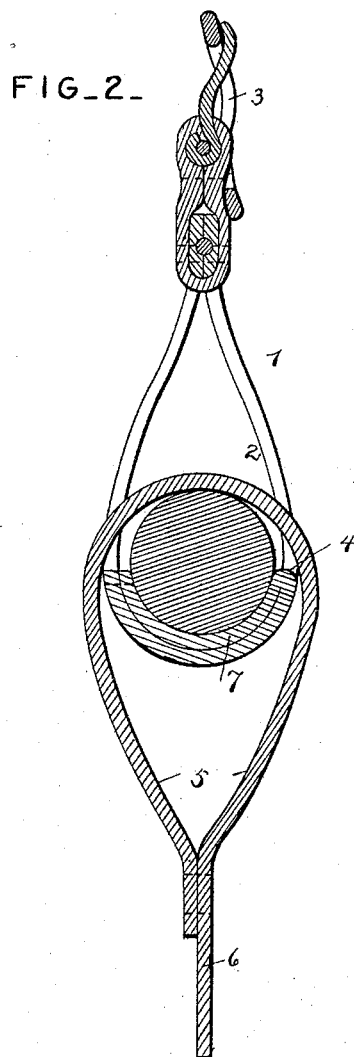
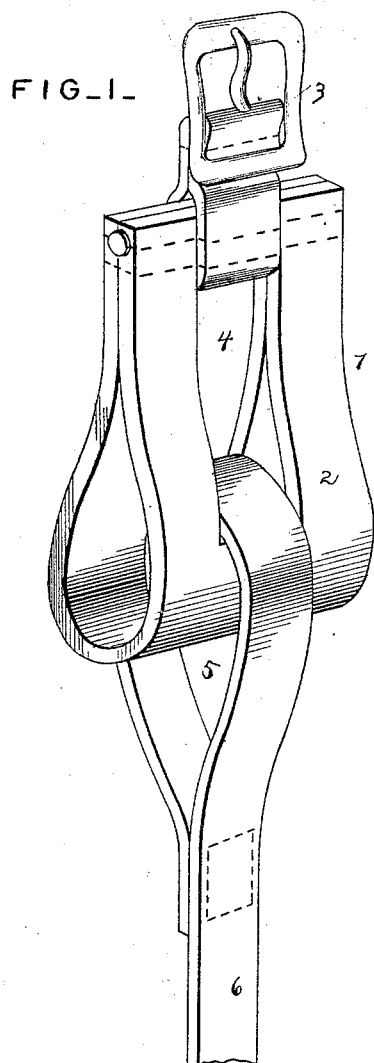


(No Model.)

J. W. GANOE.
HARNESS TUG.

No. 458,570.

Patented Sept. 1, 1891



Witnesses

B. D. O'Neil

N. F. Riley

Inventor
James W. Ganoe

By his Attorneys,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

JAMES W. GANOE, OF PHILLIPSTON, PENNSYLVANIA.

HARNESS-TUG.

SPECIFICATION forming part of Letters Patent No. 458,570, dated September 1, 1891.

Application filed March 17, 1891. Serial No. 385,412. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. GANOE, a citizen of the United States, residing at Phillipston, in the county of Clarion and State of Pennsylvania, have invented a new and useful Harness-Tug, of which the following is a specification.

The invention relates to improvements in shaft-tugs.

10 The object of the present invention is to simplify and improve the construction of shaft-tugs and to enable the same to clamp a shaft and prevent the latter rubbing an animal.

15 The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

20 In the drawings, Figure 1 is a perspective view of a shaft-tug constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view of the same, showing it in operative position.

25 Referring to the accompanying drawings, 1 designates a shaft-tug consisting of a loop 2, provided at its upper end with the usual buckle 3, and having its sides provided with slots 4, in which is arranged a loop 5 of a billet-strap 6, which is designed to be secured to a girth in the usual manner. The loop 5 of the billet-strap is passed through the slots 4 of the tug, and it encircles the lower end of the same and is adapted to engage the upper
35 face of a shaft which is supported in the tug. The tug engages the lower face of the shaft and the loop of the billet-strap engages the inner face, and the shaft is securely held

against vertical and lateral movement and is prevented from rubbing and chafing the animal, and the tug and billet-strap are capable of longitudinal movement on each other and are adapted to readily adjust themselves to any-sized shaft, which will be securely held, and as soon as the billet-strap is unbuckled the shaft will be released and the tugs may be readily slipped therefrom. The bottom of the tug is provided on its inner face with a wear-piece 7, which is constructed of leather and is formed integral with the tug and is constructed of the portion cut from one side of the tug to provide the billet-strap slot.

From the foregoing description and the accompanying drawings the construction, operation, and advantages of the invention will readily be understood.

What I claim is—

The combination of the shaft-tug having a buckle at its upper end and consisting of a loop and provided in its sides with longitudinal slots and having a wear-piece on the inner face of the lower end constructed of leather and formed integral with the tug and consisting of the portion cut from one of the sides to form the slot, and the billet-strap provided with a loop arranged in the slots and passing around the lower end of the tug and adapted to engage the upper face of a shaft, substantially as described.

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

JAMES W. GANOE.

Witnesses:

JAMES CRAIG,
J. D. HUNTER.