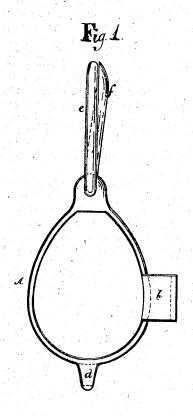
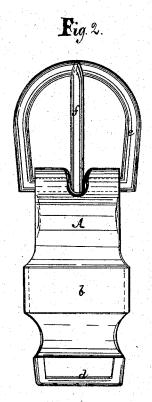
## E. BROWN. METALLIC THILL HOLDER.





Witnesses.

Gw. R. Clarker

Inventor

Elieneger Brown

## UNITED STATES PATENT OFFICE.

EBENEZER BROWN, OF SOUTH BOSTON, MASSACHUSETTS, ASSIGNOR TO S. E. BROWN OF SAME PLACE.

## IMPROVED METALLIC THILL-HOLDER.

Specification forming part of Letters Patent No. 47.765, dated May 16, 1865.

To all whom it may concern:

Be it known that I, E. Brown, of South Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Metallic Thill-Holder; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is an end view, and Fig. 2 a side

view.

Like parts are indicated by the same letters

in both figures.

The nature of my invention consists, first, in constructing a thill-holder entirely of metal, instead of leather, whereby I am enabled to produce an article many times more durable than leather and at less than half the cost of the latter; second, in casting the tug-strap loop and the shaft-girth loop in one with the thill-holder; and, third, incasting the tug-strap buckle in the metallic thill-holder, and thereby confining the two together.

To enable others skilled in the art to make and use my invention, I will now proceed to describe the construction and operation of the

same.

I propose to make my thill-holders of any suitable metal or alloy, and either cast or wrought. As a general thing, however, I construct them of malleable cast iron or brass, or they may be constructed of wrought iron, or other suitable metal, the ends of the strips of which they are made being welded, brazed, or united in any other obvious manner; but as this method is more expensive than cast-

ing, I prefer the latter.

The main body A is intended to be similar in shape to the leather thill holders in general use, as clearly shown in the drawings. The inside of the holder is intended to be made as smooth as possible and the edges rounded, so as not to chafe and wear the thills. Indeed, when the bearing parts of the thills are properly covered with leather, the wear and friction of the smooth metallic surface on the thill will be exceedingly slight, even less than between two surfaces of leather, or leather and wood; or, if ever required, the inside of my metallic holder may be lined with leather,

or other suitable substance. I prefer, however, especially with nice carriages, to cover the bearing-points of the thills with leather; but for the uncovered wooden thills of ordinary vehicles, smooth metallic holders alone are required, the friction between the wood and metal being of little importance.

b is the tug-strap loop, which (when the thill-holder is of cast metal,) is cast in one piece with the holder itself. The shaft-girth loop d is also, in this case, cast in one with the thill-holder. This method of constructing and attaching these loops is obviously very cheap as compared with the usual method, while the strength and neatness of such loops are un-

equaled.

e is the tug-strap buckle, provided with the tongue f. This buckle is constructed precisely like those in general use. When the holder is made of cast metal, the buckle is properly placed in the mold and the metal cast around it, as shown in the drawings. In this case the part of the buckle which is embedded in the cast metal is previously covered with a thin coat of plaster-of-paris, so that when the casting cools and the plaster crumbles out the buckle will turn with freedom in the holder; or the buckle may be made in two parts, and screwed or riveted together and attached to the holder after it is cast.

The outside of my holder may be painted or japanned the color of leather, or it may be plated or gilded in any fancy style re-

quired

For cheapness and durability I consider my metallic thill-holder as superior to any known or used before, and constituting a great improvement in the art.

Having thus described the nature of my invention, what I claim as new, and desire to

secure by Letters Patent, is-

1. Casting the tug-strap loop and the shaftgirth loop in one with the thill-holder, substantially as and for the purpose described.

2. Casting the tug-strap buckle in the metallic thill-holder, substantially as set forth, and for the purpose described.

EBENEZER BROWN.

Witnesses:

N. AMES, GEO. R. CLARKE,