

(No Model.)

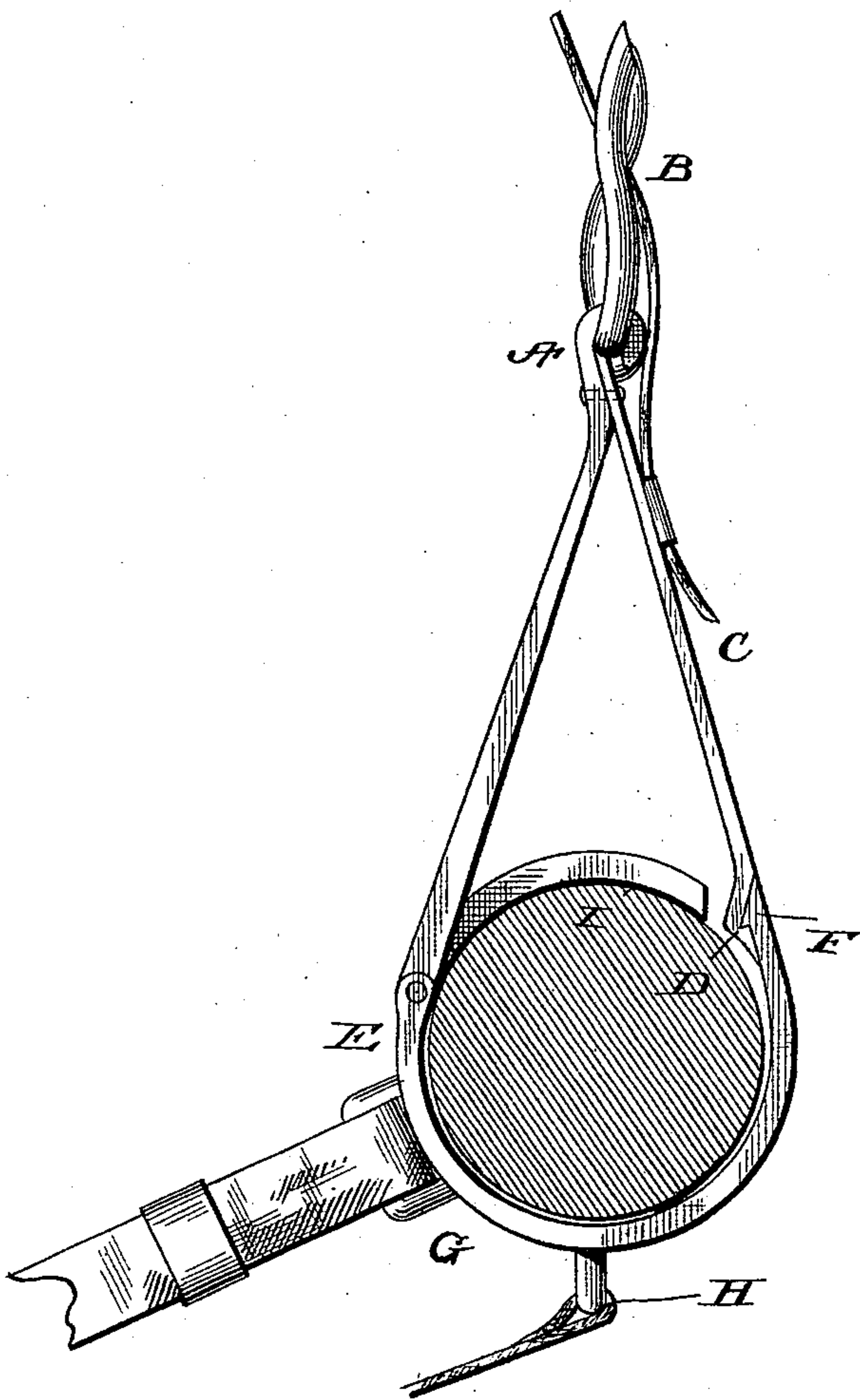
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D. C. McCOY.  
SHAFT TUG.

No. 539,634.

Patented May 21, 1895.

*Fig. 1.*



Witnesses

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*Simon Messer*

Inventor

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(No Model.)

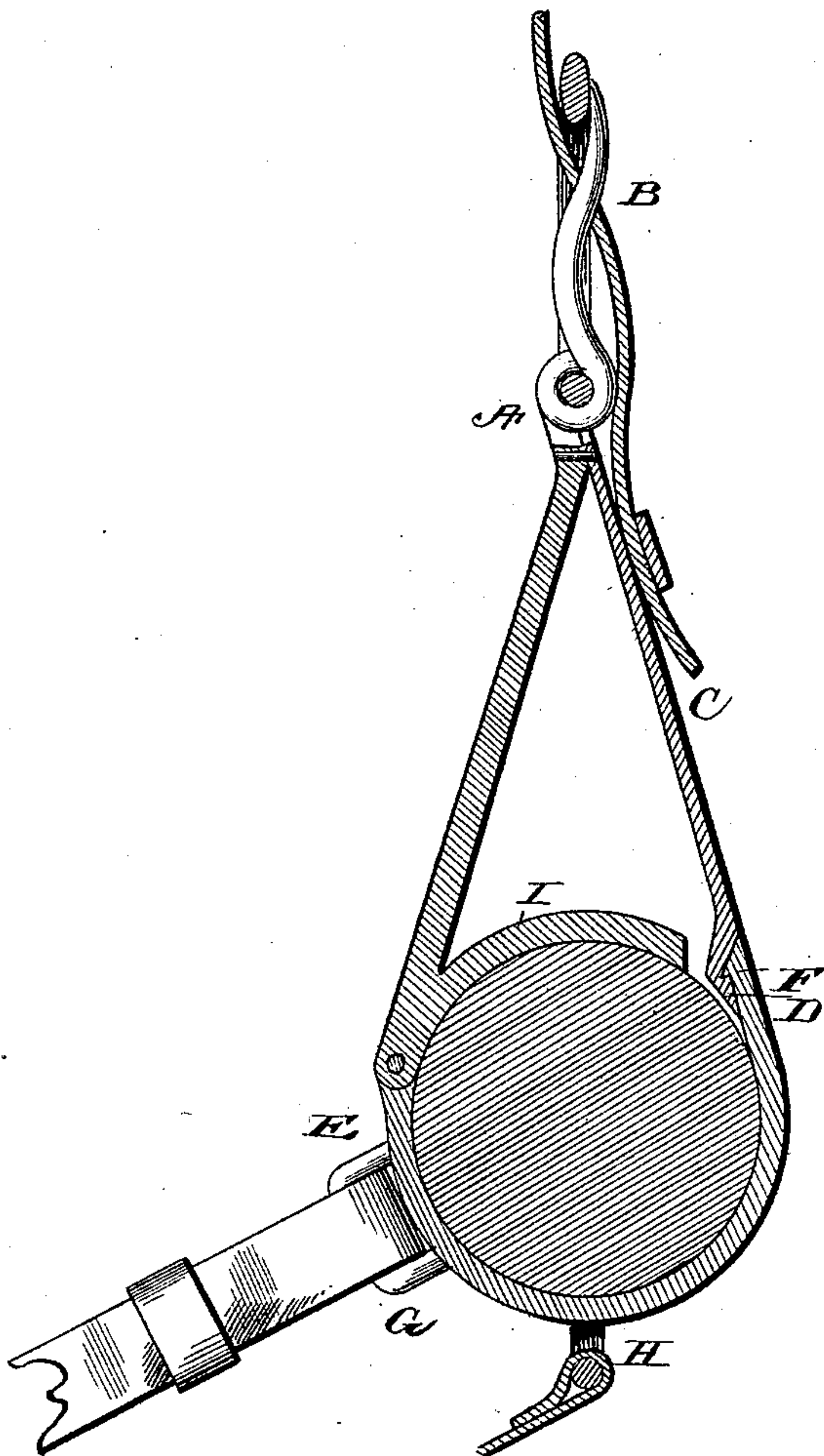
2 Sheets—Sheet 2.

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*Fig. 2.*



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# UNITED STATES PATENT OFFICE.

DAVENPORT C. MCCOY, OF JACKSONVILLE, ILLINOIS.

## SHAFT-TUG.

SPECIFICATION forming part of Letters Patent No. 539,634, dated May 21, 1895.

Application filed January 25, 1895. Serial No. 536,161. (No model.)

*To all whom it may concern:*

Be it known that I, DAVENPORT C. MCCOY, a citizen of the United States, residing at Jacksonville, in the county of Morgan and State of Illinois, 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 of reference marked thereon, which form a part of this specification.

My invention relates to improvements in shaft tugs or supporters and it consists in a certain novel construction hereinafter first fully described and then particularly pointed out in the claim.

In the annexed drawings I have shown, in Figure 1, a side elevation of my improved tug or shaft-supporter with the shaft in transverse section, and in Fig. 2 a central vertical longitudinal section of the same.

The upper member or body of the tug consists of a plate of metal or other rigid material A, to the upper end of which a buckle B is secured, the said buckle being of any preferred construction and serving to attach the tug to the saddle strap as will be readily understood. A leaf spring C is rigidly secured to the upper end of the plate A and extends downward and outward therefrom, its lower extremity being formed into a hook D, as clearly shown, to aid in fastening the tug around the shaft. The inner or undersurface of the edge of the leaf spring is concave so that when the tug is fastened around the shaft there will be no sharp edges or angles to cut or mar the shaft but it will be inclosed in a circle in which it will fit neatly.

The lower member, E, of the tug is semi-circular in formation and is hinged to the lower end of the upper member as clearly shown. Its outer or free end is formed into a hook or catch F which is adapted to engage the hook D on the leaf spring and thereby lock the tug around the shaft, as will be readily understood. On the under side of the lower member I provide the loop G which is engaged by the hold-back strap and a loop H which is engaged by the belly-band.

In order to prevent the shaft from rising in the tug and binding in the upper angle thereof and also to limit the inner movement of the leaf spring, I provide a spur I on the front or outer side of the upper member of the tug at the lower end of the same, as is clearly shown. This spur may, if so desired, be covered with rubber and the inner surface of the lower member may be also lined or covered with rubber or similar material in order to overcome the liability of the shaft to be injured by contact with the unyielding surface of the metal.

The construction of the device being thus made known, it is thought the operation of the same will be readily understood. The harness is placed in position on the horse, with the tugs attached, and the lower members of the tugs are swung downward after which the shafts are raised to the proper height. The shafts will thus be brought into position adjacent to the tugs so that when the lower members thereof are swung upward or closed they will fit around the shafts and support the same. The traces may pass through the upper portion of the tugs or may pass around the same as preferred.

It will be readily seen from the foregoing description, that I have provided a shaft tug or supporter which is exceedingly simple in its construction and which can be quickly applied so as to hold the shafts in their proper positions. In order to release the shafts it is necessary to simply disengage the lower members of the tugs from the springs when they will swing downward on their hinges and the shafts will at once drop to the ground.

A tug may be used with equal facility on either side of the harness as nothing in the construction necessitates the use of a particular tug on a particular side.

The leaf spring automatically locks the tug by engaging the lower member as it is swung upward and the shaft is firmly supported.

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

A shaft tug consisting of a rigid plate having a buckle at its upper end, a leaf spring rigidly secured to the upper end of said plate and depending downward and outward therefrom, a curved spur on the inner side of the

rigid plate at the lower end of the same projecting toward the leaf spring, and a semi-circular bar hinged to the lower end of the rigid plate and adapted to engage and be  
5 locked to the end of the leaf spring, the said bar having one or more loops on its under side.

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

DAVENPORT C. McCOY.

Witnesses:

CHAS. A. BARNES,  
W. R. BUTLER.