

G. W. BRADFORD.
Harness-Buckles.

No. 146,644.

Patented Jan. 20, 1874.

Fig. 1.

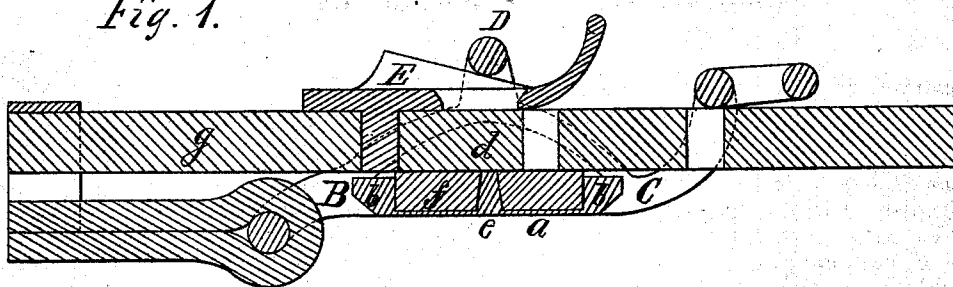


Fig. 2.

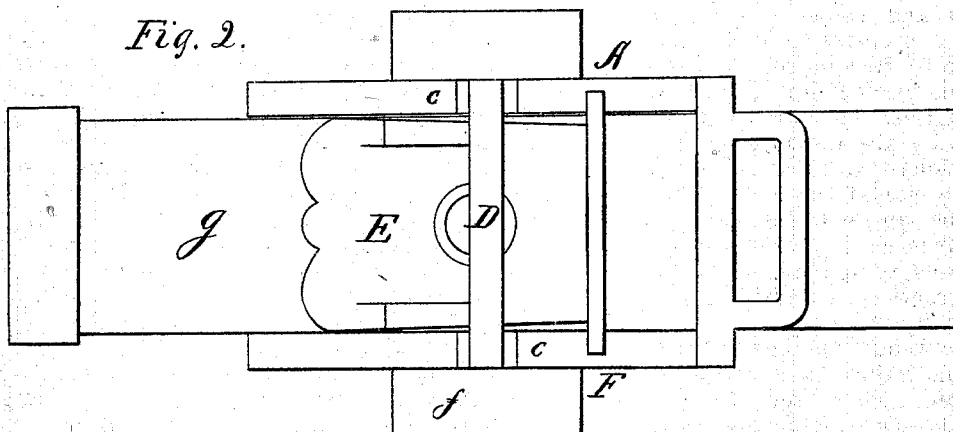
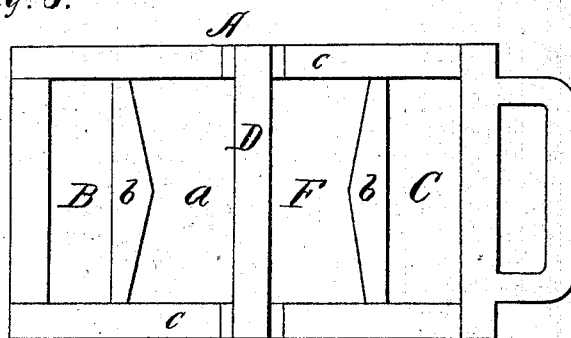


Fig. 3.



Witnesses.
George E. Upham.
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UNITED STATES PATENT OFFICE.

GEORGE W. BRADFORD, OF LA SALLE, MICHIGAN.

IMPROVEMENT IN HARNESS-BUCKLES.

Specification forming part of Letters Patent No. 146,614, dated January 20, 1874; application filed July 7, 1873.

To all whom it may concern:

Be it known that I, GEORGE W. BRADFORD, of La Salle, in the county of Monroe and State of Michigan, have invented a new and valuable Improvement in Buckles; 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 annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a sectional view of my buckle as applied. Fig. 2 is a plan of the same. Fig. 3 is a plan view of the same with tug and straps removed.

This invention has relation to an improvement in wedge tug-buckles; and it consists in the construction and novel arrangement of a transverse recess or set-back in the back plate, under the wedge, whereby the back-band may be continued through the buckle to form the belly-band, and of the short projection or stud on the back plate, about equal in height to the depth of the recess or set-back, in combination with a wedge, as hereinafter more fully described.

In the accompanying drawings, the letter A indicates the body of the buckle, having the usual end loops B and C and the transverse bar D, with which the wedge E engages. The back plate F of the body is transversely recessed, forming the set-back *a*, at each end of which a rabbet, *b*, is formed, the inner edge of which is slightly inclined from the middle outward toward each end, for the purpose of allowing the requisite play of the strap, which is located in the recess. The ends of the rabbets *b* are connected by the side bars *c*, which are preferably arched to sustain the strain of the wedge-bar D, which is transversely arranged, and connects the side bars *c* at their middle portions. In this manner slots or oblong openings *d* are formed through the sides of the buckle, at each end of the set-back or recess

a, and between the ends of the opposite rabbets *b*, which form the ends of the opening, the upper and lower sides thereof being, respectively, formed by the side bar *c* and the floor of the recess *a*. From about the center of the floor of the recess *a* rises a stud, *e*, of a height about equal to the depth of the recess, or the height of the rabbet *b*. This stud is made short in this manner, so that it will not interfere with the free movement of the tug-strap, which passes longitudinally through buckle over the faces of the rabbets *b*. The wedge E may be of the usual pattern, with its small end curved upward and lengthened to catch in the loop-bar D.

This buckle is designed to save several feet of stock and much valuable time in making a set of harness.

The back-strap *f* and belly-band may be made continuous and passed downward or in the vertical direction through the recess *a* and side slots *d*, the rabbets *b* serving to keep it steady and to support the tug-strap *g*, which is passed longitudinally through the buckle or in the horizontal direction. The strap *f* is secured by the stud *e* in the recess, and the strap *g* by the wedge E, or other device equivalent thereto.

What I claim as new, and desire to secure by Letters Patent, is—

The tug-buckle described, having the transverse recess or set-back *a* in the back plate F under the wedge, the center stud *e*, equal in height to the depth of the set-back, and the transverse bar D, in combination with a wedge, E, substantially as and for the purposes set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

GEORGE WITHINGTON BRADFORD.
Witnesses:

JOSEPH D. ROWAN,
E. R. GILDAY.