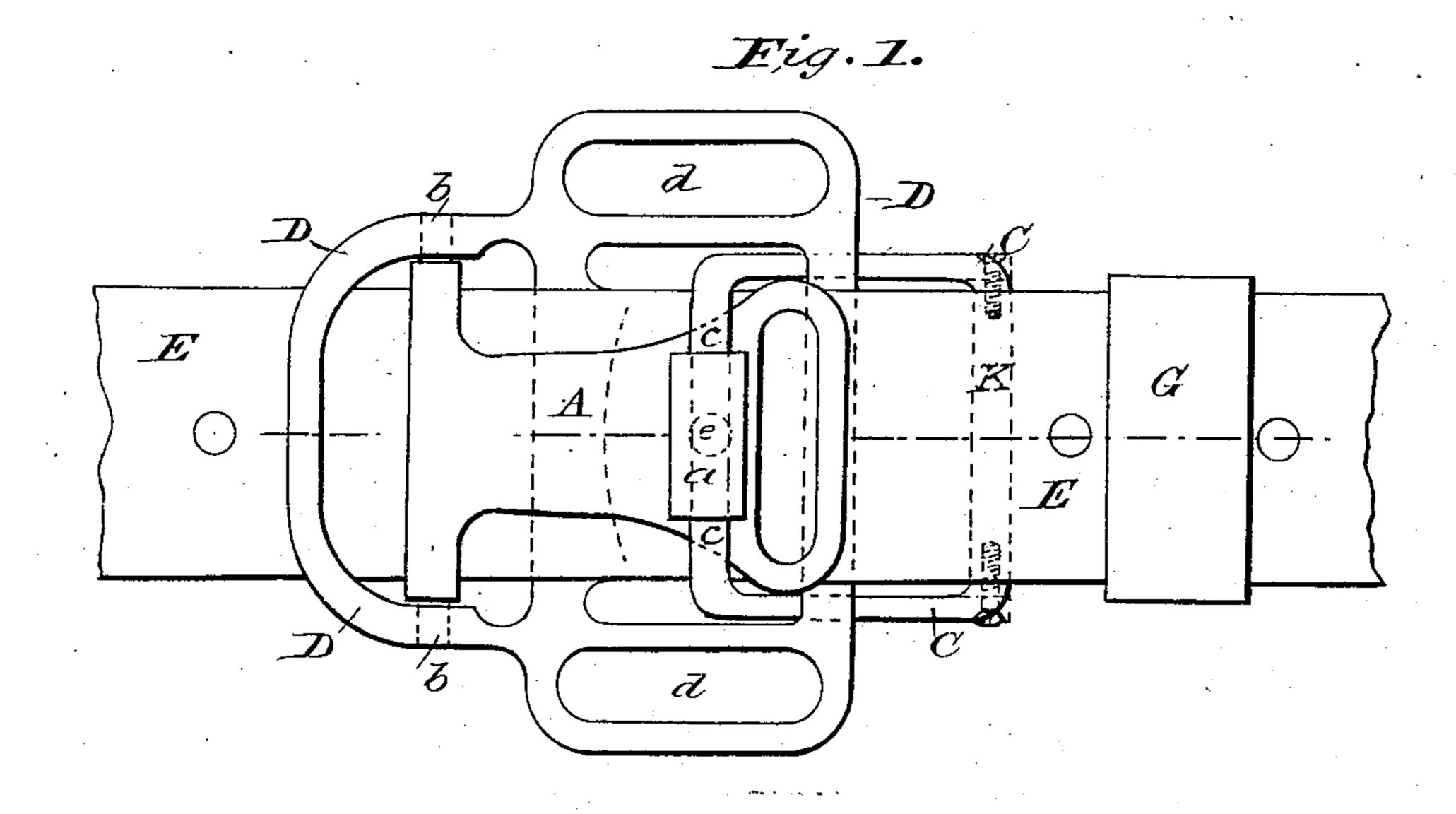
(No Model.)

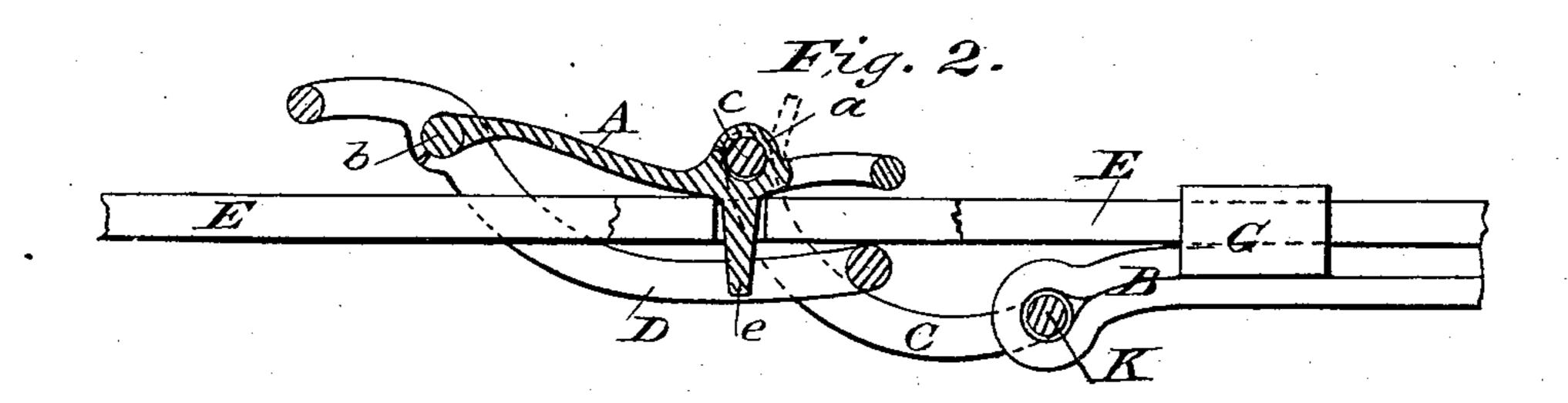
## E. KRAFT.

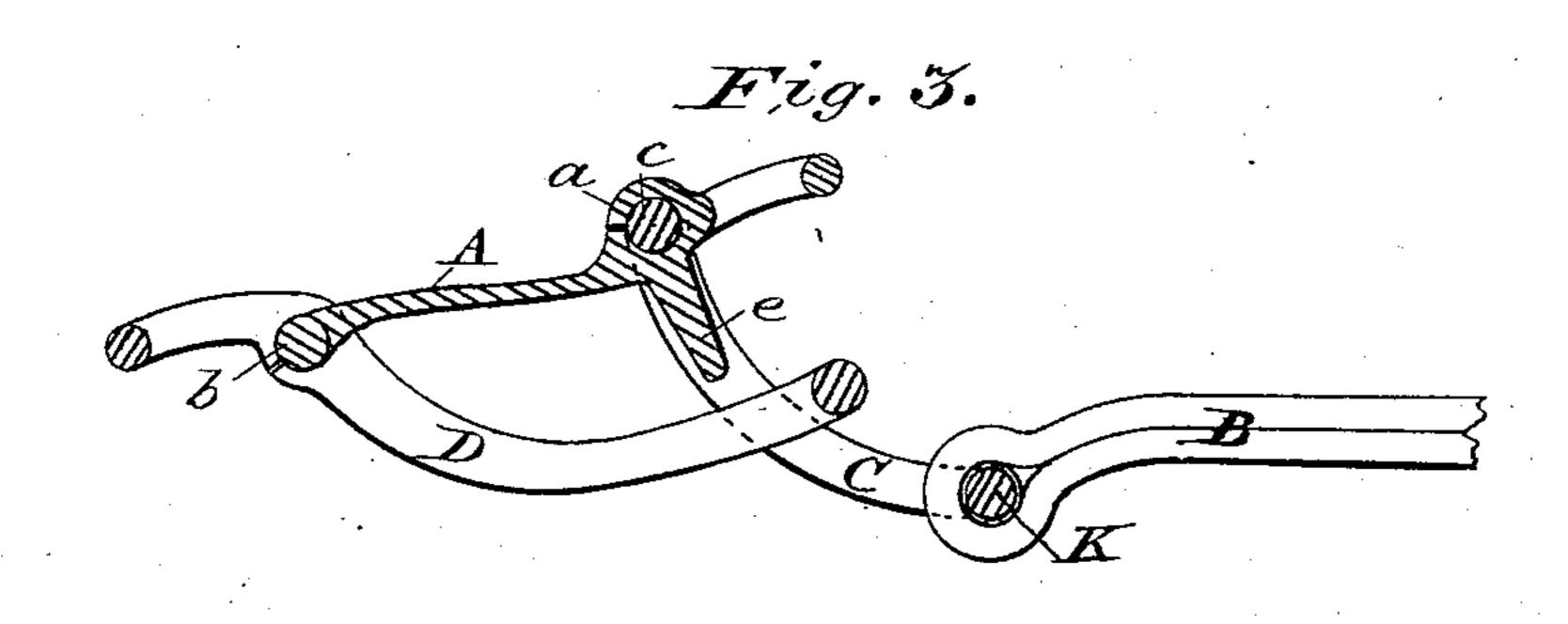
BUCKLE.

No. 316,372.

Patented Apr. 21, 1885.







Witnesses: GL. De Motte

Ernest Kraft,

By J. C. Brecht,

Attorney.

## United States Patent Office.

ERNEST KRAFT, OF HAMILTON, ONTARIO, CANADA, ASSIGNOR TO ADOLPHUS KRAFT, OF SAME PLACE.

## BUCKLE.

SPECIFICATION forming part of Letters Patent No. 316,372, dated April 21, 1885.

Application filed November 20, 1884. (No model.)

To all whom it may concern:

Be it known that I, ERNEST KRAFT, a citizen of the Dominion of Canada, residing at Hamilton, in the county of Wentworth, in the Province of Ontario and Dominion of Canada, have invented certain new and useful Improvements in Trace-Buckles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in trace-buckles; and the object is to produce a trace-buckle for harness of horses, &c., that will securely clamp the trace in the front of the tongue and prevent the tongue from tearing the leather, and which will permit the trace to be adjusted or the buckle to be shifted on the trace without removing the trace from the buckle or hame-tug loops; also, to facilitate the manufacture of the buckles and their application to the traces.

The invention consists in the construction of certain details and arrangement of parts, as will be more fully described hereinafter and specifically pointed out in the claims, reference being had to the accompanying drawings and the letters of reference marked thereon.

Like letters indicate similar parts in the different figures of the drawings, in which—

Figure 1 represents a plan view of my improved trace-buckle. Fig. 2 is a longitudinal section of the same. Fig. 3 is a side elevation of the same.

In the accompanying drawings, A is the tongue-plate, connected with the cross-bar c of the lever C, that is attached to the hame-tug B. The cross-bar c has its bearing in an open socket, a, on the tongue-plate A, which socket is closed down in a cold state on the cross-bar c and forms a hinge. The tongue-plate A has at its opposite end two journals, b, which have their bearings in the lower sides of the frame D, and they are formed also of open sockets, that are closed upon said journals in a cold state and form hinges. The frame D has the side loops, d, for attaching the pad-strap and girth thereto. The trace E is provided with a series of holes, into which the stub-

tongue e, cast on the tongue - plate A, enters when it is desired to adjust the trace.

This trace is held to the hame-tug B by loops G, through which the end slides, and when the stub-tongue e is in place the lever 55 C brings the tongue-plate tightly down on it, so that when drawn upon it has perfect freedom of action and cannot become jammed in the buckle. The wide bearing of the tongue-plate A on the trace prevents it being bent or 60 worn out by the strain on the tongue e.

When it is desired to shorten or lengthen the trace, the hame-tug is pulled back, the trace moved forward, which raises the lever C and withdraws the stub-tongue e from the 65 hole, the trace can be freely moved as desired, and the tongue e is allowed to drop into any of the holes as required, or according to the length desired. It will be thus seen that the trace always slides evenly in the buckle.

If desired, the bar K of the lever may be made separate from the lever, and can be secured in the tug by a screw on each side, so that should it be broken said bar could be easily replaced by a new one without the netroisesity of removing the entire lever C.

It will be thus seen that this buckle has no springs or extra attachments in it. It will suit any thickness of trace, as even a single strap can be used. The shape of lever C, in connection with the frame D, throws the tongue-plate A closely down, while in the buckles now in general use the tongue-plate is hinged on a bar of the frame.

By forming the sockets on the frame D a bar 85 can be dispensed with to which the tongue-plate would be hinged.

I am aware that chain-links, snap-hooks, and similar articles have been provided with open sockets which are closed in finishing the 90 articles, and I therefore disclaim such, broadly; but,

Having thus described my invention, what I claim, and desire to secure by Letters Patent,

1. In a trace-buckle, the combination, with the lever C, of the tongue plate having an open socket to form a hinge for the cross-bar of such lever, substantially as specified.

2. In a trace-buckle, the combination, with 100

95

the lever C, of the tongue - plate having an open socket to form a hinge for the cross-bar of such lever, and the frame D, having open sockets which are adapted to be closed after introduction of the tongue-plate to form its journals, all constructed as shown and specified.

3. In a trace-buckle, the combination of the lever C, provided with the bar K at one end, and hinged to the tongue-plate A at its opposite end, with the frame D, and arranged to raise and lower the tongue e, in the manner shown and set forth.

4. In the trace-buckle herein described, the combination of the lever C, attached to the 15 tongue-plate A, as shown, with the frame D, to which the tongue-plate is journaled, and the tongue e, all constructed as and for the purpose specified.

In testimony whereof I hereby affix my sig- 20

nature in presence of two witnesses.

ERNEST KRAFT.

Witnesses:
W. HERMAN.
OSCAR MEYER.