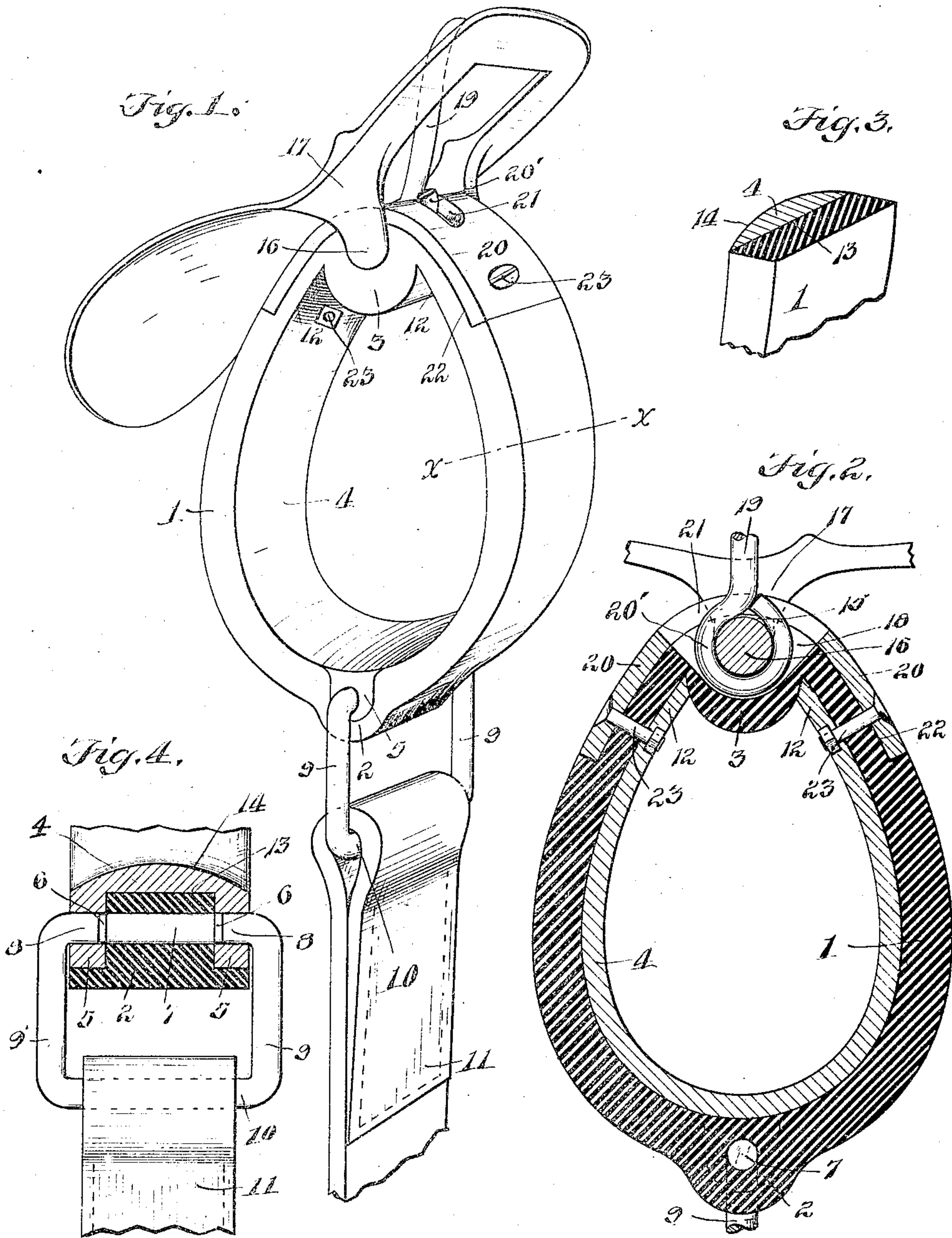


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SHAFT TUG.  
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Witnesses:  
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# UNITED STATES PATENT OFFICE.

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## SHAFT-TUG.

334,463.

Specification of Letters Patent. Patented Sept. 21, 1909.

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*To all whom it may concern:*

Be it known that I, BENJAMIN C. SHERMAN, a citizen of the United States, residing at Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Shaft-Tugs, of which the following is a specification.

My invention relates to improvements in shaft-tugs or thill-holders, and has for its object to provide a new and improved article of this character which shall be simple and inexpensive in manufacture, neat and attractive in appearance, and durable in use.

A further object of the invention is to provide an elastic buffer to deaden the concussion between the shaft or thill and the upper portion of the shaft-tug or thill-holder.

With these and other objects in view, the invention consists in certain novel features in construction and combination of parts which will be hereinafter more fully described and finally pointed out in the claims hereto appended; it being understood that various slight changes, such as in the form, proportions, and minor details of construction may be resorted to without departing from the spirit or scope of the invention.

Referring to the accompanying drawings forming a part of this specification wherein like characters of reference denote similar parts throughout the several views: Figure 1 is a perspective view of my improved shaft-tug or thill-holder, Fig. 2 is a vertical central sectional view thereof, with portions thereof broken away, Fig. 3 is a cross sectional view taken on the line  $x-x$  of Fig. 1 with the lower portion thereof broken away, and Fig. 4 is a vertical central section of the lower portion of the shaft-tug or thill-holder.

In carrying out the aim of my invention, I employ a loop-shaped rubber body 1 having the lower end 2 extending beyond the general outer peripheral line to form an ear or projection. The upper end of the body 1 is formed with an integral depending portion 3 adapted to act as a buffer for the shaft or thill in striking thereagainst.

The inner face of the loop body portion 1 is provided with the approximately U-shaped metallic bushing 4 which has its lower portion provided with a pair of oppositely disposed depending ears 5, each of which is provided with an opening 6 adapted to register with the opening 7 in the end 2 of the body portion 1, as clearly shown in

Fig. 4. The openings 6 are adapted to receive the ends 8 of the girth loop 9, which ends 8 are adapted to be sprung into position. The bar 10 of the girth loop 9 is adapted to carry the girth-strap 11 as shown in Fig. 1. The upper free ends of the bushing 4 are adapted to snugly engage the outer face of the buffer 3, as clearly shown in Figs. 1 and 2. It will be observed that the bushing 4 has its outer face 13 flat and its inner or wearing face 14 convex, as clearly shown in Fig. 3, so as to allow a rocking movement thereof upon the shaft or thill.

The upper portion of the body 1, it will be seen, is provided with a recess 15 adapted to receive the cross-bar 16 of the buckle 17, and that the recess 15 is enlarged as at 18 so as to allow for a rocking movement of the tongue 19, the lower end 20 of which encircles the cross-bar 16, as clearly shown in Fig. 4.

In order to hold the cross-bar 16 of the buckle 17 in the recess 15, I employ a strap 20 of any suitable material and of a shape to correspond with the upper portion of the rubber body 1, which strap 20 is provided with a slotted opening 21 through which the tongue 19 is adapted to pass. The strap 20 is secured to the rubber body portion 1 which is recessed as at 22 to receive the strap, and is held in place by means of any suitable fastening devices such as a bolt or the like designated at 23. These bolts or fastening devices are adapted to enter or pass through the upper ends 12 of the metallic bushing 4 to help hold the same in position.

In manufacturing my improved shaft-tug or thill-holder, it will be observed that I mold the rubber body 1 around the metallic bushing 4 to which it adheres, and then after the same has been taken out of the mold, I apply the several parts consisting of the girth-loop 9, the buckle 17 and the strap 20. Having described my invention what I claim as new, and desire to secure by Letters Patent, is:

1. A shaft tug comprising a rubber body portion substantially annular in form, the upper end of said body portion being inwardly curved forming a depending buffer and a recess in the upper edge, a substantially flat U-shaped bushing arranged within said body and extending around the same from one side of said buffer to the other and from face to face thereof and a buckle hav-



ing its cross bar arranged in said recess, substantially as described.

2. A shaft tug comprising a rubber annular body portion, the upper end of said body portion being inwardly curved forming a depending buffer and a recess in the upper edge to receive the cross bar of a buckle, a U-shaped reinforcing bushing arranged within said body and extending around the same from one side of said buffer to the other, a strap extending over the upper end of said body portion and having its ends overlapping the adjacent ends of the bush-

ing with the body portion interposed between the same, and fastening means extending through the adjacent ends of said bushing and said strap, said strap spanning said recess, substantially as described. 15

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses. 20

BENJAMIN C. SHERMAN.

Witnesses:

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