(No Model.)

D. L. SMITH.

BUCKLE.

No. 506,949. Patented Oct. 17, 1893.

Fig. 1

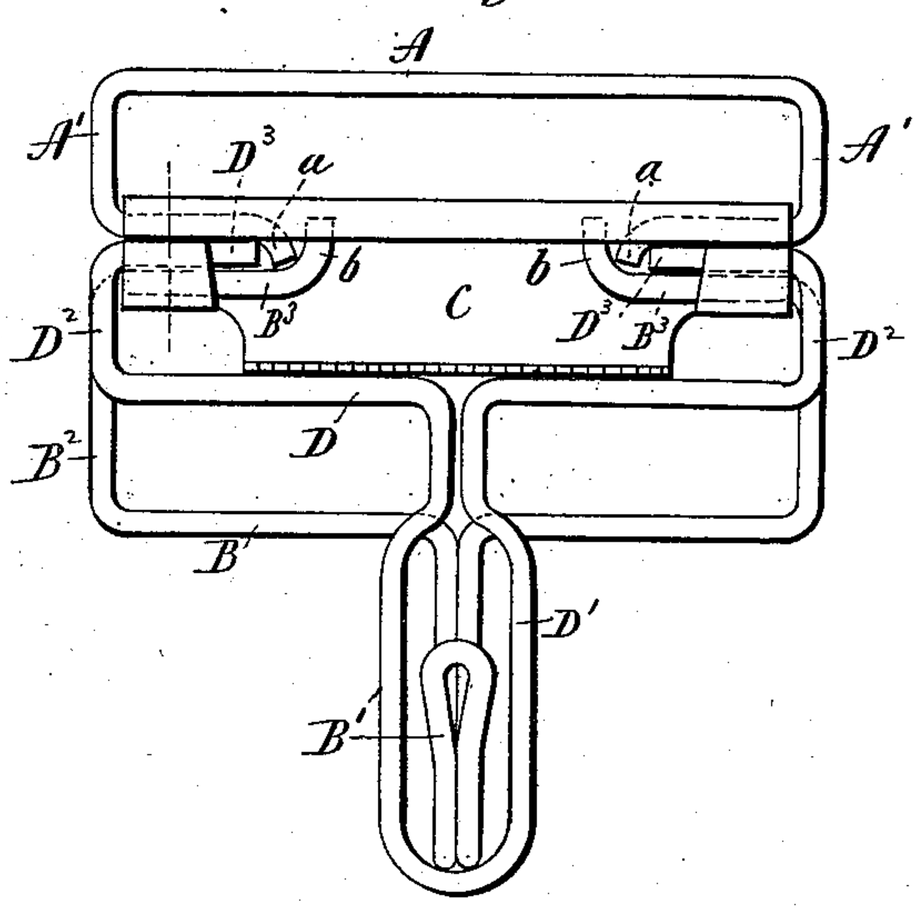


Fig. 2

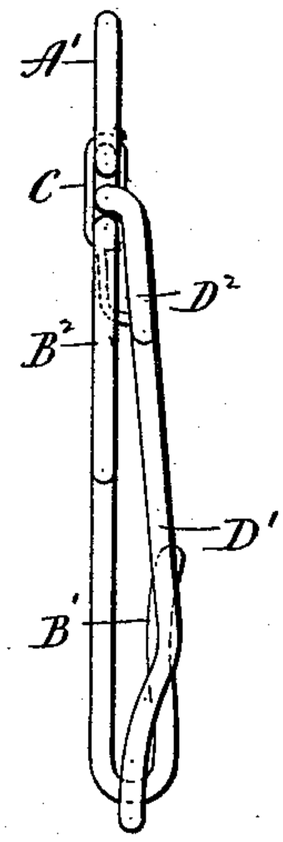


Fig. 3

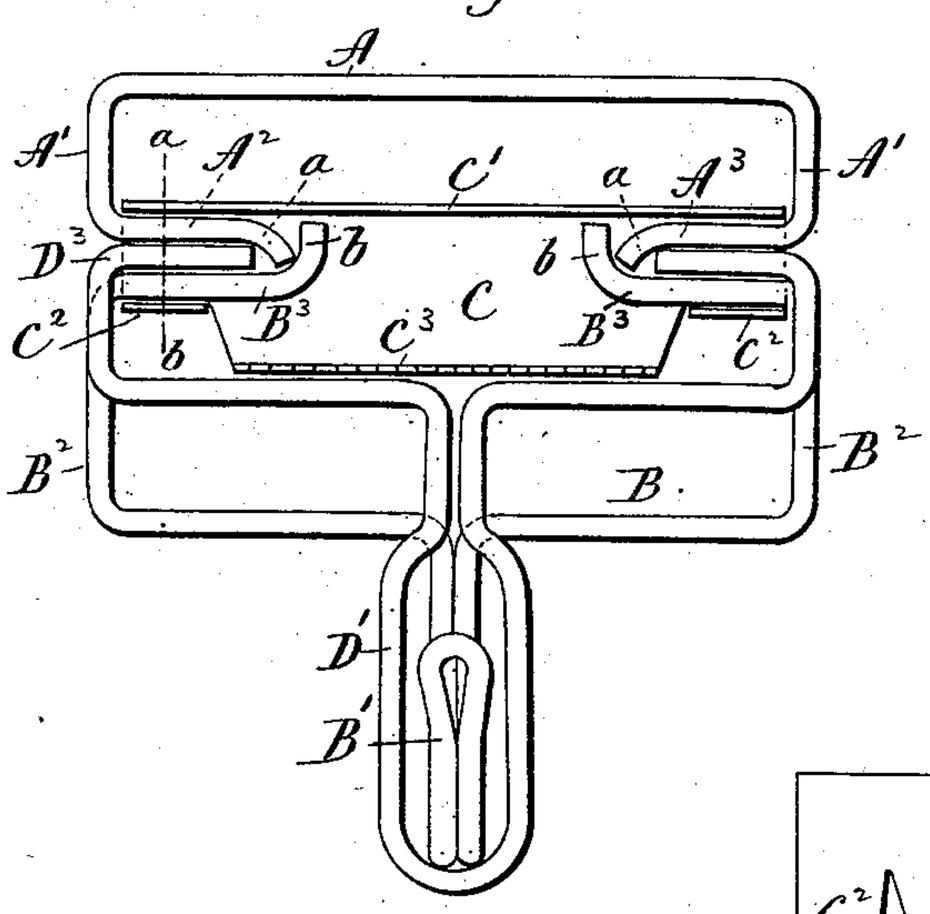


Fig. 4

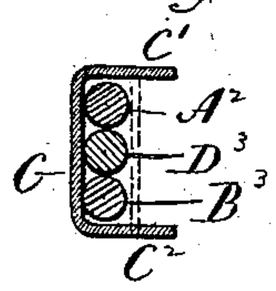
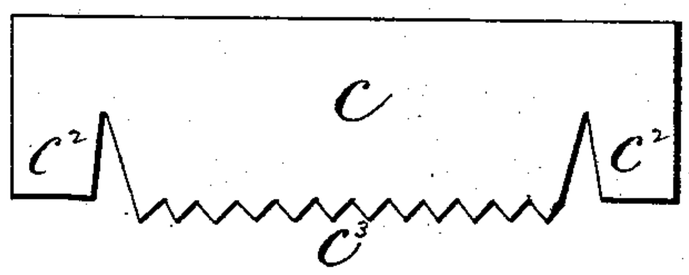


Fig. 5



Witnesses.
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Lillian D. Kelly

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Inventor
By atty
Earle Seymour

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. 506,949, dated October 17, 1893.

Application filed May 4, 1893. Serial No. 472,959. (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 view in front elevation of a buckle constructed in accordance with my invention; Fig. 2, a view thereof in side elevation; Fig. 3, a view of the buckle in front elevation after its parts have been assembled, but before the flange and fingers of its coupling plate have been turned down; Fig. 4, an enlarged view in transverse section on the line *a*—*b* of Fig. 3; Fig. 5, a detached plan view of the blank from which the coupling plate is formed.

My invention relates to an improvement in wire suspender buckles, and particularly to the buckle of United States Patent No. 439,436, granted to me under date of October 28, 1890, the object being to produce at a low cost for manufacture, a simple, convenient, reliable and effective device of neat and attractive appearance.

With these ends in view, my invention consists in a buckle having its frame composed of an upper and a lower member of wire, each having inwardly turned hooked ends, and a coupling-plate constrncted to receive and fold over the said ends, and to include a clamping jaw, and a wire lever having its ends turned inward to form pivots which are entered between the ends of the two members of the frame which are thereto maintained in sufficient separation.

My invention further consists in certain details of construction and combinations of parts as will be hereinafter described and pointed out in the claim.

In carrying out my invention, I construct the frame of the buckle with an upper member and a lower member, each formed from a single piece of wire, instead of making the frame of the buckle from a single piece of wire, as has been generally done heretofore. The said upper member comprises the upper side bar A, parallel, short frame-ends A′ A′, and inwardly turned ends A^2 A^2, having hooked extremities *a a*. The said lower member of the frame comprises the lower side bar B, from which the hook B′ centrally depends, the parallel frame-ends B^2 B^2, and the inwardly turned ends B^3 B^3, the extremities of which are hooked, as at *b b*. It will be observed that the long side bars A and B of the respective members of the frame, correspond to the ordinary upper and lower side bars of a wire buckle frame, and that the frame-ends A′ A′ of the upper frame member co-operate with the frame-ends B^2 B^2 of the lower frame-member, to form parallel ends, corresponding generally to the ends of a wire buckle frame. It will be observed that the ends B^3 B^3 of the lower member are longer than the corresponding ends A^2 A^2 of the upper member, and that the hooked extremities of the said ends are turned in opposite directions, the purpose of which will appear later on. The said members of the buckle-frame are coupled together by means of a sheet-metal coupling-plate, comprising a body C, a flange or leaf C′, located at the upper edge thereof, two fingers C^2 C^2 located at the opposite ends of the lower edge of the said plate, and a serrated clamping edge or jaw C^3, which projects downward from the body between the said fingers.

The lever of the buckle is made from wire, and comprises a bar D, from which a loop or eye D′ centrally depends, short parallel lever-ends D^2 D^2, and long pivot-ends D^3 D^3 extending inward toward each other. The said pivot-ends of the lever are inserted between the ends A^2 A^2 and B^3 B^3 of the frame-members, the said ends being thereto sufficiently separated, and co-operating with the coupling-plate to form sockets for the said pivot-ends.

In Fig. 3 of the drawings the parts of my improved buckle are shown after they have been assembled, but just before the flange C′ and the fingers C^2 C^2 of the coupling-plate have been turned down to bind the parts together. It may be here stated that by hook-

ing the extremities of the ends of the frame-members in opposite directions, the same are prevented from turning on their ends within the coupling-plate, and kept apart whereby the two members of the frame are maintained in the same horizontal plane and the said ends are kept apart for the insertion of the pivot ends of the lever between them.

By constructing a buckle-frame as described, I avoid the expense and unsightliness of the tubes which are ordinarily used on the frames of wire buckles to receive the ends of the wire, which are generally terminated in the upper side bars of the frames. Furthermore, by forming the buckle-frame with two members having inwardly turned ends, I am enabled to make the lever with pivot-ends of such length that the bands ordinarily employed on wire levers just above the loops or eyes thereof to keep their pivot-ends from spreading, may be dispensed with, for if the ends of the lever, as I use it, should spread apart some, they cannot spread enough to permit them to get out of place. By dispensing with this sheet-metal band, I also effect an economy of construction, both as to labor and material. I also find it cheaper to make the buckle-frame with an upper and a lower member as described from two independent pieces of wire, than to make it from a single piece of wire, bending the same to form deep U-shaped recesses in its ends to receive the pivot-ends of the lever.

I would have it understood that I do not limit myself to the exact construction herein shown and described, but hold myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of my invention.

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

The herein described suspender-buckle, having a frame composed of an upper and a lower member of wire formed independently of each other, and respectively constructed with inwardly turned hooked ends, a coupling-plate constructed to receive and fold over the said ends, and to form a clamping jaw, and a wire lever made with pivot ends adapted to be inserted between the said inwardly turned hooked ends of the frame-members which are maintained in the same plane by the co-operation of their hooked ends with the coupling-plate substantially as set forth.

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

DWIGHT L. SMITH.

Witnesses:
WM. L. KING,
MINNIE TRIPP.