, of which the following is a specification.

The invention relates to door-stops and adjustable box flanges such as are employed with the spring-actuated doors of water-closets or the like, the partition walls of which are usually formed of slate, marble, or the like.

The improvement seeks to provide a simple and effective door-stop with an adjustable, supporting box flange therefor which may be readily attached to the edge of the marble or slate partitions of different thicknesses.

The invention consists in the features of construction and arrangements of parts hereinafter set forth, illustrated in the accompanying drawings and more particularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of the tubular blank from which one of the sections of the door-stop is made. Fig. 2 is a perspective view of the completed section of the door-stop that is made from the tubular blank. Fig. 3 is a plan view of the improved door-stop shown attached to a partition. Fig. 4 is a cross-section thereof. Fig. 5 is a view in elevation of the improved stop. Fig. 6 is a perspective view of the parts shown in Fig. 2 looking in the opposite direction.

The improved device comprises two sections that are relatively adjustable to fit partition walls of different thicknesses. One of these sections comprises a guide portion 10 that is preferably in the form of a flattened tube, and a flange 11 that projects laterally at right angles to the tubular guide 10. This section is preferably formed of a piece of seamless tubing which is first flattened, as shown in Fig. 1, and is then cut away along a portion of its upper and lower edges, as indicated in dotted lines in Fig. 1, so that one of the side walls of the tube may be bent laterally to form the flange 11. The other section of the door-stop or box flange is formed of a blank of sheet metal and is bent

to an L-shape, as shown, so that it comprises a part 12 and a flange 13 laterally projecting at right angles to the part or portion 12. The part 12 of this second section is of proper size to fit snugly within the tubular guide 10 of the other section so that the flange 13 is held in parallel relation with the flange 11. The tubular guide 10, as stated, is adapted to abut against the edge of the partition 14, as indicated in Figs. 3 and 4, and the flanges 11 and 13 are adapted to engage respectively the opposite side faces of the partition. Bolts 15 having nuts 16 are adapted to extend through suitable openings formed in the flanges 11 and 13 and through the partition 14 so as to secure the door-stop in position. The L-shaped section of the door-stop or box flange, being slidably adjustable in the tubular guide 10 of the other section, may be properly shifted or adjusted to fit partition walls of different thicknesses. This is of importance, not only because it obviates the necessity of carrying a large number of different sizes in stock, but because partition walls of slate, marble and the like, even on the same piece of work, often vary slightly in thickness. The improved door-stop will of course snugly fit in position on the edge of the partition walls whatever may be the variation in the thickness thereof. The number of tools required for the different sizes and hence the cost of manufacture is also reduced.

One of the sections of the door-stop or box flange is arranged to carry an elastic body against which the door 17 strikes, and this elastic body is preferably secured to the section having the guide 10 and at the same edge of the guide as the flange 11. As stated, this section of the door-stop is formed of a piece of flattened seamless tubing, one side of which is bent laterally to form the flange 11. A portion of the other side is bent in the opposite direction to form a support 18 that is preferably semicircular in section and within which the elastic body 19 is firmly secured. As clearly indicated in Figs. 3 and 4, the elastic body 19 is of such a size and is so held in position that its operative face 19^a against which the door 17 strikes is in the same plane, or substantially the same plane, with the inner face of the flange 11. By this arrangement the outer face of the door 17 will always lie in the same plane with the

outer face of the partition 14, no matter what may be the adjustment of the L-shaped section 12—13 within the tubular guide 10. As indicated in Fig. 6, the wall of the tubular guide 10 adjacent its edge is cut away as at 20 to receive the flange 13 when the L-shaped section is shifted to its innermost position within the tubular guide 10.

It is obvious that numerous changes may be made in the details set forth without departure from the essentials of the invention as defined in the claims. It is also obvious that the door-stop may be reversed in position upon the edge of the partition wall so that it may be used either with an outwardly or with an inwardly swinging door.

While the improved device is particularly designed as a door-stop it is obvious that the improved box flange could be employed for supporting hinges or other fixtures upon the edge of the partition wall.

Having described our invention, what we claim as new and desire to secure by Letters Patent, is:—

25 1. A door-stop comprising a box flange formed of two sections, one section consisting of a flattened tubular guide having a laterally projecting flange, and the other section consisting of a portion adjustably engaging 30 said tubular guide and a flange laterally projecting therefrom, and an elastic body carried by one of said sections.

2. An adjustable box flange comprising two sections, one of said sections being 35 formed of a flattened, seamless tube and having a guide portion and a laterally projecting flange for engaging the edge and side respectively of the partition, the other section being L-shaped and comprising a part 40 adjustably sliding in said tubular guide portion and a laterally projecting flange for engaging the opposite side of the partition.

3. A door-stop comprising an adjustable box flange having two sections, one of said 45 sections being formed of a seamless tube and comprising a flattened tubular guide and a laterally projecting flange for engaging the edge and side respectively of the partition, and the other section being L-shaped and 50 comprising a part adjustably sliding within said tubular guide and a flange for engaging the opposite side of the partition, said tubular guide section having a projecting support, and an elastic body carried by said 55 support.

4. A door-stop comprising an adjustable

box flange formed of two sections, one section consisting of a flattened, tubular guide having at one end a laterally projecting flange and an oppositely projecting support, 60 an elastic body carried by said support with its operative face in the same plane with the inner face of said flange, and the other section being L-shaped and consisting of a part adjustably sliding in said tubular guide and 65 a flange laterally projecting therefrom and held parallel with the flange of said first-mentioned section.

5. A door-stop formed of two sections, one of said sections comprising a guide portion 70 and a laterally projecting flange for engaging the edge and side respectively of the partition, an elastic body carried by said section in line with the flange thereof, and the other section being L-shaped and comprising 75 a part engaging said guide and a laterally projecting flange for engaging the opposite side of the partition.

6. A door-stop formed of two sections, one of said sections comprising a flattened tubular guide portion and a laterally projecting 80 flange arranged to engage the edge and one side face respectively of the partition, said tubular guide portion having a projecting support at one end adjacent said flange, an 85 elastic body carried by said support with its operative face in the same plane with the inner face of said flange, and the other section being L-shaped and comprising a part adjustably engaging said guide portion and 90 a laterally projecting flange for engaging the opposite side of the partition.

7. A door-stop formed of two sections, one of said sections comprising a tubular guide and a laterally projecting flange integral 95 therewith for engaging the edge and one side respectively of the partition, said section having an integral support at the outer edge of said tubular guide, an elastic body carried by said support, the other section of said 100 door-stop being L-shaped and comprising a part adjustably sliding in said tubular guide and a laterally projecting flange for engaging the opposite side of the partition, said tubular guide cut away on one side at its 105 inner end to receive the flange of said second section.

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