

(No Model.)

D. L. SHAFER.

HARNESS.

No. 339,022.

Patented Mar. 30, 1886.

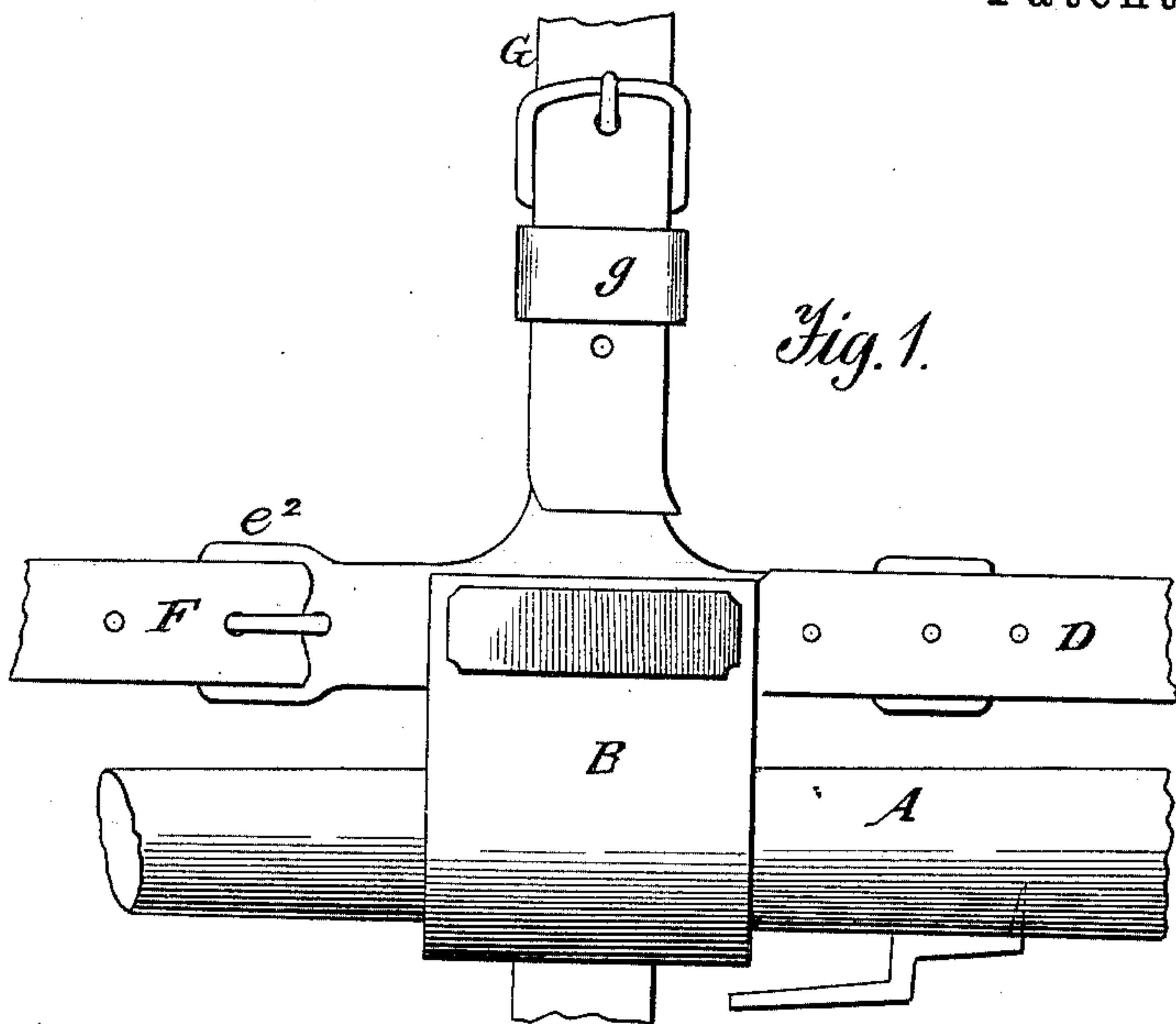


Fig. 1.

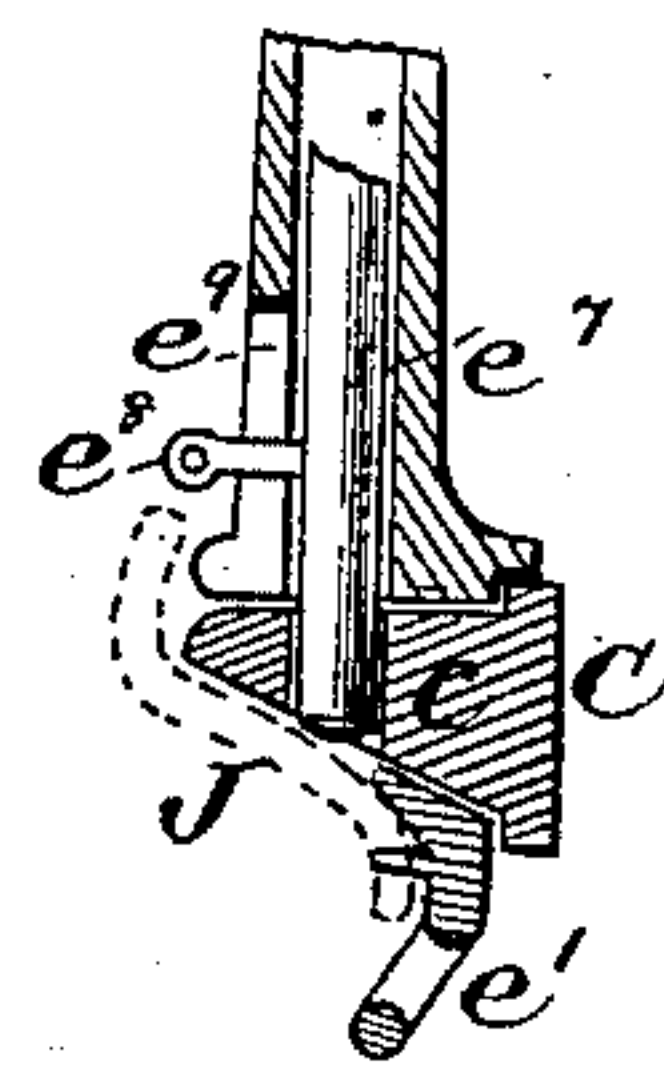


Fig. 5.

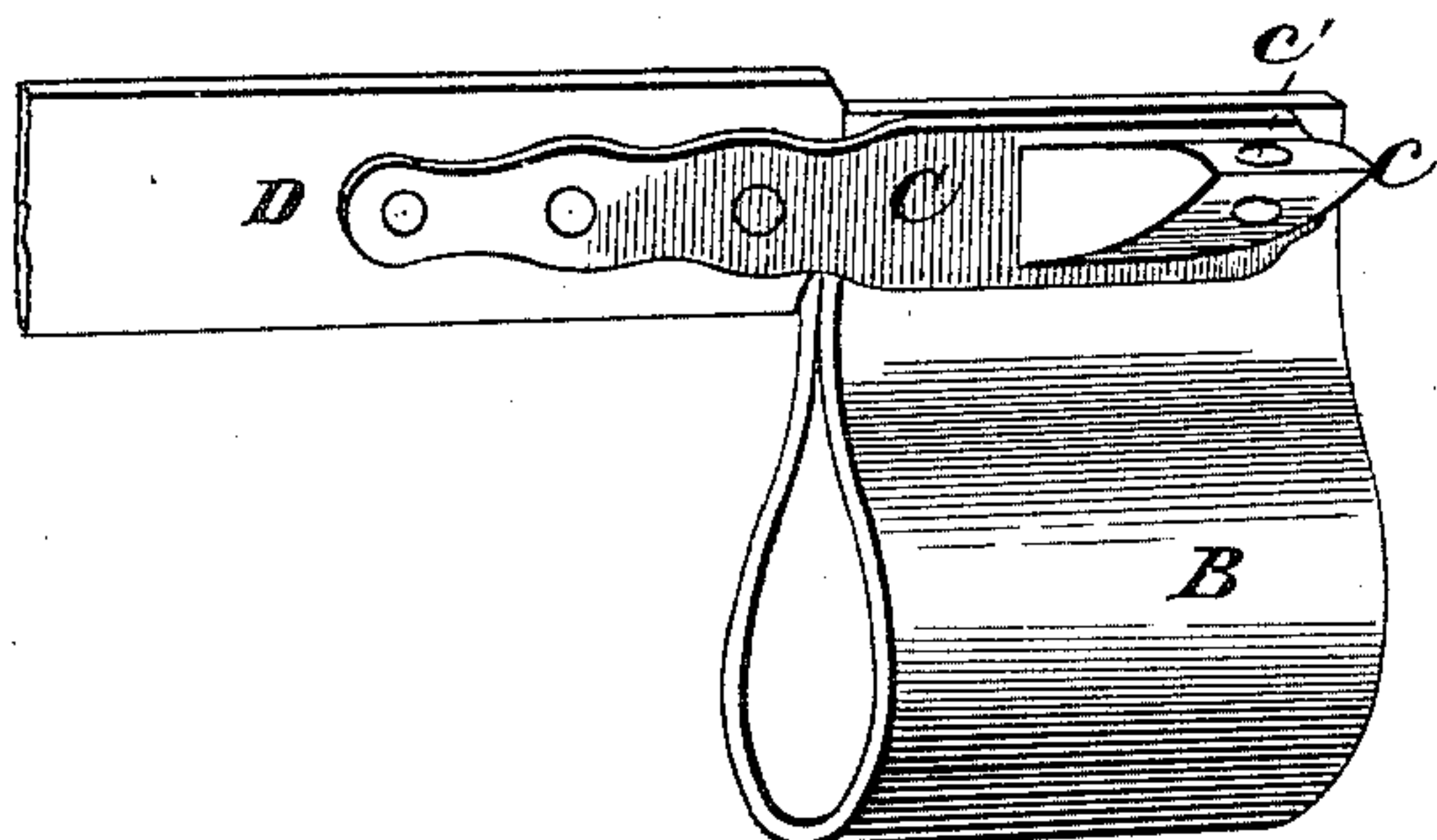


Fig. 2.

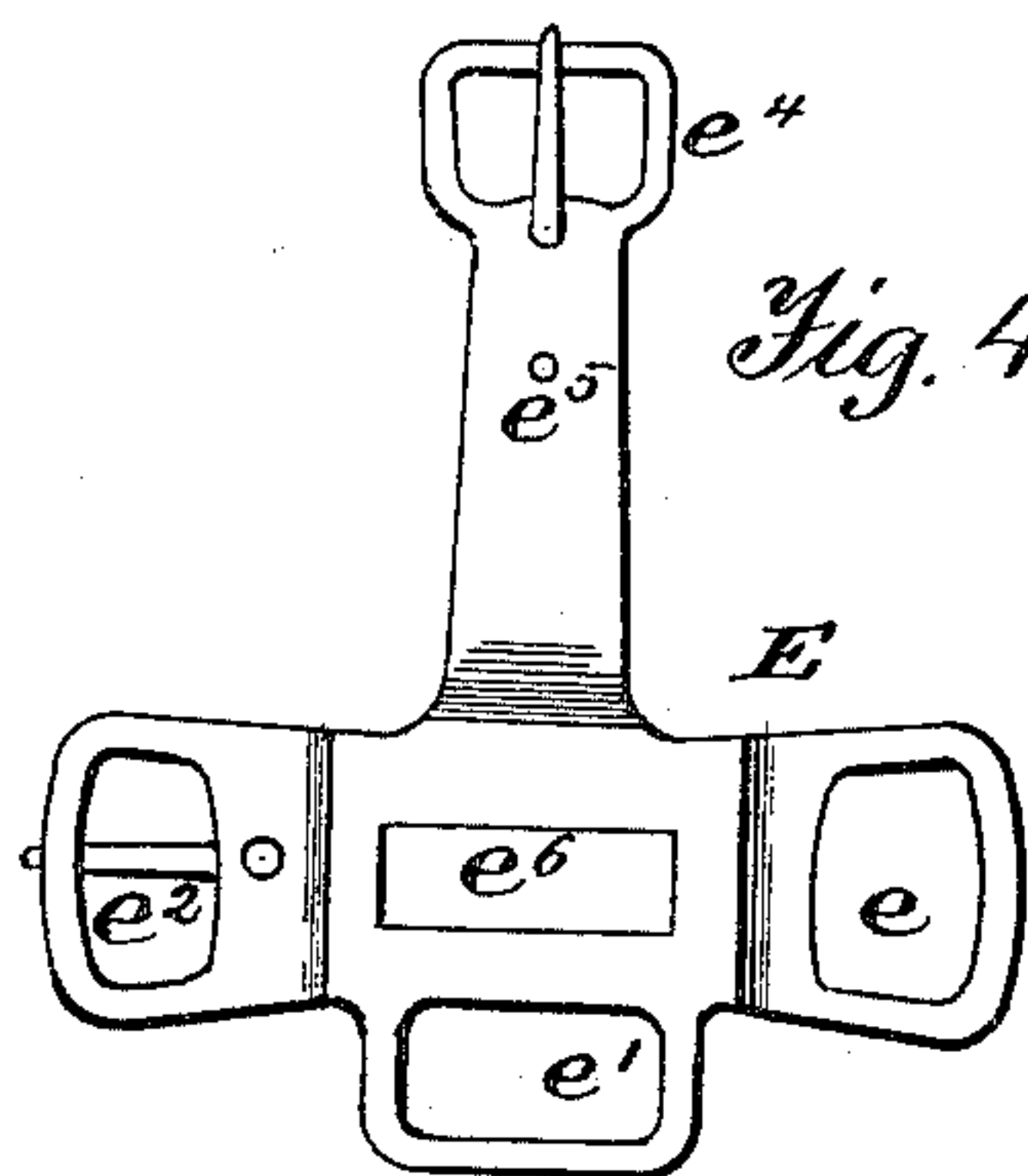


Fig. 4.

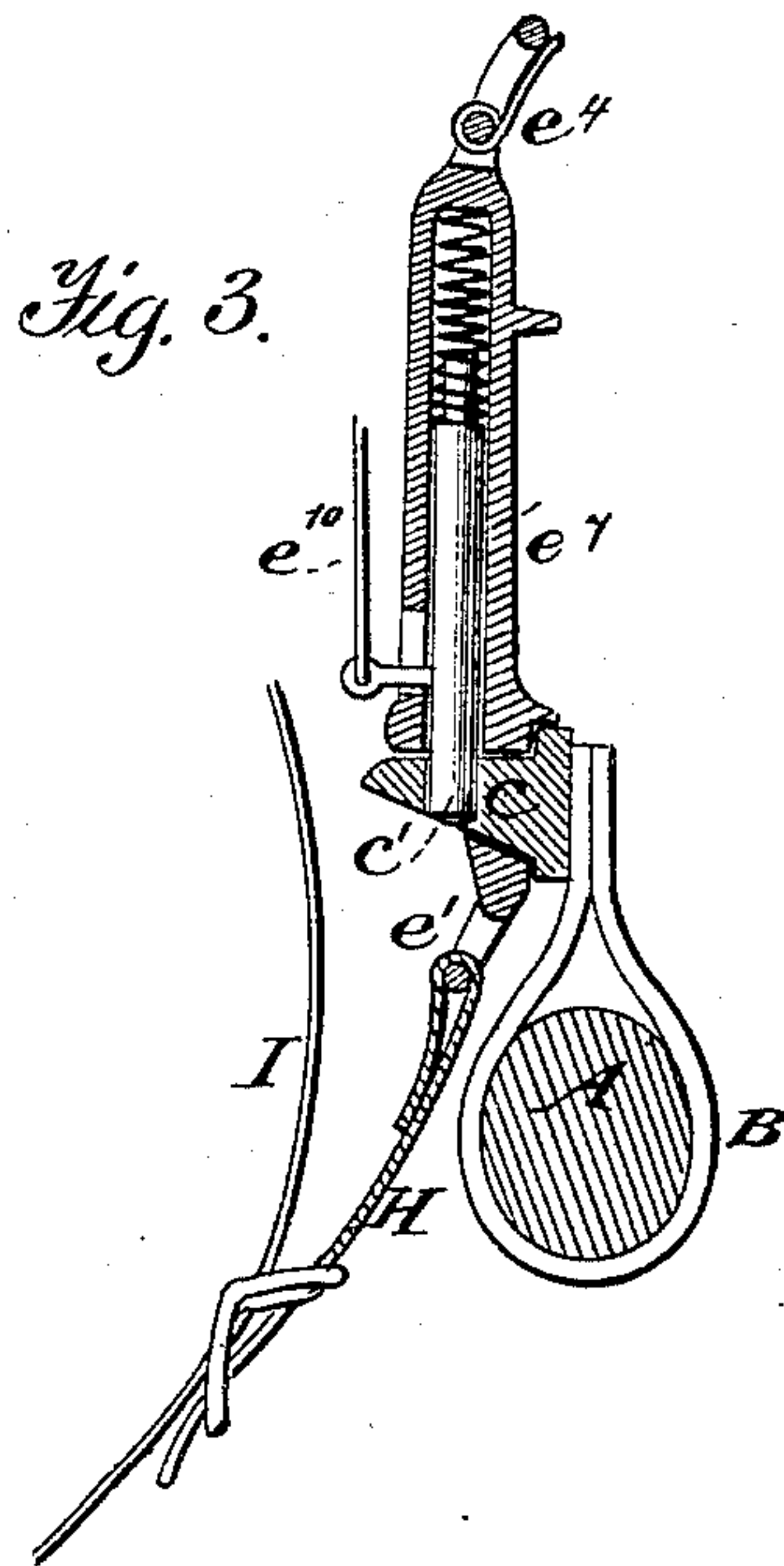


Fig. 3.

Witnesses.
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SPECIFICATION forming part of Letters Patent No. 339,022, dated March 30, 1886.

Application filed January 23, 1886. Serial No. 189,493. (No model.)

To all whom it may concern:

Be it known that I, DAVID L. SHAFER, a citizen of the United States, residing at Pleasant Hill, in the county of Miami and State of Ohio, have invented certain new and useful Improvements in Harness; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The special object of the invention is to so combine certain parts of a harness for single-horse vehicles that a horse may be hitched or unhitched in a few moments without the necessity of manipulating more than one buckle.

Figure 1 of the drawings is a side elevation showing the outside appearance of harness. Fig. 2 is an elevation in perspective giving an inside view. Fig. 3 is a transverse vertical section clearly showing how I combine the shaft and belly-band in one strap. Fig. 4 is a side elevation showing the construction of my compound buckle. Fig. 5 is a vertical section showing the rest or support for the plunger-bolt.

In the drawings, A represents the vehicle-shaft, having a holdback iron, *a*; B, the shaft-loop attached to the metallic plate C, which carries the beveled side stud, *c*, and is riveted to the trace D.

E is the metallic frame which connects the saddle-strap and trace-carrier. The latter has a loop, *e*, through which passes the holdback strap on the breeching, a loop, *e'*, in which the belly-band is secured, and a buckle, *e''*, to which the short or breast-strap trace F is attached, as shown in Fig. 1 of the drawings.

e''' is the buckle which connects with saddle-strap G.

e'''' is a rivet by which a leather keeper or a metallic one, *g*, may be secured for receiving the saddle-strap G.

e''''' is an opening, through which passes the stud *c*; *e''''''*, the spring-plunger having an eye-

stud, *e'''''''*, which passes through the slot *e''''''''*, and is provided with a flexible strap or cord that passes from side to side through the eyes of saddle-terrets—and the slack is taken up by tying a bow between said terrets. By pulling this strap or cord at the top the spring bolt or plunger *e'''''''''* is lifted from the hole *e''''''''''* of stud *c* when the supporting and trace-carrying parts of the harness are separated.

H is a strap made fast to the loop *e'* and connecting by a buckle with the belly-band I, as shown in Fig. 3 of the drawings. This enables me to dispense entirely with the usual shaft-band.

J represents the rest upon which the spring-bolt *e''* bears, the same being clearly shown in dotted lines in Fig. 5 of the drawings.

The loop *e'* is made straight, but bent, as shown, after the spring-bolt *e''* has been arranged in its true position, while the plate J, upon which the end of the spring-bolt is supported, is riveted on the part E after said arrangement has taken place.

Having thus described all that is necessary to a full understanding of my invention, what I claim as new, and desire to protect by Letters Patent, is—

1. The plate E, having the loops *e* *e'* and buckles *e''* *e'''*, to connect with the breeching holdback-straps, the belly-band, the breast-strap, and the saddle-strap, as shown and described.

2. The plate E, having the aperture *e''''*, in combination with the shaft-loop and trace-plate C, having the side stud, *c*, whereby said plates C E may be connected, as described.

3. The spring-bolt *e*, having the eye-stud *e''*, in combination with the plate E, having slot *e''''*, provided with the socket *e'''''*, and the strap or cord *e'*, as and for the purpose specified.

4. The plate C, having a vertical hole, *c'*, in its side stud, *c*, in combination with the spring-bolt *e''* on plate E, whereby said plates C E are locked together, as shown and described.

5. The combination, with the belly-band I and plate E, having the loop *e'*, of the strap H, connecting said parts, as and for the purpose set forth.

6. The combination of the plate E, having

the spring-bolt e^7 , the plate C, having the vertically-perforated stud c , and the rest J, as shown and described.

7. The combination, with the plate E, having buckle e^4 and rivet e^5 , of the keeper g , whereby the saddle-strap G may be secured, as described.

In testimony whereof I affix my signature in presence of two witnesses.

DAVID L. SHAFER.

Witnesses:

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