(No Model.)

## W. S. SHERMAN. HAME TUG ATTACHMENT.

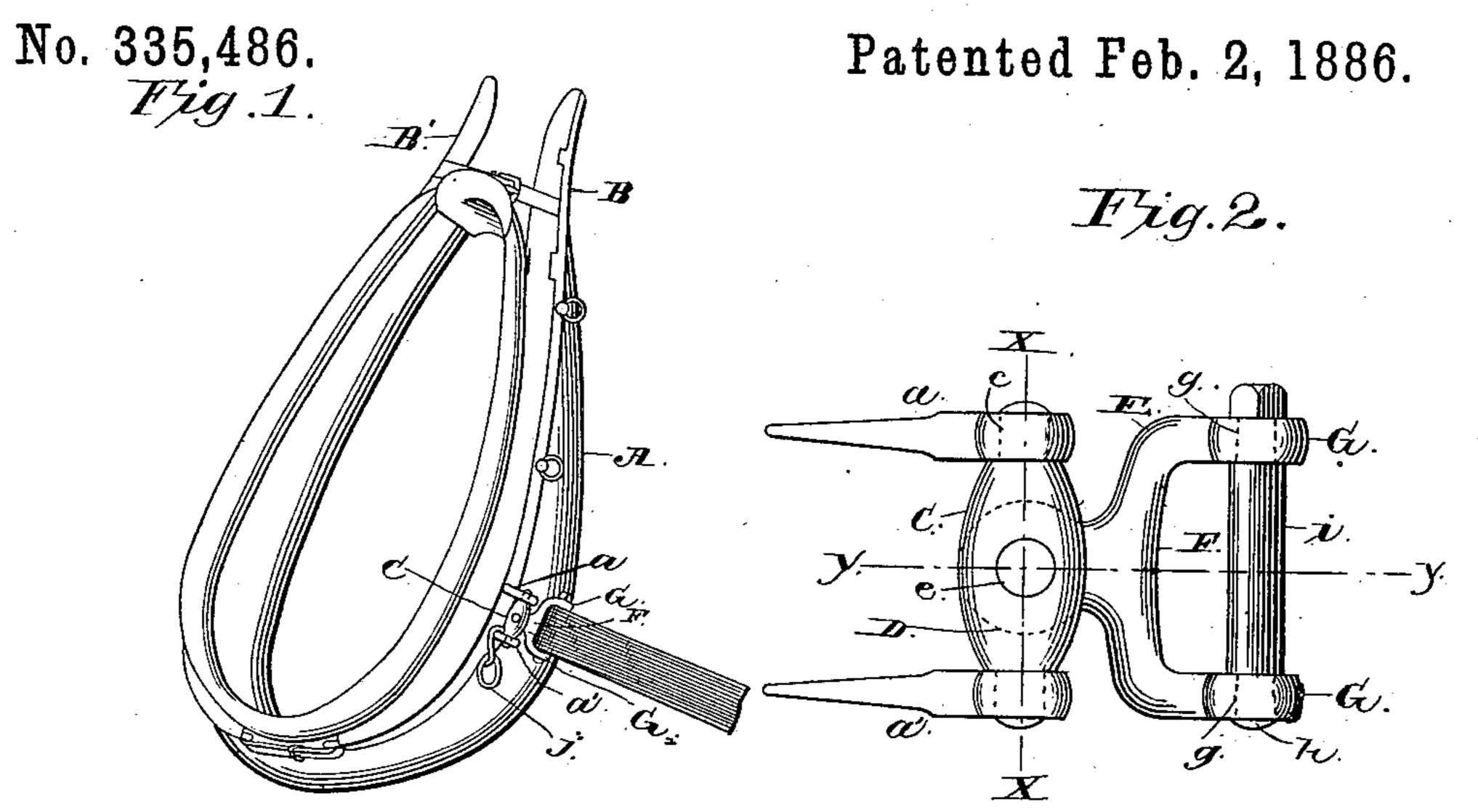


Fig.3.

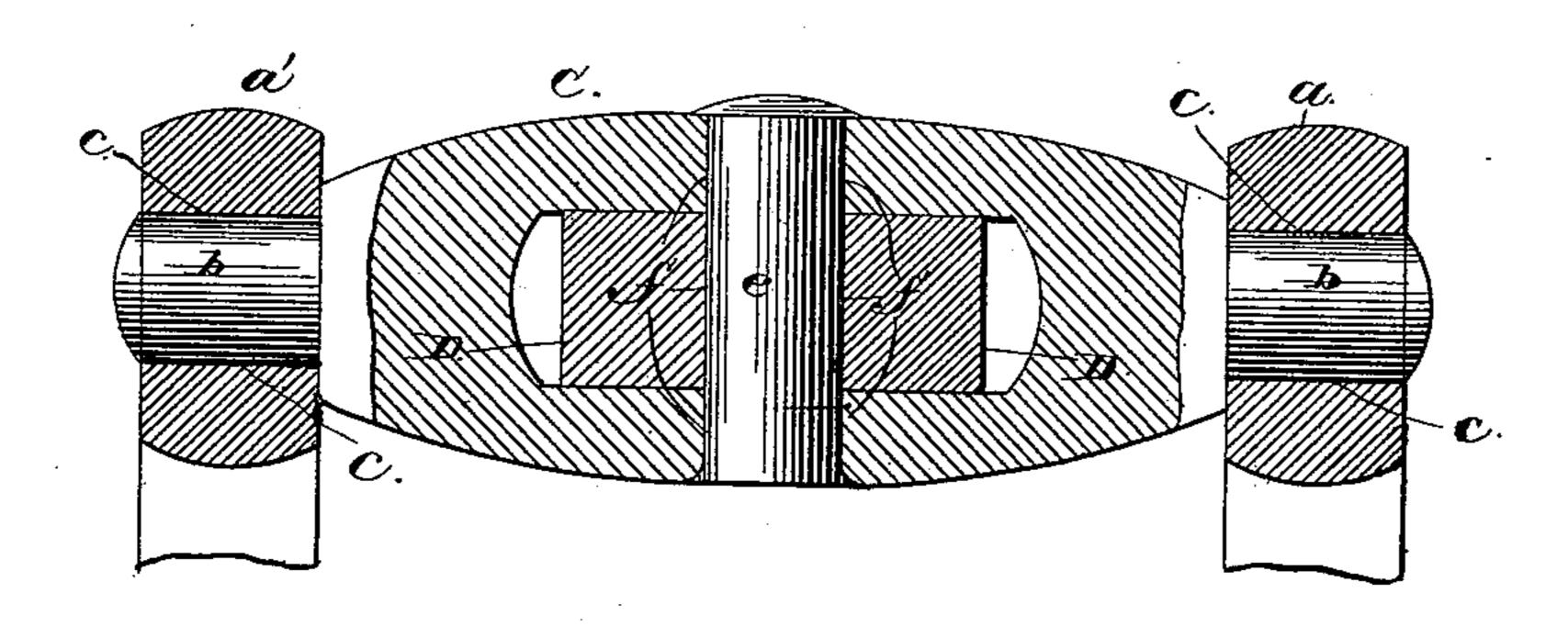


Fig. 4.

WITNESSES Howler / Man Morre

W. S. Shermoure

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## United States Patent Office.

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

## HAME-TUG ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 335,486, dated February 2 1886.

Application filed June 15, 1885. Serial No. 168,816. (No model.)

To all whom it may concern:

Be it known that I, WILLIS SHELDON SHER-MAN, a citizen of the United States, residing at Marinette, in the county of Marinette and State 5 of Wisconsin, have invented a new and useful Improvement in Hame-Tug Attachments, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to a device for connecting the hame tug of a harness with the hame; and it has for its object to provide a device of this character, whereby the strain will be equally divided upon all points of its 15 connection with the hame, and to provide a device which will accommodate itself to the various positions of the tug in plowing, scraping, pulling a wagon, &c.

A further object of the invention is to pro-20 vide a device of the character described which shall be simple in its construction, thoroughly effective in its operation, one that will be strong and durable, and may be manufactured and supplied at a slight cost.

With these ends in view the invention consists in the combination, with the hame, of a loop so connected with said hame as to have a vertical and horizontal movement, whereby it will accommodate itself to the various move-30 ments of the tug.

The invention further consists in the improved construction and combinations of parts hereinafter fully described, and pointed out in the claims.

In the drawings, Figure 1 is a perspective view showing my improvement applied. Fig. 2 is a perspective view of an enlarged scale of the same detached. Fig. 3 is a section on the line x x of Fig. 2, and Fig. 4 is a section 40 on the line y y of Fig. 2.

In the accompanying drawings, in which like letters of reference indicate corresponding parts in all the figures, A represents the collar, and B B' the hame-sections thereof. 45 My improvement is shown as applied to one section only. Secured to section B are outwardly-extending staples a a', arranged a suitable distance apart, and connecting said staples is a bar, C, the ends of which are re-50 duced, as at b, and having bearing in openings c, formed in said staples near the outer ends thereof. Heretofore the tugs were connected directly with the bar C, from which it will be seen that they had no vertical draft; !

hence the strain when the tug was off a cen- 55 tral line was on either one or the other of the staples a a'. The bar C is provided with a slot, in which is pivoted the head D of the tug-loop E by means of a transverse bolt, e, passing through openings f in the bar C. 65 The trace-loop E is composed of the bar F, having the outwardly-projecting arms G extending from its ends, and the head D, which projects from said bar midway its ends. The arms G are provided near their ends with 65 openings g, in which is located a bolt, h, and upon said bolt h is loosely mounted a sleeve, i, which is adapted to turn freely on said bolt.

It will be seen that as the bar C is pivoted 70 between the staples a a', and as the tug-loop is pivoted in a vertical slot in the bar C, the said tug-loop is allowed both a horizontal and a vertical movement, the slot in said bar C being sufficiently large to allow of the free 75 vertical play of the loop. In the old style of connection the tug was connected directly to the sleeve i on the  $\bar{b}$ olt h, so that it had neither a vertical nor a horizontal swinging movement. Connected with one of the staples a a' is a 80 pole-strap ring, j, which is for the purpose of connecting the pole with the hames, to support the outer end of the pole.

Having thus described my invention, I claim and desire to secure by Letters Pat- 85 ent—

1. The combination, with a hame-section, of staples secured thereto and projecting outwardly therefrom, a bar pivoted between said staples, a tug-loop pivoted to said bar so as 90 to move vertically, a bar located between the outer ends of the tug-loop, and a sleeve on said bar, substantially as described.

2. The combination, with the hame-section having the outwardly-projecting staples, of a 95 bar pivoted between said staples, a tug-loop pivoted in a slot of said bar and consisting of the bar F, having the outwardly-projecting arms G, and the bolt connecting the arms and the head, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

## WILLIS SHELDON SHERMAN.

OOI

Witnesses:

WILLIAM C. WILSON, JOHN P. HOLGATE.