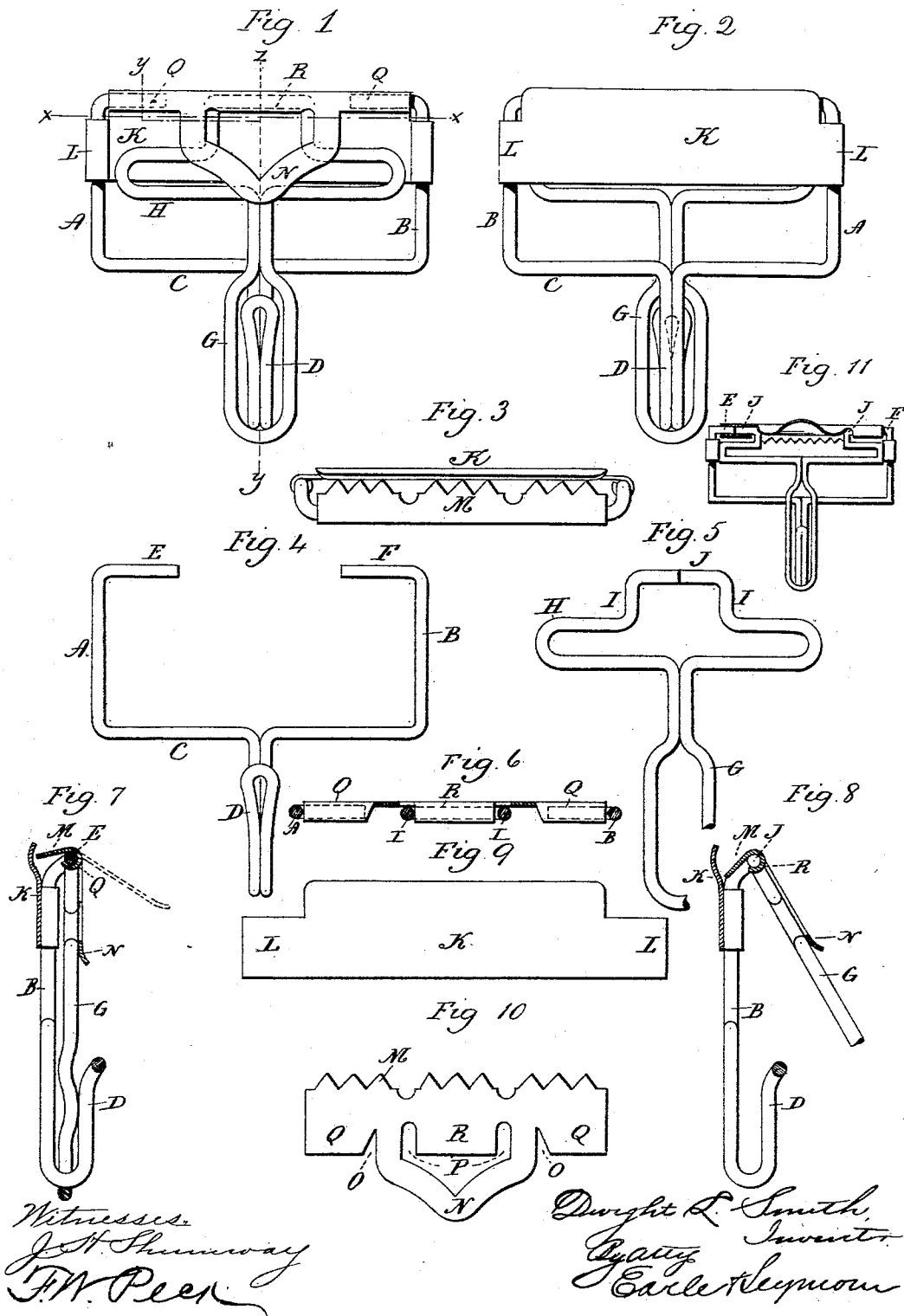


(No Model.)

D. L. SMITH.
BUCKLE.

No. 476,565.

Patented June 7, 1892.



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. 476,565, dated June 7, 1892.

Application filed October 2, 1891. Serial No. 407,534. (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
5 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,
10 and which said drawings constitute part of this specification, and represent, in—

Figure 1, a face view of the buckle; Fig. 2, a rear view of the same; Fig. 3, a plan view of the buckle, looking downward upon the upper edge; Fig. 4, a face view of the frame
15 detached; Fig. 5, a face view of the guard-lever detached; Fig. 6, a transverse section on line *xx* of Fig. 1, looking up; Fig. 7, a vertical section cutting on line *yy* of Fig. 1, showing the parts in the closed position; Fig. 8, a vertical central section on line *yz* of Fig. 1,
20 showing the guard-lever as turned away from the hook; Fig. 9, the blank from which the clamping-bar is formed; Fig. 10, the blank from which the jaw-lever is formed; Fig. 11,
25 a modification in the formation of the guard-lever.

This invention relates to an improvement in that class of buckles which are made from
30 wire and adapted especially for suspenders, and particularly to buckles of this class in which the frame is provided with a stationary clamping-bar, combined with a lever hinged in the frame and so as to operate in connection with said clamping-bar to clamp the sus-
35 pender or strap passed between the jaw of said lever and the said bar, and in which the said lever is provided with an extension or loop, which may extend down so as to form a guard to retain the suspender-ends engaged
40 with the hook on the lower bar of the buckle, the object of the invention being to make the engaging jaw separate from the loop so adapted to retain the engagement with the
45 hook and hinge both the lever and the jaw on the same axis and upon the upper side of the frame; and the invention consists in the construction as hereinafter described, and particularly recited in the claims.

50 The frame is made from wire, and consists

of two ends A B, connected by the lower side C, the lower side bent down at its center and turned upward to form the hook D, as usual in this class of buckles. Upon the upper side of the frame the ends of the wire are
55 turned inward, as at E F, Fig. 4, but so as to leave a space between the ends E F thus turned inward, the said two ends being in the same longitudinal line. The guard-lever is also made from wire, as seen in Fig. 5. The
60 wire is bent midway of its length and doubled to form a loop G, which is adapted to surround the hook D and form a guard therefor, as seen in Fig. 1. From the loop the wire extends upward and is turned to the right
65 left and then returned, forming a loop-like bar H. The portions of the wire so returned in forming the bar H at their ends are bent upward at right angles, as at I I, and then the extreme ends are turned inward and
70 brought together to form a pintle-bar J. This pintle-bar J is less in length than the distance between the two ends E F of the frame and so that it may set into the space
75 between the said two ends, as represented in broken lines, Fig. 1, the pintle-bar J of the lever standing in line with the two ends E F. On the back of the frame is a clamping-bar K, made from sheet metal and secured to the
80 frame by ears L, projecting from the end of the bar K, (see Fig. 9,) bent around the ends of the frame, as seen in Figs. 1 and 2, the clamping-bar extending above the upper side of the frame. Preferably the ends of the
85 frame are bent forward, so as to bring the ends E F into a plane forward of the frame, as seen in Figs. 7 and 8. The jaw-lever for engaging the strap is made from sheet metal, as seen in Fig. 10, one edge being preferably
90 provided with suitable teeth M, and from the other edge is a handle projection N. The length of the blank for the jaw-lever is somewhat less than the length of the frame between its two ends. The lower edge of the
95 blank (see Fig. 10) is constructed with slits O O and with other slits P, (see Fig. 10,) forming, respectively, tongues Q Q at the ends and a central tongue R.

The toothed or bearing edge M of the jaw-lever is bent at right angles to the plane of 100

the jaw-lever, as seen in Figs. 7 and 8. The tongues Q Q are bent around the ends E F, and so that the lever may swing on those ends E F as the pintle, the handle N of the lever 5 extending downward on the face of the guard-lever. The tongue R is closed around the pintle portion J of the guard-lever, and so as to form a hinge between that guard-lever and the frame, the jaw-lever being hinged to the 10 guard-lever and also to the ends E F on the frame. The said ends E F form pintles upon which either the jaw or the guard-lever may turn, and so that the jaw may be turned, as represented in broken lines, Fig. 7, without 15 movement of the guard-lever, and thus leave the passage open between the clamping-plate and the jaw for the introduction or adjustment of the strap, or the guard-lever may be turned outward, as represented in Fig. 8, and 20 in so doing will correspondingly turn the jaw-lever, because the handle portion of the jaw-lever bears upon the face of the guard-lever; yet the jaw-lever is independent of the guard-lever. By this construction the jaw-lever and 25 the guard-lever are hung to the frame through the instrumentality of the jaw-lever itself, the turned-in ends of the frame forming the pintles upon which the said two levers may turn separately or together, as described.

30 While preferring to turn the ends of the wire which forms the guard-lever inward to produce the pintle-bar J for the guard-lever, the ends may be turned outward, as represented in Fig. 11, the ears of the jaw-lever being constructed accordingly, as shown, so as 35 to inclose the turned-out ends of the frame, together with the pintle portions E F of the frame, the operation of the two levers being the same in one case as the other.

40 I do not in this specification claim, broadly, a buckle having a jaw-lever and a guard-lever made separate and so as to swing independent the one of the other or together, as the case may be, as such construction constitutes the subject of an independent appli- 45 cation serially numbered 398,469; but

What I do claim is—

1. A buckle composed of a wire frame, the lower side of the frame having a depending 50 hook therefrom, the ends of the wire upon the upper side turned inward into longitudinal line with each other, but so as to leave a space between the said two ends, combined with a wire guard-lever bent and extending down to 55 form a guard for the said hook of the frame, the ends of the wire of the said guard-lever

turned inward to form a pintle-bar and standing between and in line with the inwardly- 60 turned ends of the frame, combined with a clamping-bar made fast to the frame and projecting upward and a sheet-metal jaw-lever constructed with tongues closed around the 65 turned-in ends of the frame and around the pintle-bar of the guard-lever, so as to form a hinge between the said guard-lever and the frame, the said jaw-lever being free to swing 70 on the said turned-in ends of the frame and upon the pintle portion of the guard-lever independent of said guard-lever, the said jaw-lever constructed with a downward projection 75 to form a handle by which it may be so turned independent of the guard-lever, substantially as described.

2. A buckle having a frame made from wire provided with a depending hook upon its 75 lower side, the two ends of the frame turned inward at the top, but so as to leave a space between, a guard also made from wire doubled, its two upper ends bent at right angles to the 80 line of the guard and so as to stand in the upper side of the frame between the two ends of that side of the frame, with a lever made from sheet metal closed around the said two 85 ends of the upper side of the frame and around the portion of the bar between the ends of the upper side of the frame to form a hinge between the guard, the frame, and the 90 lever, with a clamping-bar against which the said lever is adapted to clasp the strap, substantially as described.

3. A buckle consisting of a frame made from wire, the ends of the wire turned inward to form the upper side of the frame, but 95 so as to leave a space between the said ends, a swinging part also made from wire bent to form a longitudinal portion standing between the two ends of the upper side of the frame, combined with a sheet-metal clamping-lever 100 closed around the said two ends of the upper side of the frame and around the horizontal portion of the said swinging part and a clamping-bar against which the said lever is adapted to clasp the strap, substantially as described.

In testimony whereof I have signed this 105 specification in the presence of two subscribing witnesses.

DWIGHT L. SMITH.

Witnesses:

G. E. MINTIE,
H. L. SLAUSON.