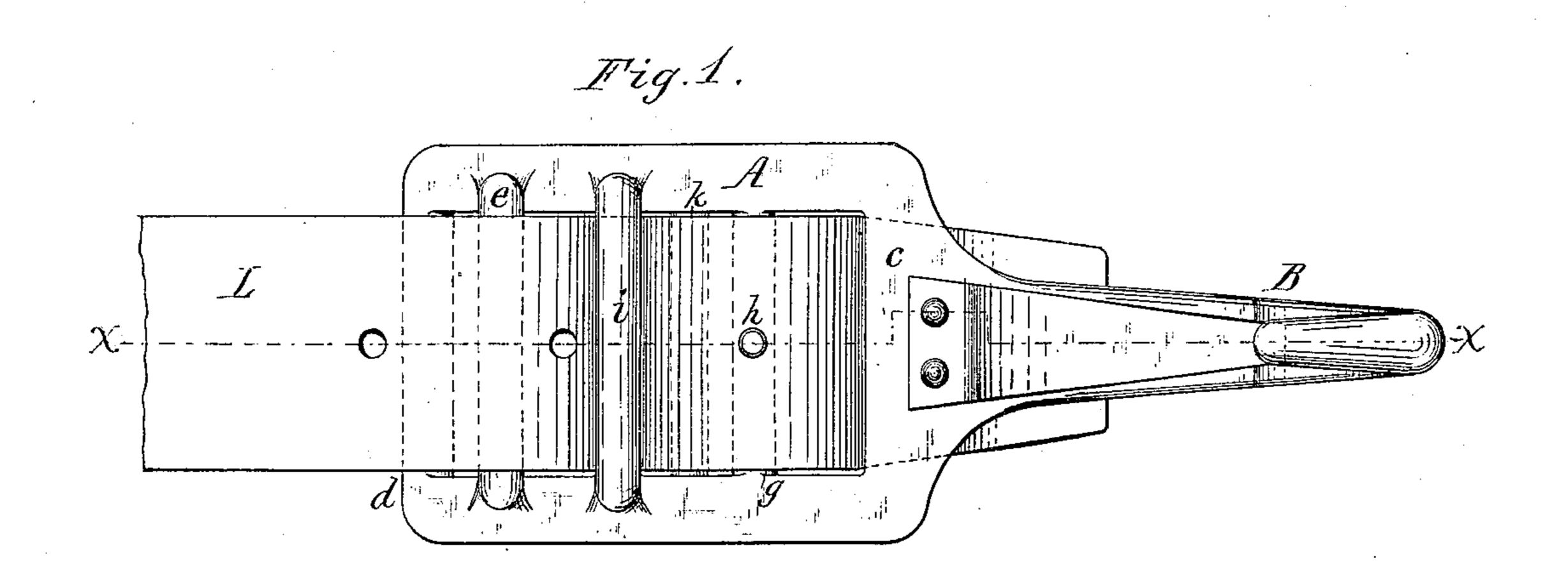
(No Model.)

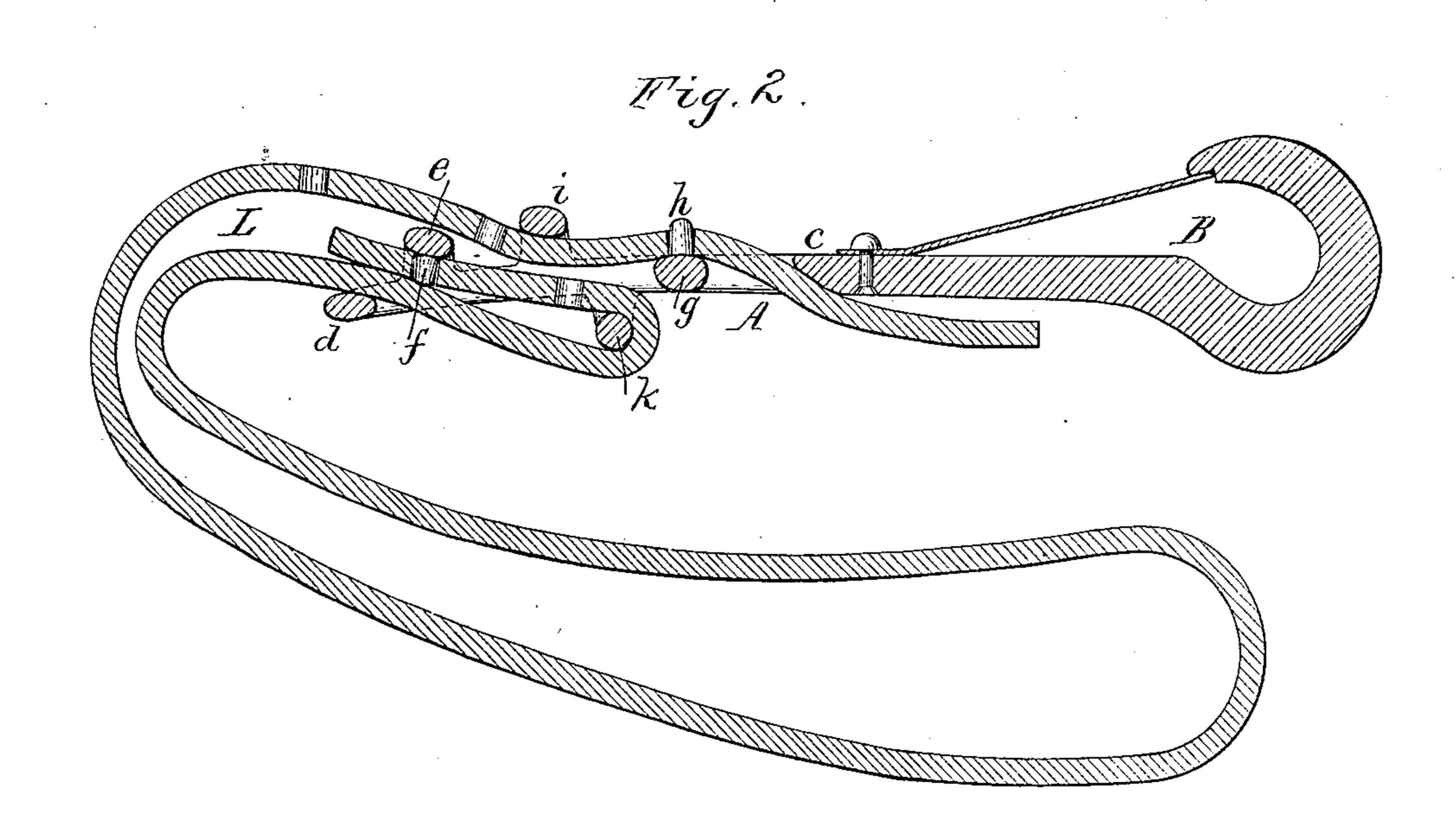
## E. A. COOPER.

BUCKLE.

No. 258,715.

Patented May 30, 1882.





Chasfibuchheit.
Theo. L. Popk.
Witnesses.

Edward A. Cooper Inventor.

By Milhelm & Bonner

Attorneys.

## United States Patent Office.

EDWARD A. COOPER, OF BUFFALO, NEW YORK, ASSIGNOR OF ONE-FOURTH TO PRATT & LETCHWORTH, OF SAME PLACE.

## BUCKLE.

SPECIFICATION forming part of Letters Patent No. 258,715, dated May 30, 1882.

Application filed January 12, 1882. (No model.)

To all whom it may concern:

Be it known that I, EDWARD A. COOPER, of the city of Buffalo, in the county of Erie and State of New York, have invented new and 5 useful Improvements in Buckles, of which the following is a specification.

This invention relates more particularly to a buckle whereby both ends of the breast-strap are secured together and to the hame-ring, and 10 which permits the ready attachment and removal of the breast strap.

The object of my invention is the construction of a simple and strong buckle of this kind; and my invention consists of the peculiar con-15 struction of the buckle, which will be herein-

after fully set forth.

In the accompanying drawings, Figure 1 is an elevation, and Fig. 2 a longitudinal section, of my improved buckle.

Like letters of reference refer to like parts

in both of the figures.

A represents the frame of the buckle, and B the snap-hook, cast in one piece with the front cross-bar, c, thereof.

d represents the rear cross-bar of the buckleframe.

e represents a cross-bar formed with the buckle-frame near the rear end thereof, and provided on its under side with a rigid tongue, f.

30 g represents a cross-bar formed with the buckle-frame near its front end and provided on its upper side with a rigid tongue, h.

i and k represent cross-bars formed respectively on the upper and lower sides of the 35 buckle-frame between the cross-bars e and g.

L represents the breast-strap, having both ends provided with perforations which are

adapted to engage with the tongues of the buckle. One end of the breast-strap is engaged with the tongue f on the under side of 40the cross-bar e. It passes thence forward and around the cross-bar k, and thence backward and over the rear cross-bar, d. The two thicknesses of the strap between the cross-bars dand e cause the strap to bind between the  $_{45}$ cross-bars d and e and relieve the tongue f to a large extent of the strain which is applied to the strap. The opposite end of the strap is drawn forward under the cross-bar i, over the cross-bar g, where it engages with the tongue 50 h, and under the front cross-bar, c, of the buckle, as clearly represented in Fig. 2. This end of the strap bears also against the upper side of the cross-bar e; and by the several bends in this end of the strap as it passes 55 from one cross-bar to the other the strap is caused to bind between these cross-bars with sufficient force to relieve the tongue h from the greater part of the strain. The strap is readily attached to the bucklein the manner indicated, 60 thereby avoiding the sewing of the strap to the buckle, and the latter is readily cast complete in one piece with the several cross-bars and tongues.

I claim as my invention—

A harness-buckle provided with cross-bars e and g, having fixed tongues f and h, intermediate cross-bars i and k, and a snap-hook, B, substantially as set forth.

EDWARD A. COOPER.

Witnesses:

JNO. J. BONNER, EDW. J. BRADY.