

A. G. RITZ.
Breast-Straps for Harness.

No. 196,935.

Patented Nov. 6, 1877.

Fig. 1.

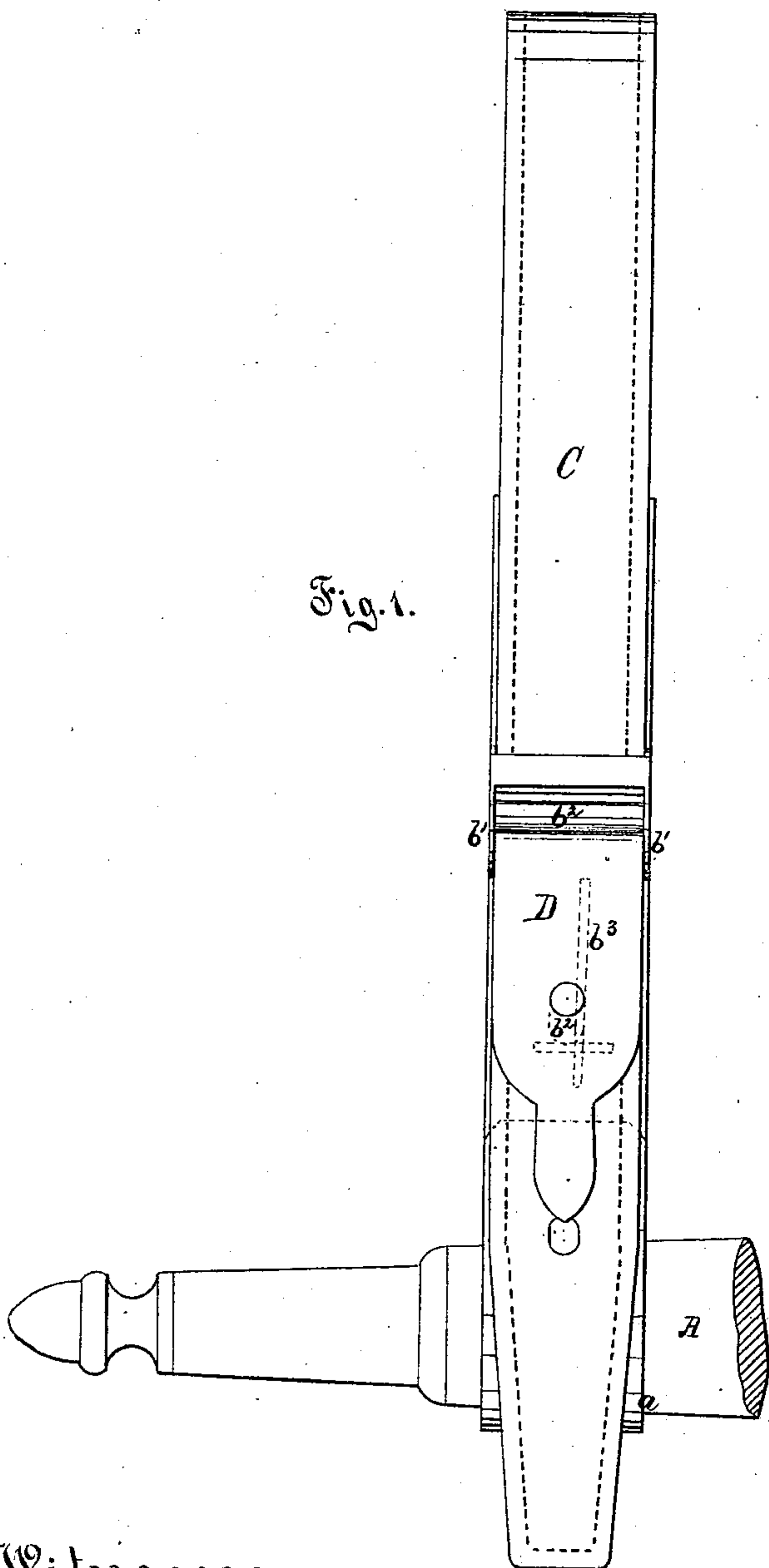
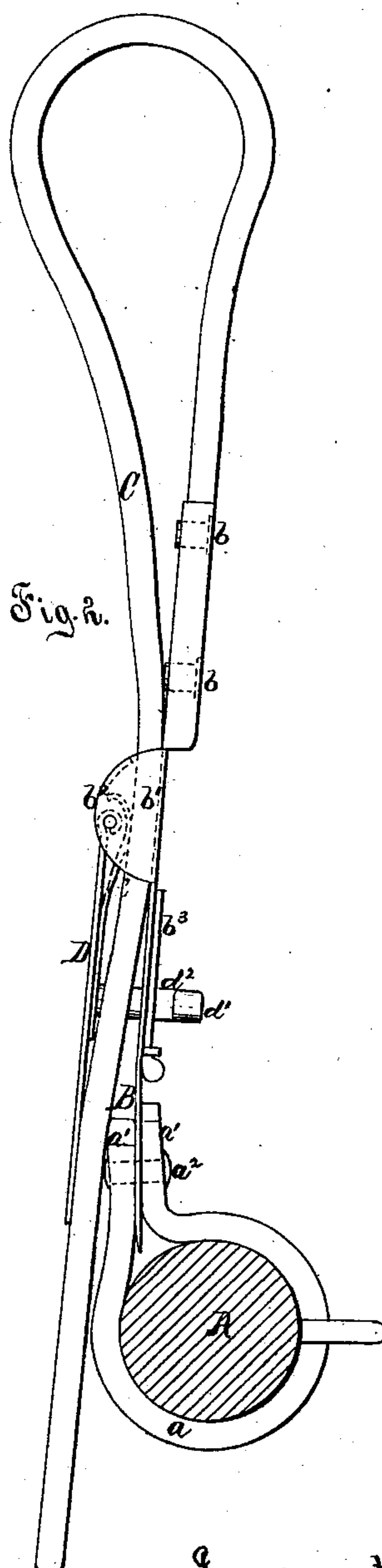


Fig. 2.



Witnesses:
Theodore G. Master.
B. S. C. C. C.

Inventor:
Arthur G. Ritz.
By *Fitch & Fitch*
attys.

UNITED STATES PATENT OFFICE.

ARTHUR G. RITZ, OF INDEPENDENCE, KANSAS.

IMPROVEMENT IN BREAST-STRAPS FOR HARNESS.

Specification forming part of Letters Patent No. **196,935**, dated November 6, 1877; application filed July 10, 1877.

To all whom it may concern:

Be it known that I, ARTHUR G. RITZ, of Independence, Montgomery county, State of Kansas, am the inventor of an Improved Breast-Strap for Harness, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to the buckle or fastening for the breast-strap which suspends the neck-yoke to the hame in a harness for horses; and it consists in the combination of devices hereinafter set forth and described, and more particularly recited in the claims.

Figure 1 is a front elevation of my improved breast-strap, and Fig. 2 is a side elevation of the same.

A is the neck-yoke. Encircling this is the strap-loop *a*. Between the secured or joined ends of this loop is interposed the lower end of the plate upon which the buckle or fastening devices are mounted, as seen at *a*¹, and a single pivotal rivet, *a*², is passed through the ends of the strap-loop and the end of the plate, thus fastening them together. The upper end of this plate B is riveted to the end of the breast-strap C, as shown at *b*. By this means the breast-strap is capable of a free swinging or side movement on the pivotal rivet *a*² without disturbing the horizontal position of the neck-yoke or causing any wear on the neck-yoke by the chafing of the strap-loop *a*, when said strap-loop is drawn to one side or the other by the swinging of the breast-strap.

The plate B is formed with ears *b*¹ extending upward from its front face, as shown, and in these ears is hinged or pivoted the flat or plate arm D. Upon the under face of this arm is fixed the leaf-spring *d*, which extends, at its free end, to and under the line of the hinge *b*², and is there curved around the hinge, as shown. Upon the under face of the arm D is fixed a pin, *d*¹, which projects at right angles thereto.

In the plate B, in line with the pin *d*¹ when the said arm D is closed down upon the plate, is a slotted opening, *b*². The end of the pin *d*¹ has a notch or shoulder formed on it at *d*², and a spring, *b*³, on the lower side of the plate is arranged to engage said notch on the pin *d*¹.

The operation of my device is as follows: The free end of the breast-strap is passed under the hinge *b*² of the plate-arm D, the said arm being swung away from the plate B. The strap is drawn down until one of its holes is coincident with the slotted opening *b*² of the plate, or a little below said opening, to allow for the backward pressure of the spring *d* when the arm D is brought down. The arm D is now swung down upon the strap, the curved end of the spring *d* holding the strap closely against the plate B, and the pin *d*¹ passing through one of the strap-holes and through the opening *b*² of the plate, when the spring *b*³ engages its notch or shoulder *d*² and prevents its return.

It is evident that the devices I have described constitute a convenient and speedily-operated fastening for a breast-strap, and one that is not liable to become disarranged or detached, besides being durable and ornamental.

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

1. In combination, the neck-yoke A, strap-loop *a*, breast-strap C, plate B, and single pivotal rivet *a*², arranged to operate as and for the purpose specified.

2. In combination, the breast-strap C and neck-yoke A, with the plate B, having hinged arm D, spring *d*, pin *d*¹, shouldered at *d*², and slotted opening *b*², with spring *b*³, arranged to operate as and for the purpose specified.

ARTHUR G. RITZ.

Witnesses:

J. B. ZIEGLER,
WILL H. WARNER.