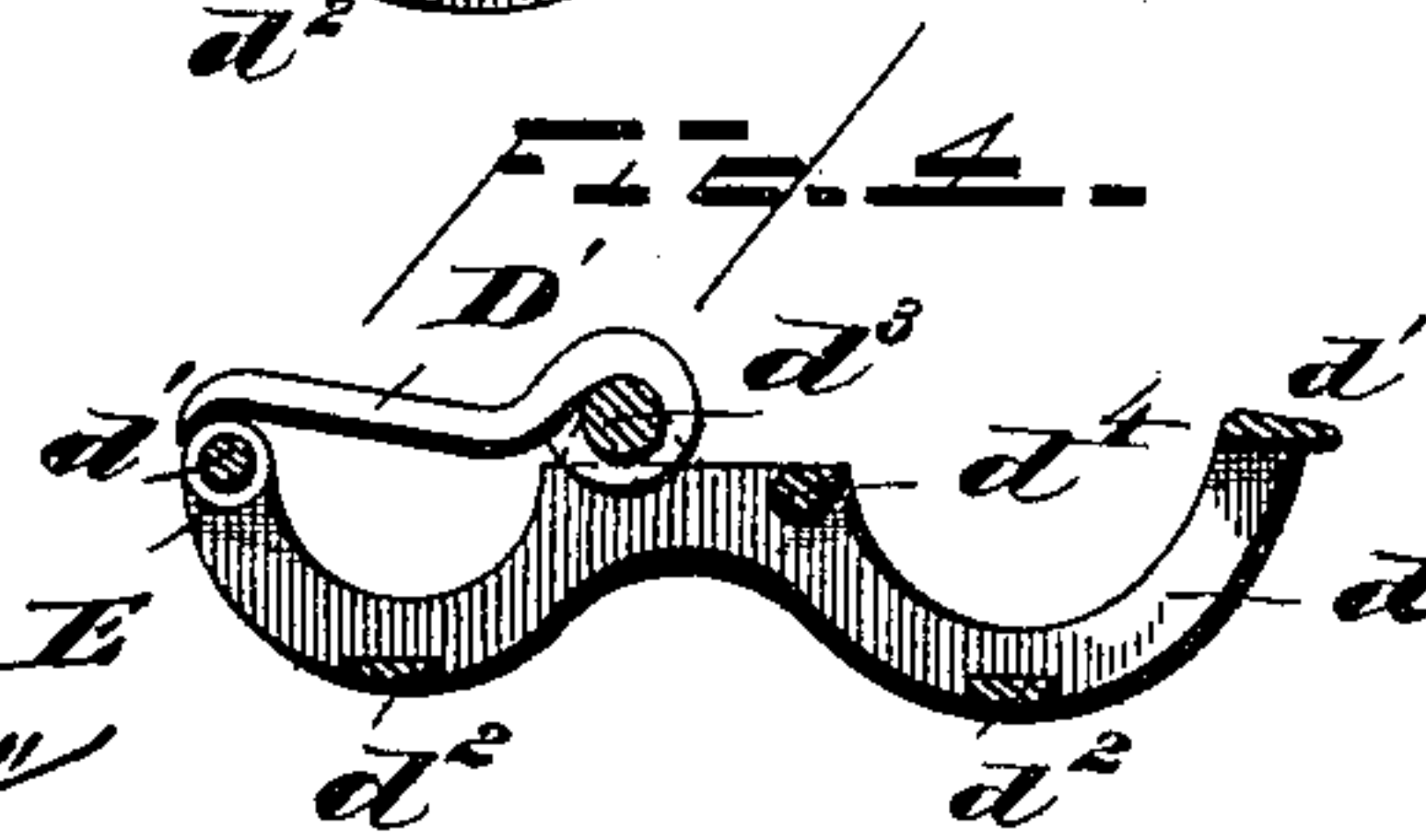
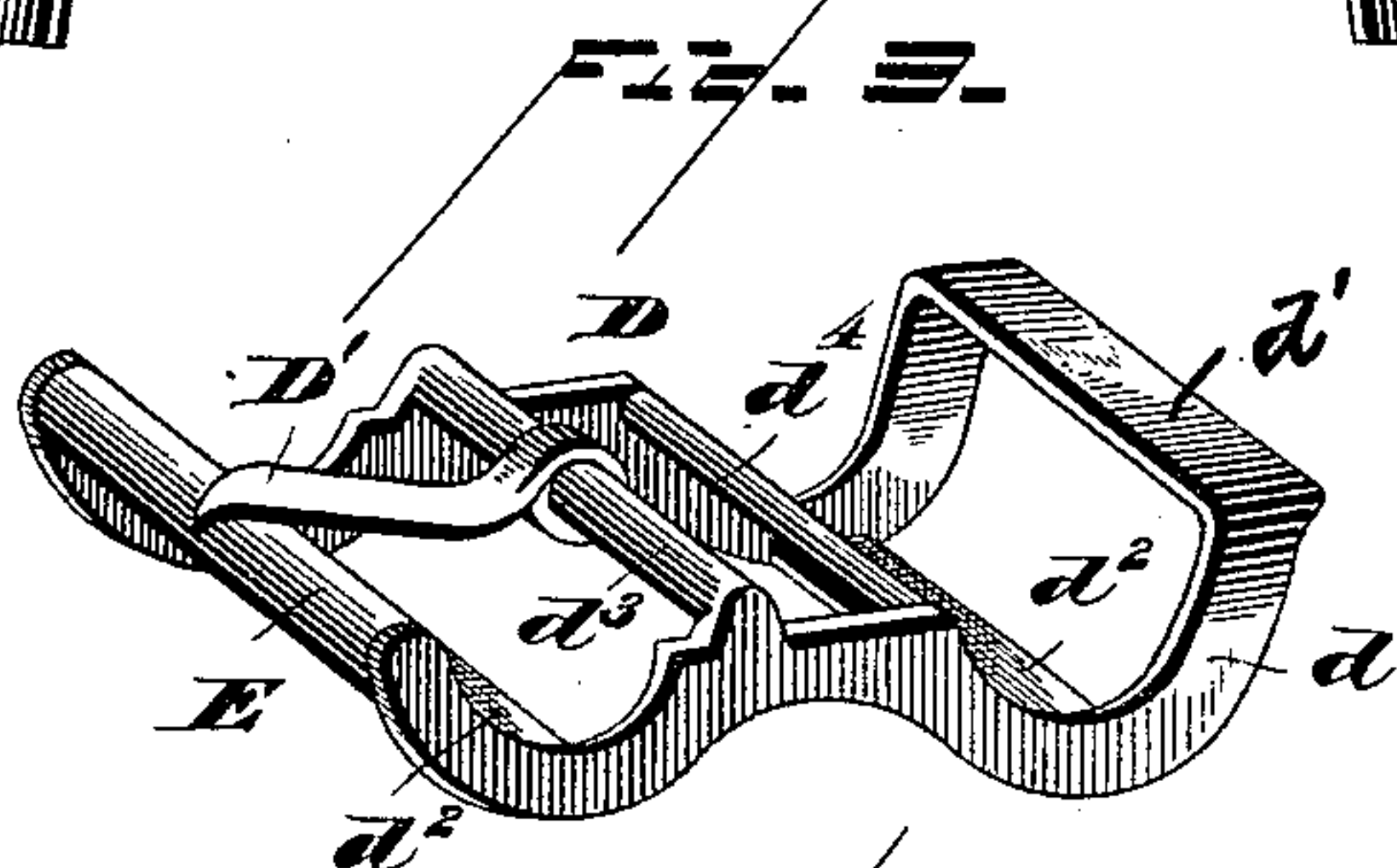
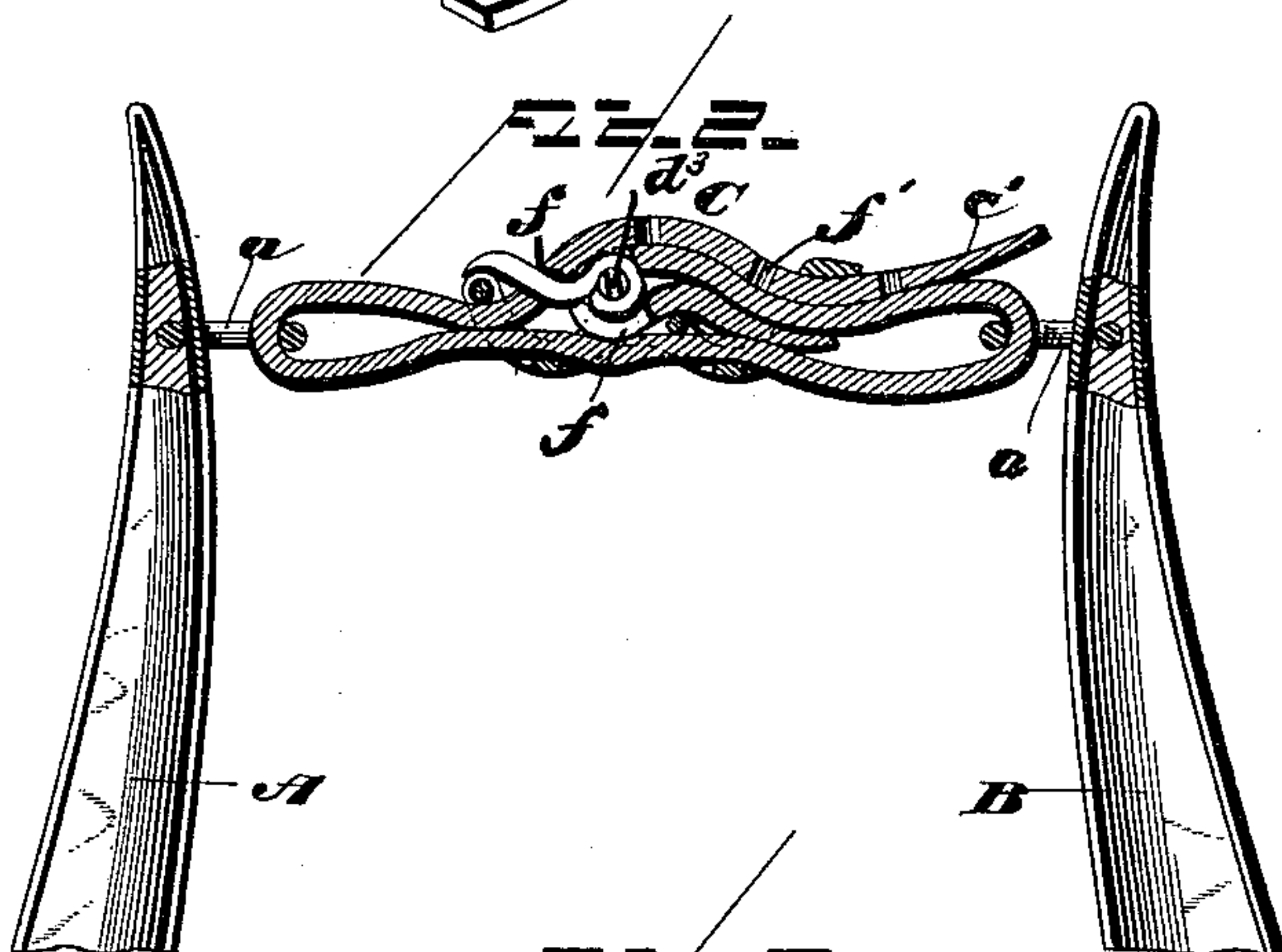
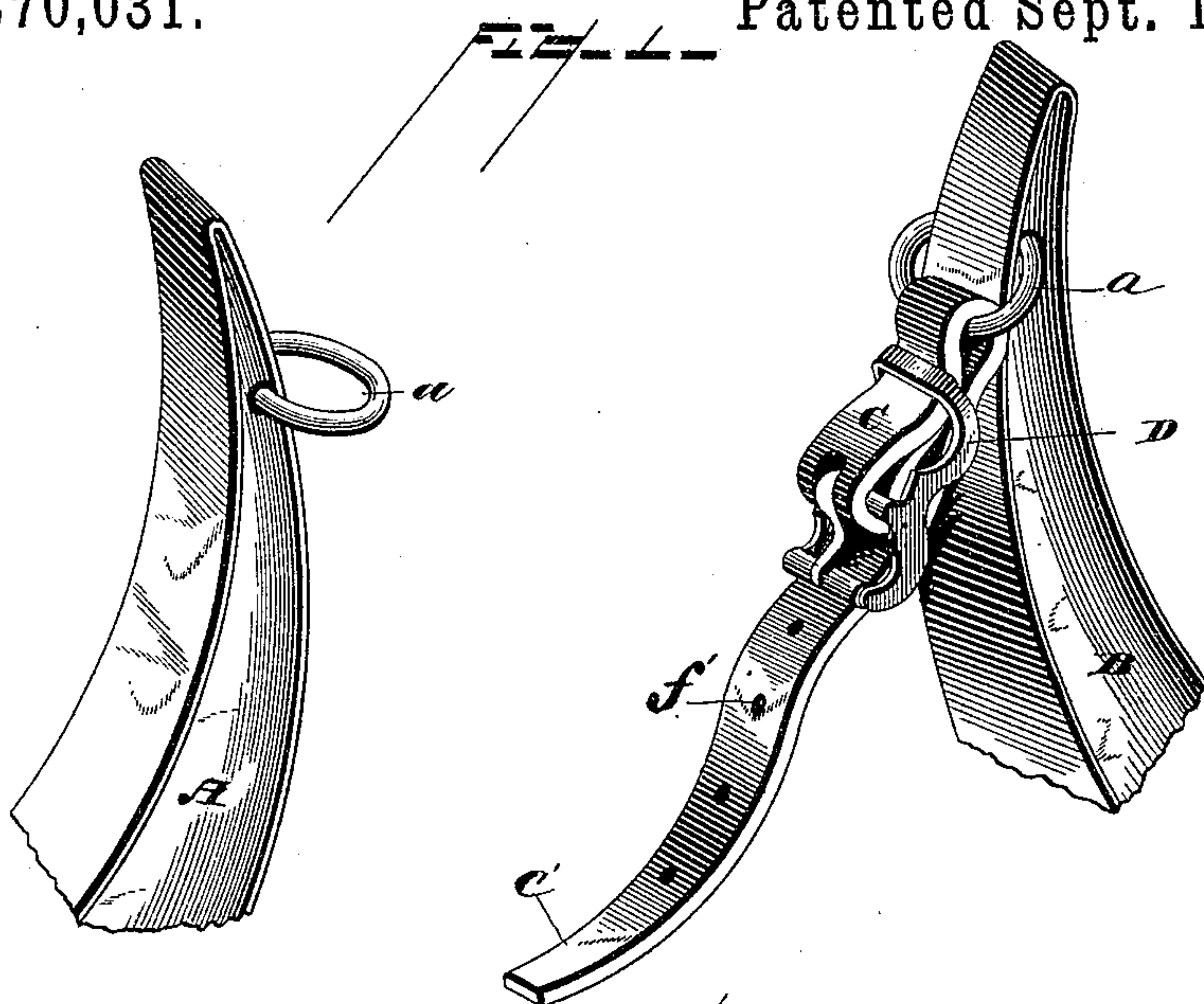


(No Model.)

M. E. ZELLER.  
HAME STRAP BUCKLE.

No. 370,031.

Patented Sept. 13, 1887.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

MELANCTHON E. ZELLER, OF BLUFFTON, OHIO, ASSIGNOR OF ONE-HALF  
TO A. J. ST. JOHN, OF SAME PLACE.

## HAME-STRAP BUCKLE.

SPECIFICATION forming part of Letters Patent No. 370,031, dated September 13, 1887.

Application filed January 17, 1887. Serial No. 224,602. (No model.)

*To all whom it may concern:*

Be it known that I, MELANCTHON E. ZELLER, a citizen of the United States, residing at Bluffton, in the county of Allen and State of Ohio, have invented certain new and useful Improvements in Hame-Strap Buckles, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to improvements in buckles especially adapted for use on the straps of hames; and it consists in the peculiar construction and arrangement of the parts of the same, as will be hereinafter fully described, and particularly pointed out in the claims.

15 The object of my invention is to provide an improved buckle of peculiar construction, to which the hame-strap is connected in such a manner that it cannot become detached under any circumstances, whether it is hanging loose from one of the hames or connected to both of the same, and to provide a buckle which shall combine great strength with simplicity of construction, efficiency of operation, and cheap-  
25 ness of manufacture.

30 One of the peculiar advantages resulting from the use of a buckle and hame-strap constructed and arranged in accordance with my invention is that the strap is held and connected more securely to the buckle in proportion to the increased strain or pull exerted by the hames on the strap, as will be hereinafter pointed out.

35 In the accompanying drawings, Figure 1 is a perspective view of a part of a pair of hames, showing my improved buckle and the strap hanging loose from one of the hames. Fig. 2 is a vertical central sectional view through the buckle and the strap, with the hames partly in elevation and section. Fig. 3 is a perspective view of the buckle detached from the strap and hames, and Fig. 4 is a vertical central sectional view through the buckle.

40 Referring to the drawings, in which like letters of reference denote corresponding parts in all the figures, A B designate the hames, of the ordinary construction, each having a loose ring at its upper end, as is usual.

45 C designates the hame-strap, which is bent or folded in a manner which will be herein-

after fully set forth, to form two loops, *c*, which are passed through or engage with the loose rings *a*, and thereby securely connect the two hames together, and the free ends of this strap are held or confined in the buckle D of my invention, so that they cannot become accidentally detached to release the hames, while at the same time one end of the strap can be readily disconnected by the operator, so that the hames can be removed or applied, as may be desired. This buckle consists of the side bars, *d*, the end bars, *d'*, the lower connecting-bars, *d<sup>2</sup>*, a tongue-bar, *d<sup>3</sup>*, and an intermediate bar, *d<sup>4</sup>*, all of which are formed or cast in a single piece of metal for strength and durability. The side bars, *d*, are preferably arranged parallel with each other, and they are curved into the shape shown to provide for the peculiar arrangement and connection of the several transverse bars, and also to secure lightness in the buckle. The end bars, *d'*, connect the side bars at the terminal ends thereof. These end bars are arranged in substantially the same horizontal plane, and the lower transverse bars, *d<sup>2</sup>*, are arranged beneath the plane of the bars *d'* and in the same plane with each other.

50 The tongue-bar *d<sup>3</sup>* of the buckle-frame is arranged at a point at or near the middle of the side bars thereof, and in substantially the same horizontal plane as the upper end bars, *d'*, and the intermediate bar, *d<sup>4</sup>*, is arranged a short distance to one side of the tongue-bar and on a plane slightly beneath the same, as will be readily understood by reference to Fig. 4. A tongue, *D'*, is pivoted or connected to the tongue-bar *d<sup>3</sup>* of the buckle-frame in the ordinary or in any preferred manner, so that it is free to turn thereon, and this tongue normally extends or projects toward the front end of the buckle, so that its free end rests upon one of the end bars, *d'*. This bar *d'*, on which the tongue rests, is made substantially circular in cross-section, and a loose roller, *E*, is fitted thereon so as to be capable of free rotation when one end of the hame-strap is drawn or passed therethrough to reduce the friction between the end bar and the strap and obviate the danger of unduly wearing the latter.

The hame-strap C is provided with a longi- 100



tudinal slot,  $f$ , near one end, and at its opposite end with a series of three or more equidistant openings,  $f'$ , as shown.

The strap is connected to the buckle and hames in the following manner: The slotted end is first passed beneath the rear end bar  $d'$  of the buckle-frame, and then around the tongue-bar  $d^3$  and over the intermediate bar,  $d^4$ , so that the tongue of the buckle can pass through the slot  $f$  of the strap and its free end rest upon the front end bar  $d'$  of the buckle-frame. The other or free end of the hame-strap is now drawn upon, so that it will press or bear down upon that end of the strap which is arranged between the intermediate bar,  $d^4$ , and that portion of the strap in the buckle-frame. By reason of the peculiar arrangement of the intermediate bar,  $d^4$ , with relation to the tongue-bar and the strap in the frame, the strap is very securely held or connected to the buckle, so that the latter cannot become accidentally detached from the strap when it is hanging loose from the hames, as shown in Fig. 1. The strap is now passed through the ring of one of the hames; as B, and back again through the buckle beneath the strap therein and above the lower bars,  $d^2$ , of the frame, thereby forming one of the loops  $c$  in the strap. When it is desired to connect the two hames together, the strap is passed through the ring of one of the hames, as A, and doubled upon itself to form the other loop  $c$ , after which the end  $c'$  of the strap is passed beneath the front end bar  $d'$  and the tongue elevated and passed through one of the openings  $f'$  therein, the end  $c'$  of the strap being finally passed beneath the rear end bar  $d'$  and above the other portion of the strap therein.

It will be observed that the ends of the strap are very securely held or connected by the buckle, so that they are not liable to become detached and thereby release the hames, and that the buckle is of sufficient strength to resist the maximum pull or strain exerted on the strap by the hames.

The operation of my invention is obvious. When it is desired to disconnect the hames and remove them from the animal, the end  $c'$  of the hame-strap is detached from the buckle by elevating the tongue and withdrawing the strap therefrom and from the ring of the hame A. The buckle and strap are still connected to the other hame, B, and hang loosely from the ring thereof, as shown in Fig. 1. To con-

nect the hames, it is only necessary to pass the end  $c'$  of the strap through the ring  $a$  and connect the same to the buckle in the manner hereinbefore set forth.

My improved buckle can be used at either the upper or lower ends of the hames with equal advantage, as will be readily understood by those skilled in the art to which it relates.

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

1. As an improved article of manufacture, a hame-strap buckle, comprising a frame having a tongue-bar, an intermediate bar arranged beneath the tongue-bar and above the lower connecting-bars, and a tongue, the tongue and intermediate bar being located within lines drawn through the lower connecting-bars at right angles to the longitudinal axis of the buckle, as and for the purpose set forth.

2. The combination, in a hame-strap buckle having upper and lower connecting-bars, of a tongue-bar located in substantially the same plane with the upper connecting-bars, an intermediate bar located between the tongue-bar and the rear lower connecting-bar, and a swinging tongue fitted on said tongue-bar, as and for the purpose set forth.

3. As an improved article of manufacture, a hame-strap buckle comprising a frame formed of a single piece of metal and having the side bars, the end bars connecting the side bars at their terminal ends and arranged in substantially the same horizontal plane, the lower transverse bars,  $d^2$ , a tongue-bar located at an intermediate point of the side bars and in substantially the plane of the end bars, and an intermediate bar arranged between the tongue-bar and rear transverse bar,  $d^2$ , a roller fitted on one of the end bars, and a swinging tongue fitted on the tongue-bar, the tongue and intermediate bar being located within lines drawn through the lower connecting-bars at right angles to the longitudinal axis of the buckle, substantially as described.

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

MELANCTHON E. ZELLER.

Witnesses:

JOS. FORREST,  
C. W. DESHIELL.