

Oct. 7, 1930.

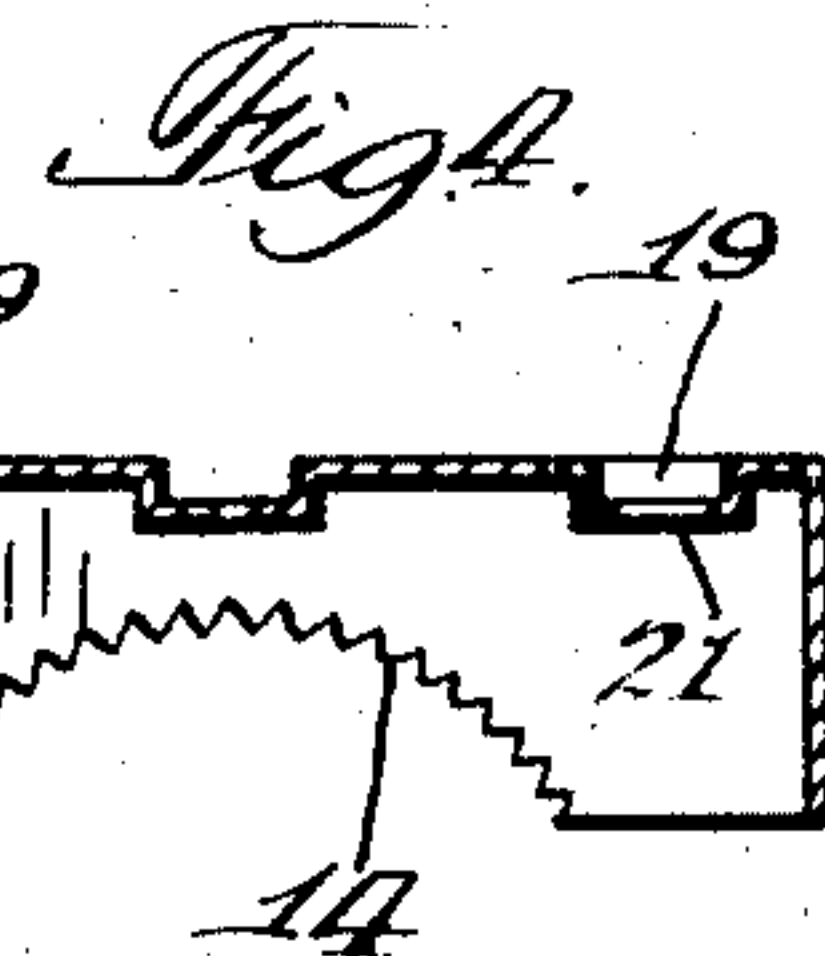
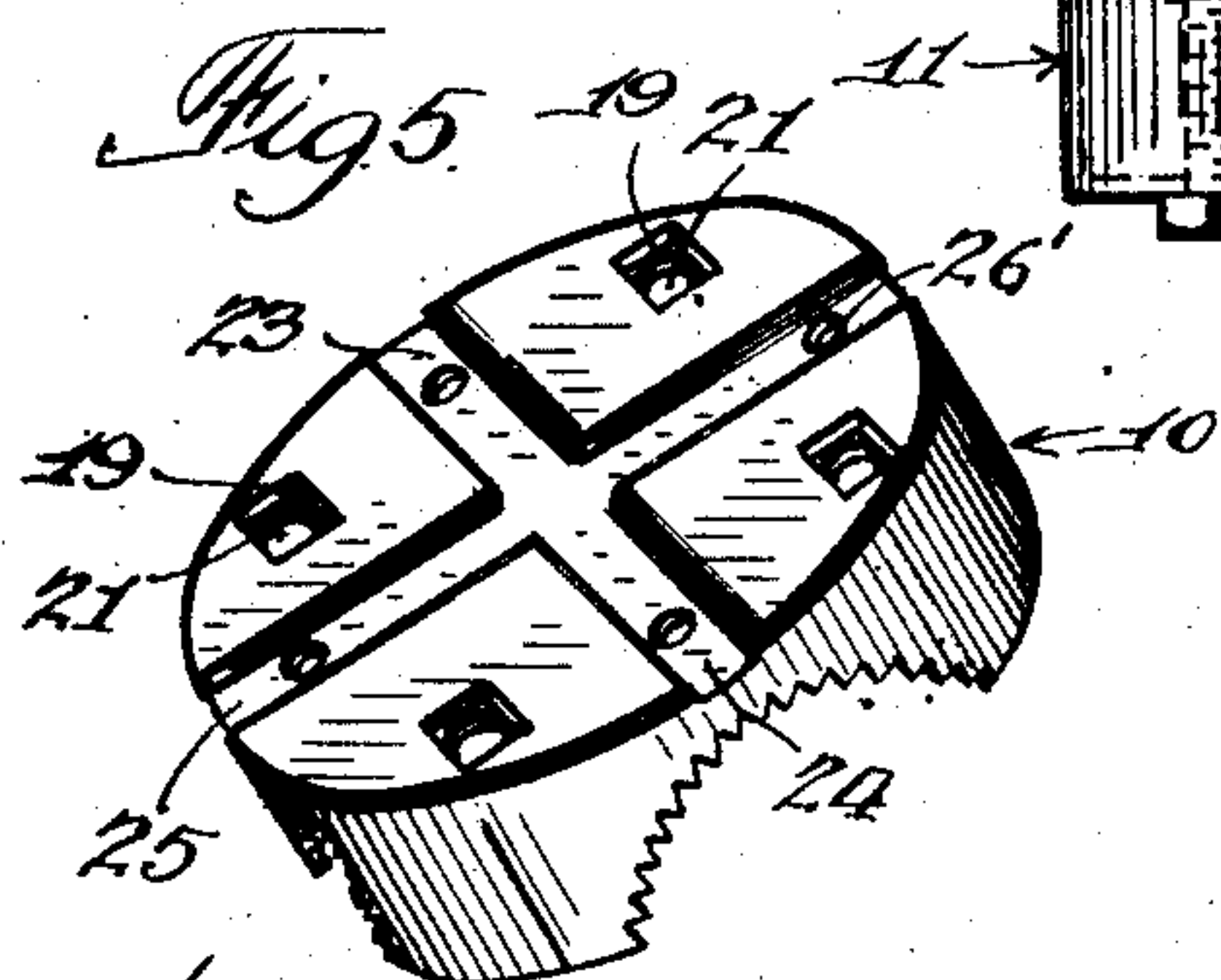
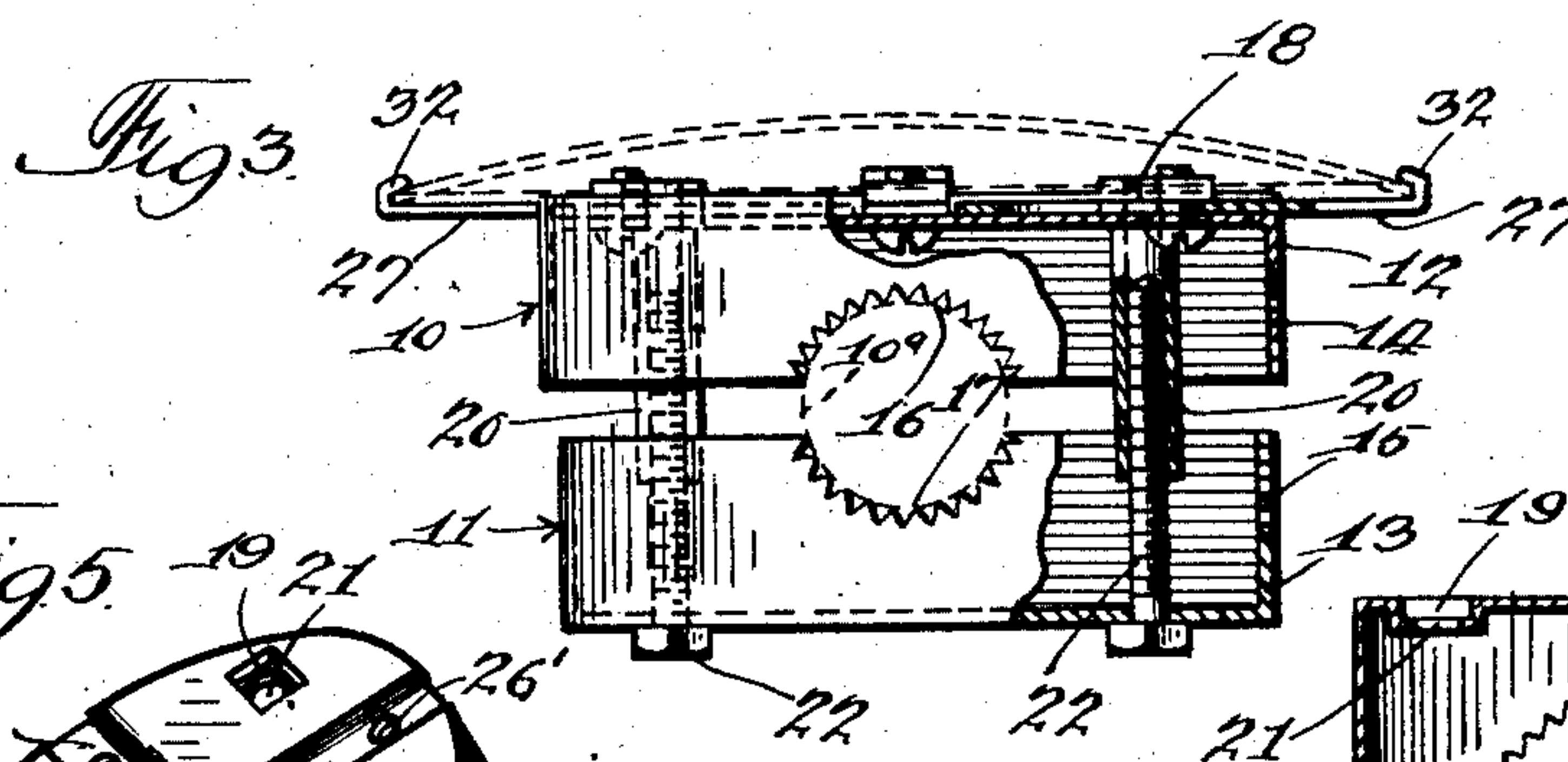
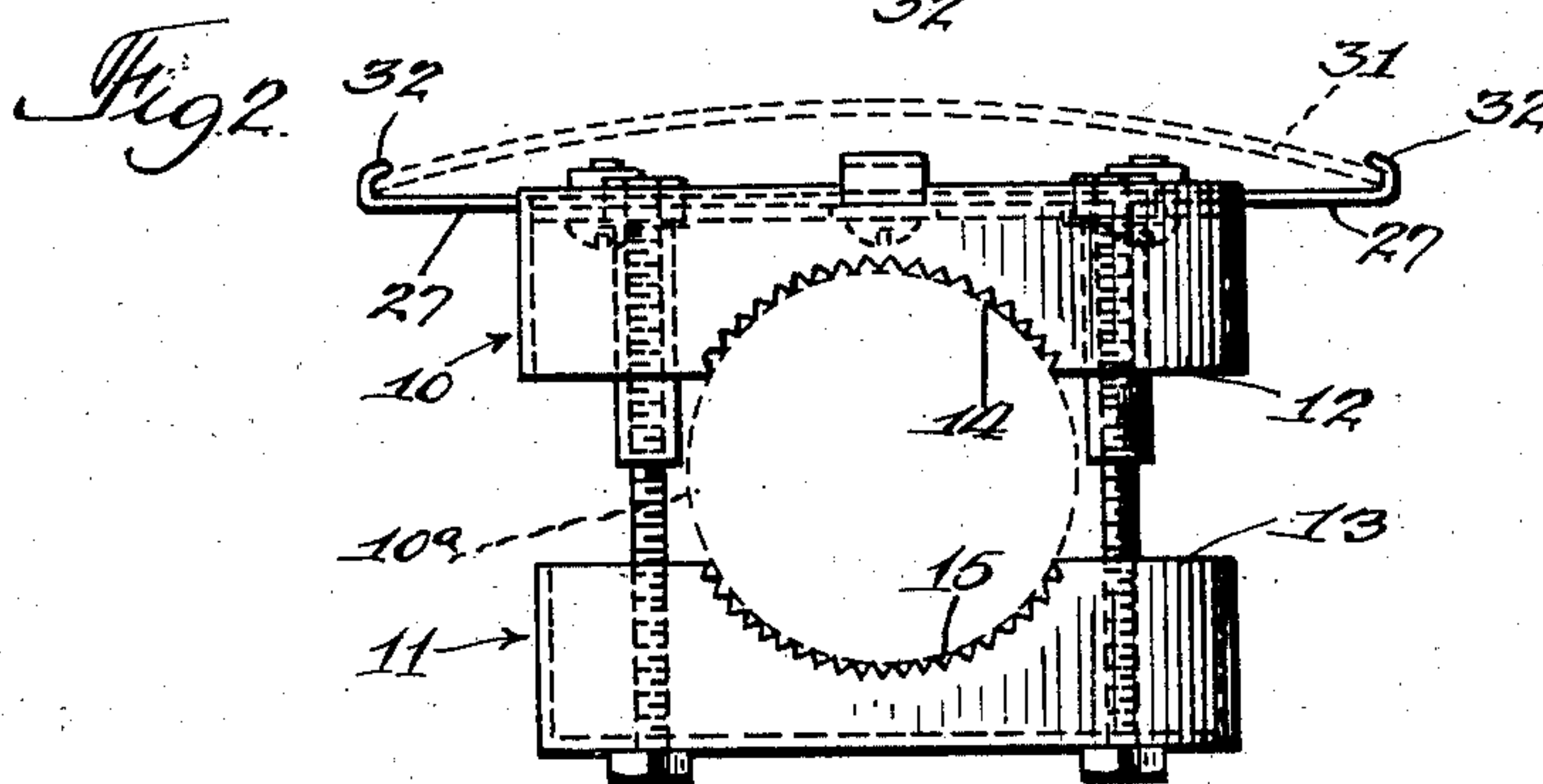
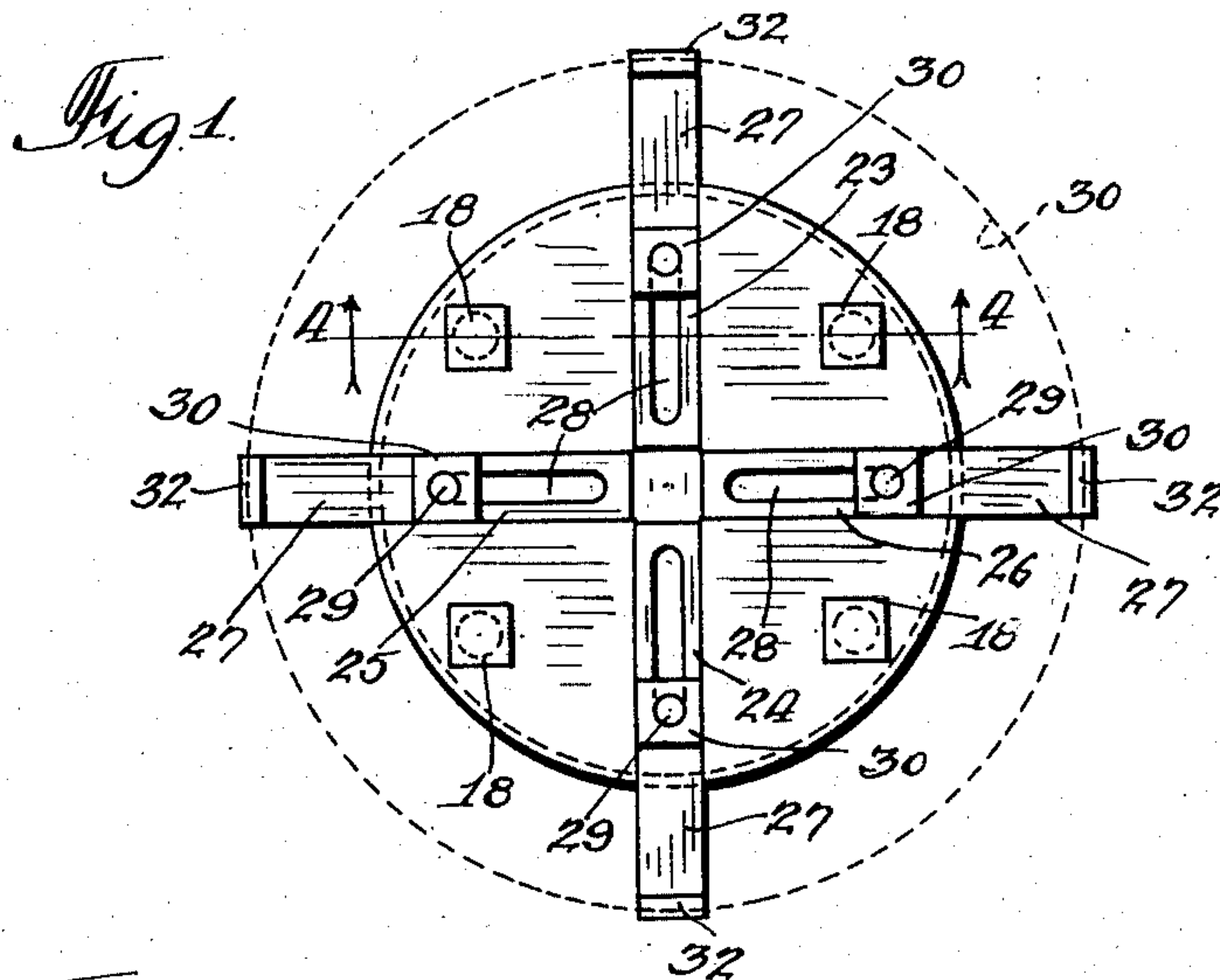
C. HORIX

1,777,884

SECURING DEVICE

Filed April 20, 1928

3 Sheets-Sheet 1



Witness:
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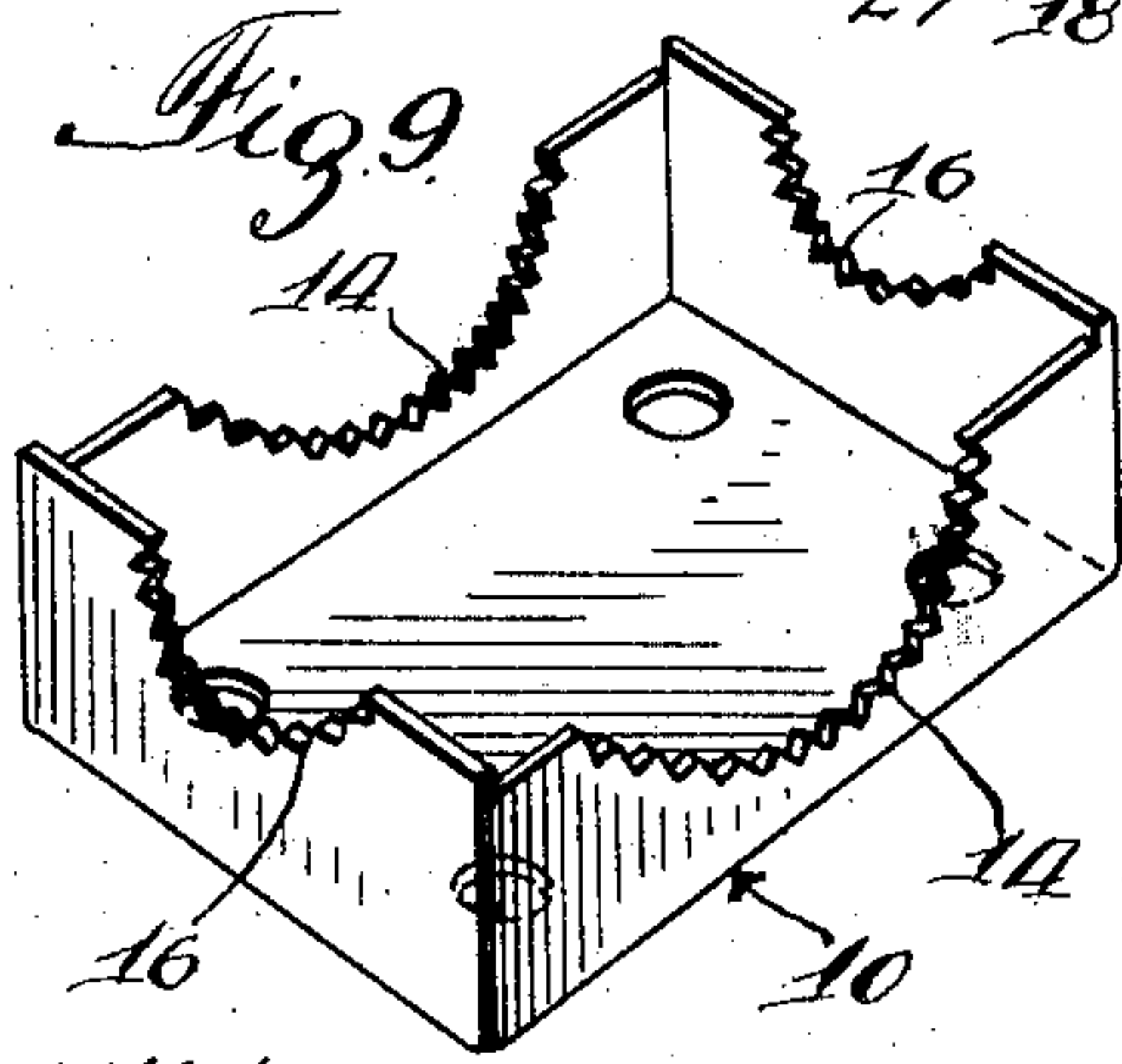
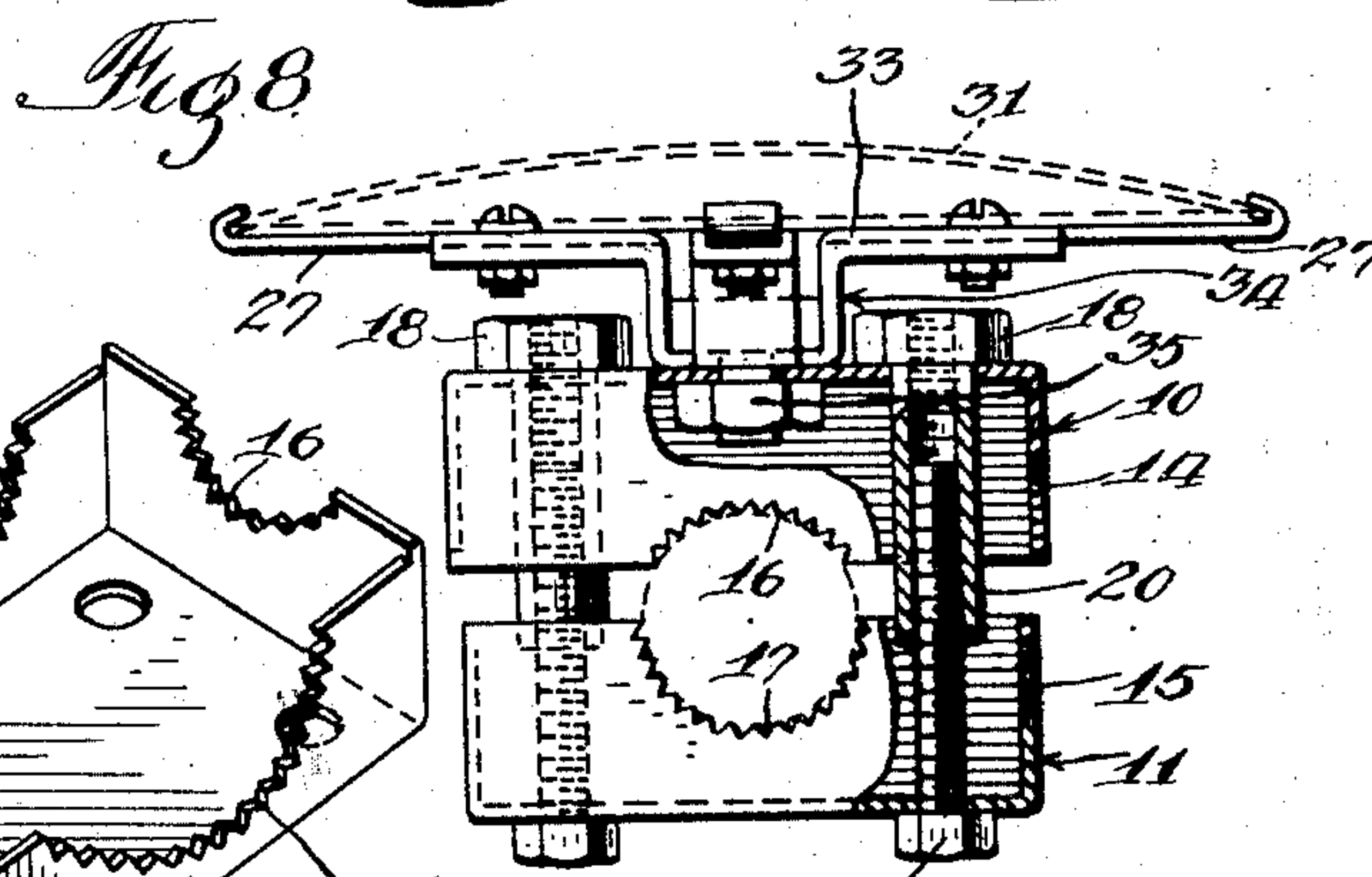
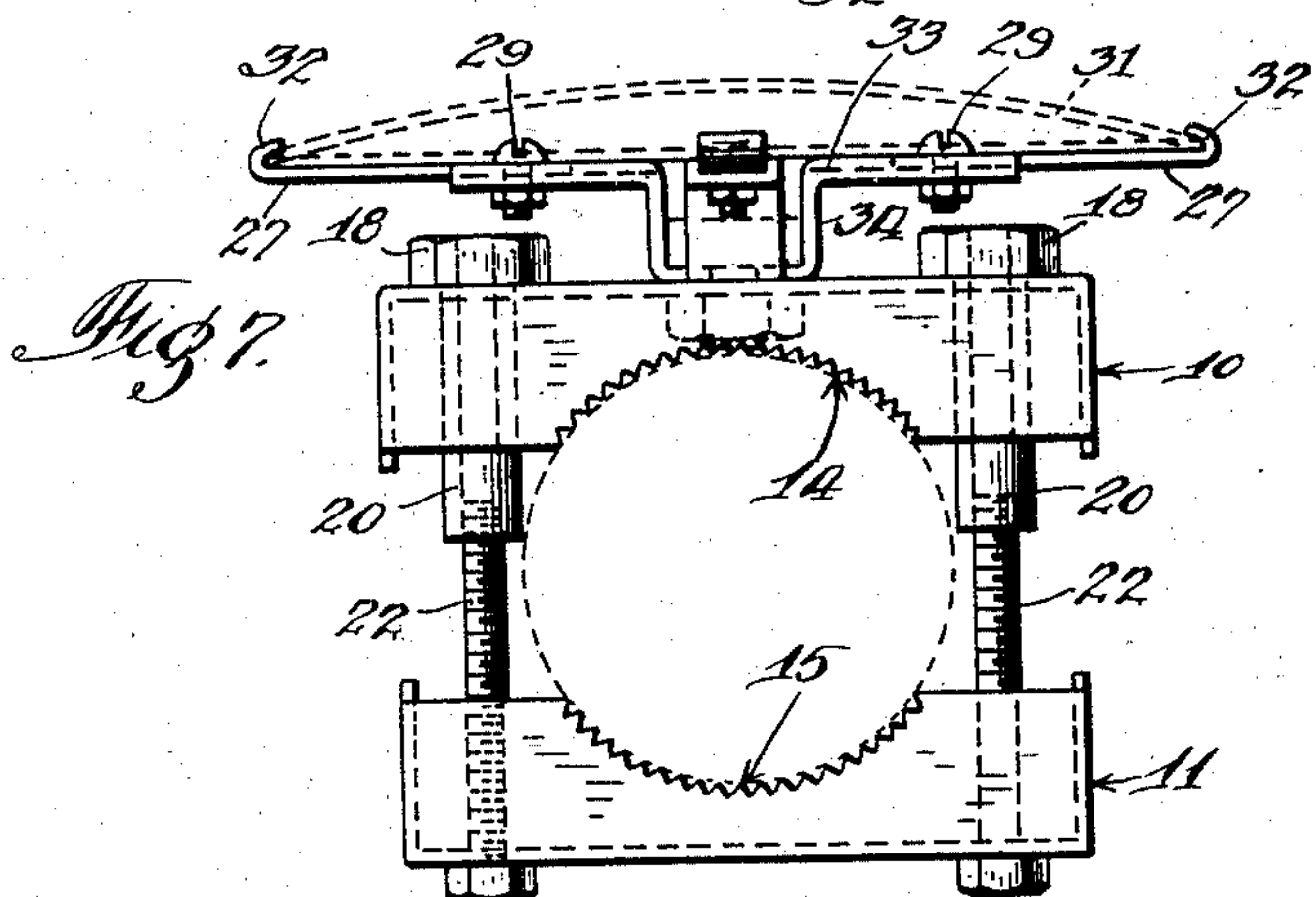
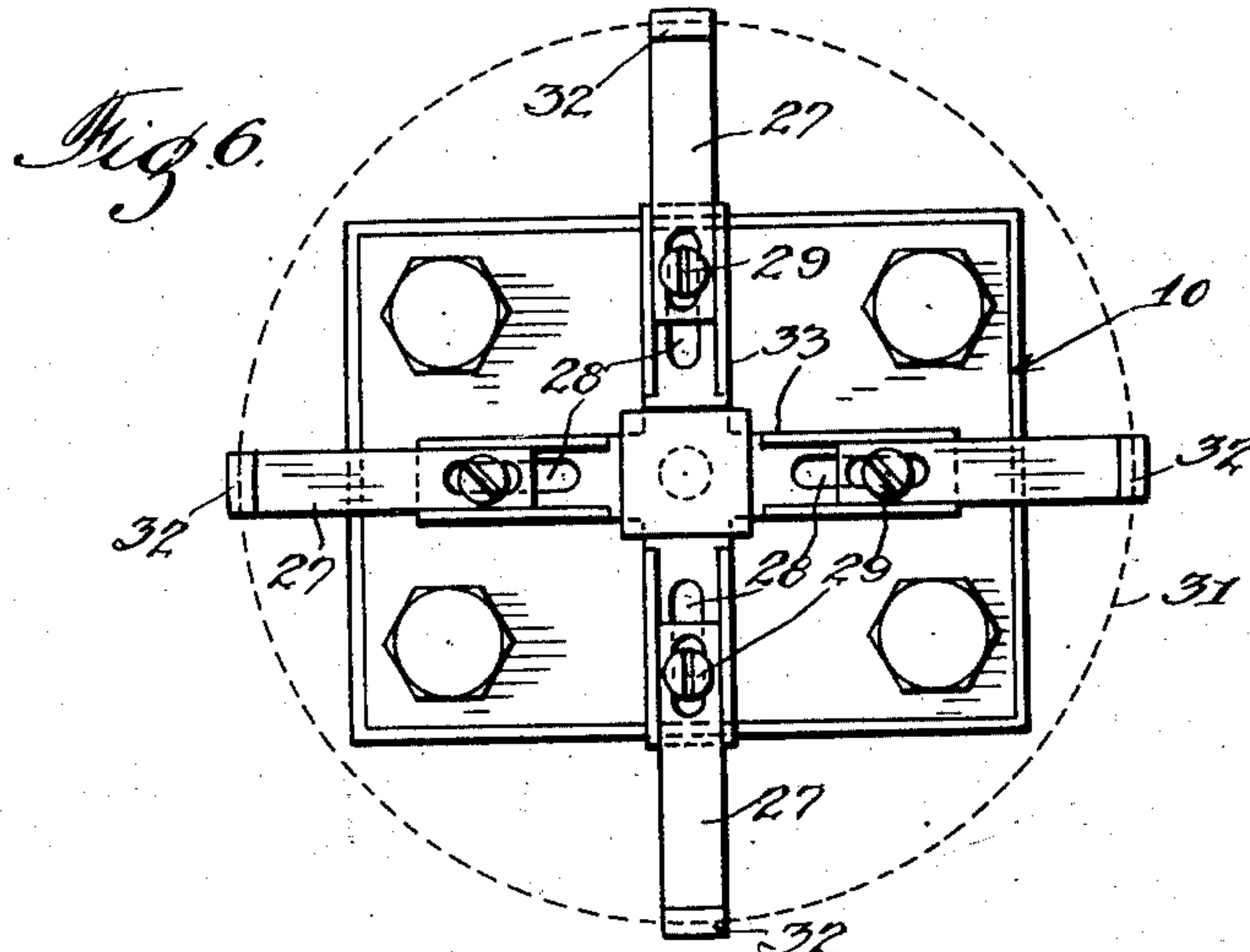
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SECURING DEVICE

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3 Sheets-Sheet 2



Witness:
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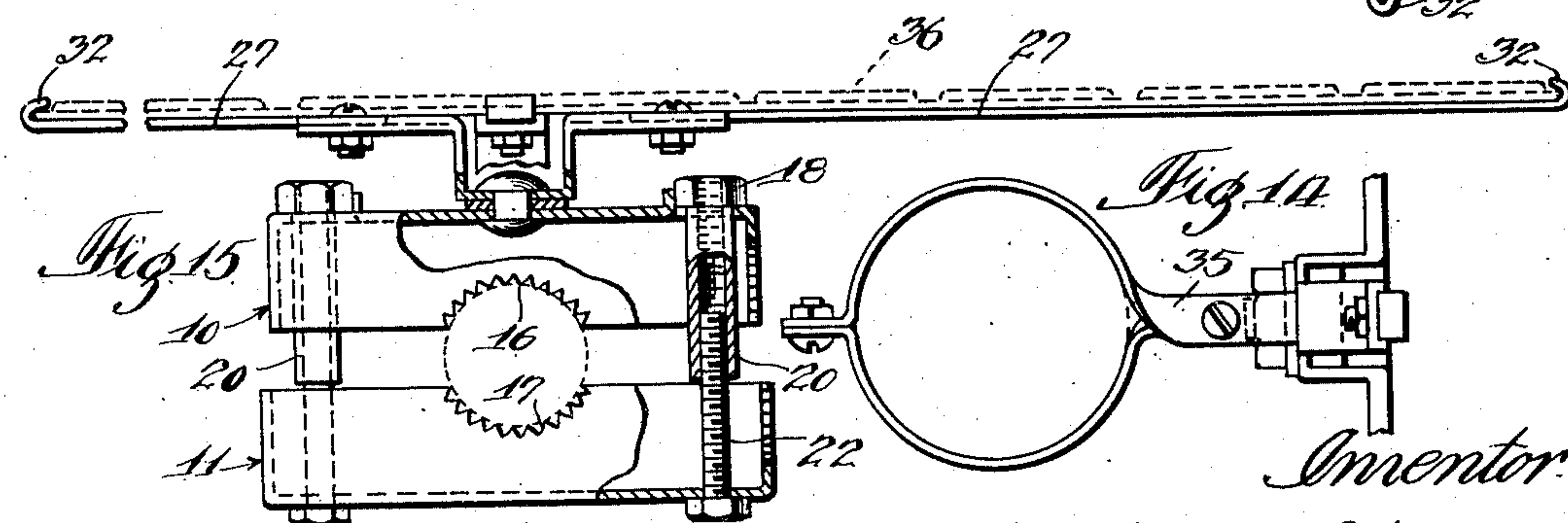
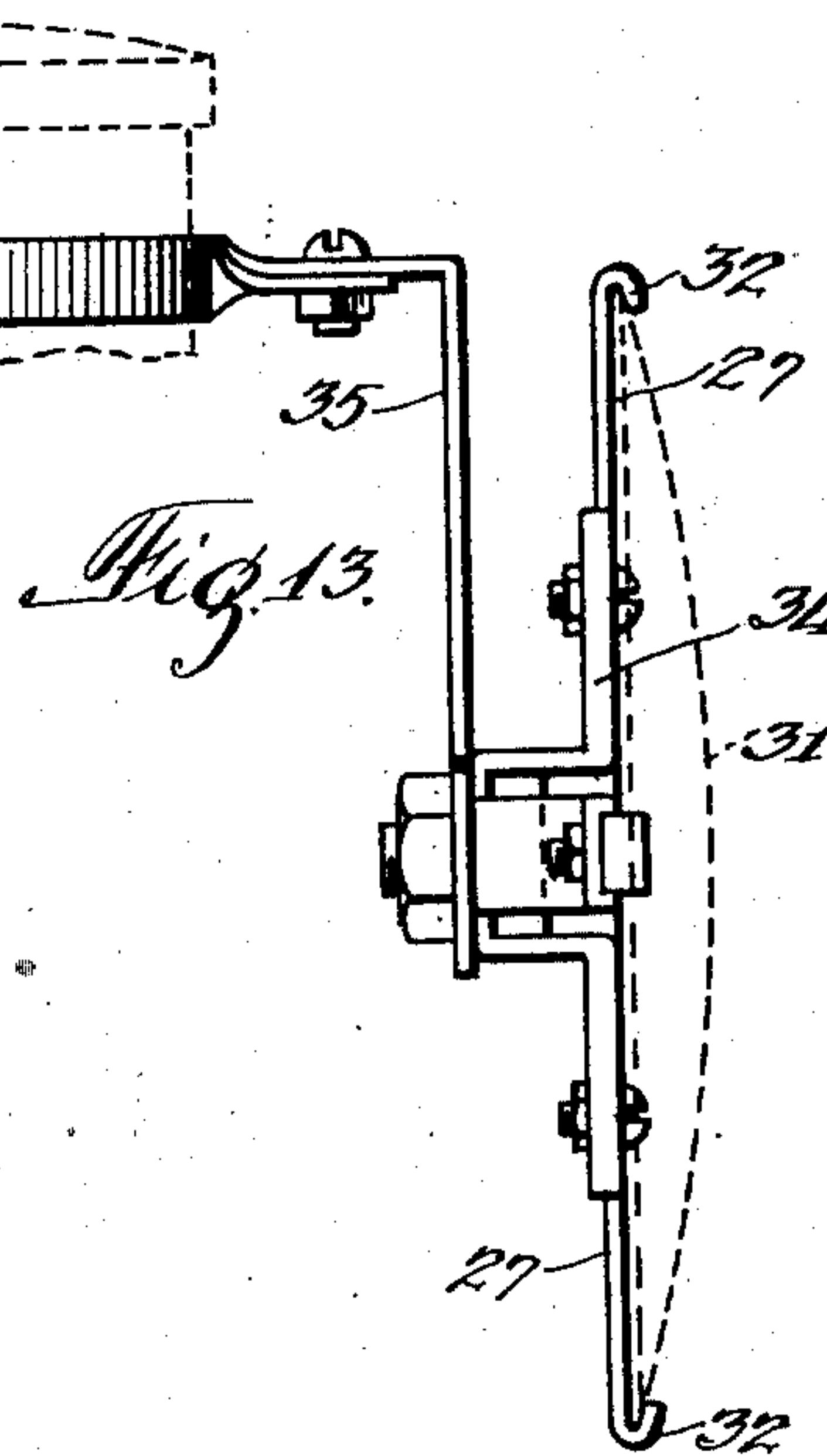
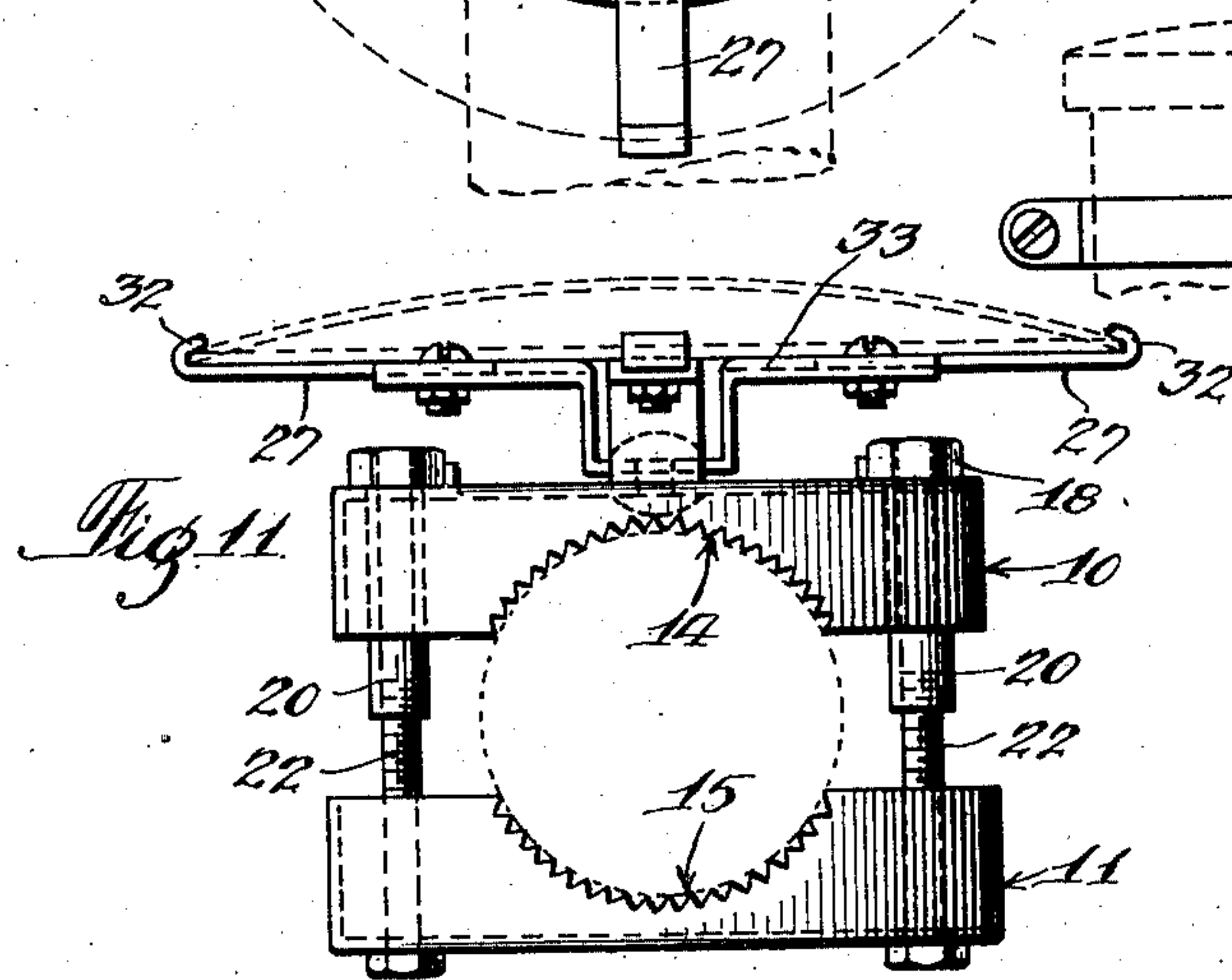
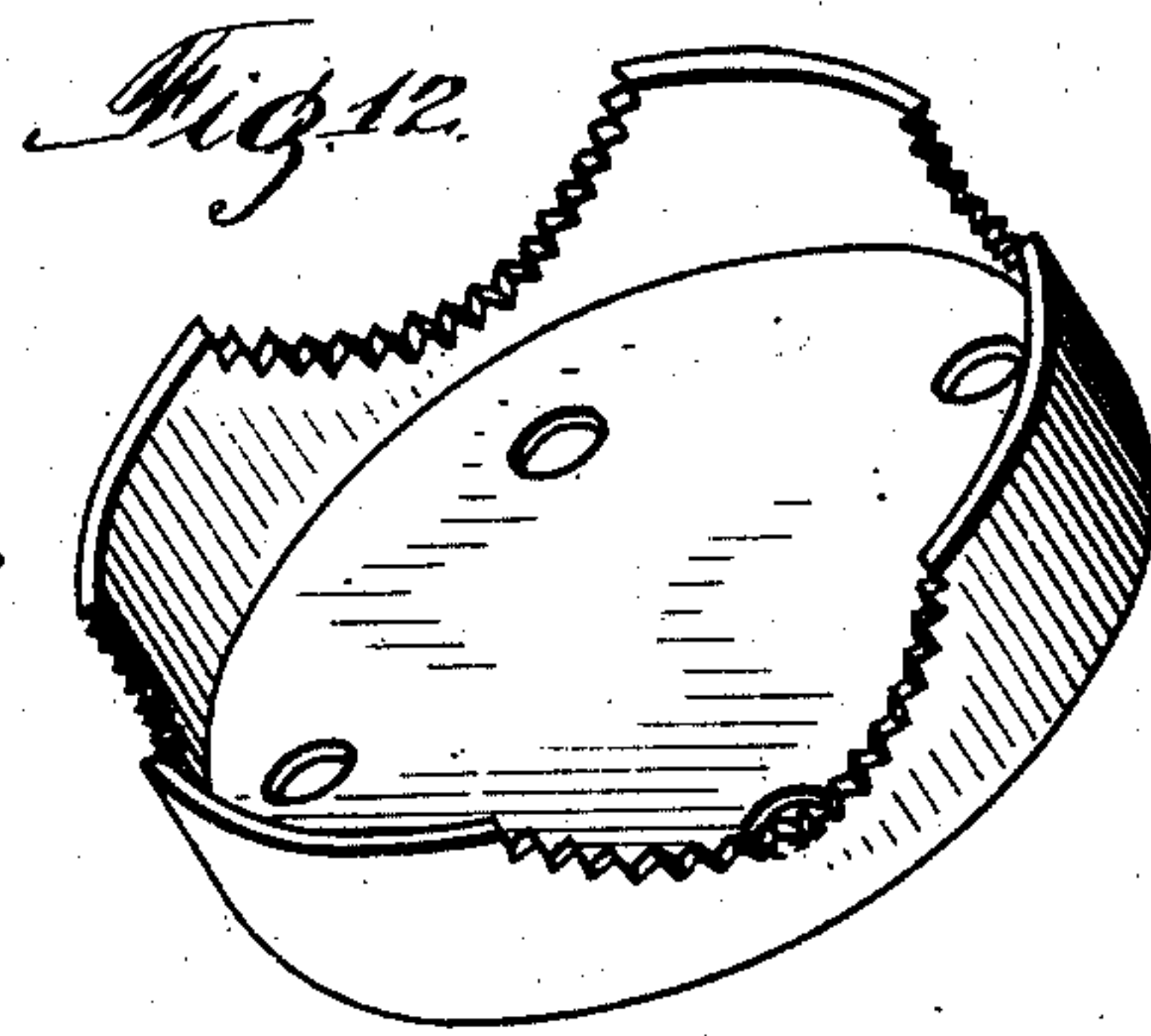
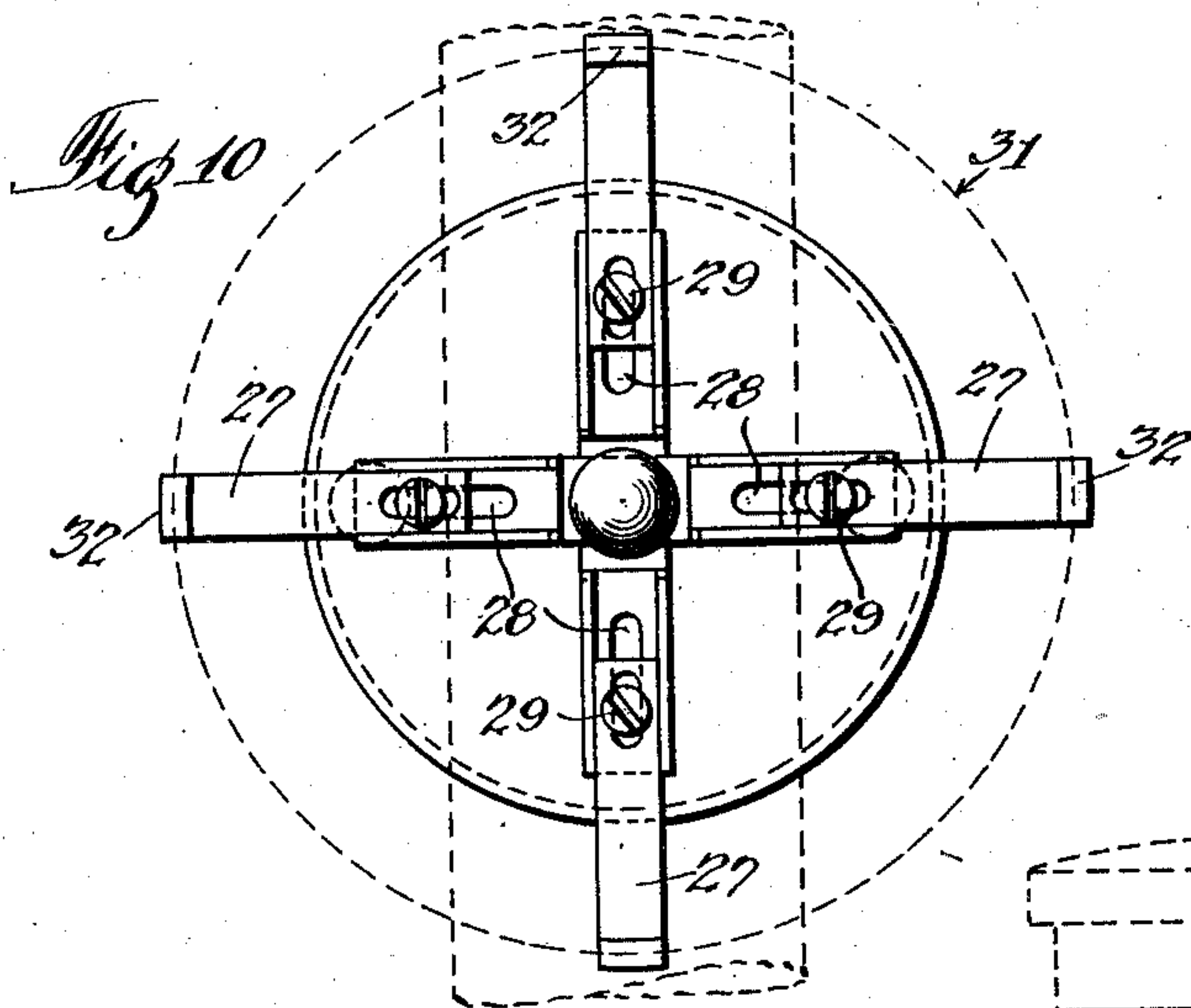
C. HORIX

1,777,884

SECURING DEVICE

Filed April 20, 1928

3 Sheets-Sheet 3



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UNITED STATES PATENT OFFICE

CARL HORIX, OF CHICAGO, ILLINOIS

SECURING DEVICE

Application filed April 20, 1928. Serial No. 271,458.

This invention relates to a securing device and has special reference to an adjustable means for securing a display device or other objects to supports of various sizes.

More particularly, this invention has reference to a securing means comprising complementary members having means therebetween for engaging supports of various sizes, and fingers adjustably secured to one of the complementary members for gripping a display device or other object of any size, shape or mass and holding the same in a fixed relation with the support.

The present invention will hereinafter be described in association with an automobile, the device being adapted to secure an emblem, a license plate or other display device thereto. However, it will be understood that although the device illustrated herein is particularly adapted to be employed in the above indicated capacity, it is nevertheless adaptable for use wherein an object is to be secured to a support.

It is usual for automobile clubs to provide the members thereof with name plates emblematic of their membership in the club. These plates are generally fastened to the front of the radiator and in direct physical contact therewith by means of small wires. This fastening means impedes the travel of air around the coils of the radiator and, of course, retards the cooling of the water circulating therethrough which is very objectionable. Again, these emblems are oftentimes secured by means of a bolt and nut to the lower or upper corner of the license plate which location makes an unsymmetrical appearance and is quite objectionable from an artistic point of view.

The present invention has for one of its objects the securing of a display device such as has been referred to in a manner such as will be attractive and symmetrical in appearance, and moreover, such as will be so positioned as to permit of a free access to the parts adjacent the support therefor.

Inasmuch as the display emblems indicated above are of various contours and masses it is another object of this invention to provide means which are adjustable there-

to for holding such display devices in a fixed relation with a support.

Another object of this invention is to provide a securing means having a wide range of adjustability in order to accommodate various sizes and shapes of supports.

Further objects and advantages will be apparent from the description and drawings forming a part of this specification, to which reference may now be had for a more complete understanding of the characteristic features of this invention, in which drawings:

Figure 1 is a front elevational view of the securing means as embodied in this application;

Fig. 2 is a top plan view of the device shown in Fig. 1;

Fig. 3 is a side elevational view of the same with a portion thereof in section;

Fig. 4 is a cross sectional view taken on the line 4-4 of Fig. 1; and

Fig. 5 is a perspective view of one of the complementary members forming a part of this invention.

Fig. 6 is a front elevational view of a modified form of securing means.

Fig. 7 is a top plan view of the structure shown in Fig. 6.

Fig. 8 is a side elevational view of the device shown in Fig. 7 with a portion thereof in section.

Fig. 9 is a perspective view of one of the complementary members of the modified form shown in Figures 6 to 8.

Fig. 10 is a front elevational view of a further modified form of a securing device.

Fig. 11 is a top plan view of the device shown in Fig. 10.

Fig. 12 is a perspective view of one of the complementary members of the structure shown in Fig. 10.

Fig. 13 is a side elevational view of a securing device as mounted on a radiator cap of an automobile.

Fig. 14 is a top plan view of the device shown in Fig. 13; and

Fig. 15 is a top plan view of a securing device for a license plate.

Referring now to the drawings, a two-

part body portion is shown comprising a pair of complementary members 10 and 11 preferably cup-shaped and having flanges 12 and 13, respectively, preferably annular and integrally formed with the base portions thereof. Each of the cup-shaped members in this instance is formed from a single sheet of material although it is to be understood that these members may be forged, cast or otherwise formed from any suitable material.

The flanges 12 and 13 are each provided with a diametrically opposed pair of co-acting recessed portions 14 and 15, the recessed portions being provided with teeth or knurled edges for gripping a support. A second pair of diametrically opposed recessed portions 16 and 17 is provided in the flanges 12 and 13 in a plane at right angles to the plane of the diametrically opposed recessed portions 14 and 15. This second pair of recessed portions is also knurled or provided with teeth to afford a gripping medium by which to securely engage a support. Both pairs of recessed portions just described are preferably arcuate in their peripheries, the portions 14 and 15 preferably having the same radii and the portions 16 and 17 likewise preferably having the same radii. However, in order to snugly engage supports of various sizes, the radii of the recessed portions 14 and 15 are substantially greater than the radii of the recessed portions 16 and 17.

The cup-shaped member 11 is preferably formed of a smaller diameter than the cup-shaped member 10, in order that the one member may nest within the other. As a means for securing the complementary members in a secure relation with a support, a plurality of nuts 18 of a non-circular contour are disposed in recesses 19 which latter are of a size and shape to snugly engage said nuts. The nuts are provided with internally threaded shank portions 20 which extend through apertures 21 in the bottoms of the recesses 19. A plurality of bolts 22 extending through the cup-shaped member 11 engage the internally threaded portions of the shanks 20, the head portions of the bolts bearing against the bottom surfaces of the member 11.

When it is desired to secure the complementary members to a support, if the latter should be of a comparatively great diameter, the diametrically opposed pair of co-acting recessed portions 14 and 15 are placed in engagement therewith. The nuts 22 are next inserted through the apertures in the member 13 and into the internally threaded shank portions 20 whereafter the head portion of the bolt is turned. The nuts 18, being of a non-circular contour and engaging the recesses 19 of a like contour, are held against rotation thereby permitting the

bolt 22 to draw the complementary members 12 and 13 together to any desired degree. If, however, the support is of a comparatively small diameter, the diametrically opposed pair of co-acting recessed portions 16 and 17 are placed in engagement therewith. The support has been indicated by dotted lines as 10^a and, in the particular construction herein shown, is a rod which ordinarily extends across the front of the automobile between the headlights thereof.

A plurality of radially extending recessed portions 23, 24, 25 and 26 are provided on the face surface of the complementary member 12 to receive a plurality of gripping fingers 27. As shown in the drawings, recess 23 is coextensive with recess 24, and recess 25 is coextensive with 26. However, it is to be understood that this construction is not to be limited to but four recess portions as any number thereof that may be desired may be employed. Further, these recesses need not be arranged in coextensive pairs as shown in the drawings. These fingers 27 are provided with elongated slots 28 for receiving screws 29 extending therethrough and through an aperture 26' in the recesses. The screws 29 are provided with nuts 30 which latter are non-circular and of a size to snugly engage the side walls of the recesses 23, 24, 25 and 26, the recessed portions being deeper than the thickness of the material of the fingers 27 to permit of such an engagement. This, of course, is for the purpose of preventing a rotation of the nuts 30 when the screws 29 are tightened.

It will be apparent that the fingers 27 may be of any length and shape. For the purpose of holding the emblem 31, the fingers 27 may all be of the same length and may all be provided with hook-shaped portions 32 formed integrally therewith to snugly engage and to grip the periphery of the emblem 31. However, if instead of being round, the device should be rectangular, as a license plate, one set of diametrically opposed fingers 27 would naturally be of a greater length than the other set of diametrically opposed fingers 27. Further, instead of being a plate of a convex-concavo shape, should the emblem or other object be of a substantial mass, the outer hook-shaped portions may be designed to suit the particular contour desired. The foregoing may be shaped at the time the device is manufactured and by the manufacturer or it may be shaped by the ultimate consumer on the object.

As a result of this invention, an adjustability of a considerable degree is obtained by disposing a pair of diametrically opposed co-acting recessed portions of comparatively great size at right angles to a pair of diametrically opposed recessed portions of comparatively small size. This adjustability, of course, is further enhanced because of the

nesting relation between the complementary cup-shaped members. Moreover, an emblem, license plate or display device of any size, shape or mass may be accommodated by the adjustable gripping fingers fixed to one of the securing members. Inasmuch as the particular positioning of the display device makes the nuts inaccessible to reach with any ordinary holding tool, such as pliers, the nuts having been novelly disposed in recessed portions provided therefor in order to facilitate the assembly of the structure.

Referring now more particularly to Figures 6 to 9, inclusive, the two part body portion comprises a pair of complementary members 10 and 11, the members in this instance having a square periphery as contrasted with the previously described members, which latter have an annular periphery. These complementary members are provided with coacting recessed portions 14—15 and 16—17, as are similarly provided in the preceding figures, the recessed portions engaging a support and being held in a secure relation therewith by means of the internally threaded shank portions 20 extending from one of the complementary members and having a bolt 22 extending from the other of the complementary members to threadedly engage the internally threaded shank portion.

The fingers 27 for gripping the display device 31 engage recessed portions in arms 33, the latter being channel-shaped on their upper horizontally extending portions. The central portions of the arms 33 are depressed as at 34, the lower surface thereof engaging the face surface of the complementary member 10 and being secured thereto by means of bolt and nut 35. Thus we have an intermediate supporting member between the gripping fingers 27 and the complementary member 10, which in the previously described figures has been omitted in lieu of the recessed portions formed in the face plate of the complementary member itself. The gripping fingers 27 are adjustably secured in the arms 33 by means of the slots 28 having the bolts 29 extending therethrough and through the gripping fingers.

The structure as illustrated in Figures 10 to 12, inclusive, is similar to that described in Figures 6 to 9, inclusive, having the intermediate supporting members 33 between the complementary member 10 and the gripping fingers 27. However, in this instance, the complementary members 10 and 11 are annularly shaped and conform to the structure shown in Figures 1 to 4, inclusive.

It may be desirable to dispose the display device adjacent the top of the radiator of an automobile and in lieu of the complementary members 10 and 11 as described in the foregoing figures, a bracket 35 is provided, into which the supporting arms 34 may be bolted. The bracket 35 is of any usual height, hav-

ing a two part clamping member at the upper end thereof for engaging the radiator cap, the two part member being suitably held in a fixed relation therewith by means of bolts and nuts as desired.

As has been previously recited, the gripping fingers 27 may be of various lengths in order to accomplish different display devices. Referring now to Fig. 15, the horizontally extending fingers 27 are elongated to accommodate a license plate 36 of an automobile. This figure is merely illustrative of the use for which the fingers 27 are provided, it being apparent that the fingers may be shaped in any desired manner to accommodate various shapes of display devices.

While but a single embodiment of this invention is herein shown and described, it is to be understood that various modifications may be apparent to one skilled in the art without departing from the spirit and scope of this invention and, therefore, the same is to be limited only by the scope of the appended claims and the prior art.

I claim:

1. In a device of the character described, complementary cup-shaped members for engaging a support, and gripping means adjustably secured to said members for holding a display device in a fixed relation therewith.

2. In a device of the character described, complementary cup-shaped members having a plurality of diametrically opposed pairs of coacting recessed portions in the flanges thereof for engaging a support, and gripping means adjustably secured to said members for holding a display device in a fixed relation therewith, said pairs of coacting recessed portions being of different sizes to engage supports of various sizes.

3. In a device of the character described, complementary cup-shaped members having a plurality of pairs of coacting recessed portions in the flanges thereof for engaging a support, and gripping means adjustably secured to said members for holding a display device in a fixed relation therewith, said pairs of coacting recessed portions being of different sizes to engage supports of various sizes.

4. In a device of the character described, complementary cup-shaped members having diametrically opposed means on the flanges thereof for engaging a support, and gripping means adjustably secured to said members for holding a display device in a fixed relation therewith.

5. In a device of the character described, complementary cup-shaped members capable of resting one within the other and having means on the flanges thereof for engaging a support, said means being adapted to accommodate supports of various sizes, clamping means associated with and for holding said members in a fixed relation with said support, and gripping means adjustably secured

to said members for holding a display device in a fixed relation therewith.

6. In a device of the character described, complementary cup-shaped members having means therebetween for engaging supports of various sizes, nuts held against rotation with and having elongated internally threaded shank portions extending through one of said members, bolts extending through another of said members and engaging the internally threaded portions of said nuts and shank portions, said bolts and nuts holding said members in a fixed relation with said support, and gripping means adjustably secured to said members for holding a display device in a fixed relation therewith.

7. In a device of the character described, complementary cup-shaped members having means therebetween for engaging supports of various sizes, one of said members having non-circular depressions therein, nuts in engagement with said non-circular depressions and having elongated internally threaded shank portions extending through said member, bolts extending through another of said members and engaging the internally threaded portion of said nuts and shank portions, said bolts and nuts holding said members in a fixed relation with said support, and gripping means adjustably secured to said members for holding a display device in a fixed relation therewith.

8. In a device of the character described, complementary body portions for engagement with a support, one of said body portions having depressions, and gripping means for adjustably seating within said depressions and for holding a display device in a fixed relation with said support, said depressions acting as guides for said gripping means.

9. In a device of the character described, complementary cup-shaped members having means therebetween for engaging supports of various sizes, each of said members being formed from a single sheet of material, and gripping means for adjustably engaging said members for holding a display device in a fixed relation with said support.

10. In a device of the character described, complementary cup-shaped members having means therebetween for engaging supports of various sizes, each of said members being formed from a single sheet of material, one of said members having depressions formed thereon, gripping fingers for adjustably engaging said depressions for holding a display device in a fixed relation with said support.

11. In a device of the character described, complementary cup-shaped members having means therebetween for engaging supports of various sizes, one of said members having depressions formed thereon, gripping fingers comprising a strip of material having a hook-shaped end for adjustably engaging said de-

pressions for holding a display device in a fixed relation with said support.

12. In a device of the character described, complementary cup-shaped members having means therebetween for engaging supports of various sizes, one of said members having depressions formed thereon, gripping fingers for holding a display device adjustably engaging said depressions, means for securing said gripping fingers in said depressions, said depressions being of a greater depth than said gripping fingers to receive and to prevent said securing means from becoming loosened.

13. In a device of the character described, complementary cup-shaped members having means therebetween for engaging supports of various sizes, one of said members having depressions formed thereon, gripping fingers for holding a display device engaging said depressions and having an aperture therein for receiving a bolt, said depressions having an elongated slot for receiving said bolt and being of a greater depth than said gripping fingers to receive a nut for said bolt whereby said nut is held against rotation, said bolt and nut securing said gripping fingers in various positions of adjustment.

14. In a device of the character described, complementary cup-shaped members having means therebetween for engaging supports of various sizes, each of said members being formed from a single sheet of material, one of said members having radially extending depressions on the surface thereof, and radially extending gripping fingers adjustably engaging said depressions for holding a display device in a fixed relation with said support.

In witness whereof, I have hereunto subscribed my name.

CARL HORIX.