

W. OBERTRIFER.  
Shaft-Tug.

No. 197,527.

Patented Nov. 27, 1877.

FIG. 1.

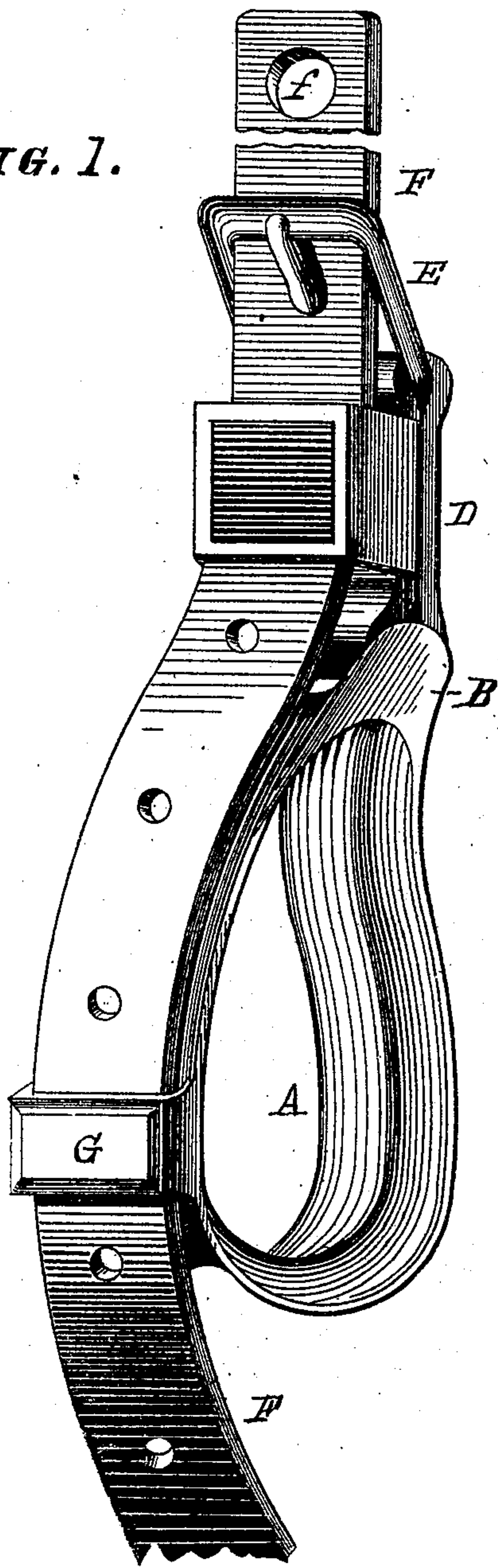
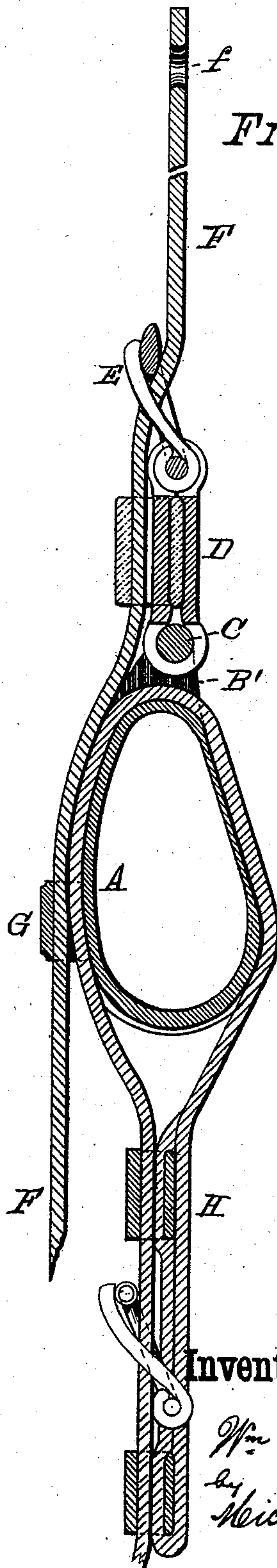


FIG. 2.



Witnesses:

Frank Hirsch.  
Chas. Beosart.

Inventor:

Wm. Obertrifer,  
by Michael J. Stark  
att'y.



# UNITED STATES PATENT OFFICE.

WILLIAM OBERTRIFER, OF GARDENVILLE, NEW YORK.

## IMPROVEMENT IN SHAFT-TUGS.

Specification forming part of Letters Patent No. **197,527**, dated November 27, 1877; application filed October 5, 1877.

*To all whom it may concern:*

Be it known that I, WILLIAM OBERTRIFER, of Gardenville, in the county of Erie and State of New York, have invented certain new and useful Improvements on a Shafting; and I do hereby declare that the following description of my said invention, taken in connection with the accompanying sheet of drawings, forms a full, clear, and exact specification, which will enable others skilled in the art to which it appertains to make and use the same.

This invention relates, in general, to shaft-tugs; and it consists in the peculiar arrangement of parts and details of construction, as hereinafter first fully described, and then pointed out in the claims.

The object of my invention is the production of a metallic shaft-tug that shall be more substantial and durable, and, at the same time, cheaper than those now in use. It shall, furthermore, be easier to the horse, allowing the same the greatest possible freedom, and so arranged as to readily slip from the shafts, &c., when the horse is being detached.

In the drawings heretofore referred to, Figure 1 is an elevation, in perspective, of my improved shaft-tug. Fig. 2 is a longitudinal sectional elevation of the same.

Like letters of reference indicate corresponding parts in both figures.

A is the metallic tug. It consists of a pear-shaped ring, having both its interior and exterior surfaces rounded, so as to present no sharp corners to either the horse or the shaft. That side of the ring which, when in use, is nearest to the horse is curved inwardly, so as to fit the contour of the belly of the horse, and the opposite side is curved outwardly, so as to produce a sufficiently large opening for the passage of the shaft.

The upper extremity of the tug terminates in two lugs, B B', which are connected together by means of the cross-bar C. The front side is provided with a loop, G.

This tug is produced entire in the process of casting, and subsequent annealing, to render it malleable from any kind of metal suit-

able for the purpose, and it may be japanned, nickel or silver plated, or otherwise coated, to prevent it from being affected by moisture, &c., and for ornamentation.

D is a buckle-piece, having the buckle E on one end. With the other end it is attached to the cross-bar C of the tug A. By means of this buckle-piece the said tug is secured to the back-strap F, which, in turn, is fastened to the saddle, in the usual manner, by the terret-screw passing through the aperture *f* in said back-strap. The other extremity of said back-strap has a number of holes, either one of which may be made to engage with the buckle E, and adjustment thus effected.

H is the belly-band. It is passed up on the inner side of the tug (being the side nearest to the horse) and over the top, below the cross-bar C, returning on the outer side, and under the loop G, to a buckle, as clearly illustrated in Fig. 2.

It will be observed that my tug has the inner side inwardly curved, so as to fit the contour of the horse. This construction renders the tug easily worn by the horse, and does not injure the same in the slightest degree.

A further improvement is the arrangement of the belly-strap being made to pass around to guide the tug, and prevent its swinging to and fro when the horse is walking.

The tug herein described can be manufactured at a cost not to exceed that of other metallic tugs, while it presents a neater appearance, and is far more serviceable.

Having thus fully described my invention, I claim as new and desire to secure to me by Letters Patent of the United States—

1. As an improved article of manufacture, a metallic shaft-tug consisting of a pear-shaped ring, of which one side is inwardly and the opposite side outwardly curved, said tug being provided with the lugs B B', cross-bar C, and loop G, the whole produced in the process of casting, as and for the use and purpose specified.

2. The combination, with the ring A, having one side slightly curved inwardly and the

opposite side curved outwardly, and provided with the loop G, of the buckle-piece D, secured to the body A by the lugs B B' and cross-bar C, and the belly-band H, passed around said body A, through said loop G, substantially as and for the use and purpose specified.

In testimony that I claim the foregoing as

my invention I have hereto set my hand and affixed my seal in the presence of two subscribing witnesses.

WILLIAM OBERTRIFER. [L. S.]

Attest:

MICHAEL J. STARK,  
FRANK HIRSCH.