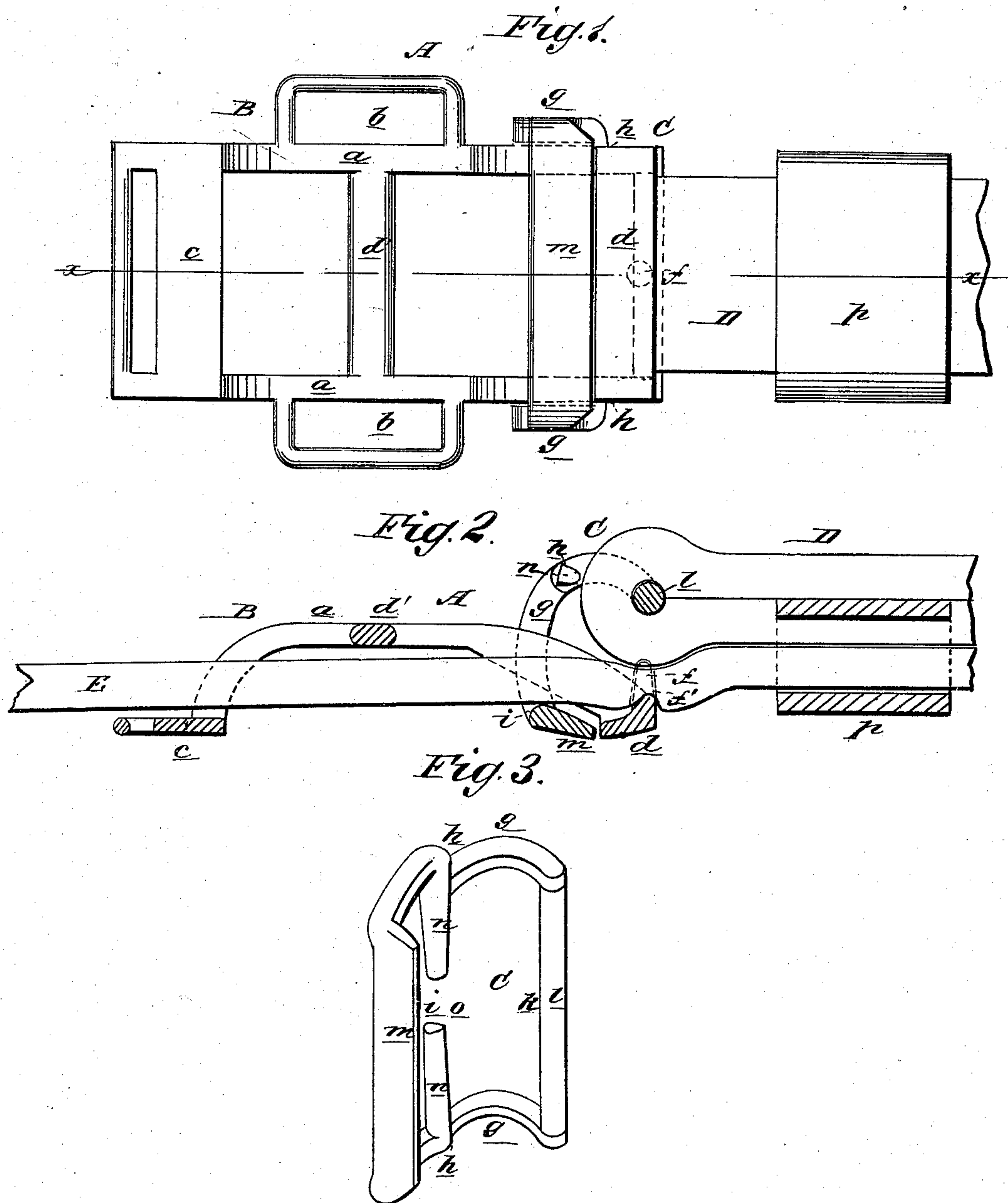


(No Model.)

N. L. ANDERSON.
Buckle.

No. 238,018.

Patented Feb. 22, 1881.



WITNESSES:

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NELS L. ANDERSON, OF SIOUX FALLS, DAKOTA TERRITORY.

BUCKLE.

SPECIFICATION forming part of Letters Patent No. 238,018, dated February 22, 1881.

Application filed September 30, 1880. (No model.)

To all whom it may concern:

Be it known that I, NELS L. ANDERSON, of Sioux Falls, in the county of Minnehaha, and Dakota Territory, have invented a new and Improved Buckle, of which the following is a specification.

The object of this invention is to provide an improved buckle, operating principally by pressure, for connecting trace and hame-tug.

10 The invention consists of a curved, looped, and barred frame, through which the trace is designed to pass, having a vertical stud projecting from the upper edge of the rear bar and designed to enter the trace, and, in combination therewith, of a tongueless barred and curved frame designed to be secured in the hame-tug, locking with the tongue-frame in such a manner that a strain upon either trace or tug will apply a corresponding pressure to 20 compress the trace between the tongue-bar of the one frame and the cross-bar of the other frame.

Figure 1 is a plan of the reverse of the buckle with a tug attached. Fig. 2 is a longitudinal sectional elevation of the buckle on line *x x*, Fig. 1, with tug and trace attached. Fig. 3 is a perspective view of a portion of the buckle.

Similar letters of reference indicate corresponding parts.

30 In the drawings, A represents the buckle, consisting of the larger frame B and smaller frame C. The frame B is composed of two parallel upward-curved side bars, *a a*, provided with lateral rectangular loops *b b*, for the engagement of certain harness-straps, and said side bars, *a a*, are connected with each other at their forward ends by a broad, flat, and rectangularly-looped end bar, *c*, designed for the engagement of a harness-strap, and at their 40 rear ends said side bars, *a a*, are connected by a nearly-rectangular cross-bar, *d*, whose apex is presented uppermost, and from the center of which projects the stud *f*, and *d'* is a central cross-bar connecting the side bars, *a a*.

45 C is a shorter frame, and has a sharper curve than frame B. This frame C consists of two curved side pieces, *g g*, offset as shown at *h h*, that the loop *i* of the said frame C, in which is engaged the tongue end of the frame B, shall be wider than the loop *k*, in which is the bend of the tug D; and said side bars, *g g*, are

united at their rear ends by a round bar, *l*, and at their front ends by a flat bar, *m*, whose beveled edge projects rearward when the buckle A is in position, as shown in Figs. 1 and 2, to 55 engage against the front edge of the bar *c* of the frame B; and said frame C is further provided with a central cross-bar, *n*, which is broken or open at the center, as shown at *o*, to avoid interference with the action or movement of the stud *f*. Internally all the loops of this buckle A have square corners, that there may be no undue wear upon the edges of the tug, trace, or straps.

When the buckle A is in proper position, as 65 shown in the drawings, the tug D is passed through the loop *k* and around the bar *l* and returned on itself and sewed down, as usual, a leather loop, *p*, being fixed to its under face. The frames B C are then interlocked, as shown, 70 and the trace E is then passed rearward straight through the frame B, over the end bar, *c*, through the loop *i* of the frame C, and over the end bar, *d*, and the stud *f* is passed up through a corresponding hole, *f'*, in the said trace E, while the end of said trace E is extended rearward and inserted in the loop *p* of the tug D. When the tug and trace D E are drawn apart the strain comes principally on the stud *f*, but at the same time the engagement of the front edge of the bar *d* against the bar *m* forces the said bar *d* up against the trace E, and consequently the trace E up against the cross-bar *n*. The greater the strain upon said tug and trace D E the more severe 85 the pressure of the bars *d n* upon said trace E, owing to the curves of the frames B C and their peculiar interlocking, whereby it will be seen that said trace E is held fast by the combined action of the bars *d n* and the stud *f*, and 90 consequently said trace E is not so liable to be distorted or broken as in the case of a trace held only by a buckle-tongue.

This improved buckle also presents a neat and finished appearance on harness, and permits the ready engagement and disengagement of the trace. 95

I am aware that it is not new to make a buckle with cross-bars, inclines, and loops in connection with a slide having cross-bars, tongue, and loops, or to provide a buckle-frame with sectional cross-bars having points turned 100

toward each other; but I construct my frames B C on such curves as to clasp together on top of the tug and give a great pressure only in one place. These curves, together with the
5 upper edge of rear bar, hold the tug fast in one place, and as the trace passes straight through the frames B C with both cross-bars, *m d*, over it and none under it, a great facility in unbuckling is attained. In consequence of hold-
10 ing the tug in this manner I am enabled to make the tongue or stud on cross-bar so small that the trace is not materially weakened by the small hole necessary to receive it. The object of the cross-bars *n n* is to prevent a small
15 trace from becoming unbuckled, the frames B C from separating, and the tug from becoming loose.

What I claim as new and of my invention is—

1. The combination, with the frame B, curved 20 on the sides *a a*, and having cross-bars arranged as described, of the frame C, having the curved side bars, *g*, with offset at *h*, united at the rear by a round bar, *l*, connected in front by a flat bar, *m*, and provided with the tongue- 25 loop *i* and tug-loop *k*, arranged as shown, and the whole adapted to operate in the manner specified.

2. The combination, with the frame B, provided with a stud, *f*, of the frame C, provided 30 with open cross-bar *n*, substantially as herein shown and described.

NELS L. ANDERSON.

Witnesses:

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