(No Model.)

D. F. DALTON.

SHOE BUCKLE.

No. 494,464. Patented Mar. 28, 1893.

Fig. 1.

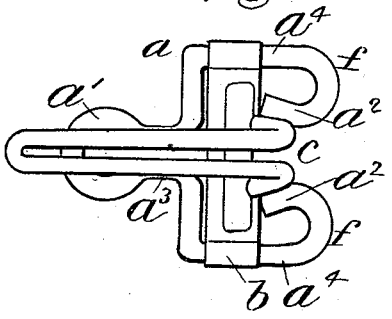


Fig. 2.

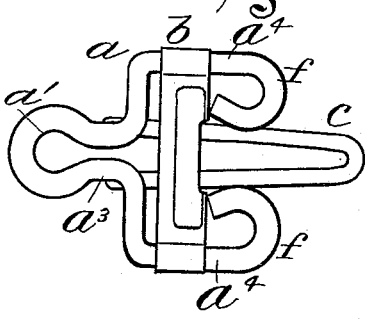


Fig. 3

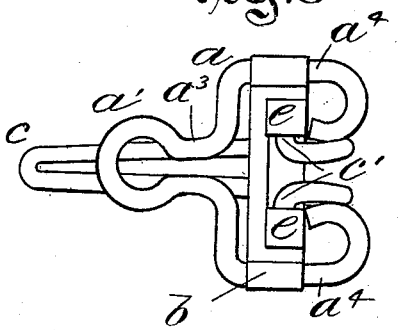


Fig. 4.

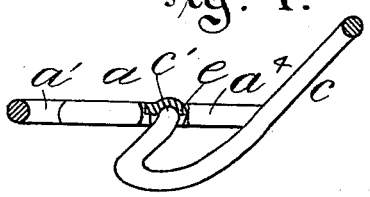
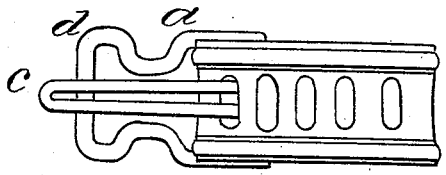


Fig. 5.



Witnesses:
Joseph Arthur Cantin
Arthur P. Jenkins,

Inventor:
Daniel F. Dalton
by Chas. L. Burdett,
Attorney

UNITED STATES PATENT OFFICE.

DANIEL F. DALTON, OF WATERBURY, ASSIGNOR TO THE HAMMOND BUCKLE COMPANY, OF ROCKVILLE, CONNECTICUT.

SHOE-BUCKLE.

SPECIFICATION forming part of Letters Patent No. 494,464, dated March 28, 1893.

Application filed October 5, 1892. Serial No. 447,872. (No model.)

To all whom it may concern:

Be it known that I, DANIEL F. DALTON, of Waterbury, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Shoe-Buckles, of which the following is a full, clear, and exact description, whereby any one skilled in the art can make and use the same.

The object of my invention is to provide a buckle or clasp that shall be particularly adapted for use on shoes, overshoes, or other articles of wearing apparel and one that can be cheaply constructed.

To this end my invention consists in the details of the several parts making up the buckle as a whole and in the combination of such parts as more particularly hereinafter described and pointed out in the claims.

Referring to the drawings: Figure 1 is a detail top or plan view of a buckle embodying my improvements. Fig. 2 is a detail plan view of the under side of the buckle. Fig. 3 is a detail bottom view of the buckle with the tongue extended. Fig. 4 is a detail view in central cross section through the opened buckle on the center line of the parts. Fig. 5 is a detail view of the buckle shown attached to a take-up plate, the frame being adapted to receive the end of a strap as a means of attachment of the buckle to a shoe or other article.

In the accompanying drawings the letter a denotes the frame of the buckle that is formed of wire bent to shape, the ends a^2 of the wire being turned back toward the cross bar b and forming abutments so located as to be encountered by the side parts of the tongue c in the opening and closing movement of the latter. The wire of which the frame a is made is bent to form an eye a' through which a rivet may pass as a means of securing the buckle to any article, as a flap of a shoe. Between this eye and the wider part of the frame a shank a^3 is formed, the wire turning outward and forward to the proper shape to form the frame of a buckle. In case the frame is to be attached to a shoe or any like article by means of a strap the wire is bent to for a loop d as shown in Fig. 5 of the drawings, but the remainder of the frame is formed substantially on the outlines described and shown. The cross bar b is formed of thin metal secured across the side parts a^4 of the frame as by bending the ends of the bar firmly around and down upon such parts. This cross bar has sockets for the tongue pintles formed preferably by rolling up projections left on the edge of the bar when the latter is blanked out from a thin strip of metal. These sockets e are preferably circular in outline and adapted to receive the tongue pintles, the tongue being hook-shaped and preferably formed of a single piece of wire bent to shape, the folded part of the wire forming the point of the tongue and the ends being turned outward and forming the pintles c' that are adapted to fit into the sockets b'. When thus mounted on the tongue plate the tongue extends from the pintles forward and upward between the arms f and then backward over the plate thus giving the tongue the peculiar hook-shape common in this class of buckles. The distance between the side parts of the tongue at the bend is greater than the distance between the projections on the plate thus causing the tongue to be held in either a closed or an opened position and to resist a tendency to open the tongue to an extent determined by the stiffness of the spring metal of which the tongue is formed. The inturned ends of the wire of the frame may also possess some degree of resiliency and co-operate with the tongue in the spring action obtained in the opening and closing movement of the latter. A buckle thus formed mainly of wire possesses the advantages of simplicity and cheapness of construction and possesses sufficient strength to readily adapt it to any of the uses to which a buckle is put in the ordinary use. The frame is readily and cheaply made in a machine into which the end of a coil of wire is entered, the wire feeding into the machine as the frames are successively formed of short lengths of wire cut within the machine from the end of the coil. The tongue is in like manner formed to shape by an automatic machine. When thus made from wire there is no waste in stock and the saving in this regard is of importance as in this line of goods it represents the profit made.

I claim as my invention—

1. In a shoe buckle in combination a tongue frame formed of wire bent to shape and comprising within the bent portion an eye or socket to receive the fastening means and with the free ends of the wire turned back upon the side parts of the frame and in the plane thereof, the cross bar formed of thin metal and having pintle sockets, and a swinging hook-shaped tongue pivoted to the cross bar and with a broadened part adapted to pass between the adjacent sides of the back turned ends of the frame, all substantially as described.

2. In a shoe buckle in combination, a tongue frame formed of wire bent to shape and comprising within the bent portion an eye or socket to receive the fastening means and with the side parts projecting beyond the pintle sockets, the cross bar formed of thin metal and having integral rolled up portions forming pintle bearings, and a hook shaped tongue with its pivots arranged in the pintle bearings, all substantially as described.

DANIEL F. DALTON.

Witnesses:
CHAS. W. GILLETTE,
JOS. C. HAMMOND, Jr.