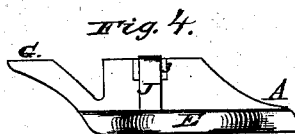
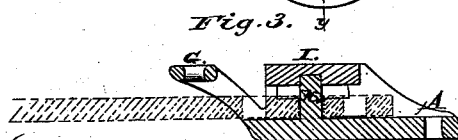
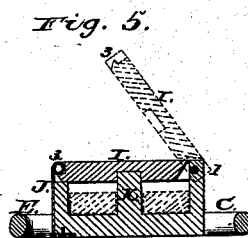
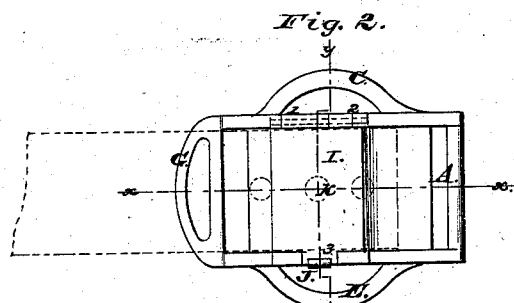
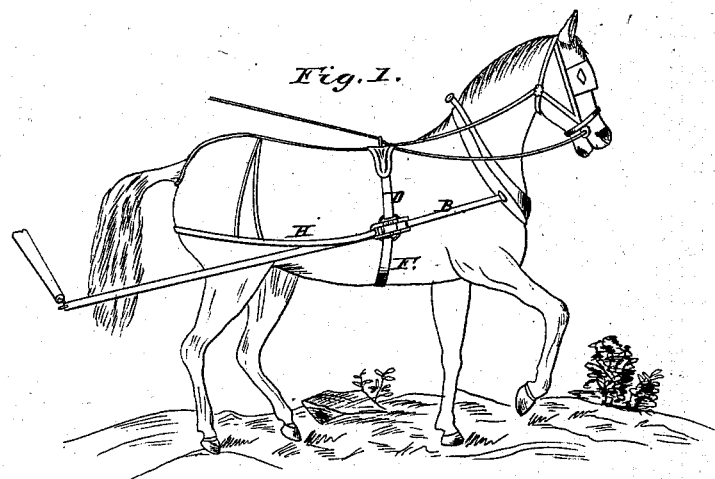


C. D. W. Ries,
Harness Buckle,
N^o 47,570. Patented May 2, 1865.



Witnesses:
Chas. E. How.
James T. Graham.

Inventor:
Clark S. W. Ries.
By Chas. E. How.
Atty

UNITED STATES PATENT OFFICE.

CLARK D. W. RIES, OF EDWARDS, NEW YORK.

IMPROVED TUG-BUCKLE.

Specification forming part of Letters Patent No. 47,570, dated May 2, 1865.

To all whom it may concern.

Be it known that I, CLARK D. W. RIES, of Edwards, in the county of St. Lawrence and State of New York, have invented certain Improvements in Tug-Buckles, of which the following is a specification.

My invention consists of a tug-buckle so formed as to allow the tug to be readily unbuckled and shortened or lengthened, as may be required, however stiff and unyielding the tug may have become.

In the drawings, Figure 1 is a sketch showing the position of the buckle with respect to the parts of the harness which are attached to it. Fig. 2 is a side view of the buckle, showing in red lines the position of the tug. Fig. 3 is a section through the line *x x*, Fig. 2, showing in red lines the position of the tug. Fig. 4 is an edge view of the buckle, showing the spring by which the hinged bar of the buckle is held in place when shut down. Fig. 5 is a section through the line *y y*, Fig. 2, showing in red lines the position of the tug and in blue lines the hinged bar opened.

A is the part of the buckle to which is attached the breast-strap B, or the strap which passes from the collar to the tug-buckle.

C is the part of the buckle to which the back-strap D, or the strap which passes from the pad to the tug-buckle, is attached.

E is the part of the buckle to which the belly-band F is attached, and G is the part to which the hold-back strap H is attached.

I is the hinged bar, which is furnished with two square projections, 1 and 2, which fit into two square notches in the edge of the buckle, to which said hinged bar is hinged by a pin, which passes lengthwise through the edge of the buckle, and through the projections 1 and 2, as represented in Figs. 2 and 5, the shoulders of the hinged bar I, between and adjacent to the projections 1 and 2 and the bottom of the notches, being beveled, as represented in Fig. 5, to allow the said hinged bar to be operated. On the other end of the hinged bar

I is a projection, 3, which is notched in the end, as represented in Figs. 2, 4, and 5. The outer half of this notch extends deeper than the inner half, and is square, so that the spring-catch J may take hold of it and keep the hinged bar I shut. The inner half of said notch is beveled, as represented in Fig. 5, so that it may force back the spring-catch J automatically when closed.

J is a spring-catch, which holds the hinged bar I securely in place when said bar is closed, and which is fastened to the inner bar of the buckle, as represented in Fig. 5, and extends up the edge of the buckle, where it lies in a groove prepared for its reception, except when forced back by closing the hinged bar I, or when forced back for the purpose of opening said bar.

K is the tongue or projection, extending from and at right angles to the inner bar of the buckle, thus passing through the tug at right angles to it, and utilizing the whole strength of the leather. Said tongue or projection K may be cast in one piece with the buckle, as represented in the drawings, or it may be made separately and then screwed or riveted to the inner bar of the buckle, as may be thought most desirable. The tongue or projection K may be made of such a length as just to clear the inner side of the hinged bar I when closed, or it may be made longer, so as to extend into a cavity prepared for it in the inner side of the said hinged bar I, as represented in the drawings, thus securing an additional support for said tongue or projection if thought desirable.

I claim—

The combination of the hinged bar I with the tongue K, projecting from the inner bar of the buckle, substantially as described, and for the purposes set forth.

CLARK D. W. RIES.

Witnesses:

L. M. GARDNER, Jr.,

E. E. BRAND.