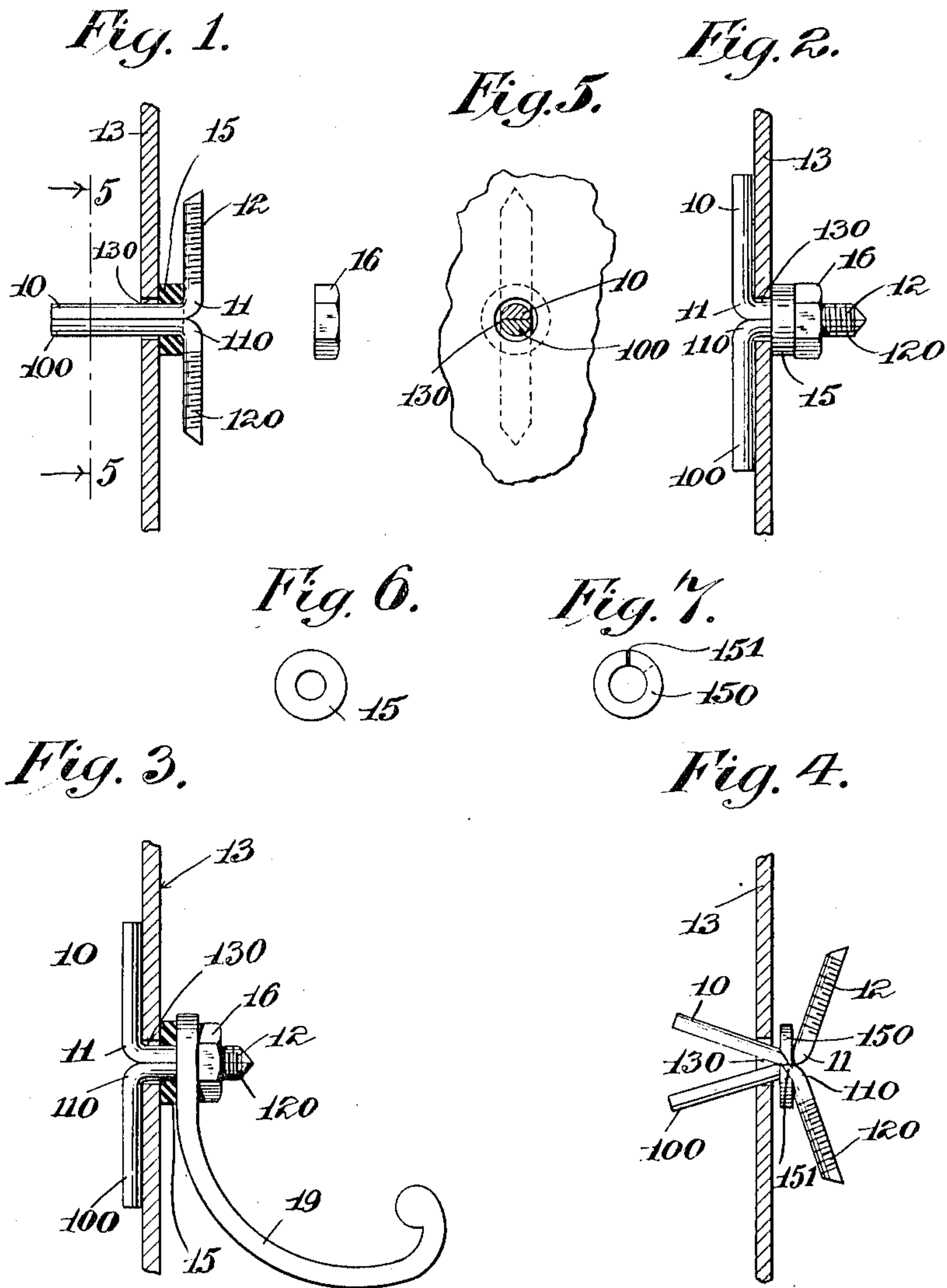


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FASTENER.
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UNITED STATES PATENT OFFICE.

CARL JOSEPH, OF BAYONNE, NEW JERSEY.

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To all whom it may concern:

Be it known that I, CARL JOSEPH, a citizen of Germany, residing at Bayonne, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Fasteners, of which the following is a specification.

My invention relates to fasteners whereby any desired object can be secured to a wall or partition inaccessible except from the front.

As the use of metal as a material of construction increases in frequency, a demand has arisen for a ready means of securing brackets, hangers and similar objects to thin metal partitions from which no access can be had except at the front. Many attempts have been made to provide means to accomplish this result, but so far as known to me they have not been cheap or efficient. The subject matter of this application possesses both of these qualities.

In the drawings, Figure 1 represents a vertical section through a wall, or partition, and a side view of the parts of the fastener in a position ready for use. Fig. 2 is a similar view showing the parts in place after manipulation. Fig. 3 is a view similar to Fig. 2, showing a bracket secured to the wall by means of the fastener. Fig. 4 is a view showing the use of a modified form of the elastic band and the manner of inserting the fastener in place. Fig. 5 is a vertical section on the plane of the line 5—5 in Fig. 1. Fig. 6 is a detail of the form of elastic band shown in Figs. 1, 2 and 3. Fig. 7 is a detail of the modified form of band shown in Fig. 4.

Similar reference numerals designate corresponding parts in all the figures of the drawings.

The fastener, as disclosed, comprises two substantially L-shaped members, preferably formed of half round rods of metal or other suitable material, each member therefore having inner arms, designated respectively 10 and 100 and outer arms designated respectively 12 and 120 that are disposed at substantially right angles to the inner arms. The arms thus produce knuckles 11 and 110. The flat sides of the members are disposed in opposing relation, and said members are so arranged that the knuckles have a rocking bearing against each other to permit the corresponding inner and outer sets of arms to swing into and out of parallel

relation alongside each other with their flat surfaces abutted.

For the purpose of securing the members together, and yet permit of their relative swinging movement, a tie device is employed, which, in the form of construction shown in Figs. 1, 2, 3 and 6, consists of a ring or washer of rubber or other suitable material. This ring or washer slides from one set of arms to the other, accordingly as the arms move into and out of parallel relation, as will be evident by a comparison of Figs. 1 and 3. At the same time, this washer constitutes a stop and abutment as hereinafter set forth. Instead of a continuous ring of rubber, a split elastic ring of metal or other suitable material, as shown in Figs. 4 and 7 may be employed, the same results being secured thereby. The outer arms and 120 have their rounded surfaces threaded the threaded portions being so arranged that when the arms are together, a continuous thread is provided that will receive a nut, as 16.

The device may be employed in a number of ways and for a variety of purposes. In the drawings, a support is disclosed in the form of a vertical wall 13 having an opening 130 therethrough to permit the passage of the arms 10 and 100 when the arms are together, but too small to permit the passage of the washer 15. In applying the device, the arms 10 and 100 are arranged together, as shown in Fig. 1, and are inserted through the opening or aperture 130. The arms 12 and 120 are then swung together, whereupon the washer 15 will slide on to said arm and will prevent the passage of the same entirely through the opening, thereby forming a stop and abutment. The threaded stem, thus produced, which projects from the wall, is now in position to receive the nut 16, and any other suitable device to be supported. Thus in Fig. 3, a bracket 19 is shown, which is clamped between the ring or washer 15 and the nut.

From the foregoing, it is thought that the construction, operation and many advantages of the herein described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion and minor details of construction, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is:—

1. A fastener of the class described, comprising two members, each member having angularly disposed arms and a knuckle, the knuckles of said members having a rocking bearing against each other to permit the corresponding arms of the members to swing into and out of abutting relation alongside each other, and a tie device holding the members together and slidable from one set of arms to the other accordingly as the arms swing out of and into abutting relation.

2. A fastener of the class described, comprising two members, each member having angularly disposed arms and a knuckle, the knuckles of said members having a rocking bearing against each other to permit the corresponding arms of the members to swing into and out of abutting relation alongside each other, and a tie ring holding the members together, said ring being slidable from one set of arms to the other accordingly as the arms swing out of and into abutting relation.

3. A fastener of the class described, comprising two members, each member having angularly disposed arms and a knuckle, the knuckles of said members having a rocking bearing against each other to permit the corresponding arms of the members to swing into and out of abutting relation alongside each other, and an elastic tie ring holding the members together, said ring being slidable from one set of arms to the other accordingly as the arms swing out of and into abutting relation.

4. A fastener of the class described, comprising two substantially L-shaped members

having opposing flat sides and knuckles that rest against each other and form a rocking bearing between the members to permit the corresponding arms of said members to swing into and out of parallel relation with their flat sides abutted, one set of arms being threaded, a nut for holding the threaded arms together, and an elastic tie ring surrounding the members and slidable from one set of arms over the knuckles to the other set of arms accordingly as said arms are swung out of and into said parallel relation.

5. The combination with a support having an opening therethrough, of a fastener comprising two substantially L-shaped members having opposing flat sides and knuckles that rest against each other and form a rocking bearing against each other to permit the corresponding arms of each member to swing into and out of parallel relation with their flat sides abutted, one set of the arms being threaded and the other set when in abutting relation being arranged to pass through the opening and swing out of abutting relation, a nut for holding the threaded arms together, and an elastic ring surrounding the members and holding them together, said ring being slidable from one set of arms to the other upon the swinging movement of the members and being of too great a diameter to pass through the opening, said ring furthermore constituting a stop for preventing the members passing entirely through the opening when the threaded arms are abutted.

In testimony whereof I affix my signature in presence of two witnesses.

CARL JOSEPH.

Witnesses:

MAY HUGHES,

ALAN McDONNELL.