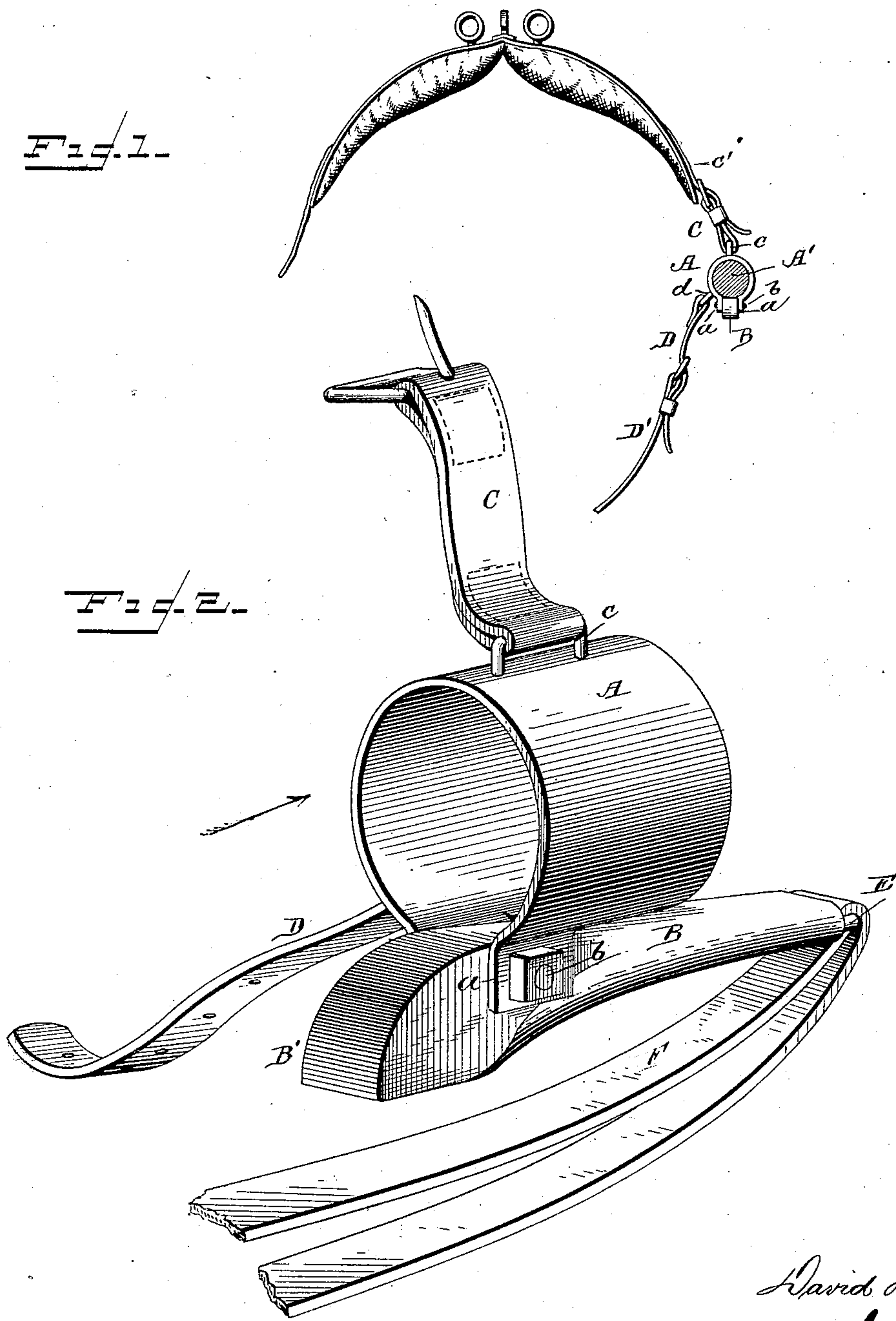


(No Model.)

D. HAWN.
TUG.

No. 337,263.

Patented Mar. 2, 1886.



WITNESSES
F. L. Curand
E. W. Johnson

David Hawn
INVENTOR
[Signature]
Attorney

UNITED STATES PATENT OFFICE.

DAVID HAWN, OF SWEDESBOROUGH, NEW JERSEY.

TUG.

SPECIFICATION forming part of Letters Patent No. 337,263, dated March 2, 1886.

Application filed December 24, 1885. Serial No. 186,595. (No model.)

To all whom it may concern:

Be it known that I, DAVID HAWN, a citizen of the United States of America, residing at Swedesborough, in the county of Gloucester and State of New Jersey, have invented certain new and useful Improvements in Harness Attachments; and I do hereby 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 letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to certain new and useful improvements in shaft-tugs, the object of the same being to provide a means whereby the shaft tug or holder can be caused to be securely clamped to the shaft when it is desired to back the vehicle; and my invention consists in the construction and combination of the parts, as will be hereinafter fully set forth, and specifically pointed out in the claims.

In the accompanying drawings, which illustrate my invention, Figure 1 is an end view of a harness-saddle showing my improvement applied thereto, and Fig. 2 is a perspective view of my improvement detached.

A represents a shaft tug or support, which preferably consists of a metallic band, the rear end of the same being cut away, so as to provide portions *a*, which are integral therewith, and when said portions are bent down they will form ears, through which a pivot-pin, *b*, may be passed for retaining in position a pivoted bar, B, which has a cam-face, B'. The tug or shaft support is provided on its upper edge with a bail or loop, *c*, through which a strap, C, passes, said strap being provided with a buckle for connecting the same to the strap *c'* of the saddle. The inner side of the shaft-support A is also provided with a bail, *d*, to which is secured a strap, D, so as to provide a means for attaching the same to the belly-band D'. The bar B, which is pivoted to the tug by the pivot pin or bolt *b*, is provided at its end with a loop or bail E, through which passes the breeching-strap F.

In hitching a horse to a vehicle the shafts

A' are passed through the tugs A, said tugs serving as a support for the same, and when there is no pressure upon the breeching-strap the pivoted bar will normally assume a position shown in Fig. 2 of the drawings. When it is desired to back the vehicle, the horse, as he moves rearwardly, exerts a pressure upon the breeching-strap, which is connected to the end of the pivoted bar, so as to cause the cam-face of said pivoted bar to engage with the shafts, thus clamping the tug firmly thereon.

It will be noted that the shaft is passed through the tug A in the direction indicated by the arrow, Fig. 2, and that the free end of the bar B extends forward in the same direction; consequently, when a pull is exerted on the breeching-strap F in the direction opposite to that indicated by said arrow, occasioned by backing the horse, the free end of the bar B will be pulled downward, so as to throw the cam end B' up into the tugs A until it hits the shaft and firmly holds it against play in the tug.

It will be seen by making use of this device that attachments to the shafts for holding the breeching-straps are entirely dispensed with; also, that it is unnecessary to adjust the breeching-straps or make them fast to the shafts. This device renders the shafts self-adjusting with respect to the breeching-straps, and in harnessing a horse to a vehicle it will be readily seen that it will only be necessary to attach the traces. If desirable, the cam-face of the bar B may be serrated and weighted, so that it will remain out of contact with the shafts until pressure is applied to the opposite end of said bar.

I claim—

1. The combination, with tug A, provided with integrally-depending ears, of a bar having a cam portion pivoted between said bars, and a portion, B, extending forward beneath the tug, and a breeching-strap connected to said portion B, whereby, upon the rearward pull of the breeching-strap, the cam portion is thrown up, substantially as set forth.

2. A shaft-tug provided with straps C and D for connecting the same to the back and belly band of a harness, said shaft-tug having

a pivoted bar, B, attached thereto, so as to engage with a shaft, substantially as shown, and for the purpose set forth.

3. In a harness attachment, a rigid tug, A,
5 provided with bails *c* and *d* for the reception of straps for connecting the same to the back and belly band of a harness, said tug having ears projecting therefrom, between which is pivoted a cam-lever, said cam-lever being
10 adapted to engage with a shaft when pressure

is applied to the breeching strap, which is connected thereto, substantially as shown, and for the purpose set forth.

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

DAVID HAWN.

Witnesses:

MILTON H. MYERS,
THEODORE F. MAYER.