

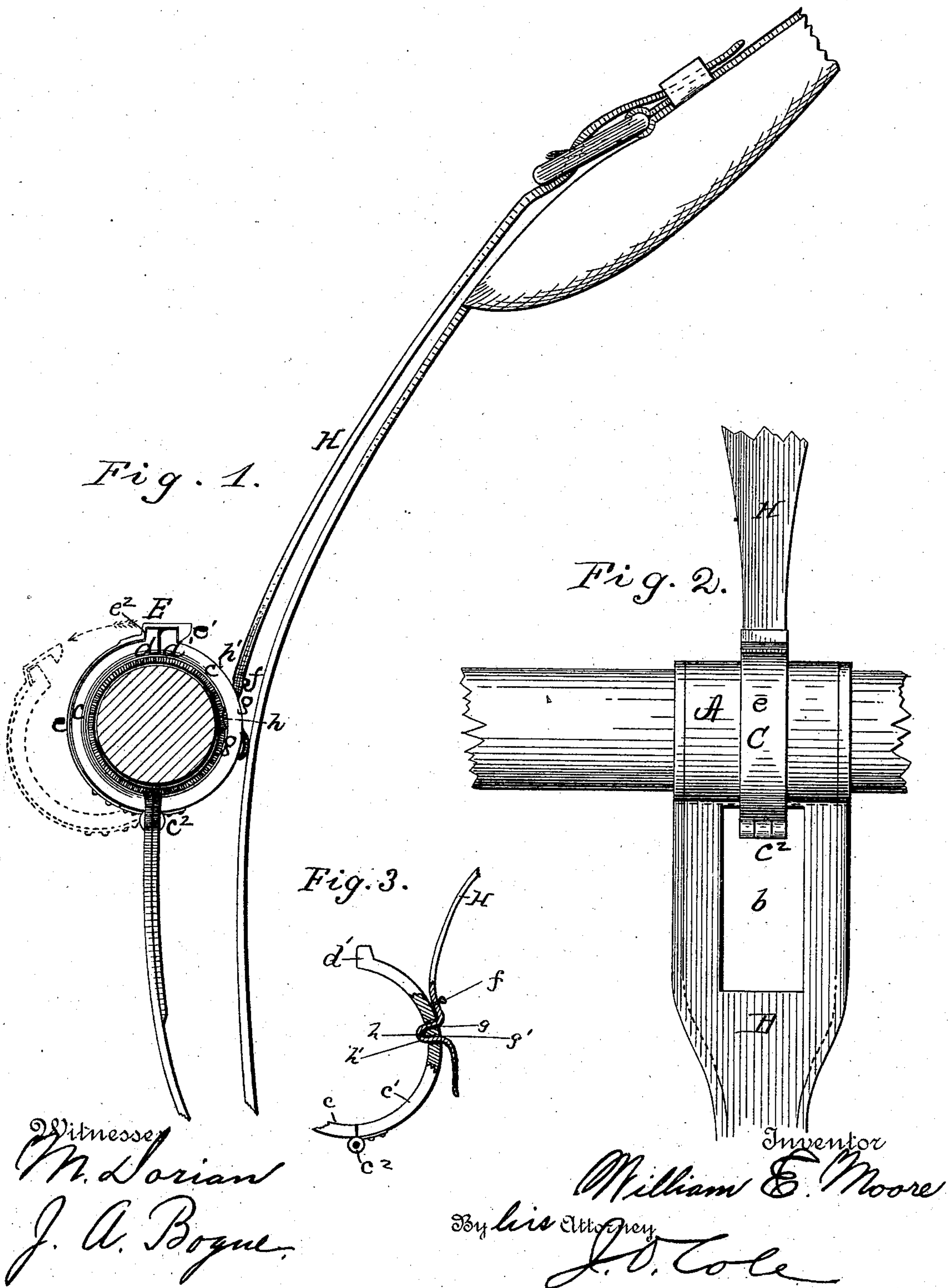
(No Model.)

W. E. MOORE.

SHAFT TUG.

No. 373,087.

Patented Nov. 15, 1887.



UNITED STATES PATENT OFFICE

WILLIAM E. MOORE, OF CHILLICOTHE, OHIO.

SHAFT-TUG.

SPECIFICATION forming part of Letters Patent No. 373,087, dated November 15, 1887.

Application filed March 30, 1887. Serial No. 233,034. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. MOORE, a citizen of the United States, residing at Chillicothe, in the county of Ross and State of Ohio, have invented certain new and useful Improvements in Shaft-Tugs; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

Figure 1 represents an end view of the device in use. Fig. 2 is a side view. Fig. 3 is a detail.

This invention relates to improvements in harness, more particularly to shaft-tugs; and it consists in the construction hereinafter set forth.

In the annexed drawings, the letter A indicates a cylinder of leather, projecting from which is the tag B, having the slot *b*. Surrounding the cylinder A and passing through the slot *b* is a metallic band, C, composed of two pieces, *c c'*, hinged together by the hinge *c²*. At their ends these pieces have the projections *d d'*. Secured to one piece, *c*, is a spring, *e*, carrying a catch, E. This catch has the beveled head *e'* and the shoulder *e²*. The piece *e'* has on the outside the T-headed pin *f*, and back of this pin the two slots *g g'*.

Underneath and between these slots this piece *e'* has a pointed pin, *h*. The end *h'* of the saddle-strap H is caught over the head of the pin *f*, then passed through the slots *g g'* and caught against the pin *h*.

The cylinder A is slipped upon the shaft, the tag B being for the shaft-band. In harnessing up, the band C is slipped through the slot *b* and the catch E is snapped into place, as shown in Fig. 1.

With this device the shaft cannot become worn, as the leather cylinder protects it. At the same time the attachment can be quickly made or released.

Having described my invention, what I claim is—

1. The cylinder A in combination with the removable band C, as set forth.
2. The cylinder A, having the tag B, with the slot *b*, in combination with the removable hinged band C, as set forth.
3. The cylinder A, having the tag B, with the slot *b*, in combination with the removable hinged band C, having the spring-catch E, as set forth.

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

WILLIAM E. MOORE.

Witnesses:

CHARLES WILKINSON,
E. B. DAWES.