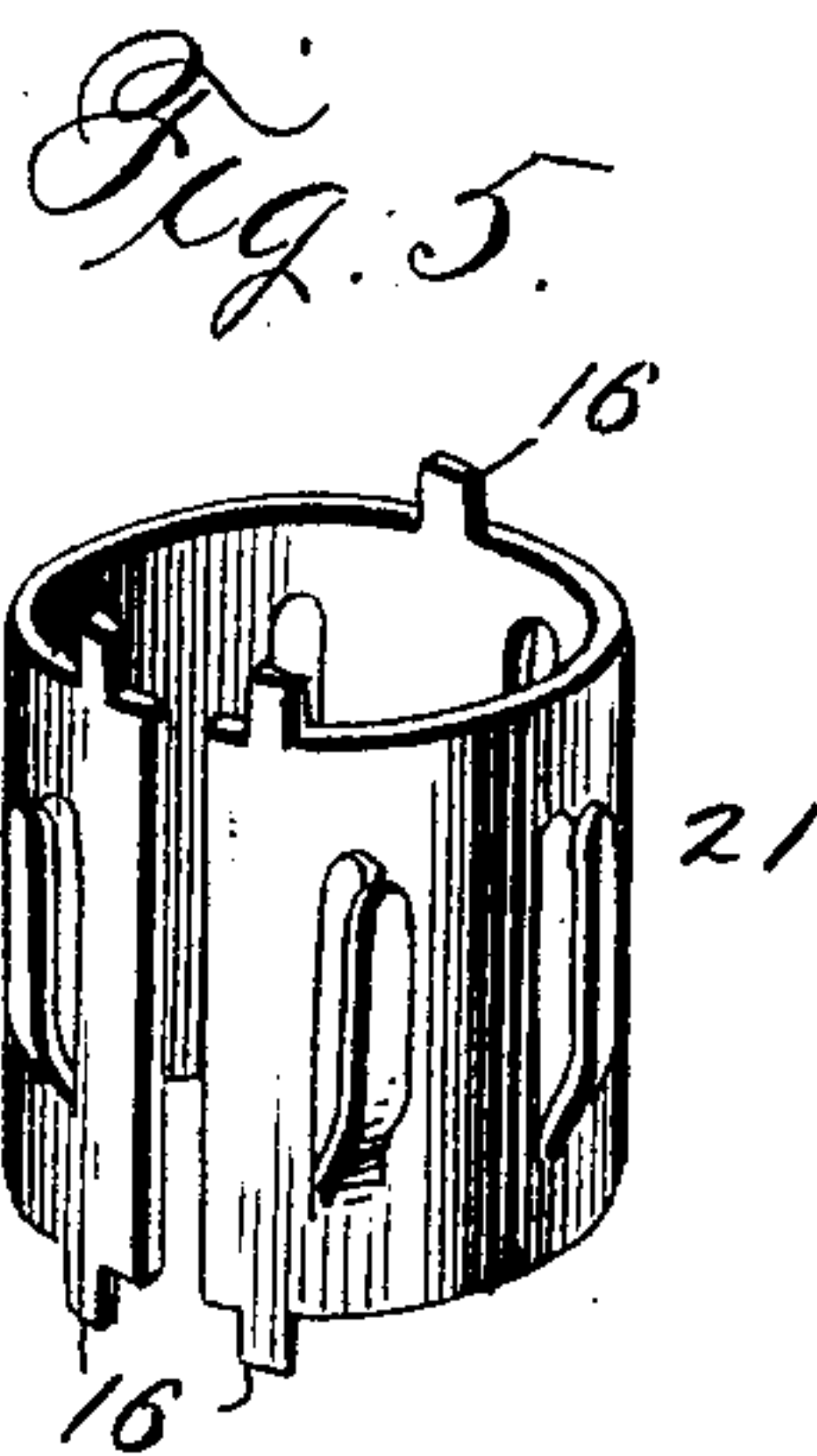
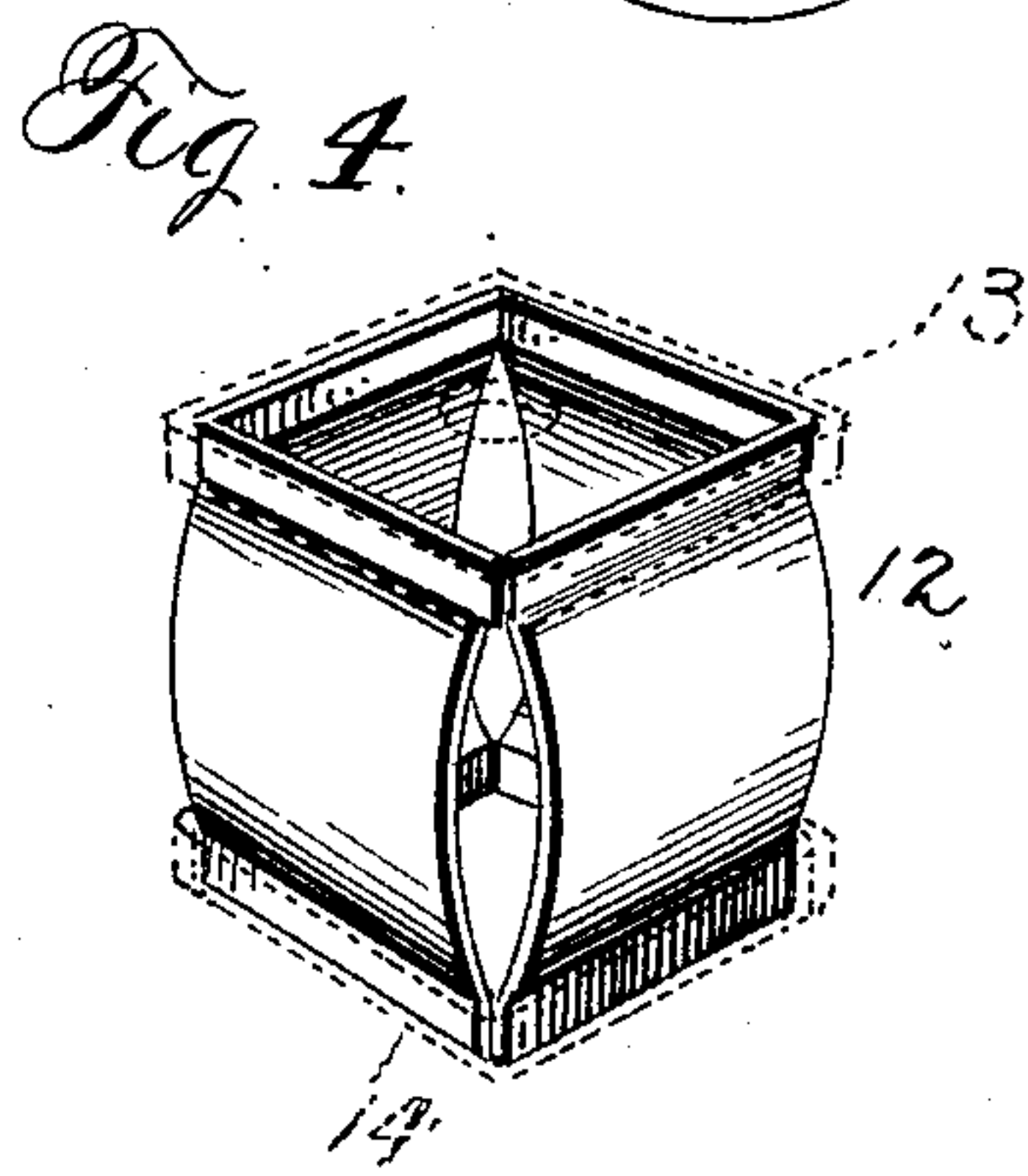
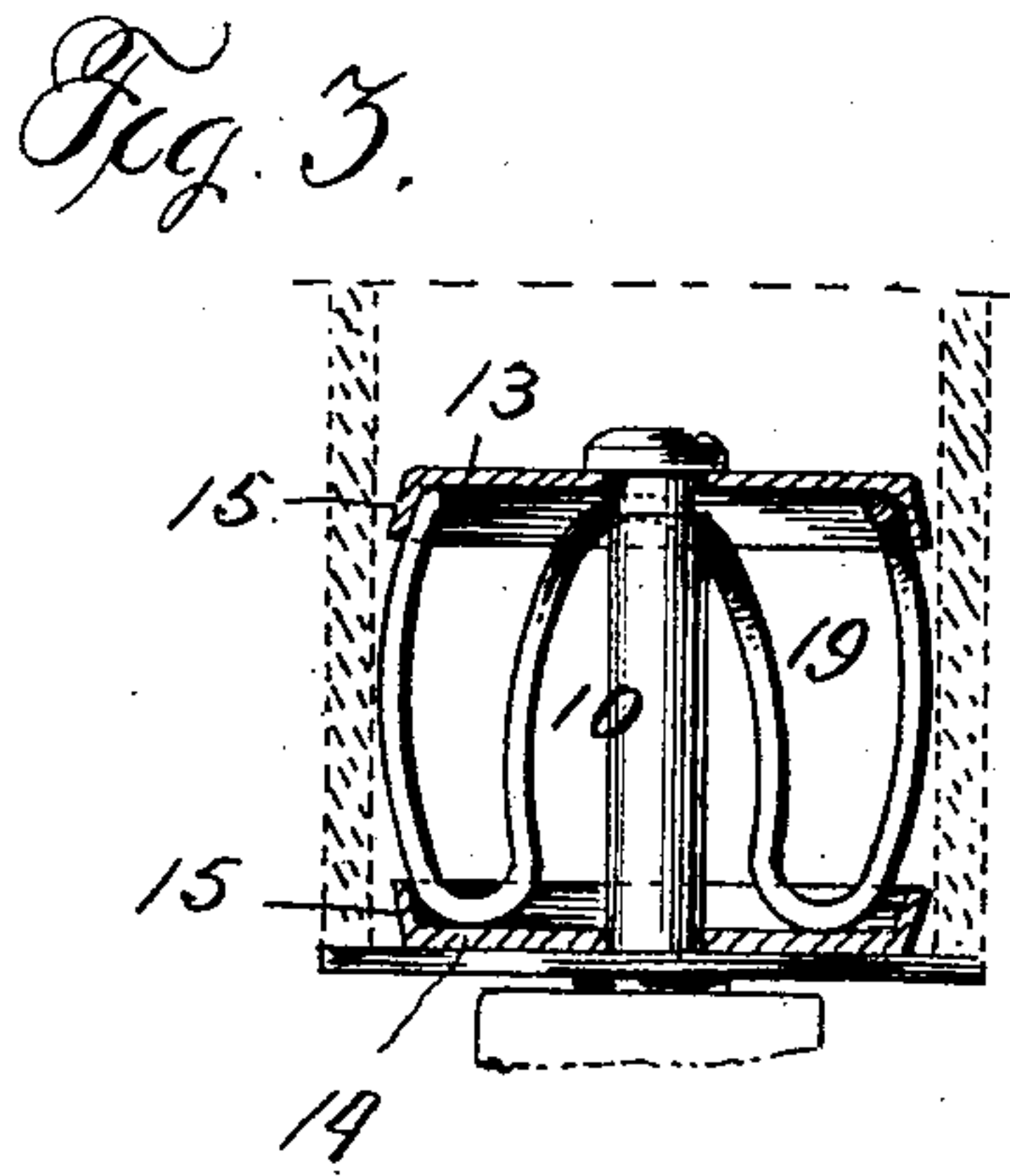
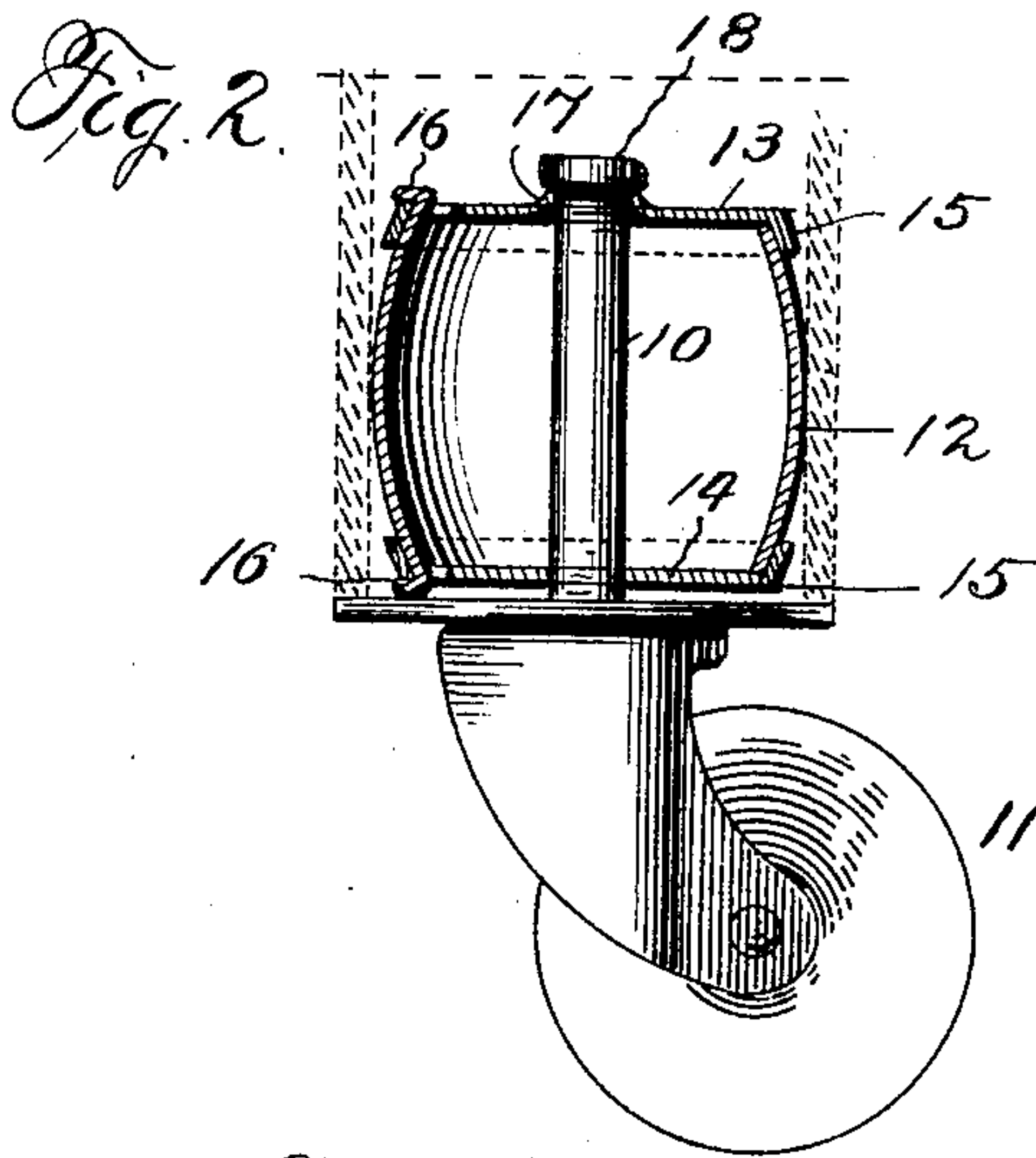
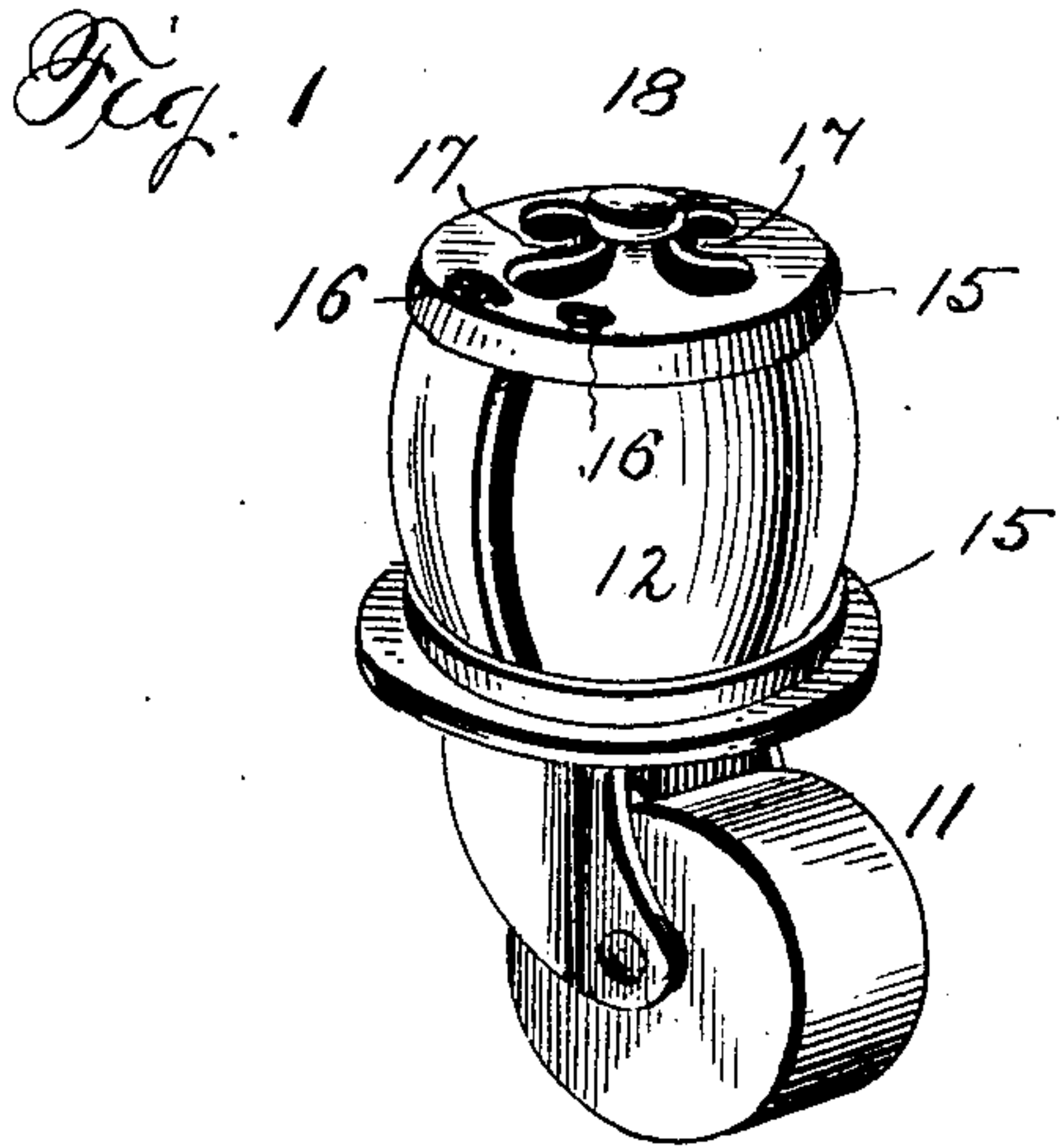


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 CASTER ATTACHING BEARING BOX.
 APPLICATION FILED APR. 17, 1909.

925,117.

Patented June 15, 1909.



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CASTER-ATTACHING BEARING-BOX.

No. 925,117.

Specification of Letters Patent.

Patented June 15, 1909.

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To all whom it may concern:

Be it known that I, VALENTINE C. LUPPERT, a citizen of the United States, residing at Williamsport, in the county of Lycoming and State of Pennsylvania, have invented certain new and useful Improvements in Caster - Attaching Bearing - Boxes, and do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the figures of reference marked thereon.

My invention relates more particularly to casters used upon iron or metal bedsteads, and my object is to provide an attaching spindle bearing box capable of being inexpensively made, and involving no alteration in the caster spindle, and which may be easily applied to the bed post and yet securely held thereto, and to this end my invention consists in the device constructed substantially as hereinafter specified and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a caster embodying my invention; Fig. 2 a vertical section of the parts assembled; Fig. 3 a similar view showing a different form or embodiment of my invention; Fig. 4 a perspective view of a caster having a square form of box; and Fig. 5 a detail view in perspective of another form of box that may be employed.

As far as the matter of the spindle or pivot post 10, the roller 11, and its pivotal connection with the spindle 10, are concerned, the caster is of ordinary construction, and indeed one of the objects of my invention is to make unnecessary any alteration in the caster in those regards.

Referring to the embodiment of my invention illustrated in Figs. 1 and 2, the box having the general form of a barrel comprises a body portion 12, formed of sheet metal rolled to produce the bulging barrel form, and bent into a circular shape but with the edges separated, so as to allow the necessary movement for contraction and expansion, and two heads 13 and 14, respectively, of sheet metal, which may be simply flat plates or disks, or provided each with a flange 15 to encircle the contiguous edge of the body of the barrel. As an inexpensive and yet effective connection between the body and head, the body at each end is provided with tongues or tangs

16, and each head is provided with slots or holes for the passage therethrough of the tangs, which are bent over into engagement with the outer side of the head. The holes are sufficiently larger than the tangs to allow the necessary play of the body. The contact of the tangs with the inner sides of the holes limits the movement of the body under compression, and therefore is useful in preventing such undue compression of the body as might result in destroying the spring or elasticity thereof. The heads are of course provided with alining holes for the passage therethrough of the caster spindle, and if desired, the connection between the upper end of the spindle and the upper head may be by upsetting or riveting the end of the spindle over a washer, but a form of connection which I prefer, because it enables the box to be made complete as an article of manufacture, and sold for application to the caster, is provided by punching or slitting the upper head on radial lines, so as to form a series of spring tongues 17 whose inner free edges are preferably upturned, and between which the upper end of the spindle or pivot post 10 may be thrust to carry a head or enlargement 18 thereon above the free ends of the spring tongue, whereby the latter will pass under the head or enlargement and prevent the withdrawal of the spindle or post. The box once applied to the caster, there is of course no occasion for its removal therefrom, and the connecting means I have just described, besides being extremely simple and inexpensive, nevertheless affords the desired permanent connection of the box with the caster.

Although the flanges on the heads may be omitted, yet I prefer them, and especially on the lower head, because while confining and supporting the barrel body against undue outward movement, and assuring, especially in the case of the lower head, the proper insertion of the box within the bed post, they permit all required contraction of the box body for its insertion in the bed post.

For the sake of lightness, and to provide pieces of sheet metal that may be useful for other purposes, the barrel body may be perforated by cutting or punching out pieces of suitable shape, and my invention therefore is to be understood as extending to a barrel body whether of an imperforate or a perforated sheet.

The posts or legs of some metal beds are square, and while of course the round barrel form of box is applicable to such posts or legs, yet it may be desirable to give the box a form corresponding to the form of the post, and I therefore illustrate in Fig. 4 a square form of box, the barrel body of which is made of sheet metal bent to a rectangular or square form, pieces being cut or punched out at points corresponding with the corners to enable the square form to be thus produced, and to afford the required elasticity of the body.

As illustrated in Fig. 3, instead of forming the barrel body of sheet metal, it may be formed of a piece of wire 19 bent to form a skeleton frame of the required bulging form, the construction being otherwise the same as that described as far as the heads are concerned.

As illustrated in Fig. 5, the box body may be of cylindrical form, with a series of spring tongues 21 struck up therefrom to provide the expansible and contractible element of the body.

It will be understood that when the connection between the upper end of the spindle and the upper head is effected by upsetting or riveting the end of the spindle, as hereinbefore described, the tangs 16 will not be employed; and it is also to be understood that when the spring tongues 17 are employed for connecting the box and the spindle, they need not be bent upward if a construction should be desired enabling the disconnection of the spindle from the box. Of course when the spindle and head are riveted together, it is not necessary to employ a washer between the opposite head or end of the spindle and the box head.

Having thus described my invention, what I claim is—

1. An attaching device for casters, comprising an outwardly expansible body, heads for the body, and yieldable means for interlocking one of the heads and the caster spindle.

2. An attaching device for casters, comprising an outwardly expansible body, heads for the body, and means for interlocking one of the heads and the caster spindle, composed of spindle-engaging tongues.

3. An attaching device for casters, comprising an outwardly expansible body, heads for the body, and means for interlocking one of the heads and the caster spindle, the heads having flanges to overlap the ends of the body.

4. An attaching device for casters, comprising an outwardly expansible body, heads for the body, and tongue and slot connections between the heads and the body, the heads having flanges engaging the outside of the body.

5. An attaching device for casters comprising an outwardly expansible and inwardly contractible body, heads for the body, and head-carrying means for limiting movement of the body with reference to the heads.

6. An attaching device for casters, comprising an outwardly expansible member, and heads with flanges that engage the ends of said member on the outside.

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

VALENTINE C. LUPPERT.

Witnesses:

HUGH GILMORE,
BESSIE THOMPSON.