

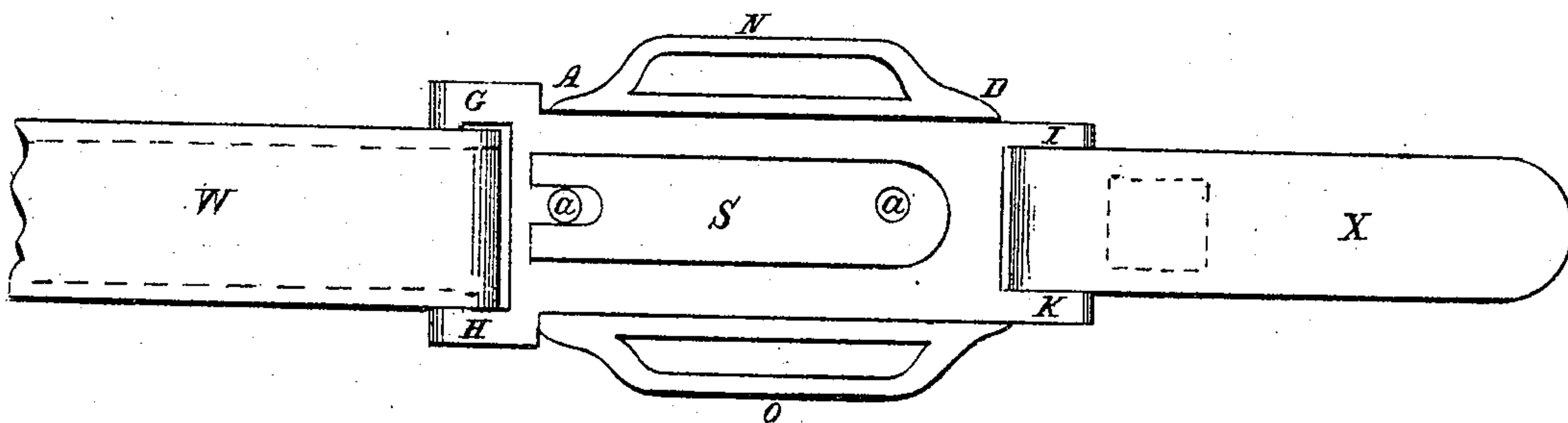
*S. Bingham Jr.,*

*Buckle.*

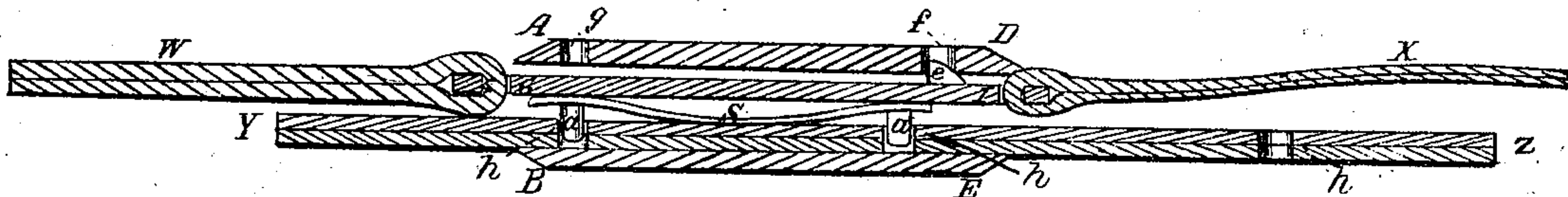
*No. 7818.*

*Patented Dec. 10. 1850.*

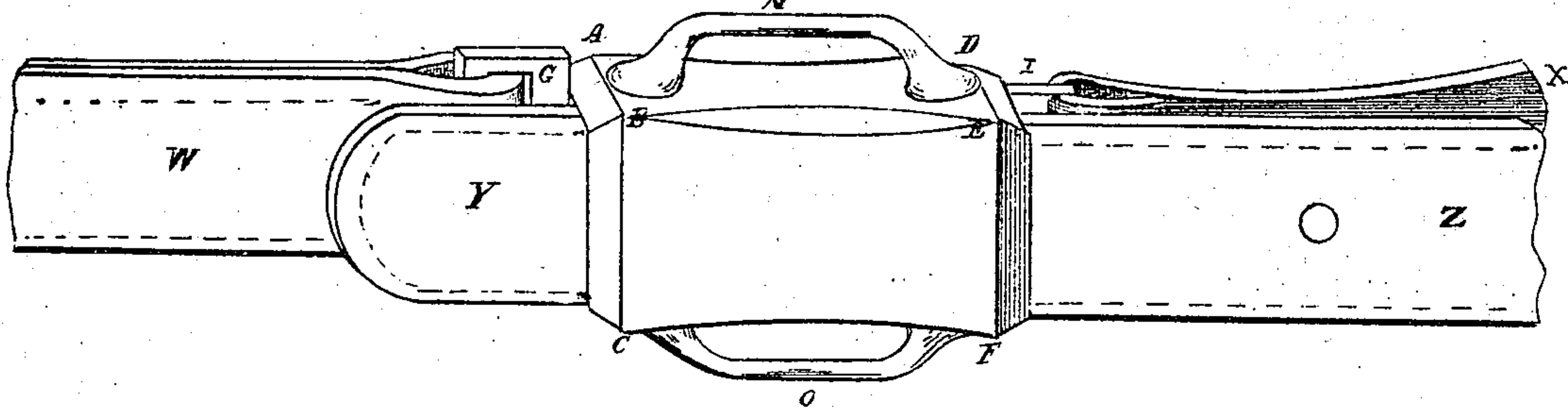
*Fig 3*



*Fig 2*



*Fig 1*



# UNITED STATES PATENT OFFICE.

SOLON BINGHAM, JR., OF POESTENKILL, NEW YORK.

## BUCKLE FOR HARNESS.

Specification of Letters Patent No. 7,818, dated December 10, 1850.

*To all whom it may concern:*

Be it known that I, SOLON BINGHAM, JR., of Poestenkill, Rensselaer county, State of New York, have invented a substitute for a buckle, to be used in all cases to which the same can be conveniently applied, and more especially intended to be used with leather harness in the place of the trace buckle or wherever two stiff straps of leather are to be attached to each other; I call the article "Bingham's Trace-Clasp," and declare the following specification, with the drawings hereto appended as part of the same, to be a full and complete description thereof.

The figure represents the complete apparatus attached to harness straps.

Similar letters in the figure designate the same parts of the apparatus.

A, B, C, D, E, F, represents a rectangular oblong slide or box open at its ends, just high enough to receive the width of the trace-strap Y, Z, to which the hame-tug strap W is to be attached. Its width is a little more than twice the thickness of the strap. A slip or thin tongue of metal G, H, I, K, is fitted to lie within the box, parallel with the strap Y, Z. Each end of this tongue is extended and formed into an eye or loop, the one G, H to receive the hame-strap W, the other I, K, to receive the breeching strap X, by which one can draw conveniently the tongue through the slide into its place. Near each end of the tongue two small studs *a, a*, are fixed projecting far enough from its surface to reach nearly across the entire depth of the slide allowing play enough to permit the tongue to pass easily out and into the same.

The strap Y, Z, is perforated with holes *h, h*, to permit these studs to enter, as far down its length as may be requisite to adjust the trace to its proper length. Between the strap Y, Z, and the tongues a light steel spring S, see Figs. 2 and 3, is placed to keep the tongue against the back plate of the slide and further in order to prevent the slide from shifting its position, from any cause, a small stud or detent, whose form is shown at *e*, Fig. 2, is attached to the back thereof; which drops into and holds against the edge of a small hole *f* pierced into the back plate of the slide. A corresponding hole *g* is also made in the other end of the back plate simply to permit the

change of the tongue end for end if at any time needed. At the top and bottom of the slide are affixed metal loops N, O, for the attachment of the pad tug and girt straps of the harness.

The mode of operation is thus: To fasten the straps, the trace-strap Y, Z, is passed through the slide so far as to uncover beyond the slide, the holes to be used for the proper adjustment of the harness. The tongue G, H, I, K, is then to be laid upon the strap, the spring S intervening, and its studs entered into the proper holes. The strap X is then to be passed through the slide, and by it the tongue drawn into the slide, till the stud *e* enters into its hole *f* when the apparatus is adjusted. To detach the straps from each other press the end I, K, of the slide toward the front, until the stud *e* is detached from its hold, then draw the slide in the direction Z along the trace strap uncovering the tongue, when the studs can be withdrawn from the holes of the strap, and shifted to other holes or the straps can be entirely separated from each other.

The peculiar advantage of this apparatus is: It avoids the constant wear and tendency to crack occasioned in the use of the buckle by bending stiff leather around its frame and in short turns, when shifting the tongue from hole to hole, also the hold of the two studs is much stronger, and less liable to tear out, than is the buckle-tongue and the lengthening or shortening the trace is done with much more ease and promptness than in the ordinary way.

I claim—

The construction of a trace clasp as a substitute for a buckle for fastening together two straps of leather, by the use of a metal tongue fastened to one of the straps having projecting from it pins or studs, fitted to enter into holes to be made therefor in the other strap, the tongue and strap lying one against and upon or near the other, the tongue and strap to be kept in this juxtaposition by a slide or box inclosing them—the whole substantially as set forth in this specification.

SOLON BINGHAM, JR.

Witnesses:

JAMES B. SANDERS,  
RICHD. VARECK DE WITT,