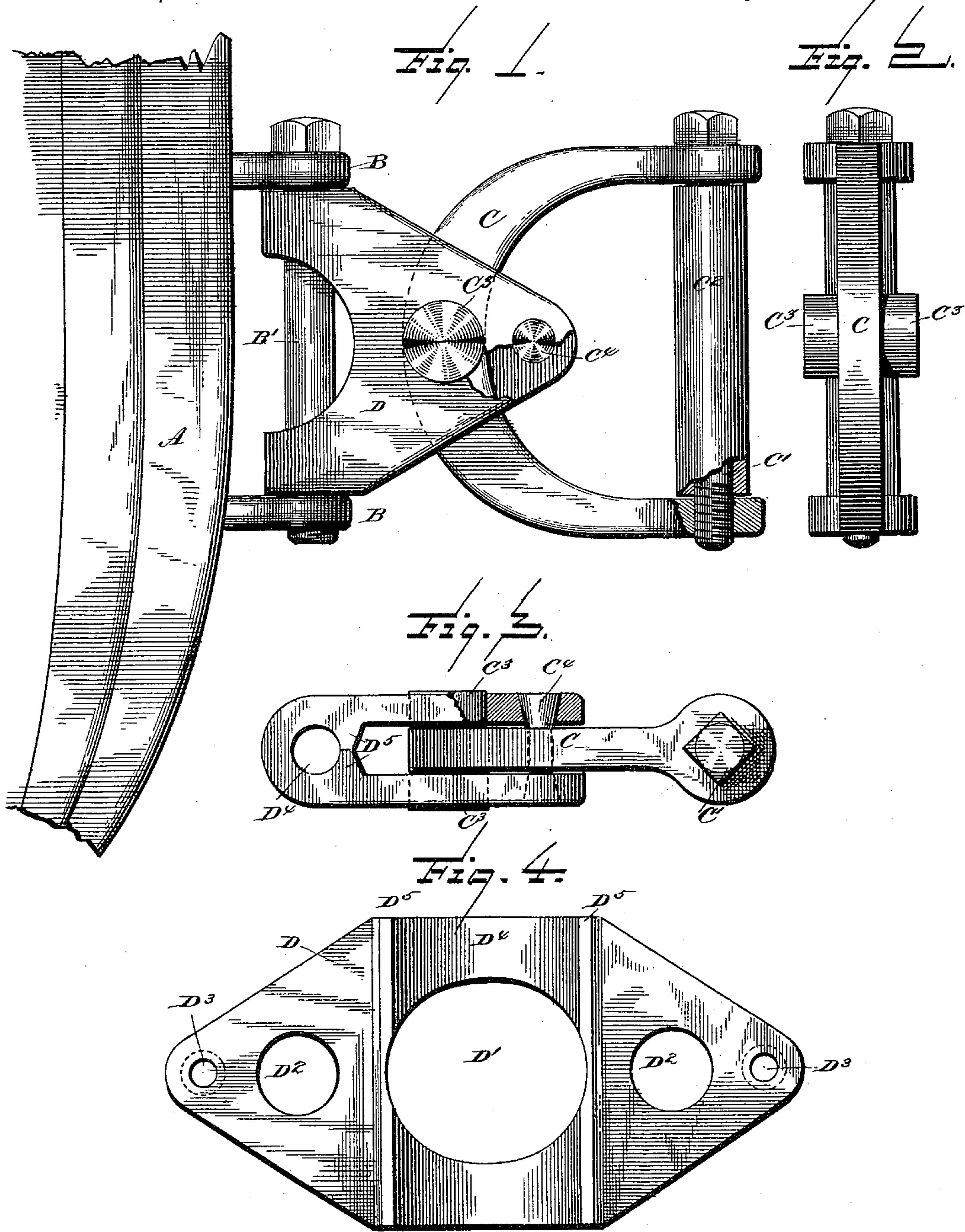


(No Model.)

W. S. SHERMAN.
HAME TUG ATTACHMENT.

No. 363,009.

Patented May 17, 1887.



Witnesses:

S. C. Hills
William D. Dural

Inventor:

Willis S. Sherman

By his Attorney,

E. B. Stocking

UNITED STATES PATENT OFFICE.

WILLIS S. SHERMAN, OF MARINETTE, WISCONSIN, ASSIGNOR OF ONE-THIRD
TO AUGUST WITMEYER, OF SAME PLACE.

HAME-TUG ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 363,009, dated May 17, 1887.

Application filed March 7, 1887. Serial No. 229,917. (No model.)

To all whom it may concern:

Be it known that I, WILLIS S. SHERMAN, a citizen of the United States, residing at Marinette, in the county of Marinette, State of Wisconsin, have invented certain new and useful Improvements in Hame-Tug Attachments, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention has relation to hame-tugs; and my object is to provide a device of the above character, that is simple, cheap, and durable, that can be easily attached and detached from the hame, and which will have a vertical swinging movement or oscillation in conformity with the movement of the trace caused by the motions of the animal, securing a square pull upon the tug.

20 Other objects and advantages of the invention will appear in the following description, and the novel features of the invention will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a side elevation of a hame-tug constructed in accordance with my invention, the same being connected to a hame. Fig. 2 is an end elevation of the hame-loop. Fig. 3 is a side view, portions being shown in section; and Fig. 4 is plan view of the blank from which the hame-strap is formed.

30 Similar letters of reference indicate like parts in all the figures of the drawings.

A represents one side of a hame of any usual construction, in the sides of which and at suitable distances apart are inserted a pair of screw-eyes, B, through which is adapted to pass the hame bolt B', which may be either screw-threaded in said eyes, as shown, or formed with a head and nut, as desired.

40 C represents the tug-loop, in this instance of semicircular form, the ends of which are perforated and screw-threaded for the reception of a bolt, C', upon which is rotatably mounted a sleeve or friction-roller, C², adapted to receive the forward end of the trace, whereby wearing of the same upon the bolt C' is obviated.

D represents a metal strap, perforated as at D' D² D³, and bent to form a circular aperture, D⁴, and formed with shoulders D⁵. The arms 50 of the strap D are adapted to embrace the tug-

loop C, and upon the latter are formed oppositely-located lugs C³, adapted to take into and form a pivotal support for the tug-loop by passing through the apertures D² thereof, whereby the vertical oscillation or swing given the trace by the motion of the horse, or the varying position of the back and of the tug, is imparted to the loop and permitted by reason of its being pivoted to the strap D, the wear accruing from said swing coming upon the strap D and lugs C³, instead of on the forward end of tug on roller C². A binding-pin, C⁴, inserted through the apertures D³ of the strap, serves to connect the ends thereof, whereby it is strengthened, and also serves the purpose of limiting the pivotal action of the two elements, the strap and the tug-loop.

By forming the blank D with the cut-out or apertured center D' the strain in the completed strap comes upon the bolt B', at or near each end thereof, and directly at the points where said bolt is secured to the eyes B. Aside from this advantage, it lessens the contact-surface of the strap and bolt and renders the weight of the former less. It also facilitates the bending of the strap.

Should it be desired to place my attachment upon the face of a collar instead of the side, as shown, it is apparent that the tug-loop C may be bent to conform to the collar.

Having thus described my invention and its operation, what I claim is—

1. In the hame-tug herein described, the combination of a semicircular or U-shaped tug-loop provided with lugs at opposite sides, with a hame-strap perforated for the reception of said lugs and for pivotal connection with the tug-loop, and bent to form an eye for the reception of a bolt suitably connected with the hame, substantially as specified.

2. In the hame-tug herein described, the combination of a U-shaped tug-loop provided with opposite lugs, with a hame-strap bent to embrace said loop and perforated for the reception of the lugs, and provided with a stop for limiting its pivotal movement on said tug, substantially as specified.

3. The hame-strap herein described for hame-tugs, formed of a metal blank and with transverse shoulders, whereby the blank when

bent forms an eye for the reception of a hame-bolt, and perforated for attachment to and in combination with a tug-loop, substantially as specified.

5 4. The combination of the tug-loop C, having the lugs C³ arranged at opposite sides, with the strap D, perforated as at D' D² D³, and formed with ribs D⁵, and with the eyes B and bolts B' C⁴, substantially as specified.

10 5. The combination of the hame A, eyes B,

and bolt B', with the strap D, perforated as at D' D² D³, and the limiting and binding bolt C⁴, and the tug-loop C, having lugs C³, bolt C', and collar C², substantially as specified.

In testimony whereof I affix my signature in 15 presence of two witnesses.

WILLIS S. SHERMAN.

Witnesses:

AMOS HOLGATE,

W. J. RAICHE.