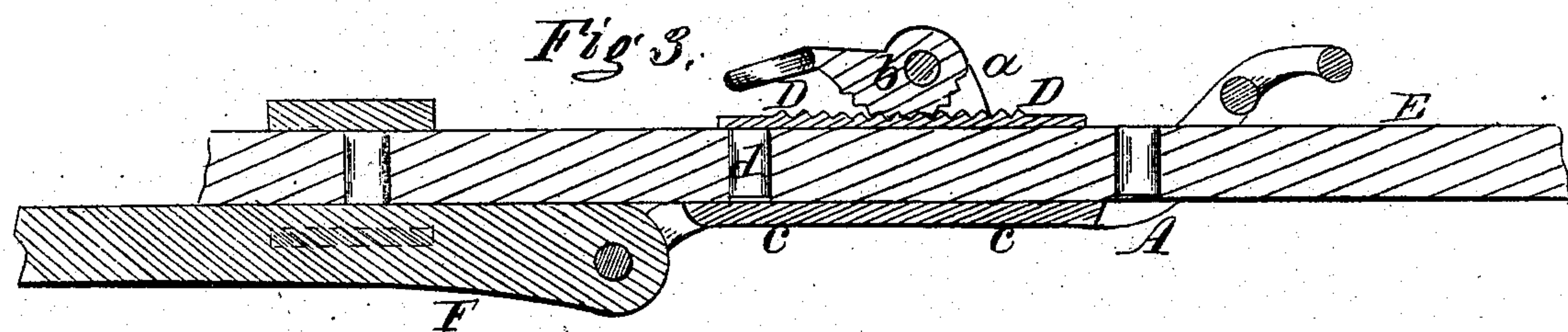
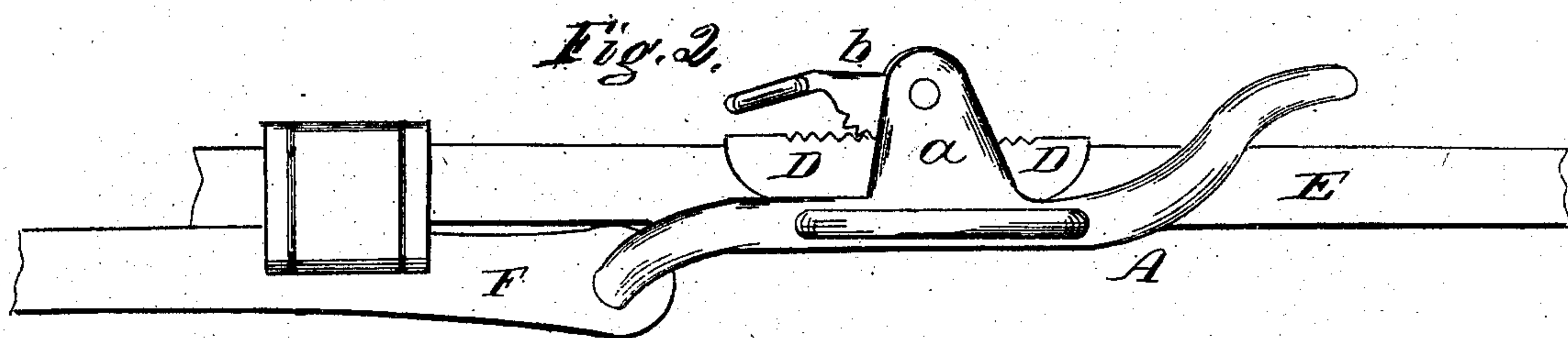
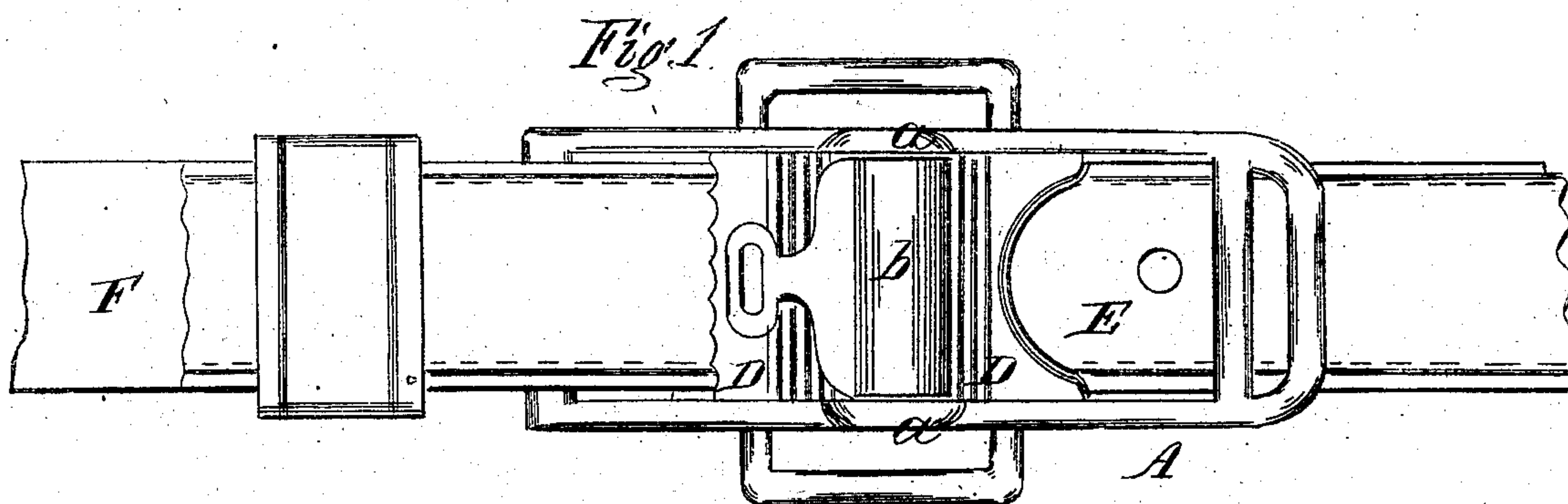


J. P. Hisley,
Buckle.

No. 93,440.

Patented Aug. 10. 1869.



Witnesses
Wm B Lodge
T A Moller

Inventor
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United States Patent Office.

JOHN P. HISLEY, OF SYRACUSE, NEW YORK.

Letters Patent No. 93,440, dated August 10, 1869.

IMPROVEMENT IN BUCKLES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN P. HISLEY, of Syracuse, in the county of Onondaga, and State of New York, have invented a new and useful Improvement in Trace-Buckles for harness; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front view;

Figure 2 is an edge view; and

Figure 3 is a sectional edge view.

Similar letters of reference indicate like parts.

This invention consists in a buckle-frame having a corrugated or toothed cam, and a toothed tongue-plate acting in connection therewith, in such manner that the strain on the tug causes the tongue-plate to turn the cam, and thus securely clamp the tug between said tongue-plate and a flat portion of the buckle-frame, and thereby hold the tug mainly by pressure, so that it is not liable to be strained or torn by the buckle-tongue, as hereinafter more fully explained.

In the accompanying drawings—

E is the tug, and F is the hames-tug.

A is the buckle-frame, having ears *a a*, to which is pivoted a cam, *b*, and opposite to said cam the buckle-frame has a wide-cross-bar or plate, *c c*, fig. 3.

The tongue *d*, (fig. 3,) is attached to a sliding plate,

D, the upper face of which is provided with teeth, which engage with the teeth of the cam *b*.

Its operation is as follows:

To shorten or lengthen out the tug, the cam *b* is turned back, and this disengages the plate D, so that the tongue *d* can be withdrawn from the tug and changed to any hole desired. When the plate D is again brought to the proper position, and the cam turned down, and as strain is brought upon the tug, the teeth of plate D engage with the cam, and turn it down with such force that the cam clamps the plate D and tug E securely upon the cross-bar *c c*.

The tongue *d* merely fills the toothed plate D at the desired point on the tug, and the tug is held from slipping through the buckle by the teeth D and *b*, and by the clamping-pressure, but mainly by the latter, and in this manner the tug is held without liability of injury, the clamping-pressure being in proportion to the strain brought upon the tug.

Having thus described my invention,

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

A buckle composed of frame A, *c c*, serrated cam *b*, and sliding tongue-plate, D *d*, all constructed and operating as and for the purpose herein set forth.

JOHN P. HISLEY.

Witnesses.

WM. J. DODGE,

F. A. MORLEY.