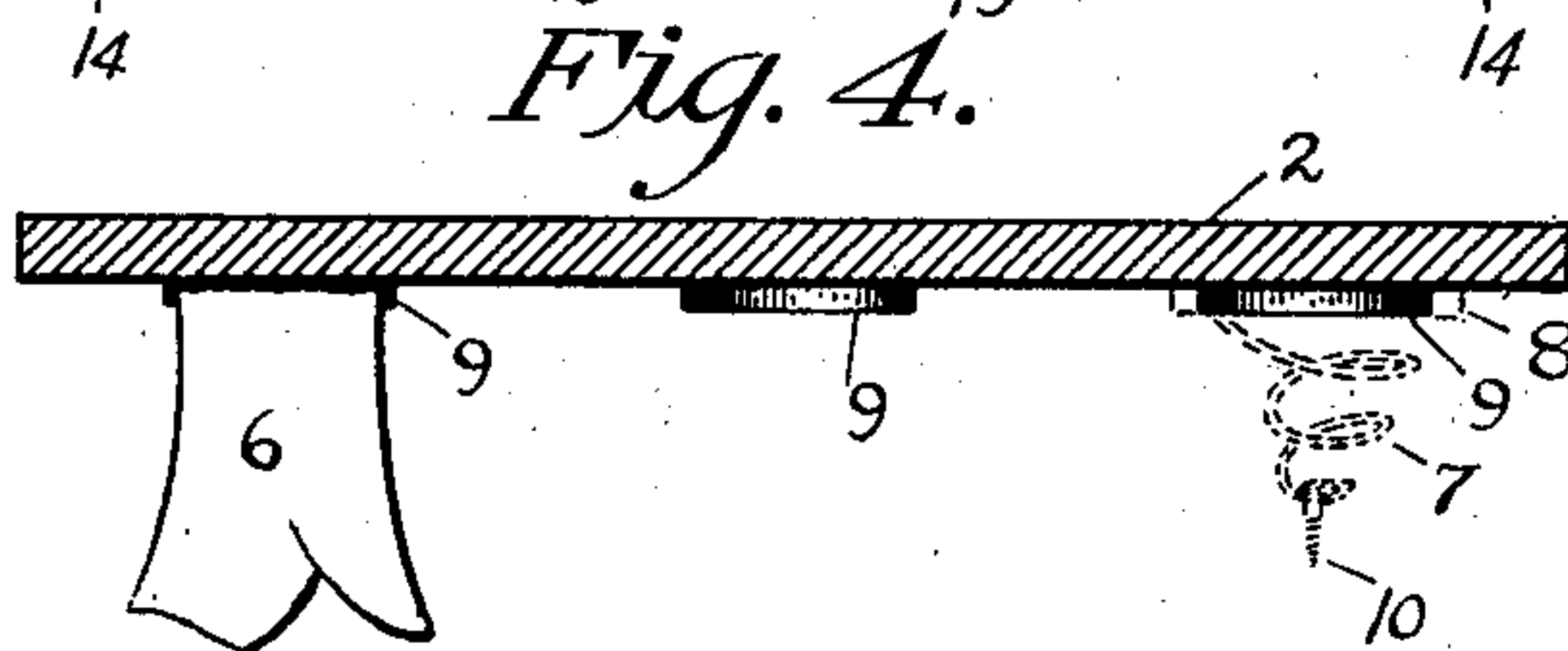
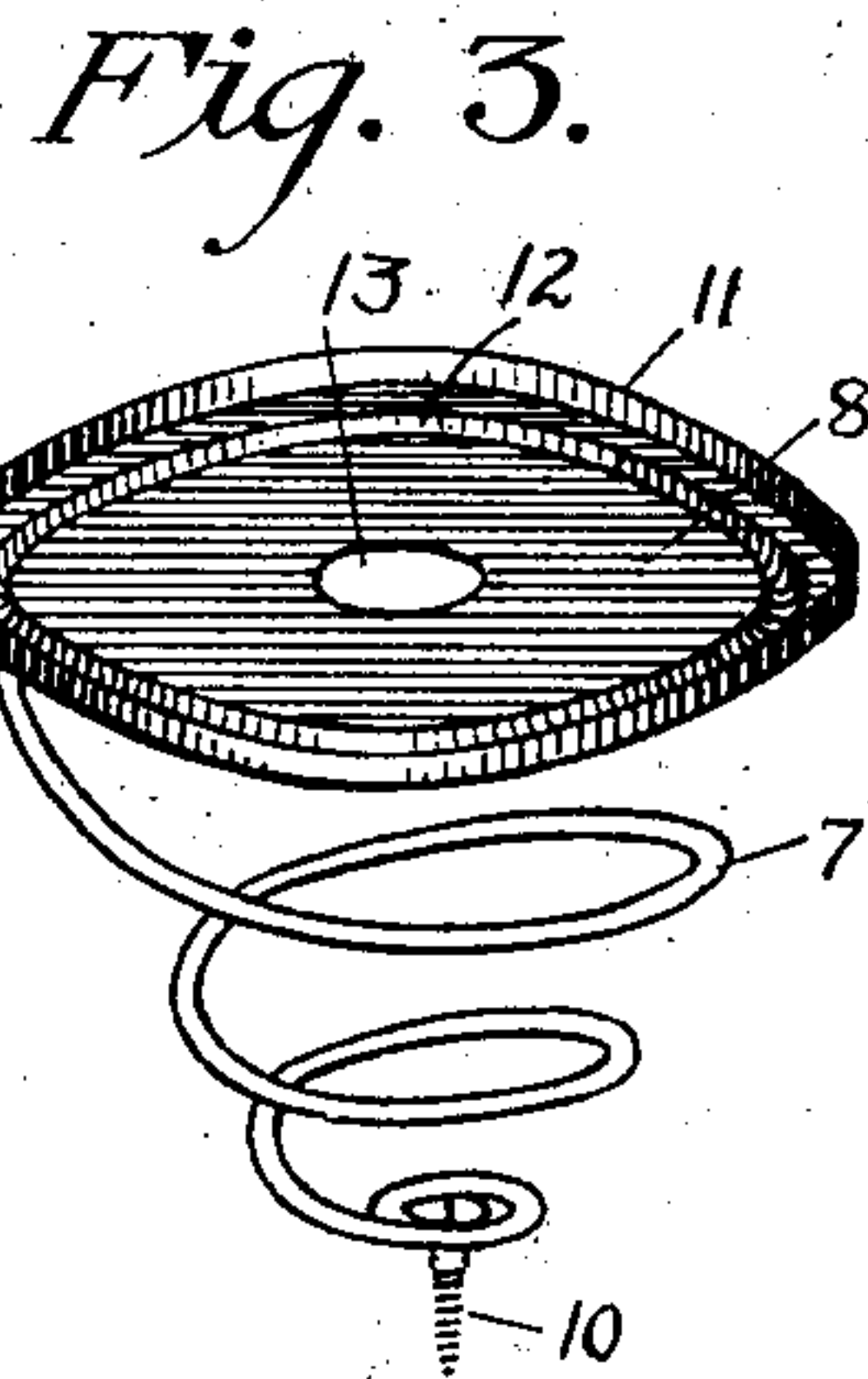
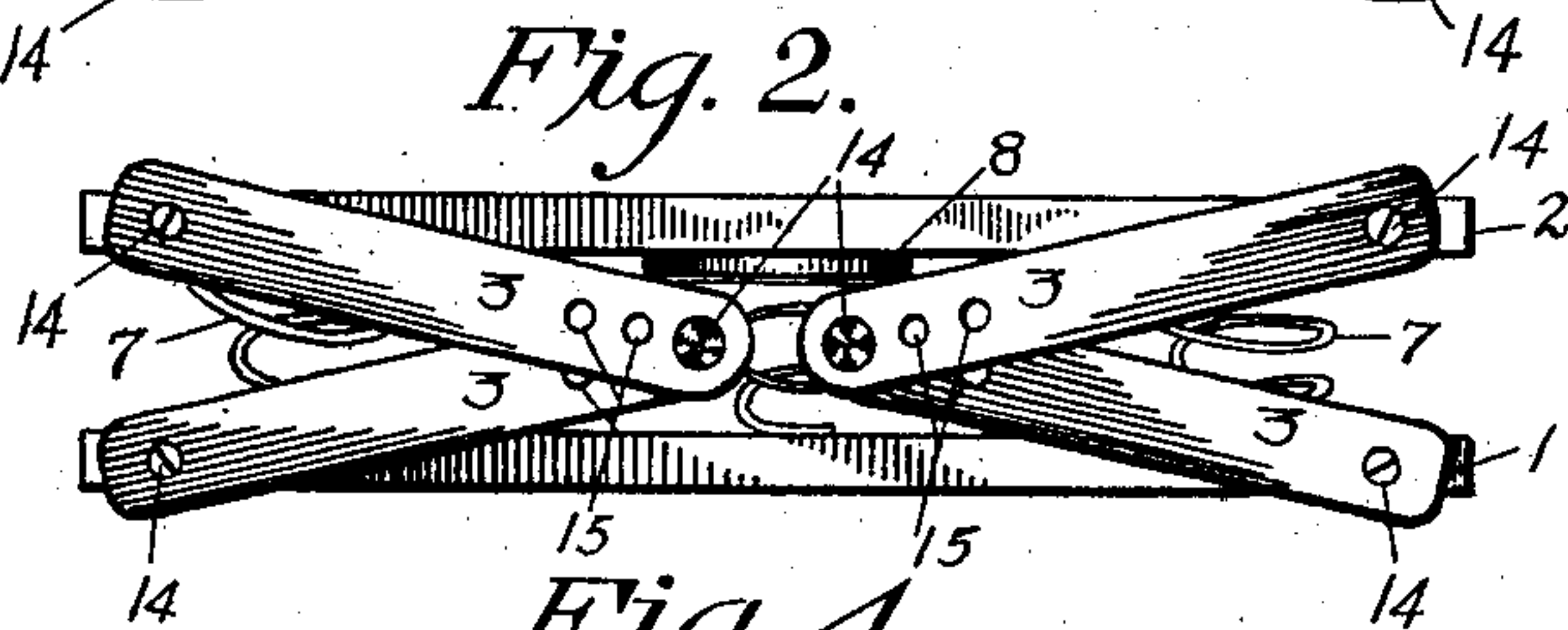
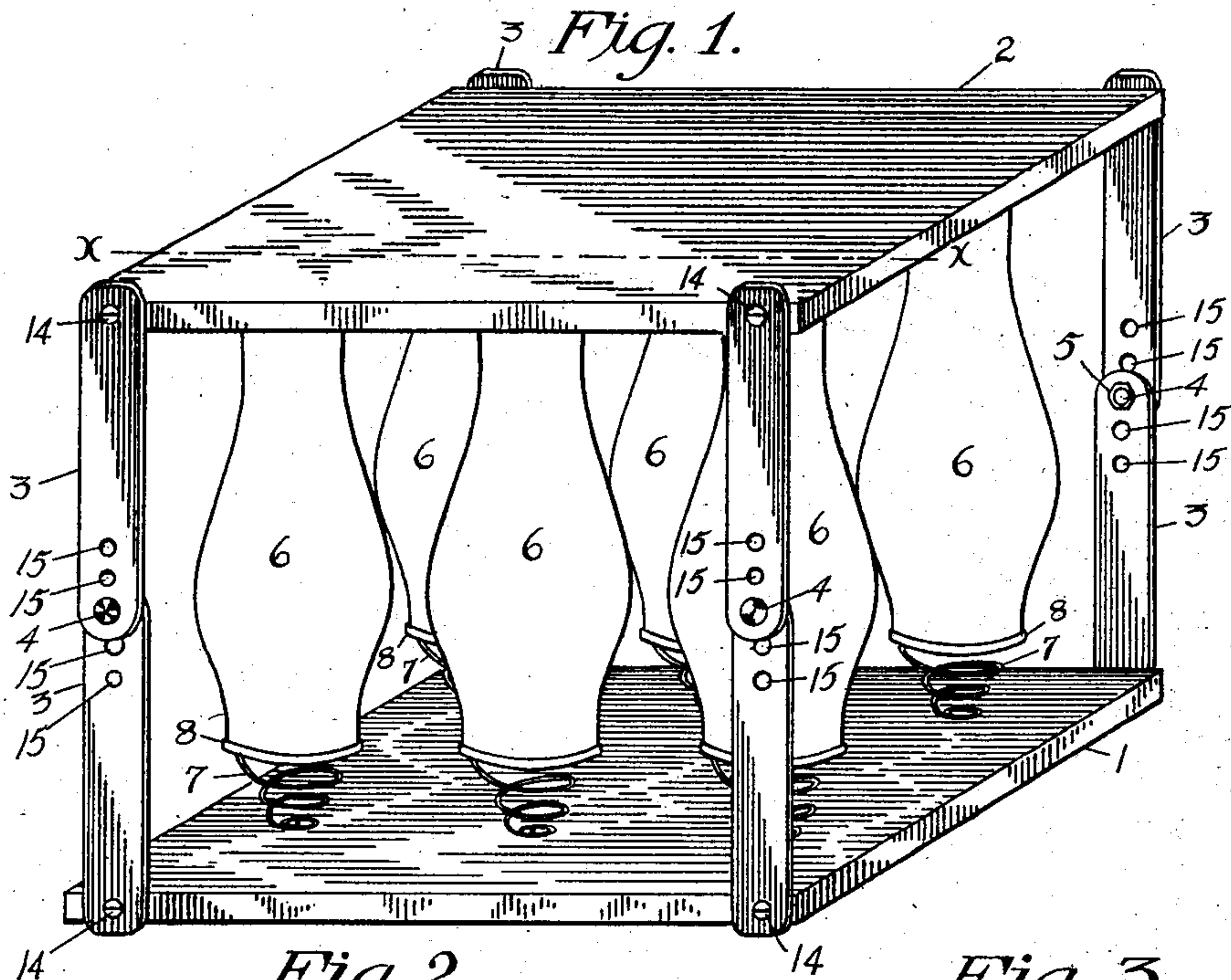


No. 746,077.

PATENTED DEC. 8, 1903.

E. P. HENIGAN.
LAMP CHIMNEY OR BOTTLE CARRIER.
APPLICATION FILED DEC. 15, 1902.

NO MODEL.



Witnesses
W. S. Moran.

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By

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UNITED STATES PATENT OFFICE.

EDWARD P. HENIGAN, OF DUNMORE, PENNSYLVANIA.

LAMP-CHIMNEY OR BOTTLE CARRIER.

SPECIFICATION forming part of Letters Patent No. 746,077, dated December 8, 1903.

Application filed December 15, 1902. Serial No. 135,197. (No model.)

To all whom it may concern:

Be it known that I, EDWARD P. HENIGAN, a citizen of the United States, residing at Dunmore, in the county of Lackawanna and State of Pennsylvania, have invented certain new and useful Improvements in Lamp-Chimney or Bottle Carriers, of which the following is a specification.

This invention relates to folding crates adapted to carry lamp-chimneys, lantern-globes, vases, and the like.

The objects of the invention are to provide a safe means for carrying fragile articles in railway-trains, to make any of the articles accessible without disturbing the rest, to simplify the construction and operation of folding crates, and other objects, as are herein specified, and pointed out in the claim.

To these ends the invention consists of the construction, arrangement, and combination of parts, as herein specified, and illustrated in the drawings, in which—

Figure 1 is a view in perspective of one of my folding crates complete filled with lamp-chimneys. Fig. 2 is a view of the same in the folded position when the contents are removed. Fig. 3 is a detail view of one of the spring-supports used in the device. Fig. 4 is a view, partially in cross-section, taken on the line *x x* of Fig. 1.

Similar characters of reference denote like and corresponding parts throughout the several views.

Referring to the drawings, 1 denotes the base or bottom board of my improved crate, and 2 denotes a top board of similar shape designed to be arranged directly over the bottom 1 and held into position by the pivoted and jointed struts 3 3, &c., which are pivoted or jointed together by means of the bolts 4 4, &c., each of said bolts being secured by means of a nut 5 and said struts being capable of adjustment at different lengths by means of the holes 15 15, &c., any one of the said holes 15 being capable of registering with a similar hole on the strut with which it pairs, so that the upper and lower boards 1 and 2 may be adjusted at variable distances, accommodating the length of the different objects to be crated.

My device is illustrated as carrying lamp-chimneys 6 6, &c., which are secured and

held into position by means of the coiled springs 7 7, carrying shields or supports 8 8, &c. The said supports are preferably constructed from sheet or plate metal and may be soldered or otherwise fastened to the spring 7. A rim or flange 11 extends around the top of the support 8 to prevent the object from sliding off. A bead 12 may also be swaged into the metal to give it rigidity. A central aperture 13 is cut out of the metal for the purpose of giving access to the head of the screw 10, by means of which the spring 7, with its attachments, is secured to the bottom 1. A support 9, preferably smaller in diameter than the support 8, but similar in shape, is secured on the under side of the top 2 directly over each of the supports 8 aforesaid.

The operation of the device is now readily explained. When it is desired to insert an object into the crate in the position of the lamp-chimneys shown, the lower end of the object is placed upon the support 8 and pressed downward, compressing the spring 7 until the upper end of the object may be passed into engagement with the upper support 9. The small end of a lamp-chimney or the neck of a bottle may be included within the flange of the upper support; but larger objects, such as the upper end of lamp-globes, may encircle and include within their upper ends the upper supports. When the crate is empty, it may be collapsed by folding inward the jointed struts 3 3, which operation is designed to bring the lower and upper bases 1 and 2 closely together, as shown in Fig. 2, the supports 8 on the springs 7 encompassing the upper supports 9, as shown in dotted lines in Fig. 4. In the folded position the crate may be used as a spring-seat for fragile objects.

Having thus described my invention, I do not wish to be confined to the exact details shown, as many of them may be varied without departing from the general spirit of the invention.

What I claim, and desire to secure by Letters Patent, is—

In a folding crate of the kind described, an upper base-piece and a lower base-piece, jointed struts uniting said base-pieces and arranged to hold them in parallel planes at

varying distances apart, opposed holding-clips arranged on the facing sides of said base-pieces, coiled springs supporting the holding-clips on one of the base-pieces, where-
5 by the holding-clips may be constrained apart for the purpose of inserting the objects to be held, substantially as specified.

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

EDWARD P. HENIGAN.

Witnesses:

F. J. DE LACEY,
P. P. SMITH.