E. K. BRAYTON & J. BAUGH.

Trace-Buckles.

No. 141,108. Patented July 22, 1873.

Fig 1.

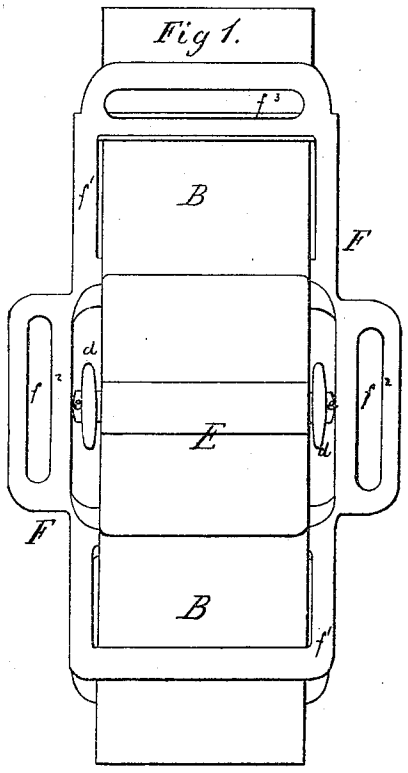


Fig 2.

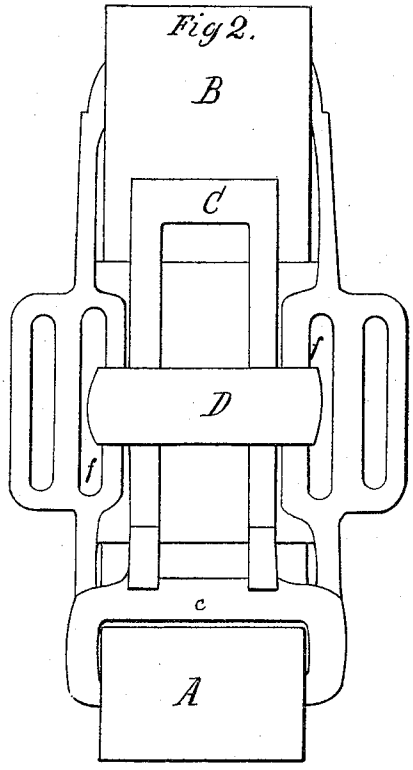


Fig 3.

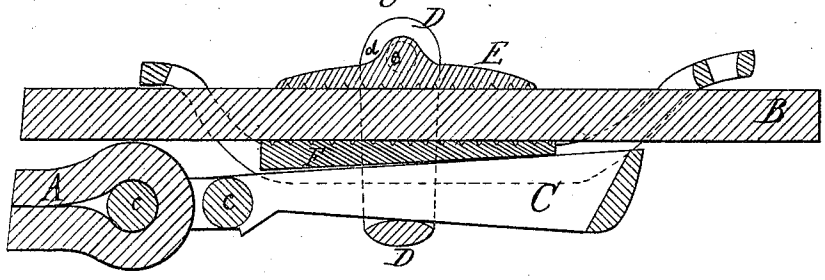


Fig 4.

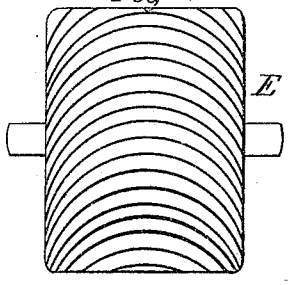
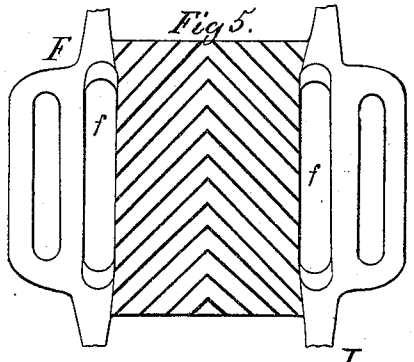


Fig 5.



Witnesses.
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AM. PHOTO-LITHOGRAPHIC CO. N.Y. (OSBORNE'S PROCESS.)

UNITED STATES PATENT OFFICE.

EDWARD K. BRAYTON AND JOHN BAUGH, OF EAU CLAIRE, WISCONSIN.

IMPROVEMENT IN TRACE-BUCKLES.

Specification forming part of Letters Patent No. **141,108**, dated July 22, 1873; application filed May 24, 1873.

To all whom it may concern:

Be it known that we, EDWARD K. BRAYTON and JOHN BAUGH, of Eau Claire, in the county of Eau Claire and State of Wisconsin, have invented a new and valuable Improvement in Trace-Buckles; and we 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 drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figures 1 and 2 of the drawings are representations of top and bottom views of our trace-buckle. Fig. 3 is a sectional view of the same. Figs. 4 and 5 are details of the same.

Our invention relates to buckles for harness; and it consists in the novel construction and arrangement of the self-tightening friction-clamps taking hold of the flat sides of the traces with the aid of two corrugated friction-plates, which are forced together by a movable yoke and a wedge on the end of the hame-strap. The object of our invention is to avoid the weakening of the traces by a row of holes, as they are used for the ordinary buckle, and to be able to adjust the traces faster, with less labor and more accuracy, than the ordinary buckles will permit.

In the drawings, A represents the hame-strap, and B the trace, of a harness. The strap A is fastened to the end part of a wedge, C, shaped as an oblong frame, and tapering down toward the strap A. The trace B passes between two corrugated surfaces belonging to the plates E and F, the first of which is pivoted at the center *e* to the parallel arms *d* of a transverse brace, D, which bears against the inclined surface of the wedge C. The said arms *d* are passed through slots *f* to the right and left of the plate C, and they also inclose the sides of the wedge C, thereby keeping the two friction-plates E F and the wedge C in their proper positions. The plate F is provided at each end with a buckle blank or guide, f^1, through which the trace is passed and by which it is held in position; there are other slots f^2 and f^3 to connect the plate F with the harness by straps. The wedge C ends into a slotted link, *c*, to which the hame-strap is attached.

To connect the trace with the hame-strap, the plate F is held with the plate E up and the brace D down; the wedge is then pushed between the back of the plate F and the brace D, until the small end of the wedge arrives opposite the said brace; then the plate E is raised until the brace D touches the wedge, and the trace-strap is pushed between the corrugated surfaces of the plates E and F. By pulling the hame-strap and the trace in opposite directions the wedge C becomes jammed between the back of the plate F and the brace D, whereby the plates E and F are compressed, and the coupling of the trace and hame-straps is completed. To uncouple the said straps, the wedge C is pushed back, which sets the plates E and F free, so that the trace may be easily moved between them.

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

1. The trace-clamp, consisting of the wedge C to be fastened to a hame or trace, the brace D, and the pressure-plates E F with corrugated friction-surfaces, substantially as specified.

2. In a trace-coupling, the friction-plate F with the buckle-blanks or guides f^1, and the strap-slots f^2 f^3, substantially as specified.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

EDWARD K. BRAYTON.
JOHN BAUGH.

Witnesses:
LEVI E. LATIMER,
ALBERT SMITH.