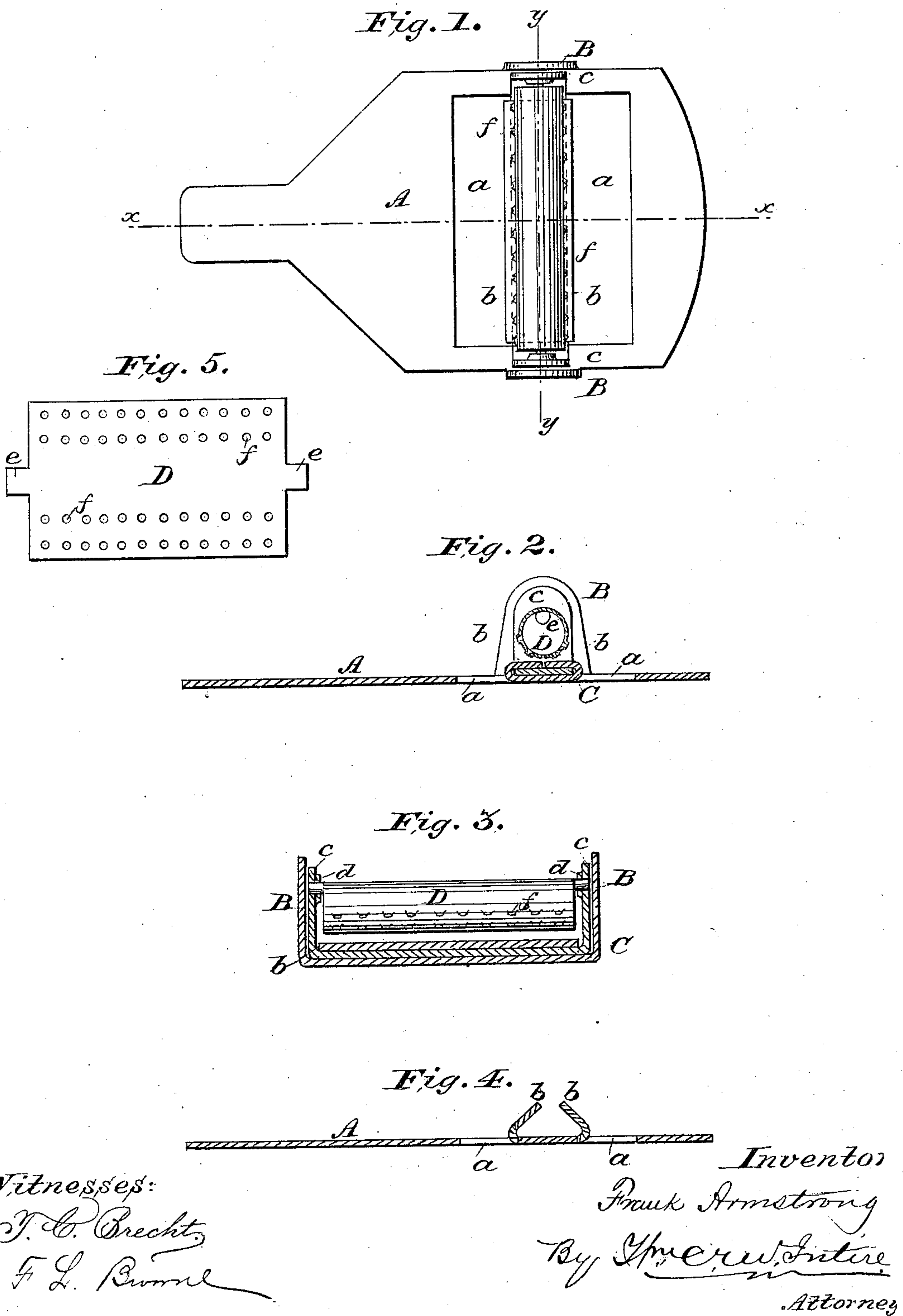


(No Model.)

F. ARMSTRONG.
BUCKLE.

No. 287,081.

Patented Oct. 23, 1883.



UNITED STATES PATENT OFFICE.

FRANK ARMSTRONG, OF BRIDGEPORT, CONNECTICUT.

BUCKLE.

SPECIFICATION forming part of Letters Patent No. 287,081, dated October 23, 1883.

Application filed June 21, 1883. (No model.)

To all whom it may concern:

Be it known that I, FRANK ARMSTRONG, a citizen of the United States, residing at Bridgeport, Connecticut, have invented new and useful Improvements in Buckles, of which the following is a specification.

My invention relates to certain new and useful improvements in buckles, and particularly to that class made from sheet metal.

The object of my invention is simplicity and economy in construction and absolute action in the operation of grasping the web or other material upon which it is designed to operate; and with these ends in view my invention consists of the peculiarities of construction hereinafter fully described and specifically claimed.

To enable those skilled to fully understand my invention, I will proceed to describe the construction and operation of the same, referring by letters to the accompanying drawings, in which—

Figure 1 is a plan view of a buckle embodying my invention, the means for attachment being unformed. Fig. 2 is a longitudinal section taken at the line *x x* of Fig. 1; Fig. 3, a transverse section taken at line *y y* of Fig. 1. Fig. 4, a longitudinal section of the frame-blank, and Fig. 5 a plan view of the blank from which the cylindrical clamping-jaw is formed.

Similar letters denote like parts in the several figures of the drawings.

A is the frame-blank, which is formed of sheet metal, with web-slats *a a*, which are made by cutting the metal and turning up, as seen at *b b*, Fig. 4. Ears B B are formed on the sides of the frame, and turned up at right angles, as clearly represented, forming a support and shield to the upturned ends *c c* of a separate strip of metal, C, which is bent, as shown at Fig. 3, and confined in place by bending down the ends *b b*, as most clearly shown at Fig. 2. The ends *c c* are formed with bearings or sockets, *d d*, to receive the pivot ends *e* of the clamping cylindrical jaw D, which, being formed by bending the blank seen at Fig. 5, throws the pivots *e* on one side, as clearly seen at Figs. 2 and 3, thus providing for an eccentric movement to secure the proper bite against the web interposed between the said

jaw and the frame. Suitable projections or barbs, *f*, are formed in the lower circumference of the jaw D by punching, or in any other suitable manner.

From the construction illustrated and described it will be seen the central bar of the frame is greatly strengthened by the introduction of the metallic strip C, and that the upturned ends *c* of the latter form a much more substantial bearing for the pivots of the cylindrical jaw D, than the ears B used in the usual way.

The jaw D, as will be seen, is composed of a single piece, bent or otherwise formed into a cylinder, and is devoid of any projecting arm or lever for operating the same, and is provided with suitable barbs or points to facilitate the bite upon the interposed web.

I am aware, of course, that jaws pivoted eccentrically and provided with operating-levers or extensions have been made; but such structures involve the use of comparatively large amounts of material, while with my improved jaw a minimum amount of material only is necessary.

By the employment of the cylindrical jaw D, the bite on the web is produced by pulling the same under the jaw, which being rotated eccentrically, quickly and firmly grasps the web, and in the act of releasing the same a reverse pull of the web is all that is necessary, which is a much more desirable method than the lever movement necessary in buckles as at present constructed.

I have described and shown the independent strengthening-strip C, and prefer to use it as described; but it will be understood that in the use of the cylindrical jaw D, the pivots thereof may take their bearings within the ears B of an ordinarily-constructed frame; and it will be understood that sometimes, as a matter of economy in metal, the frame A may be made without the ears B, and the strip C may be made of scrap metal, and furnish the ears and bearings.

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

1. In a suspender or other buckle, the frame A, provided with suitable pivot-bearings, in combination with the eccentrically-pivoted jaw

D, consisting of a simple metallic cylinder provided with biting-barbs, substantially as set forth.

2. In combination with the frame A, provided with web-seats *a a* and ends *b b*, the strengthening-strip C, provided with upturned ears or ends *c c*, the ends *b b* being turned down, as described, to confine the strengthening-strip in place, substantially as set forth.

10 3. The cylindrical jaw D, made of a single

piece of sheet metal, provided with pivots *e e* and barbs *f*, substantially as shown and described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

FRANK ARMSTRONG.

Witnesses:

F. T. STAPLES,
JULIA A. FAIRCHILD.