

No. 891,186.

PATENTED JUNE 16, 1908.

H. PAAR.  
THILL COUPLING.  
APPLICATION FILED SEPT. 25, 1907.

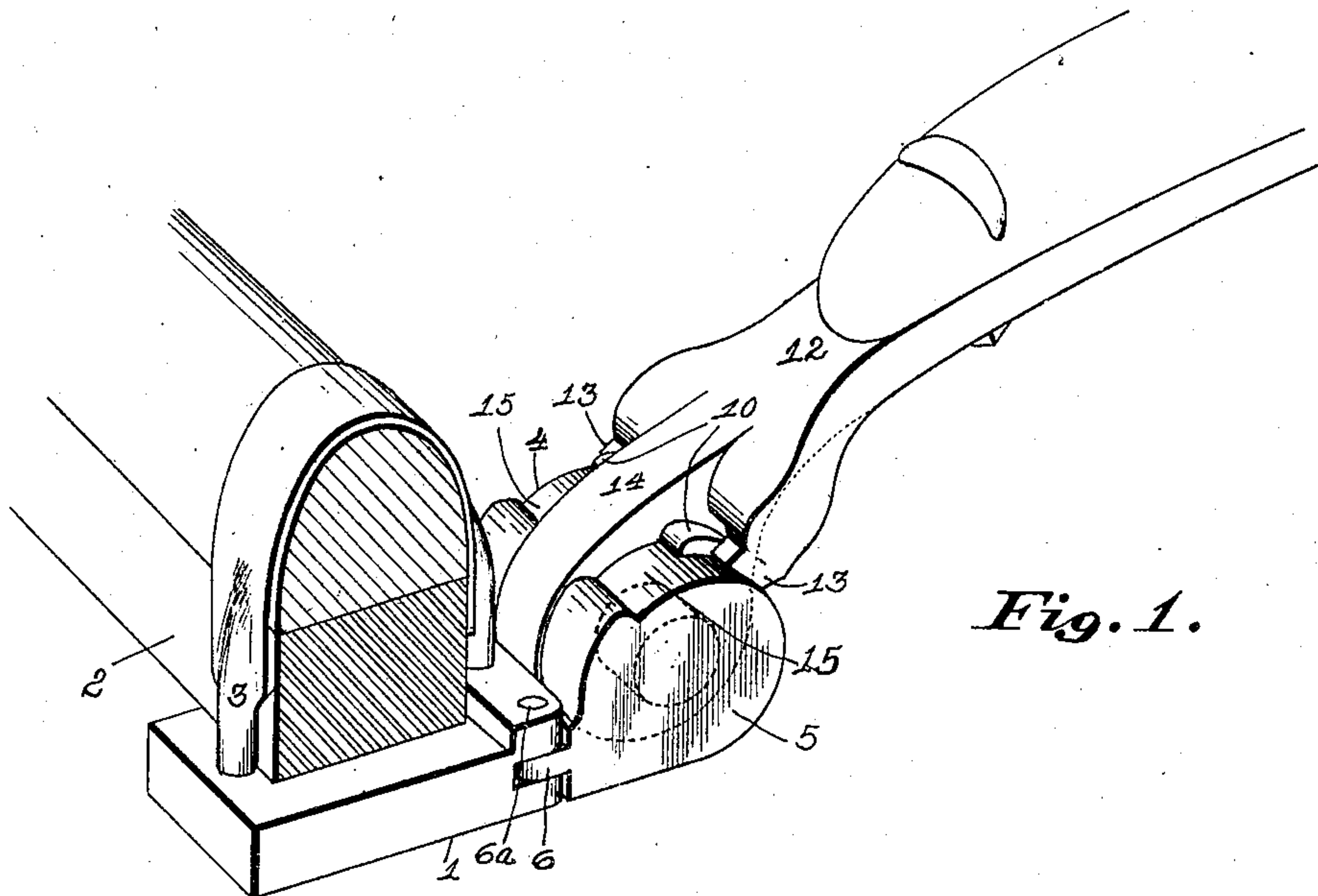


Fig. 1.

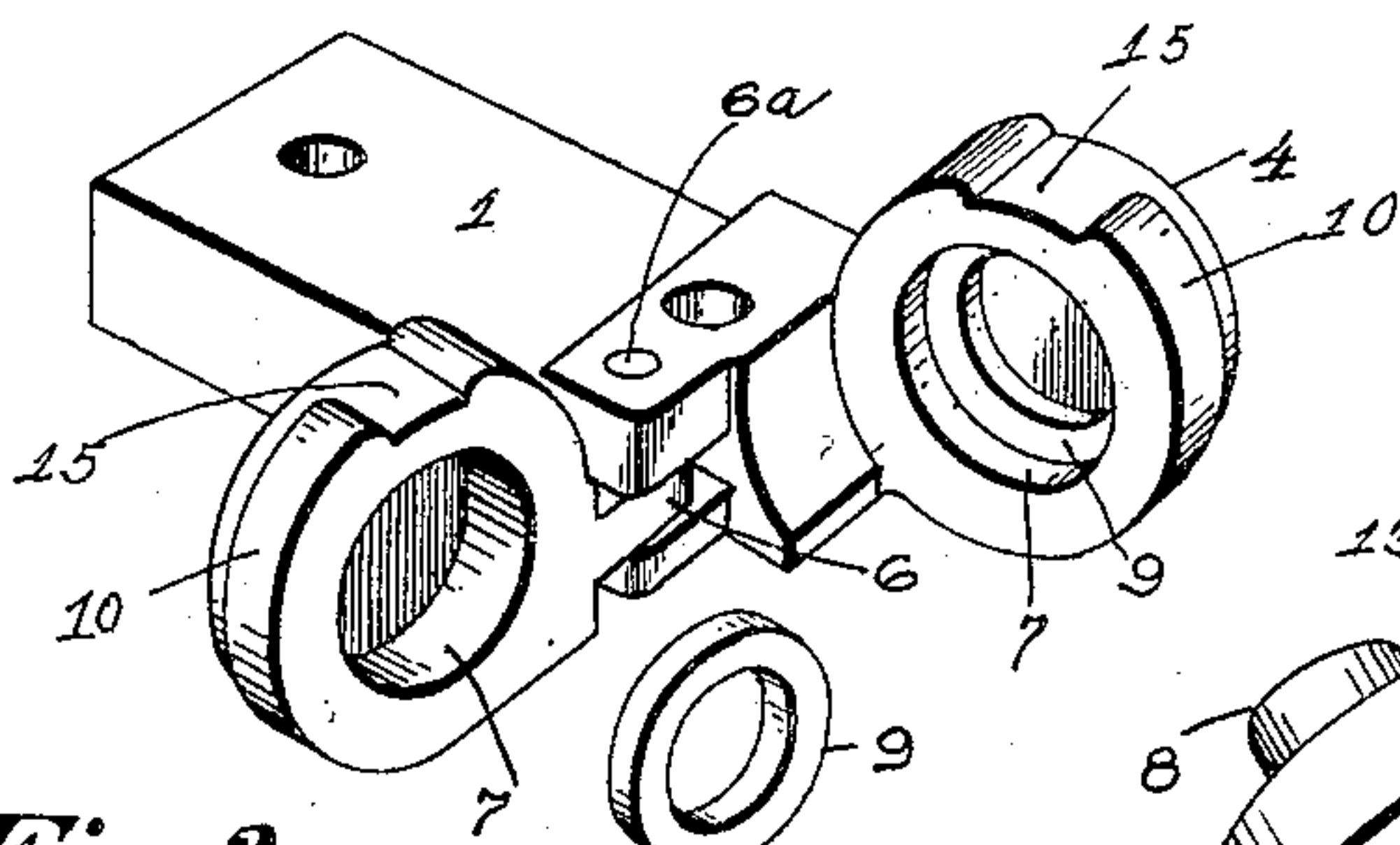


Fig. 2.

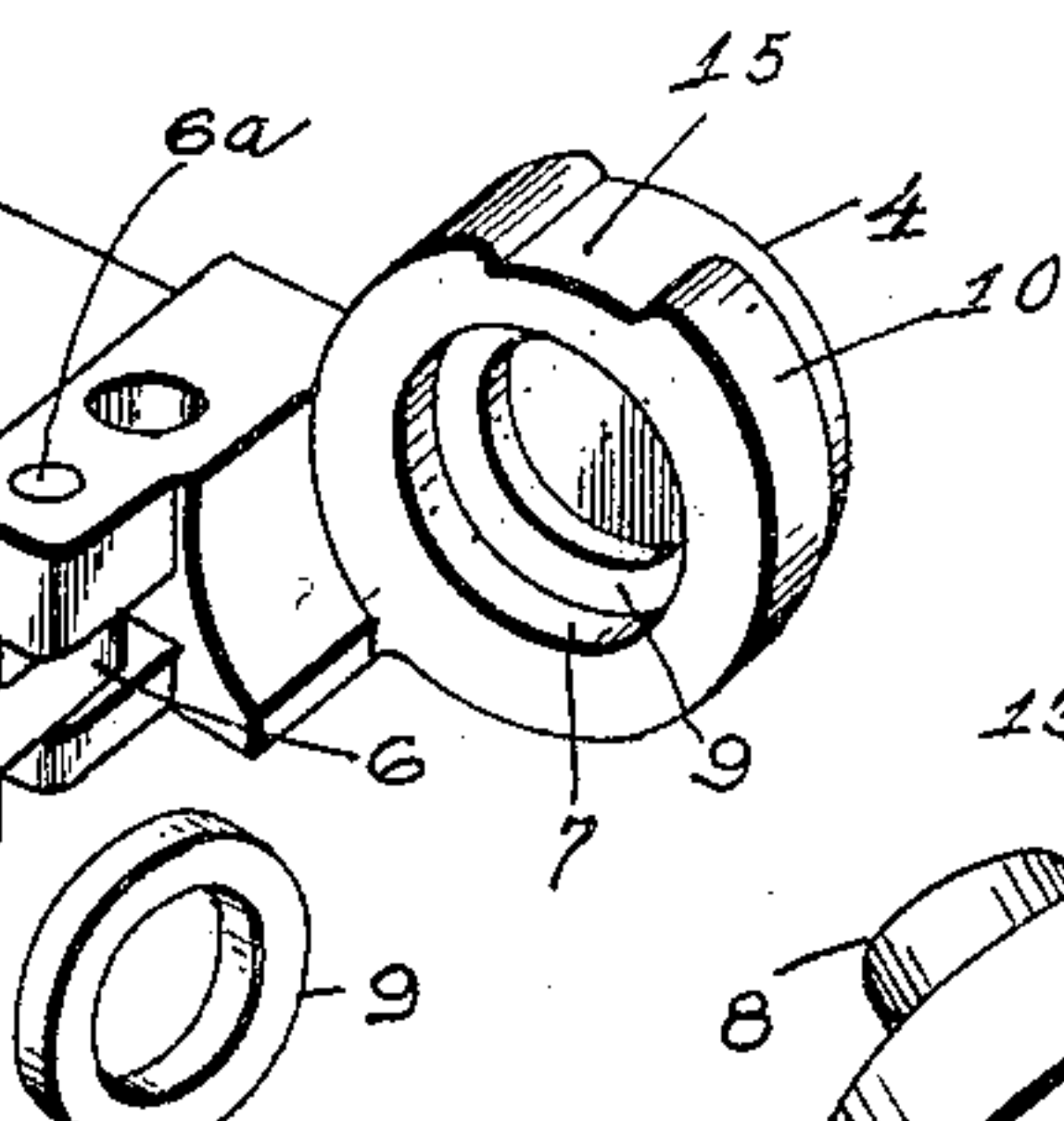


Fig. 3.

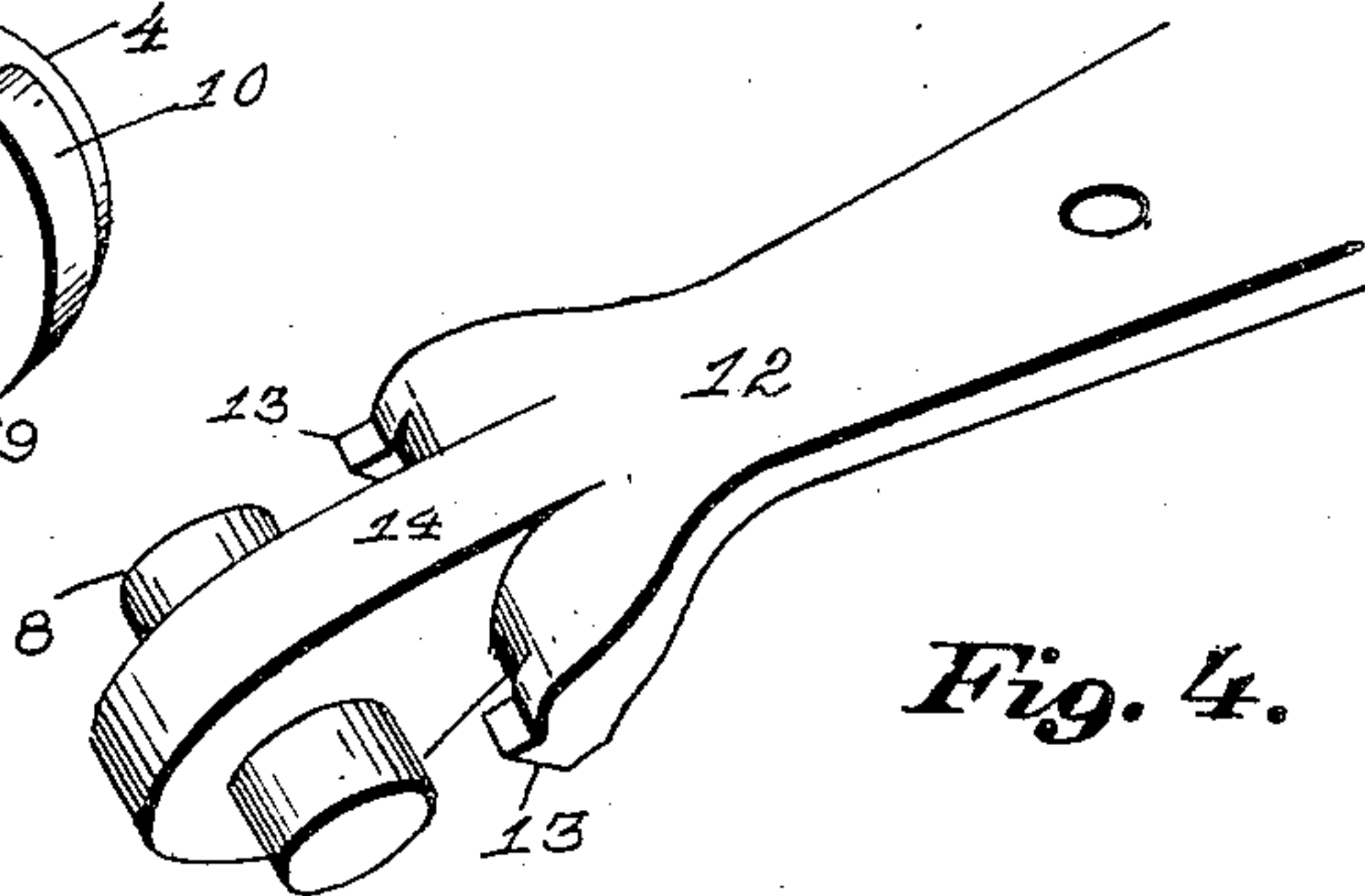


Fig. 4.

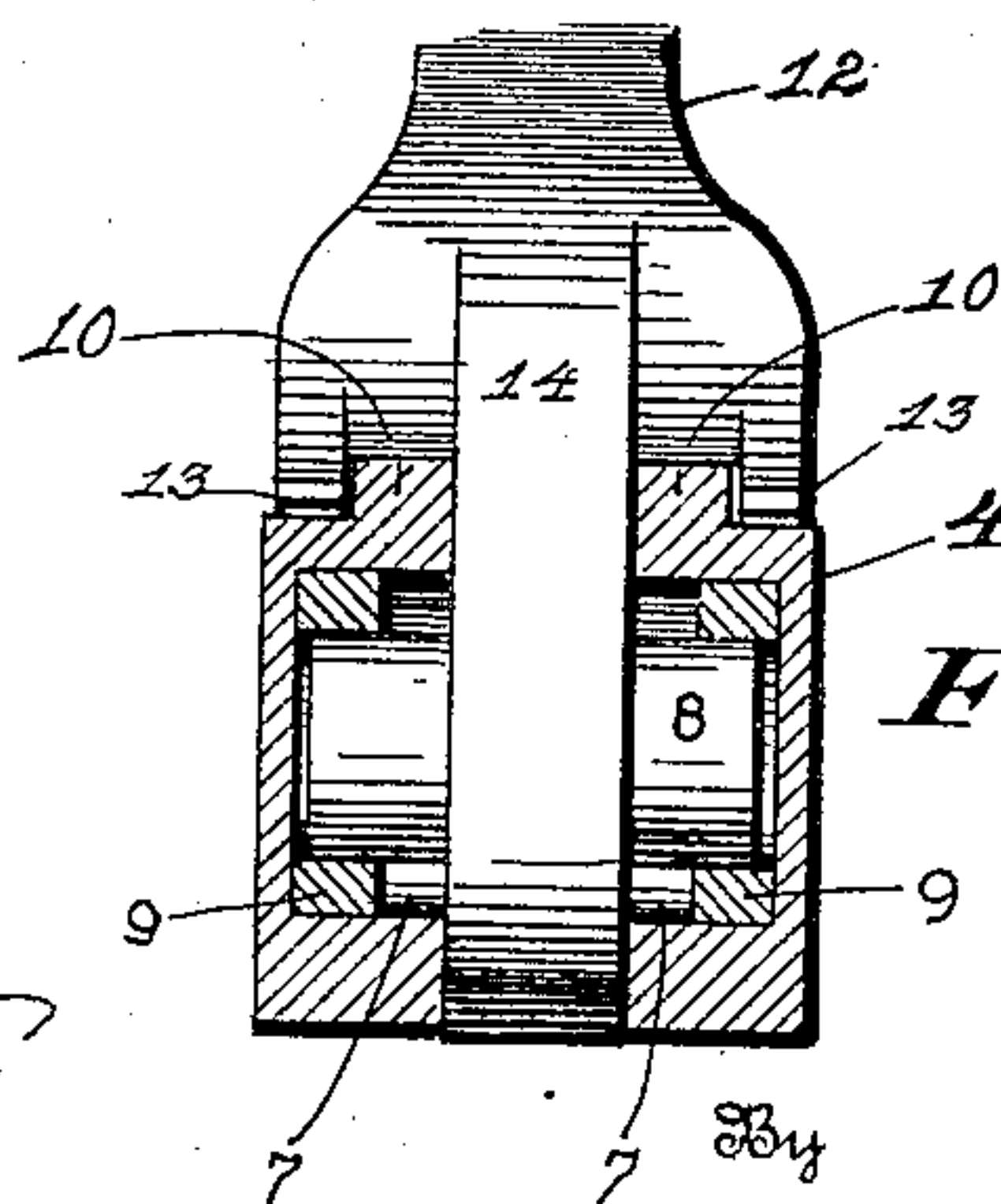


Fig. 5.

Witnesses  
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# UNITED STATES PATENT OFFICE.

HENRY PAAR, OF CANTON, OHIO, ASSIGNOR OF ONE-HALF TO CHARLES McGRANAHAN, OF CHICAGO, ILLINOIS, AND ELMER E. MACK, OF CANTON, OHIO.

## THILL-COUPLING.

No. 891,186.

Specification of Letters Patent.

Patented June 16, 1908.

Application filed September 25, 1907. Serial No. 394,477.

*To all whom it may concern:*

Be it known that I, HENRY PAAR, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have  
5 invented certain new and useful Improvements in Thill-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being  
10 had to the accompanying drawing, making a part of this specification, and to the numerals and figures of reference marked thereon, in which—

Figure 1 is a perspective view showing the different parts properly connected. Fig. 2 is  
15 a perspective view of the coupler head showing the thill arm detached. Fig. 3 is a detached view of one of the gaskets. Fig. 4 is a detached view showing a portion of the thill iron. Fig. 5 is a vertical section of the  
20 coupler head showing the thill iron connected.

The present invention has relation to thill coupling and it consists in the novel arrangement hereinafter described and particularly pointed out in the claim.

25 Similar numerals of reference indicate corresponding parts in all the figures of the drawing.

In the accompanying drawing, 1 represents the thill coupler head, which is secured  
30 to the axle 2 in the usual manner by means of the clip 3. The coupler head 1 is provided with the integral ear 4, which ear is substantially of the form shown and as shown its extended portion is circular and is so formed  
35 for the purpose hereinafter described.

To the coupler head 1 is pivotally attached the ear 5 by means of the flange 6 and the rivet 6<sup>a</sup>, said parts being arranged substantially as shown in the drawings. The ears 4  
40 and 5 are each provided with the sockets 7, which sockets are for the purpose of receiving the cross head 8, said cross head being formed of a shape to properly fit the socket 7, reference being had to the proper entering of  
45 the cross-head 8 through the gaskets 9, said gaskets being located in the sockets as best illustrated in Fig. 5. In the drawings I have illustrated the gaskets formed of a width somewhat less than the depth of the sockets  
50 7, but it will be understood that the gaskets may be formed of a width to correspond with the depth of the sockets without departing from the nature of my invention. The ears 4 and 5 are each provided with the extended  
55 flanges 10, which flanges are located substan-

tially as shown in the drawings, and are for the purpose hereinafter described. The thill iron 12 is provided with the lugs 13, which lugs are located upon opposite sides of the center bar 14 and spaced therefrom a distance equal to or substantially equal to the width of the flanges 10. The ears 4 and 5 are each provided with the open or non flanged portions 15, which non-flanged portions are for the purpose of allowing the lugs 13 to be placed in a position so that they will be extended beyond the outer edges of the flanges 10 as best illustrated in Fig. 1.

In use when it is desired to connect the thill iron proper to the coupler head 1 the ear 5 is turned upon its pivotal point and brought into the position illustrated in Fig. 2. After which one end of the cross-head 8 is inserted in the socket 7 formed in the ear 4 after which the ear 5 is brought into the position illustrated in Figs. 1 and 5, and when brought into said position the opposite end of said cross-head 8 from that seated in the socket of the fixed ear will be seated in the socket 7 formed in the pivoted ear. After the pivoted ear has been brought into the position illustrated in Figs. 1 and 5 the thill iron is turned down so as to bring the lugs 13 upon the outer sides of the flanges 10, thereby locking the pivoted ear against pivotal movement and at the same time securely connecting the thill iron to the coupler head.

It will be understood that in order to couple the thill iron to the coupler head, said thill iron must be elevated so as to bring the lugs 13 in proper alinement with the open spaces 15 and afterwards lowered. In use the thill iron after it has been coupled as just above described and lowered into its normal position the pull upon the coupler head will be a direct pull, owing to the fact of the cross-head 8 being seated in the socket 7. In Fig. 1 the thill iron is shown elevated somewhat above its normal position.

It will be understood that by providing the gaskets and forming the gaskets out of non-metallic material such as is commonly used, there will be no rattle as between the cross-head 8 and the ears 4 and 5.

After the thill iron has been brought down or into its normal position the ear 5 will be held against pivotal movement, owing to the fact that the lug 13 adjacent the flange 10 will prevent any lateral or pivotal movement of said ear. When it is desired to detach the

thill iron the same is brought into an elevated position or into such a position that the lugs 13 will register with the openings 15, at which time the ear 5 is free to turn upon its pivotal point, thereby releasing the cross-head 8 after which the thill iron can be detached.

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

A thill coupler comprising a coupler head provided with a fixed ear and a pivoted ear, said ears provided with sockets, flanges located upon the ears and the ears provided with non-flanged portions, a thill-iron provided with a cross-head of a diameter less than the diameter of the sockets in the ears,

said cross-head adapted to be located in the sockets, gaskets located around the cross-head and in the sockets, flanges located upon said thill-iron and adapted to engage the flanges upon the ears, and one of the flanges located upon the thill-iron adapted to lock the pivoted ear in fixed relationship with reference to the coupler head, substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

HENRY PAAR.

Witnesses:

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F. W. BOND.