

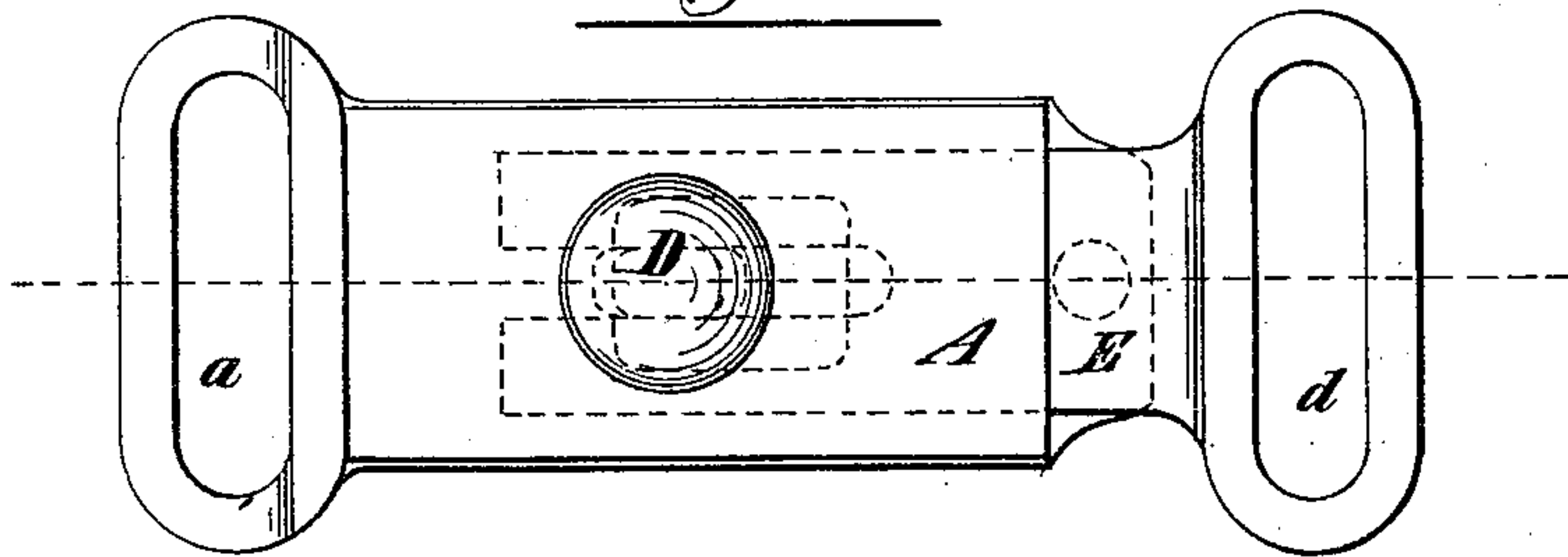
(No Model.)

J. IVES.  
Fastener for Carriage Aprons, &c.

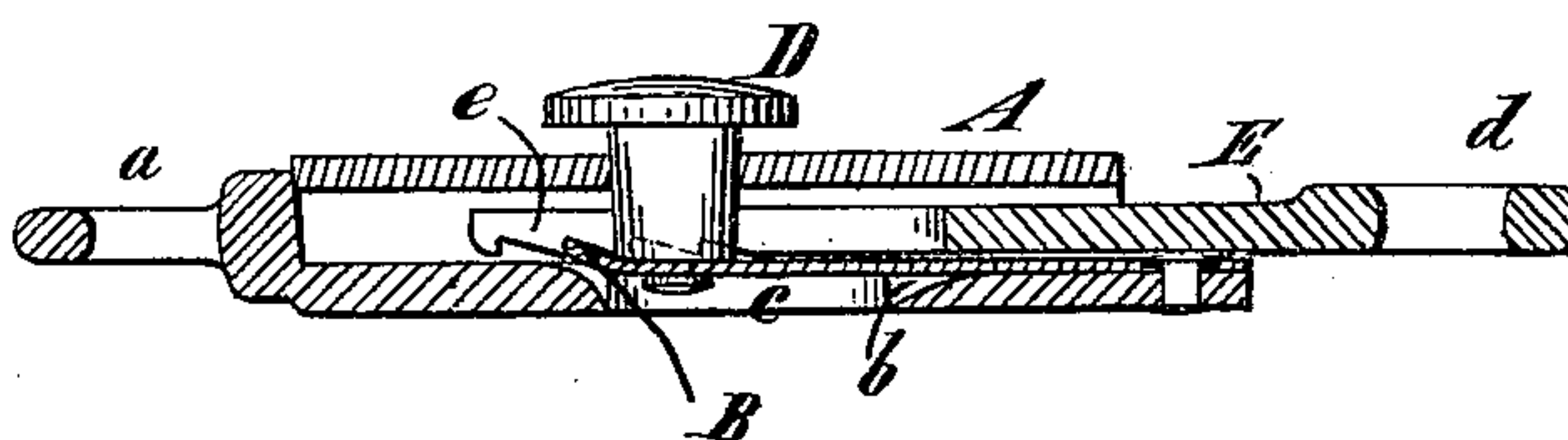
No. 231,048.

Patented Aug. 10, 1880.

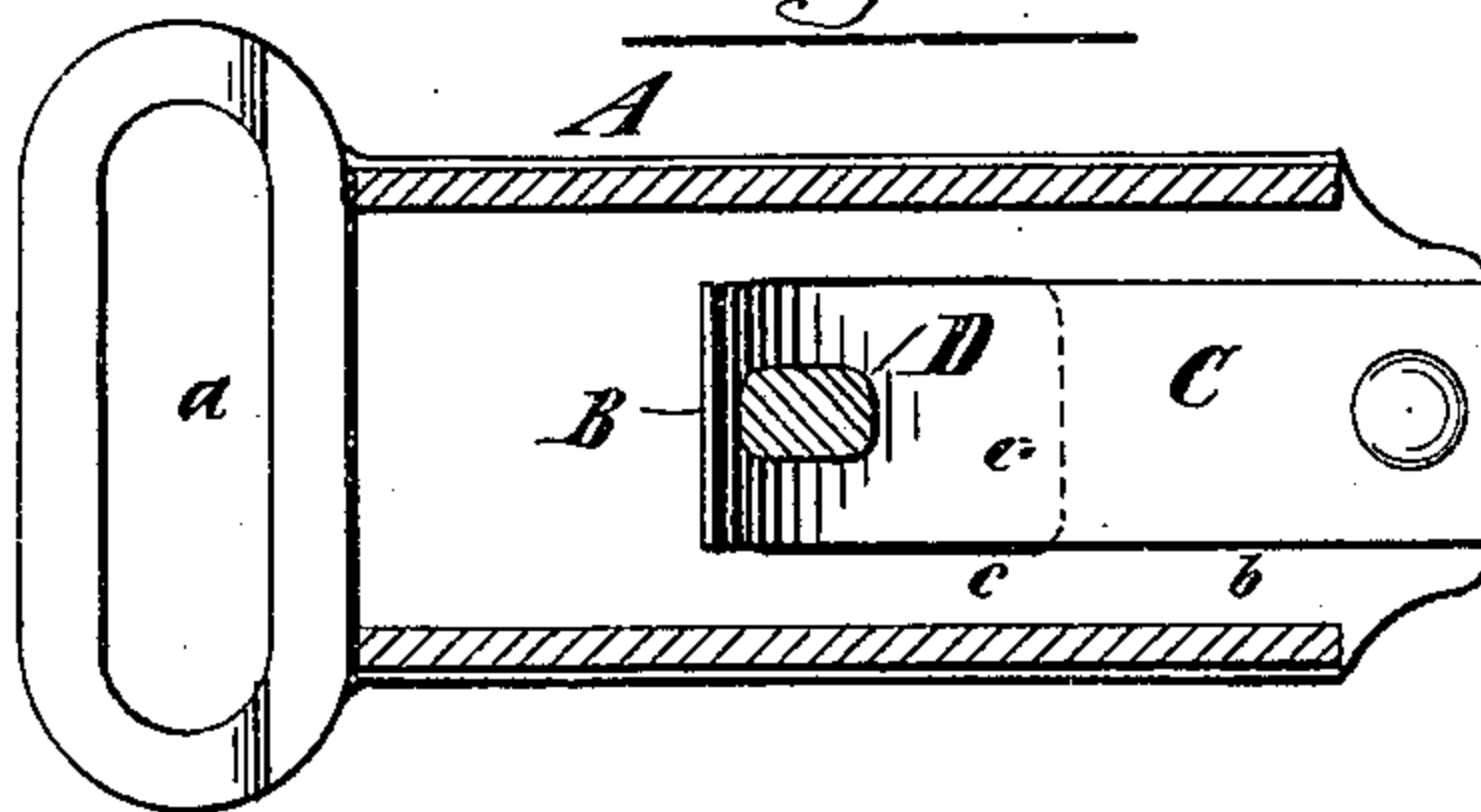
*Fig 1*



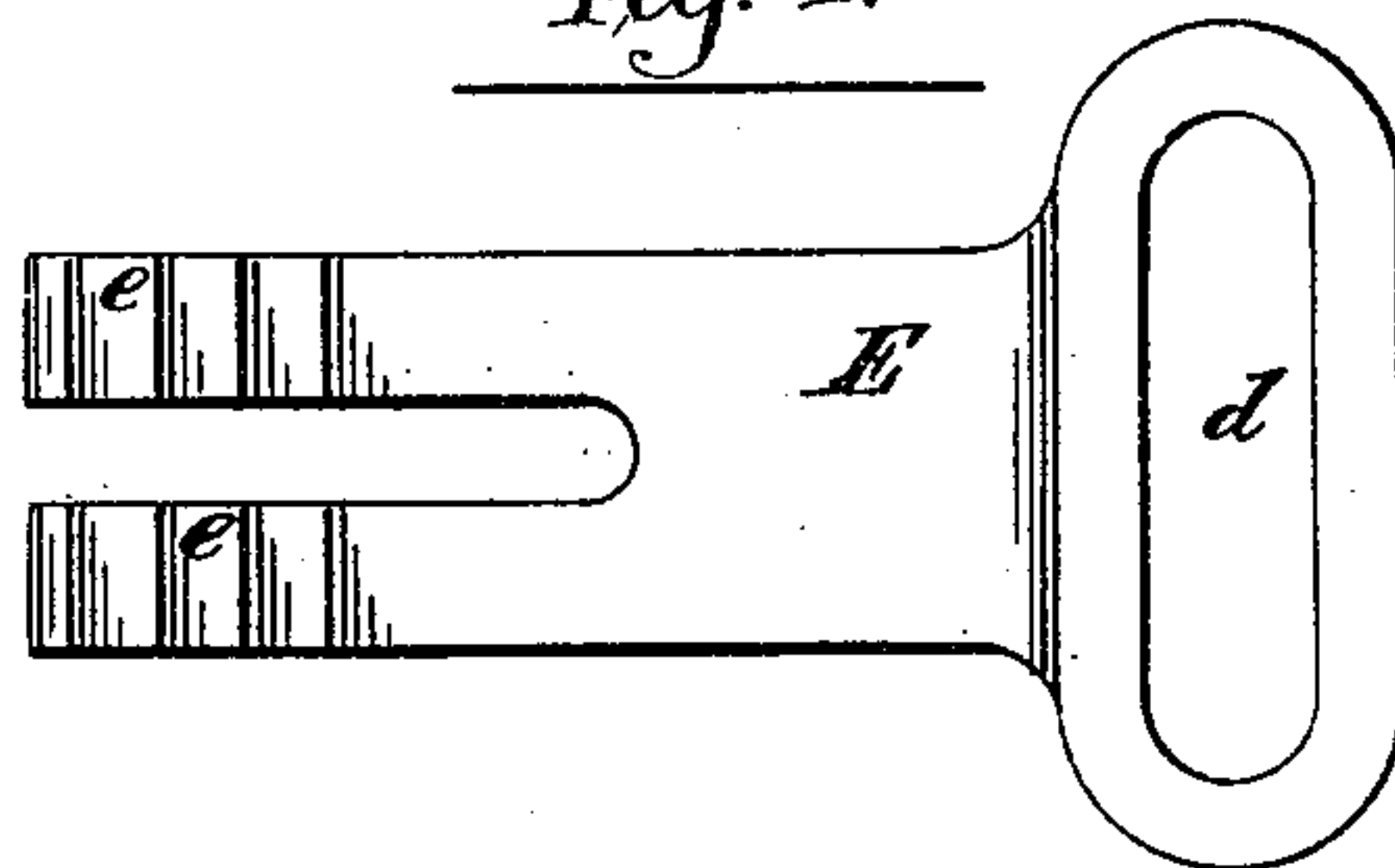
*Fig. 2*



*Fig. 3*



*Fig. 4.*



Witnesses:-

Louis M. Whitehead.  
Geo. T. Haynes

Inventor:-

James Ives  
by his Attorneys  
Brown & Brown

# UNITED STATES PATENT OFFICE.

JAMES IVES, OF MOUNT CARMEL, CONNECTICUT.

## FASTENER FOR CARRIAGE-APRONS, &c.

SPECIFICATION forming part of Letters Patent No. 231,048, dated August 10, 1880.

Application filed June 2, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES IVES, of Mount Carmel, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Fasteners for Carriage-Apron Straps and other Purposes, of which the following is a specification.

The object of my invention is to provide a neat and effective fastener for carriage-apron straps in carriages.

My invention consists in the combination of a box or case, which may be attached to a section of a strap or other article, and which has a front or top, forming an integral part of it, a tooth or catch within the box or case concealed by said front or top, a slide-plate capable of entering the box or case at one end, which may be attached to another section of a strap or other article, and which is provided with one or more notches or projections for engaging with the tooth or catch, and a hand-piece extending through the front or top and serving to move the tooth or catch to disengage it from the said notch or notches, projection or projections in the slide-plate, whereby facility is afforded for connecting the box or case and slide-plate at different points. The tooth or catch is preferably actuated by a spring to engage with said notch or notches, projection or projections, or catch, and the tooth may be advantageously disengaged from the notch or notches, projection or projections by a hand-piece, similar to the one above mentioned, extending through the front of the box or case and through a longitudinal slot or opening in the slide-plate.

In the accompanying drawings, Figure 1 is a face or front view of a fastener embodying my improvements. Fig. 2 is a central longitudinal section of the same. Fig. 3 is a longitudinal section of the box or case thereof, taken just behind the face or front plate; and Fig. 4 is a back view of the slide-plate.

Similar letters of reference designate corresponding parts in all the figures.

A designates a box or case, which may be made of metal or other suitable material. It is shown as made of a back plate provided at one end with a loop, *a*, for attachment to a strap or other article, and a trough-shaped

plate, composing the face or front plate and sides.

The back plate, near the loop *a*, is shown as offset and shouldered, so as to close the box or case at one end and bring the loop opposite the center of the depth of the said box or case. The other end of the box or case is left open.

It will be observed that the trough-shaped piece, which forms the front or top of the box or case, constitutes an integral part thereof, and is permanently connected or secured to the back plate.

B designates a tooth or catch projecting forward from the back plate of the box or case and secured thereto. In this example of my invention the said tooth or catch is formed with or secured to a spring, C, so that the latter carries and actuates it, impelling it in a forward direction.

The spring may consist of a strip of steel, secured by a rivet or otherwise to the back plate within a recess, *b*, communicating with a cavity or opening, *c*, whereby it and the tooth or catch can be accommodated when pressed backward so that the tooth or catch will project beyond the face of the back plate.

D designates what I term a "hand-piece," consisting of a pin or stud projecting through the face or front plate, attached by riveting or otherwise to the spring C, and provided, outside the face or front plate, with a knob or button, which may be conveniently manipulated.

E designates a slide-plate, made of metal or other material, of suitable size to be capable of entering the box or case A through the open end thereof, having at one end a loop, *d*, for attachment to a strap or other article, and on its back a series of notches, *e*.

I desire it to be distinctly understood that I regard the parts of the slide-plate intervening these notches as teeth or projections, and consider any kind of notches, teeth, or projections to be equivalents, so far as this invention is concerned. One notch, tooth, or projection may be used in lieu of a series thereof.

It may be found advantageous to provide the slide-plate with a tooth or catch and the box or case with a series of notches or projections.



To connect the box or case and slide-plate, the latter is slipped into the open end of the former until its notch or one of its notches, if there be more than one, engages with the tooth  
5 or catch, and when it is provided with more than one notch it may be inserted more or less into the box or case, as may be desirable to take up slack.

To release the slide-plate the hand-piece is  
10 pressed in to disengage the tooth or catch, whereupon it may be pulled out.

Though specially designed for fasteners for carriage-apron straps in carriages, my invention may be advantageous for fasteners put to  
15 other uses.

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

1. The combination of a box or case having a front or top forming an integral part of it, a  
20 tooth or catch within the box or case concealed by the front or top thereof, a slide-plate capable of entering the box or case at one end and provided with one or more notches or projections for engaging with said tooth or catch,  
25 and a hand-piece extending through the front or top and serving to move the tooth or catch

to disengage it from the notch or notches, projection or projections of the slide-plate.

2. The combination of a box or case provided internally with a tooth or catch, a slide-  
30 plate provided with a longitudinal slot or opening and one or more notches or projections, and a hand-piece projecting through the box or case, extending through the slot or opening in the slide-plate, and serving to move the  
35 tooth or catch to disengage it from the notch or notches, projection or projections of the slide-plate.

3. The combination of a box or case provided internally with a tooth or catch and a spring  
40 for actuating the same, a slide-plate provided with a longitudinal slot or opening and one or more notches or projections, and a hand-piece projecting through the box or case, extending through the slot or opening in the  
45 slide-plate, and serving to move the tooth or catch to disengage it from the notch or notches, projection or projections of the slide-plate.

JAMES IVES.

Witnesses:

E. S. DICKINSON,  
H. M. IVES.