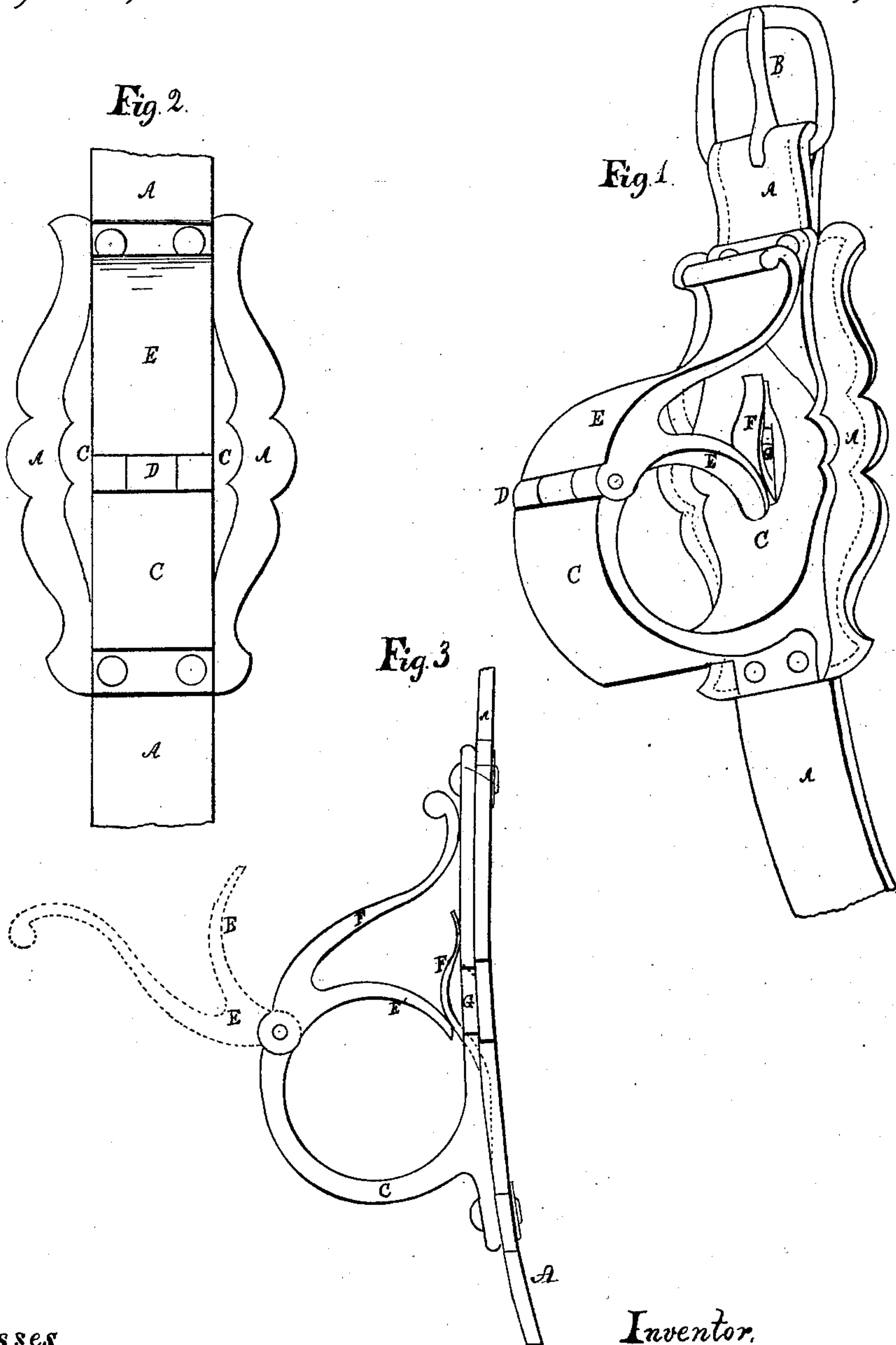


Brown & Babcock,

Harness Tug,

No 30,459,

Patented Oct. 23, 1860.



Witnesses,

J. H. Howard.
S. J. Shugart

Inventor,

Brown & Babcock
by their Attorney
Chas. F. Sanbury

UNITED STATES PATENT OFFICE.

D. R. BROWN AND A. C. BABCOCK, OF NEW HAVEN, CONNECTICUT.

SHAFT-TUG.

Specification of Letters Patent No. 30,459, dated October 23, 1860.

To all whom it may concern:

Be it known that we, D. R. BROWN and A. C. BABCOCK, of New Haven, in the State of Connecticut, have invented an Improved Shaft-Tug; and we do hereby declare the following to be a correct description of the same, reference being had to the accompanying drawings, in which—

Figure 1, is a perspective view of the tug complete; Fig. 2, is a side elevation, and Fig. 3, an end elevation of the same.

The same part is marked by the same letter of reference in all the figures.

The nature of our invention consists in making a shaft tug of metal, with the upper part hinged to the lower part, so that the tug can be opened to receive the shaft from above, and then closed and clasped securely to inclose the shaft, the whole being capable of being made highly ornamental as well as superior in convenience to the ordinary closed leather tug as hereinafter more particularly set forth.

To enable others to make and use our improved shaft tug, we will proceed to describe its construction and operation referring to the drawings, where A marks the leather girth to which the improved tug is attached; B the buckle by which it is fastened to the strap of the saddle; C the fixed portion of the tug, which supports the shafts, and is attached by rivets to the girth A; D, the

hinge between the part C, and the arm E on which the latter turns; E' a curved catch forming part of arm E, and projecting out in such a position as to work over the curved spring F, which projects through slot G. The dotted red lines in Fig. 3 show the position of arm E when the tug is opened.

The operation of the tug is obvious from the construction. Many shafts are made with their forward ends curved downward, and are inconvenient to introduce into the ordinary tug. Even when the shafts are straight, it is not always an easy matter to back the horse so as to introduce the shafts into the tugs readily. By this tug both these difficulties are obviated, as all that is necessary is to open the top of the tug, and allow the shaft to fall into it, and then by clasping make it secure.

Having thus fully described our invention, what we claim, and desire to secure by Letters Patent, is—

A hinged shaft tug constructed and operating substantially in the manner described.

The above specification, signed and witnessed this thirty-first day of August, A. D. 1860.

D. R. BROWN.
A. C. BABCOCK.

Witnesses:

LUCIUS G. PECK,
CLAYTON PAGE.