(No Model.)

D. L. SMITH.

BUCKLE.

No. 378,730. Patented Feb. 28, 1888.

Fig. 1

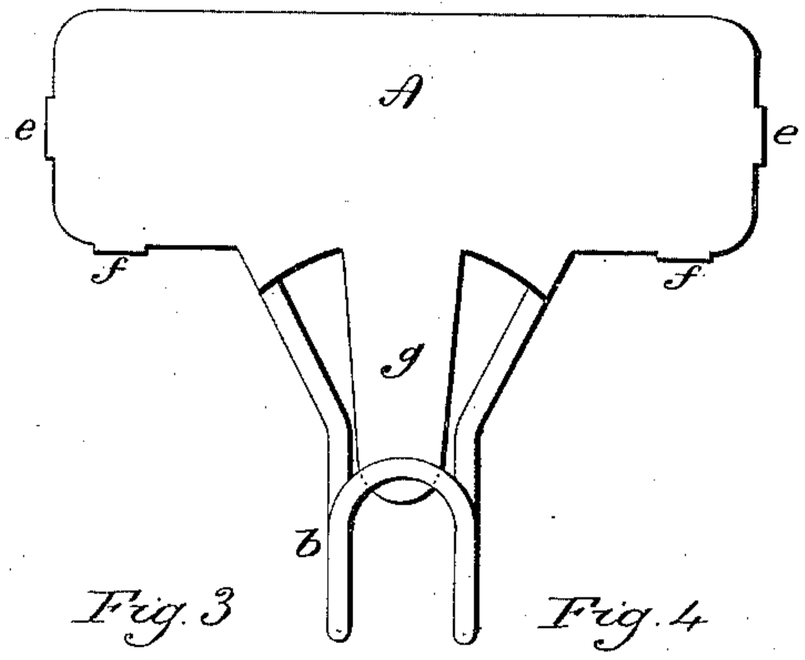


Fig. 2

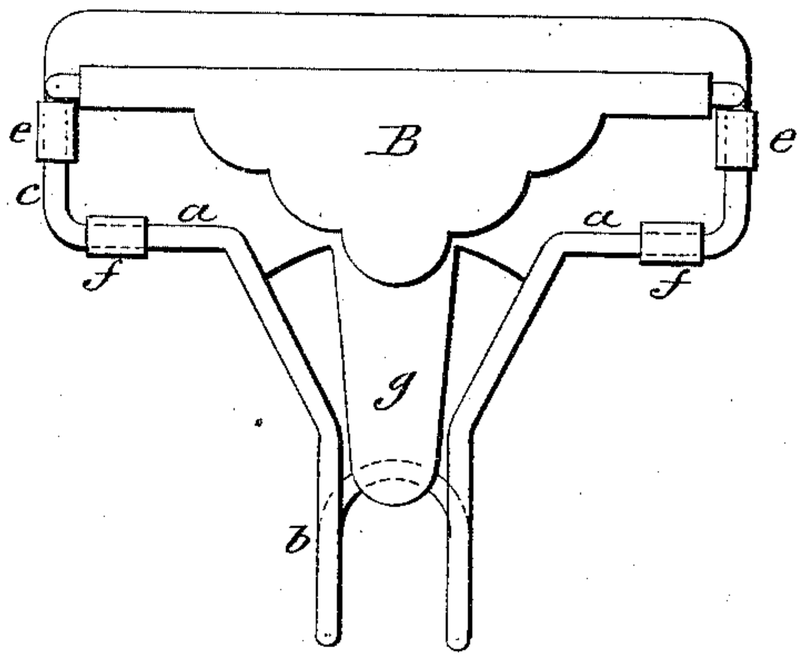


Fig. 3

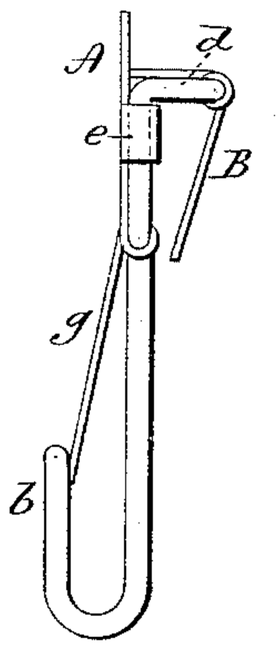


Fig. 4

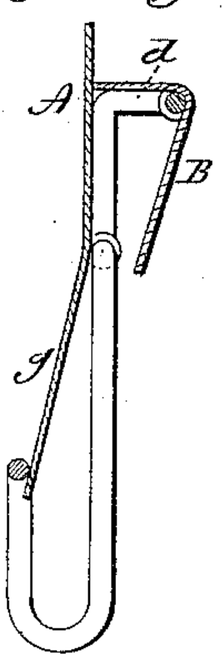


Fig. 5

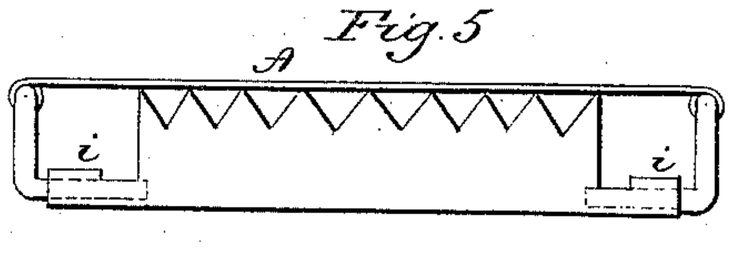


Fig. 6

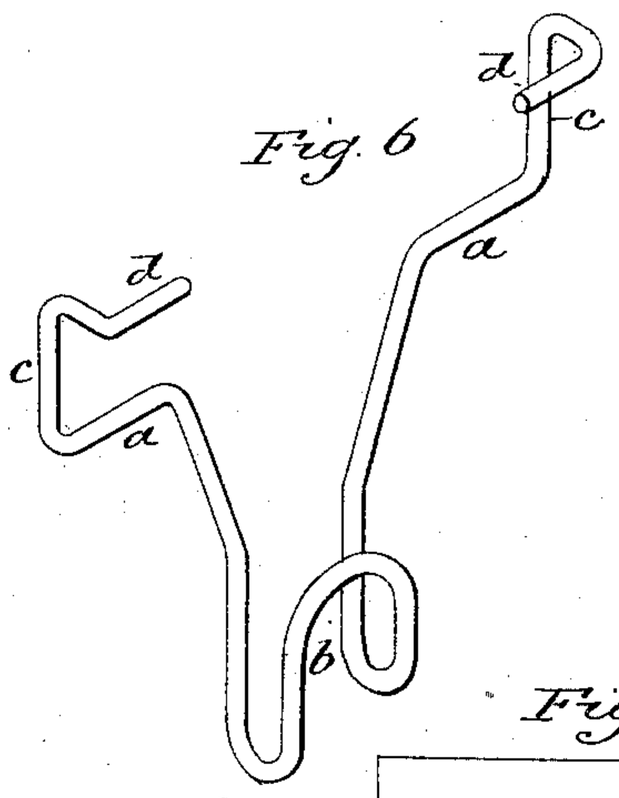


Fig. 8

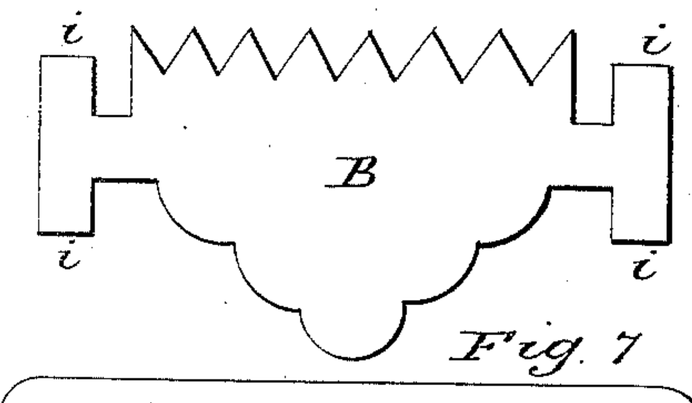


Fig. 9

Fig. 10

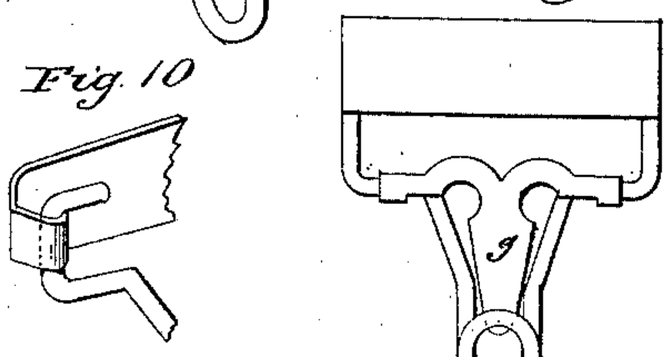
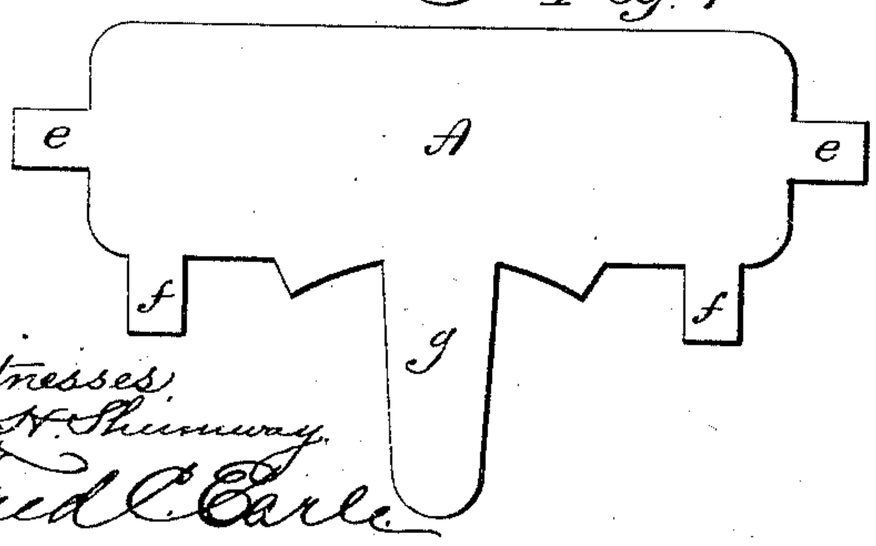


Fig. 7



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By atty.
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UNITED STATES PATENT OFFICE.

DWIGHT L. SMITH, OF WATERBURY, CONNECTICUT, ASSIGNOR OF ONE-HALF TO EARL A. SMITH, OF SAME PLACE.

BUCKLE.

SPECIFICATION forming part of Letters Patent No. 378,730, dated February 28, 1888.

Application filed January 3, 1888. Serial No. 259,664. (No model.)

To all whom it may concern:

Be it known that I, DWIGHT L. SMITH, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new Improvement in Buckles; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a front view of the buckle complete; Fig. 2, a rear view of the same; Fig. 3, an edge view of the same; Fig. 4, a vertical central section; Fig. 5, a top view; Fig. 6, a perspective view of the frame detached; Fig. 7, the bearing-plate as prepared for attachment to the frame; Fig. 8, the blank from which the lever is formed; Figs. 9 and 10, modifications.

This invention relates to an improvement in that class of buckles in which the frame is made from wire, with a clamping-plate attached thereto, and a lever hinged to the frame to engage the strap against the clamping-plate; and the invention consists in the construction, as hereinafter described, and more particularly recited in the claims.

The frame of the buckle is made from wire of a single piece, as seen in Fig. 6. The piece of wire cut to the required length, the frame is doubled at its center and bent to form the hook *b*, the two branches extending up above the nose of the hook, but turned to the right and left to form the lower bar, *a*, of the frame, and at the respective ends of the lower bar the wire is turned upward to form the two ends *c c* of the frame. At the upper ends of the end portions, *c*, of the frame the wire is turned rearward at right angles to the plane of the frame, and thence turned horizontally to form pivots *d d* in line with each other and in a plane parallel with the plane of the frame, but distant therefrom, and as clearly indicated in Fig. 6.

The bearing-plate A is made from sheet metal, as seen in Fig. 7, and of any desirable shape, preferably of substantially the height of the frame, or little more, and at its ends the plate is constructed with ears *e e*, and with similar ears, *f*, upon its lower edge, so that the plate may be placed upon the frame and lie flat upon the side of the frame opposite the pivots *d*, as seen in Fig. 2, and the ears *e f* bent around the respective portions of the frame, so as to secure the bearing-plate firmly to the frame. From the lower edge of the bearing-plate a tongue-piece, *g*, extends downward to form the spring for the hook. The bearing-plate thus applied, as represented in Figs. 3 and 5, leaves the pivots *d* in rear thereof and at a considerable distance therefrom, but parallel with the plane of the plate. The clamping-lever B is constructed, as seen in Fig. 8, from sheet metal, its working-edge serrated or otherwise prepared to suitably engage the strap. It is of a length corresponding to the frame, and at its two ends it is constructed with ears *i i*, which are adapted to be bent around the pivots *d*, as seen in Figs. 2 and 5, so as to form the hinges upon which the lever may turn. The impinging edge of the lever is bent at substantially right angles to the plane of the lever, as indicated in Fig. 4, so that the edge forms a jaw to impinge against the bearing-plate A, that it may grasp the strap, which is introduced between the bearing-plate and the lever. This construction produces a buckle occupying very little space, but yet very strong and durable.

The attaching-hook, frame, and pivots are all made in the single piece of wire, and the bearing-plate having the extension, as described, not only forms a finish for that face of the buckle, but also provides the spring-tongue for the hook in one and the same piece with the bearing-plate.

While I prefer to make the projection of the pivots from the bearing-plate by turning the pivots into a plane parallel with the plane of the frame, but distant therefrom, so as to form a space between the pivots and the bearing-plate, the frame may be made, as represented in Fig. 10, with the pivots in the same plane as the frame, and the projection of the bearing-plate from the pivot produced by an extension of the end of the bearing-plate turned at right angles and clasped around the frame, as indicated in said Fig. 10. In Fig. 10 I omit the lever, for convenience of illustration.

I have represented the spring as formed as

a part of the bearing-plate; but it may be made separately and attached to the frame, as seen in Fig. 9. I have also represented the lever as applied upon the rear of the frame; but this may be applied to the front, if preferred, as also seen in Fig. 9, in this modification it only being necessary to turn the pivot ends of the frame forward instead of rearward, as first described, the pivots being in the same relation to the frame and made as a part of the wire frame, as in the first instance.

I claim—

1. The herein-described buckle, consisting of a frame made from a single piece of wire bent to form the hook *b*, the lower bar, *a*, and the two ends of the frame, *c c*, with the extreme ends of the wire turned inward from said ends *c c* to form pivots *d d*, combined with a bearing-plate, A, rigidly secured to said frame in a plane parallel with the pivots, but distant therefrom, with a lever, B, hinged upon said pivots, the edge of the lever turned toward and so as to impinge upon said bearing-plate, substantially as described.

2. In a buckle, the frame made from a single piece of wire bent to form the lower bar, *a*, and the hook *b*, dependent therefrom, and the two ends *c c* of the frame, the wire at the top of the frame upon each end turned at right angles to the plane of the frame, and the extreme ends of the wire then turned again at right angles horizontally toward and into line with each other to form pivots *d d*, said pivots being parallel with but out of the plane of the frame, combined with a bearing-plate, A, rigidly secured to said frame, with a lever, B, hinged to said pivots *d d*, the edge of the lever turned toward and so as to impinge upon said bearing-plate, substantially as described.

DWIGHT L. SMITH.

Witnesses:
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JAMES STOVELL.