

J. J. POLI.
COMBINATION COLLAR CAP AND FASTENER.
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899,803.

Patented Sept. 29, 1908.

Fig. 1.

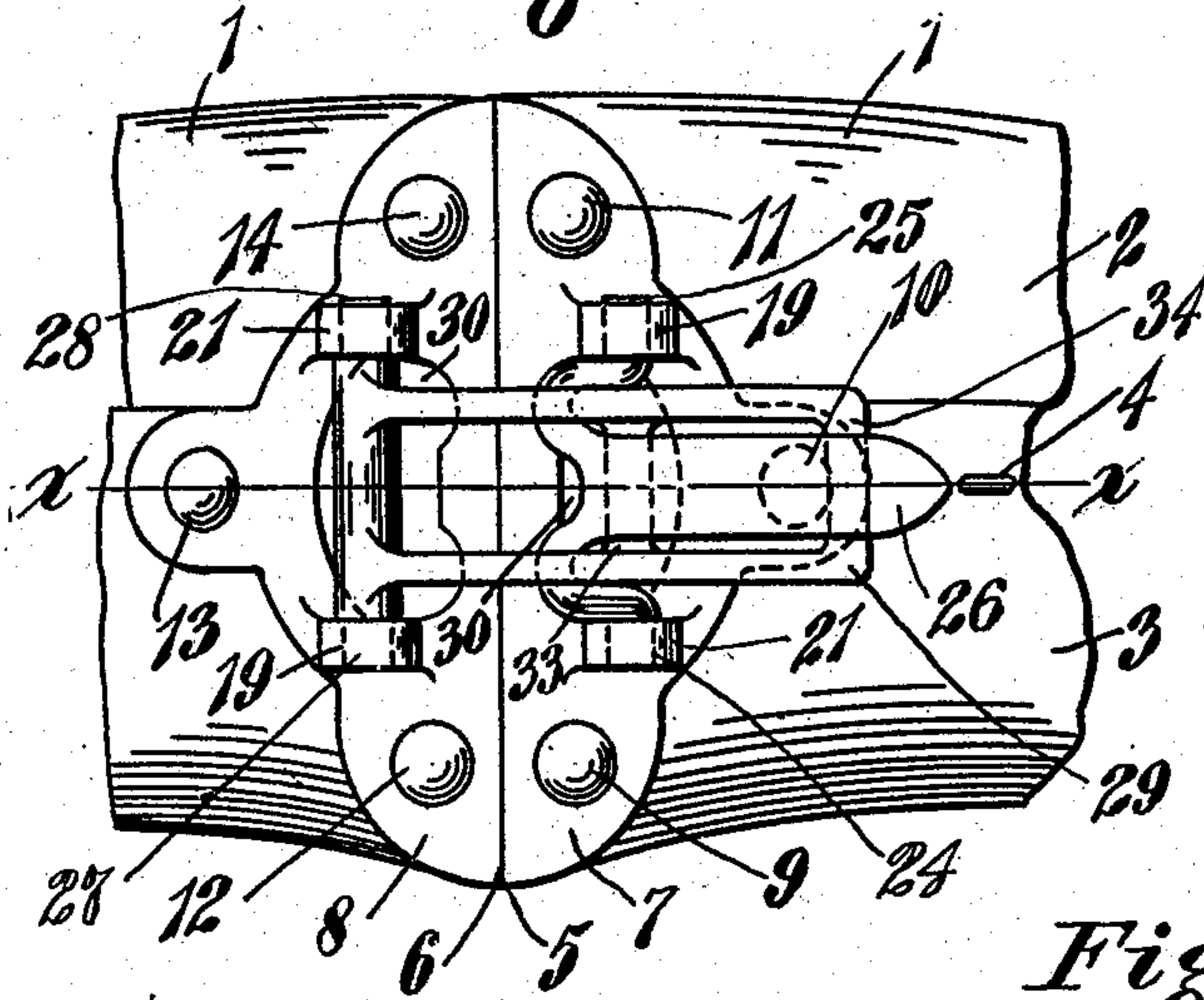


Fig. 2.

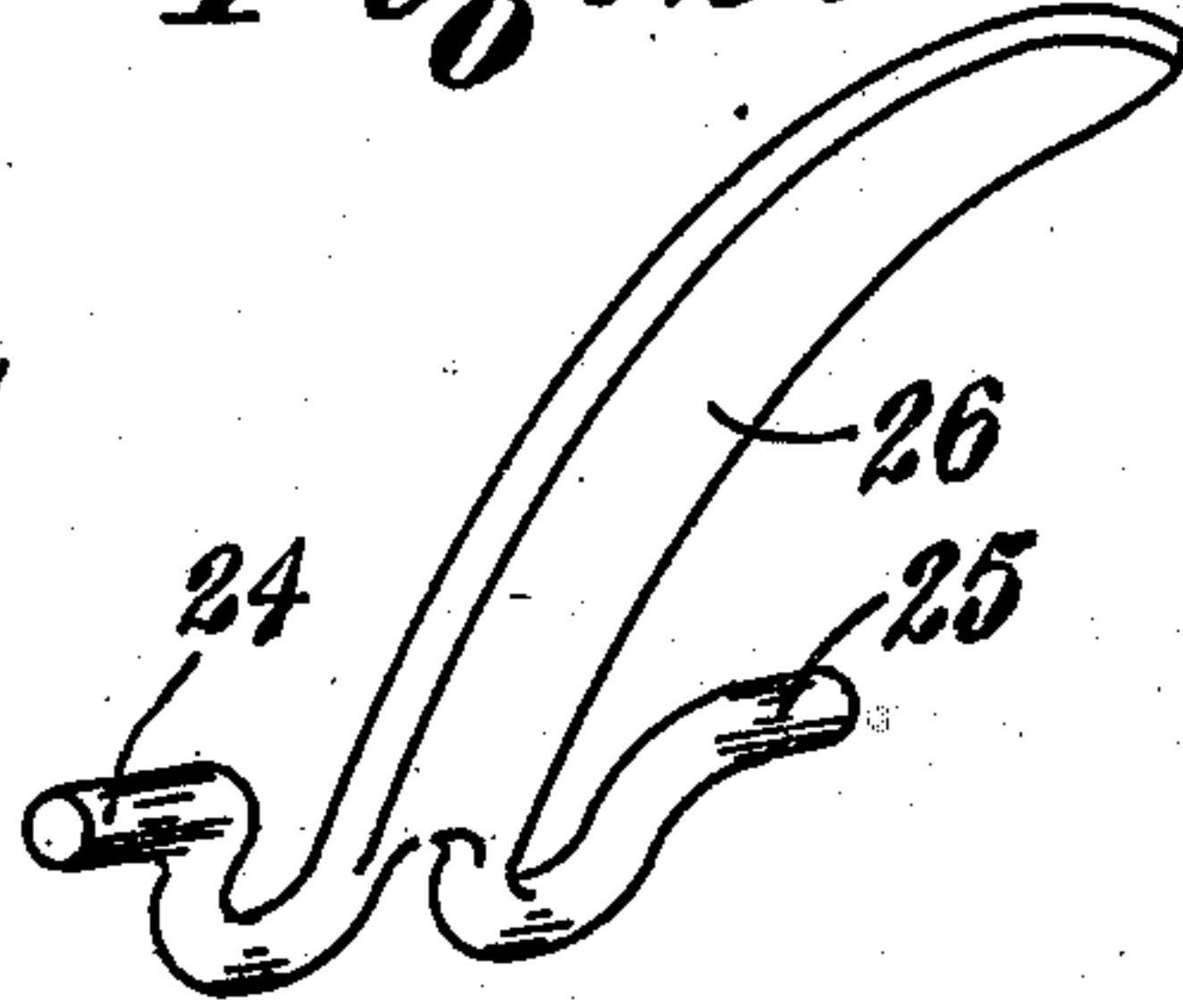


Fig. 3.

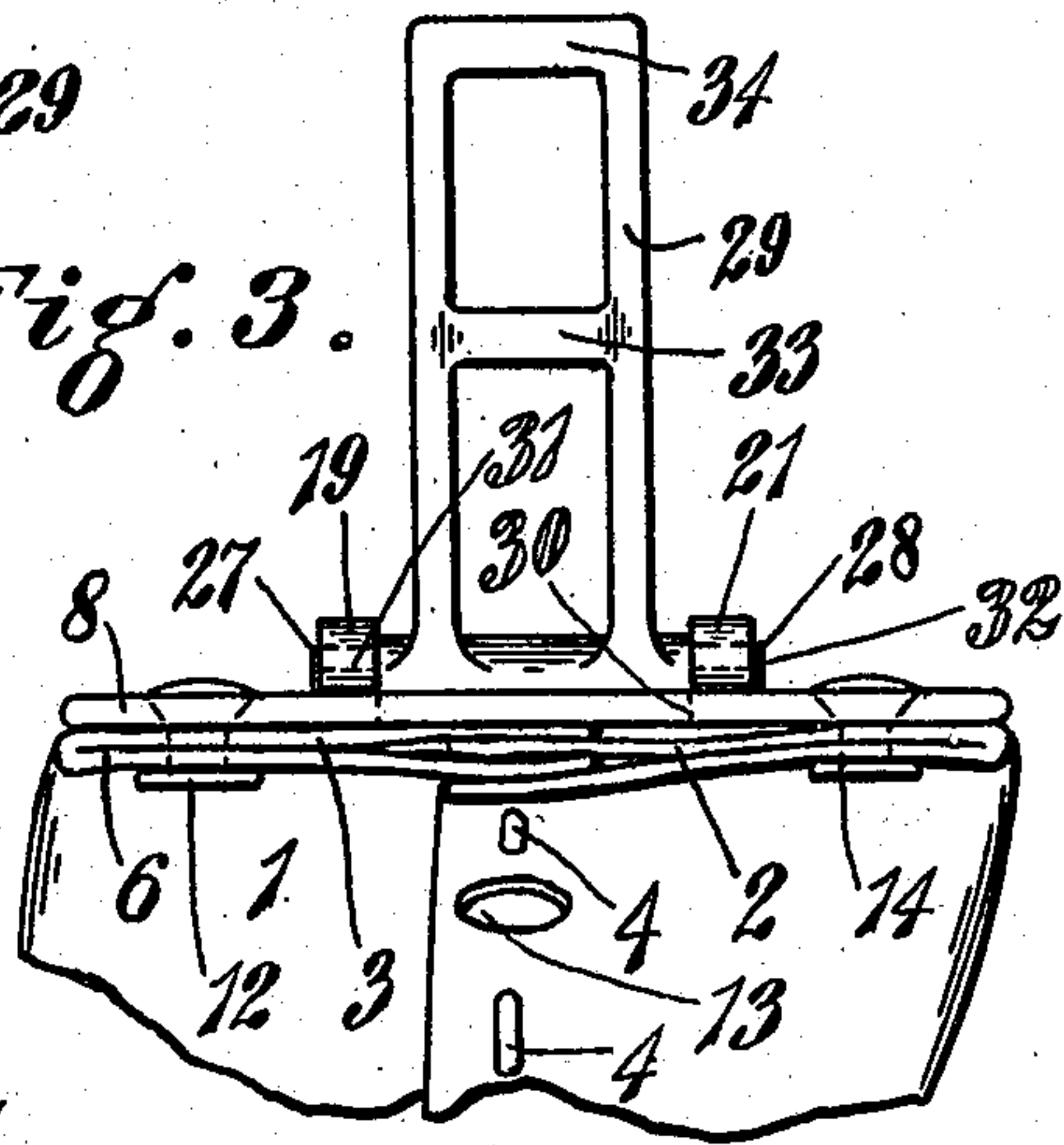


Fig. 4.

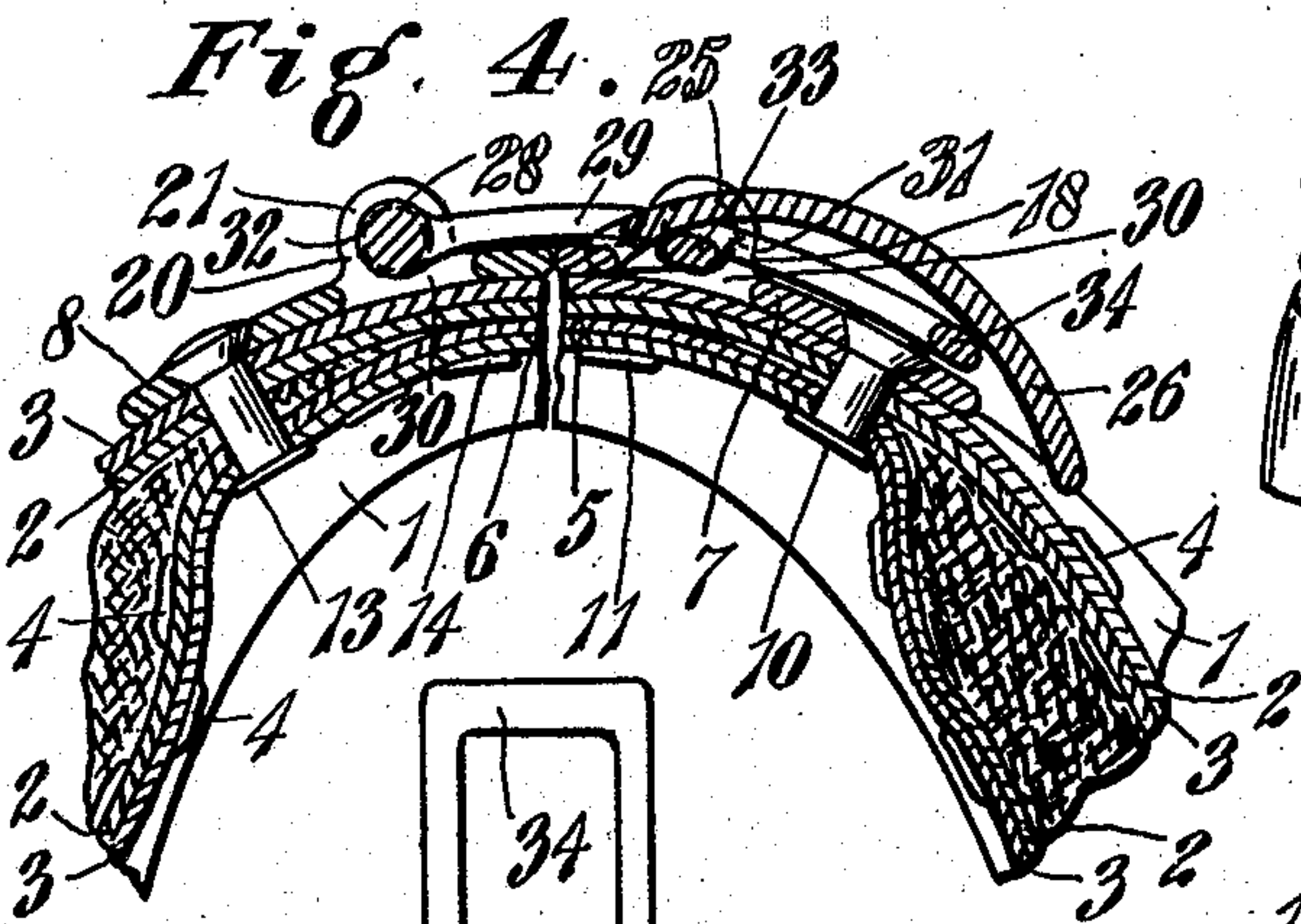


Fig. 5.

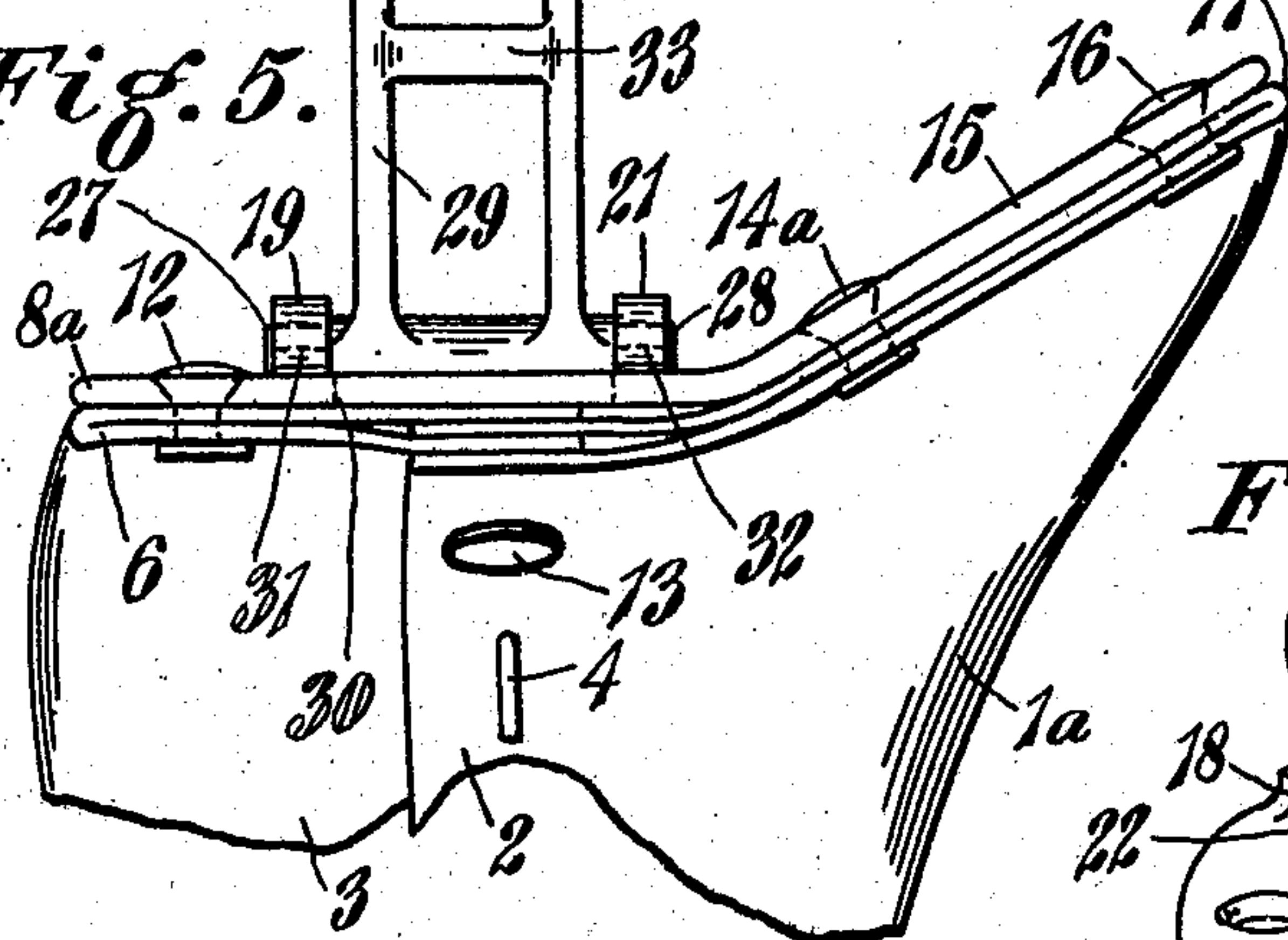


Fig. 6.

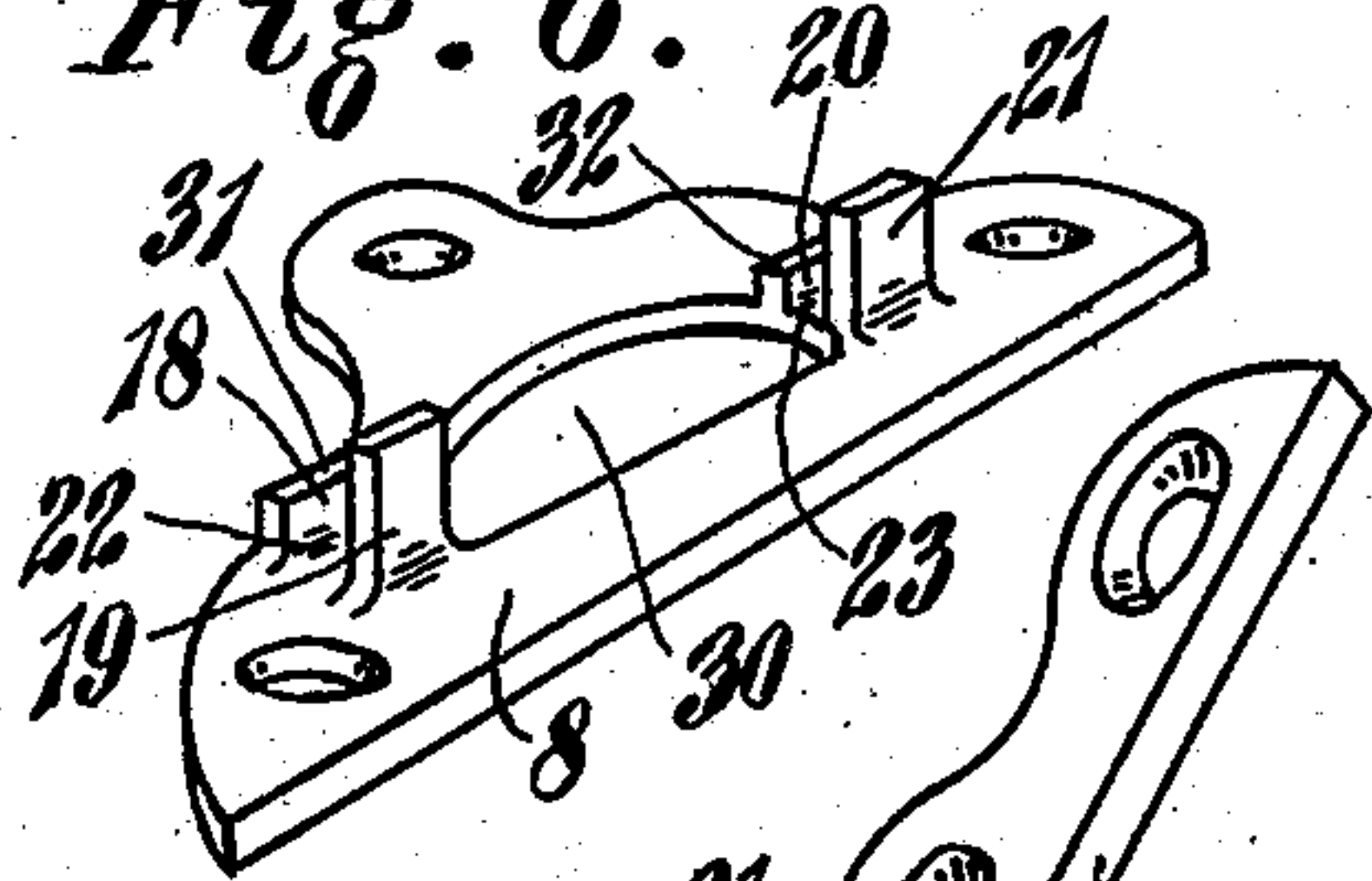
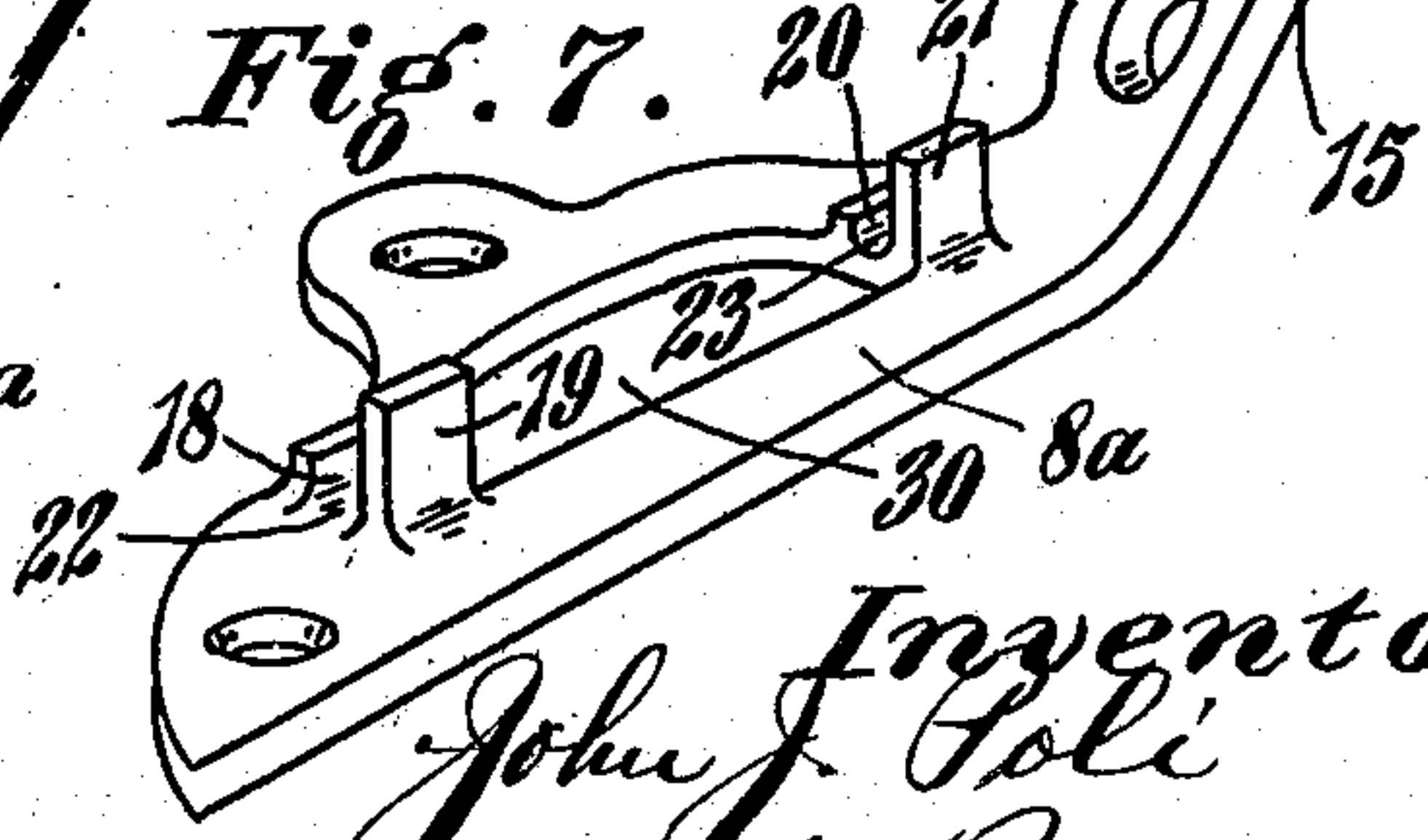


Fig. 7.



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UNITED STATES PATENT OFFICE.

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COMBINATION COLLAR CAP AND FASTENER.

No. 899,803.

Specification of Letters Patent.

Patented Sept. 29, 1908.

Application filed February 24, 1908. Serial No. 417,238.

To all whom it may concern:

Be it known that I, JOHN J. POLI, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Combination Collar Caps and Fasteners, of which the following is a specification.

My invention relates to harness fittings, and the object is to provide a cap for a horse collar that will properly reinforce the ends of the collar where they come together over the horse's neck, and which will at the same time constitute a support for the fastening used to hold the ends of the collar together.

My invention consists in a plate secured to each end of the collar, each of said plates being provided with members for operatively supporting the fastening device.

My invention also consists in the parts and in the details of arrangement and construction of parts as will hereinafter be more fully set forth and claimed.

In the drawing:—Figure 1 is a plan view of my invention as applied to a flat collar. Fig. 2 is a perspective view of the lever which forms part of the fastening as I prefer to embody it in my invention. Fig. 3 is an elevation, looking toward one end of the collar, showing one of the plates with the hasp, which forms part of the fastening, in raised position thereon. Fig. 4 is a section on the line $x-x$ of Fig. 1. Fig. 5 is an elevation similar to that in Fig. 3, showing a modification of my invention for use on a peaked collar. Fig. 6 is a detail perspective view of the plate used on the flat collar. Fig. 7 is a detail perspective view of the plate used on the peaked collar.

In illustrating my invention, only the ends of the collar 1 are shown, which collar 1 is the well known form which is slipped onto the horse's neck from below and its ends brought together above the horse's neck and fastened together, in harnessing the horse. The body of such a collar is composed of two pieces of leather 2 and 3, which are lapped over each other interlapped and sewed with seams 4 from end to end of the collar, thus constituting a tubular construction, the ends 5 and 6 of which must be closed. This closure has heretofore been effected by pressing the sides of the tube thus constituted, together at the ends and thus flattening them and running

a seam across it near the ends. I avoid sewing the ends of the collar by providing plates 7 and 8 which are preferably secured to the ends 5 and 6, respectively, by rivets 9, 10 and 11 and 12, 13 and 14 passing through the plates 7 and 8, respectively, and through the pieces of leather 2 and 3, which form the collar body, near their ends. The middle rivets 10 and 13 pass through the lapped over parts of the pieces 2 and 3, and consequently reinforce the seam 4 as well as assisting to hold together and close the ends of the collar body. The rivets 9 and 10, and 12 and 14 being near the folds which form the edges of the end parts of the collar when the tube is flattened, serve to efficiently reinforce these exposed folded edges.

Heretofore, in addition to the necessity of running a seam across the ends of the collar, it has been the practice, in order to provide a fastening for securing the ends of the collar together after it is placed on the horse's neck, to rivet or sew a piece of material, generally leather, to each end part of the collar to form a means of attaching, and a support for, the fastening device, this fastening device usually consisting in a pivoted metal hook or lever used with a hasp or eye within which the hook or lever engages. The fastening device when secured to the collar by a piece of leather, is loosely mounted, does not afford the rigidity of fastening desired, and is subject to rapid wear and consequent derangement, while the necessity of running the seam across the end of the collar to close it, and then separately securing the fastening support to the end part of the collar, involves an amount of labor which, by the use of my improved cap and fastener combined, is greatly reduced. This reduction in the labor of manufacturing a collar with the use of my improvement will be readily understood, when it is noted that the entire cap and fastener of metal may be molded or formed, and is ready for applying to the collar with only the necessity of punching holes in the end parts of the collar and riveting, which process, compared to that of sewing across the ends of the collar, and besides this, cutting out stock to form the supports for the fastening devices and riveting or sewing this stock to the collar, is very simple.

The same observations in regard to the simplicity of application and the efficiency of operation of my improvement are true, either in regard to the application to the flat

collar or to the peaked collar 1^a, as illustrated in Fig. 5 of the drawing. In this application to the peaked collar, a plate 8^a is used, similar to the plate 8, excepting that it is provided with a continuation 15 which extends at an angle to the body part of the plate and is provided with openings receiving the rivet 14^a which corresponds to the rivet 14 in the flat plate, as well as an additional rivet 16 near the end of the continuation 15 and which reinforces the fold at the peak 17 of the collar. The efficacy of my improvement is especially instanced in this application to the peaked collar, where it will be noted that the rigid metal plate 8^a gives form to, and maintains the form of, the end of the collar as desired in this style. It should be noted that to produce and maintain this form with the use of the ordinary sewed end of the collar, is difficult and requires expert workmanship, while the mere riveting of the metal plate to the end of the collar, as in my improvement, may be done by comparatively unskilled workmen.

With either the plate 8 as applied to the flat collar or the plate 8^a as applied to the peaked collar, I prefer to combine short and long lugs 18 and 19, respectively, near one end of the plate, and 20 and 21, respectively, near the other end of the plate, as is best illustrated in Figs. 6 and 7 of the drawing. The plates provided with the lugs 18 and 19 and 20 and 21 in this way are molded and composed of a metal which will be malleable after cooling, and the lugs, when the plates are cast, extend substantially at right angles to the adjacent face of the plate. The spaces 22 and 23 between these lugs 18 and 19 and 20 and 21, respectively, are to form the bearings for the pivots 24 and 25 of the lever 26, or the pivots 27 and 28 of the hasp 29, depending upon which end of the collar the plate is to be used upon. An opening 30 is provided in the plate between the lugs 18 and 19 and the lugs 20 and 21 to accommodate the downwardly extending parts of the lever 26 or the hasp 29, and when the pivots 24 and 25, or the pivots 27 and 28 have been disposed in the spaces 22 and 23, respectively, the long lugs 19 and 21 are bent over the pivots so that their ends come down and meet the ends of the lugs 18 and 20 at 31 and 32, respectively, thus closing the bearing and bringing the joint of closure at 31 or 32 on the side of the bearing opposite to the direction of strain when the fastening is in use. This construction of the bearing for the pivots of the lever and the hasp facilitates the economical assembling of the device, and it will be noted that this operation is the only one required to complete the device ready for application to the collar after the parts have been molded.

The downwardly extending parts of the lever 26 for which the opening 30 is provided

in the plate, as above noted, consist in eccentric extensions of the pivots 24 and 25, while the downwardly extending parts of the hasp 29 consist in its transverse part between the pivots 27 and 28 and in the transverse part 33 which lies somewhat below the body of the hasp near its middle, and is adapted to have the lever 26 lie over it when the fastening is closed, as is best illustrated in Fig. 4 of the drawing, the lever 26 being curved to thus lie over the transverse part 33 and over the end transverse part of the hasp 29.

To open the fastening, it is necessary to raise the lever 26, and, owing to the eccentric arrangement of its pivots 24 and 25, it will be caused during the beginning of its rise, to bear against the transverse part 33 of the hasp 29, tending to force the ends of the collar toward each other, after which the ends will be allowed to again recede, and when the lever is thrown to its extreme opposite position, it may be withdrawn from the hasp 29, allowing the collar to be removed from the horse's neck. This tendency of the lever 26 to draw the ends of the collar together in the beginning of its rise results, owing to the reaction of the parts, in retaining the fastener in closed position and holding the collar on the horse's neck while in use. The parts are so proportioned and adjusted that the ends of the collar, while it is thus in use, will be slightly separated to allow them to come together to allow the manual raising of the lever 26, for opening the fastener as above described. This fastening device, as above described and as illustrated, is peculiarly adapted to the rigid support with which it is used in the embodiment of my invention, and while I have shown and described it specifically, I do not wish to be understood as limiting myself to it, or to any of the minor details herein enumerated, but

What I claim as new and desire to secure by Letters Patent is:

1. In a combination collar cap and fastener, a rigid metal plate permanently secured by rivets and extending the full length of each end of the collar, said plates having their meeting edges formed straight and flush with the meeting edges or ends of the leather part of the collar and having their rear edges formed of an irregular shape with central extensions flaring downwardly and adapted to take and fit into the crease of the collar and be riveted thereto, a hasp connected to one plate and a lever connected to the other plate, and lugs upon each plate integral therewith, adapted to form pivot bearings for the hasp and lever, respectively, said plates being each provided at its center, between said lugs, respectively, with an opening to permit the rib on the adjacent leather part of the collar to extend partially therein and to permit the end of the lever to extend therein and allow free play thereof, as well

as to limit engagement thereof with the leather, to bring the hasp and lever into compact relation with the collar when closed, and said hasp and lever being mounted in 5 said bearings, respectively, and adapted to coöperate with said plates, substantially as and for the purposes set forth.

2. In a combination collar cap and fastener, a rigid metal plate secured by rivets to 10 each end of a leather collar and extending the full length of each end of the collar, said plates being provided with meeting edges adapted to engage each other throughout their length, and having extensions flaring 15 downwardly and adapted to conform to the shape of the collar and be riveted thereto, a hasp connected to one plate and a lever connected to the other plate, and bearing lugs formed integral with each plate to 20 form pivot bearing for the hasp and lever, respectively, said plates each being provided with an opening between said lugs and between the meeting edges and extensions to permit free play of the pivoted end of the 25 hasp and lever, respectively, and to allow the pivoted end of the lever to extend therein, to bring the hasp and lever nearer to the collar when closed and permit a more compact assembling of the parts when closed,

and said hasp and lever, each being pivot- 30 ally mounted in said bearing lugs and adapted to engage each other to hold said plates in engagement and said collar in closed position, substantially as shown and for the purposes set forth. 35

3. In a combination collar cap and fastener, a rigid metal plate secured to each end of the collar, and formed flush therewith to reinforce and close the end, bearings on one 40 of the plates formed integral therewith, and a lever pivotally mounted in said bearings, bearings on the other plate, and a hasp pivotally mounted in said latter bearings to constitute a fastening device to hold the ends 45 of the collar together, all of said bearings being formed by lugs between which pivots of the lever and hasp respectively are disposed, and one of the lugs being bent over the pivot of the lever or hasp in each bearing, whereby the joint of closure of the bear- 50 ing is disposed opposite to the direction of the strain when the fastening device holds the ends of the collar together, substantially as and for the purposes specified.

JOHN J. POLI.

Witnesses:

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