(No Model.)

D. L. DURAND.

SUSPENDER BUCKLE.

No. 521,084. Patented June 5, 1894.

Fig. 1.

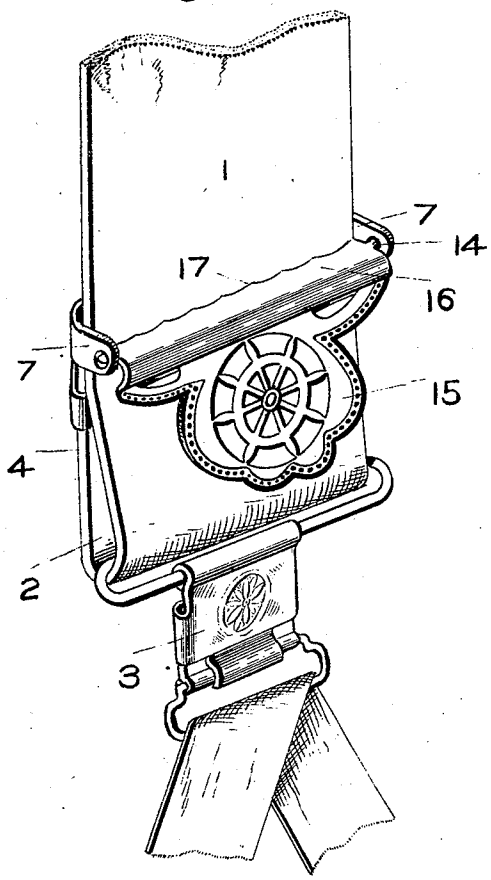


Fig. 2.

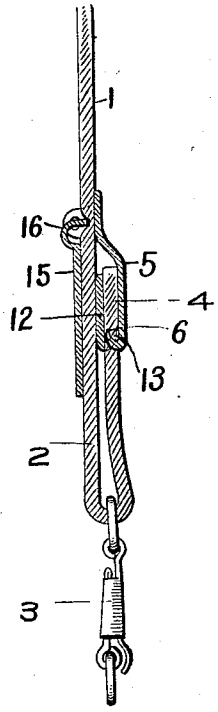
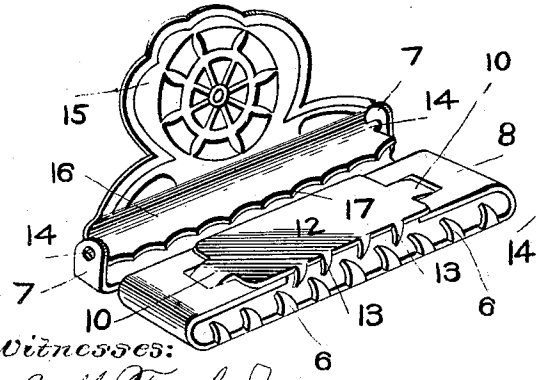


Fig. 3.



Witnesses:
J. M. Fowler Jr.
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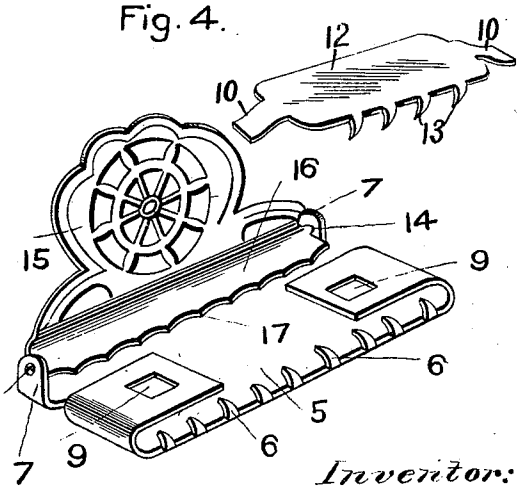
Fig. 4.



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DAVID L. DURAND, OF BIRMINGHAM, CONNECTICUT.

SUSPENDER-BUCKLE.

SPECIFICATION forming part of Letters Patent No. 521,084, dated June 5, 1894.

Application filed April 20, 1894. Serial No. 508,343. (No model.)

To all whom it may concern:

Be it known that I, DAVID L. DURAND, a citizen of the United States, residing at Birmingham, in the county of New Haven and State of Connecticut, have invented new and useful Improvements in Suspender-Buckles, of which the following is a specification.

This invention relates to suspender buckles or clasps, and more particularly to that type of suspender buckles composed of a pivoted clamping-lever, and a sheet metal frame or plate provided with teeth which serve to firmly secure one end of a suspender-web which passes between the clamping-lever and the frame or plate, and is in the form of a loop carrying the device by which the suspender end or cast-off is supported, such loop being adapted to be lengthened or shortened by sliding the web between the lever and the frame or plate.

The object of my invention is to provide a novel, simple, efficient, and economical two-part or sectional buckle or clasp frame for firmly securing the end of the web.

To accomplish this object my invention consists essentially in a suspender buckle or clasp composed of a sheet metal-plate having a toothed lower edge and flanges bent around toward one another, and each formed with a slot or orifice, and a connecting tie-plate having a toothed edge, and provided at its ends with tongue pieces inserted into the slots or orifices in the said bent flanges, said flanges and tie-plate being adapted to be compressed upon the end of a suspender-web for rigidly attaching such end to the buckle or clasp.

The invention also consists in a suspender-buckle composed of a sheet metal plate having a toothed lower edge, lateral, pivot-supporting lugs at its upper portion, and flanges bent round toward one another and each formed with a slot or orifice, a connecting tie-plate having a toothed edge and provided at its ends with tongue pieces inserted into the slots or orifices in the said bent flanges, and a flanged clamping-lever pivoted to said pivot-supporting lugs, said end flanges and said tie-plate being adapted to be compressed upon the end of a suspender-web for rigidly attaching such end, as will hereinafter more fully appear.

The invention is illustrated by the accompanying drawings, in which—

Figure 1 is a perspective view on an enlarged scale of a portion of a suspender-web provided with my improved lever buckle. Fig. 2 is a vertical central sectional view of the same. Fig. 3 is a detail perspective view of the buckle prior to inserting the end of the web and compressing the buckle-frame thereupon; and Fig. 4 is a similar view, showing the tie-plate detached.

In order to enable those skilled in the art to make and use my invention, I will now describe the same in detail, referring to the drawings, wherein—

The numeral 1 indicates a suspender-web designed for that type of suspenders wherein the end of the web lying in front of the wearer is folded to form a loop 2, which carries a suitable cast-off 3 to which the ordinary suspender end, not here shown, is attached. The cast-off may be of any construction suitable for the conditions required, and, although I have illustrated a particular form of cast-off, I do not confine myself to any specific construction. The end 4 of the suspender-web is designed to be firmly secured to the lever-buckle; and to accomplish this in a very simple and economical manner I construct the buckle-frame of a sheet-metal plate 5 formed at its lower edge with a series of teeth 6 extending inward approximately at right angles to the plane of the plate. The ends of the plate near its upper edge are provided with laterally projecting pivot-supporting lugs 7, and below these lugs, the ends of the plate are formed with flanges 8 which are bent around and extend toward one another, but their extremities are separated a considerable distance apart. The flanges 8 constitute portions of the rear wall of the buckle-frame, and each flange is formed with a rectangular or other suitably shaped slot or orifice 9 to receive the narrow tongue pieces 10 formed on the extremities of a connecting tie-plate 12, the body of which is coextensive in height or width with the height or width of the flanges 8. The lower edge of the connecting tie-plate 12 is formed with a series of teeth 13 which extend inward approximately at right

angles to the body of the tie-plate, in such manner that the teeth 6 on the lower edge of the frame or plate 5 lie directly opposite and project toward the teeth 13 on the lower edge of the tie-plate.

To firmly secure the end 4 of the suspender-web, it is inserted into the buckle-frame between the front wall thereof and the flanges 8 and tie-plate 12, and then the buckle-frame is compressed, so that the flanges 10 and the tie-plate 12 are flattened down upon the web, whereby the teeth 6 and 13 are interlocked with the web, and the tongues 10 are firmly and rigidly secured in engagement with the slotted portions 9 of the flanges 8. By this means the end of the suspender-web is attached to the buckle-frame in a very strong and substantial manner, and the continuity of the rear wall of the buckle-frame is preserved through the medium of the connecting tie-plate 12, which, as before stated, is coextensive in height or width with the height or width of the flanges 8, so that a nicely finished and smooth appearance is imparted to the buckle, and a desirable and useful article is obtained.

The pivot-supporting lugs 7 serve to receive and support the pivot pins 14 on the ends of a clamping-lever 15 which is provided with a clamping flange 16, preferably having a series of teeth 17 along its edge, so that the main body of the suspender-web which lies between the front wall of the buckle frame and the clamping-lever can be gripped by the latter for the purpose of holding the parts in position after the suspender-web has been adjusted to lengthen or shorten the loop 2, as usual in this type of suspenders.

The improved buckle-frame can be very rapidly manufactured by simplified machinery, and the parts comprising the buckle can be assembled and placed on the market for subsequent application by manufacturers of suspenders, while the frame can be made of pieces of sheet metal which could not be practically used in the construction of buckle-frames composed wholly of a single piece of sheet metal, or of two pieces of sheet metal coequal or coextensive in dimensions.

The provision of the connecting tie-plate 12 renders it possible to make the flanges 8 comparatively short, because this tie-plate co-operates with the flanges 8 to constitute the rear wall of the buckle-frame and preserves the continuity thereof, and in addition thereto produces a smooth rear wall which is strong, durable, and efficient in actual use. The connecting link formed by the tie-plate 12 sufficiently braces and supports the flanges 8, so that they will not become disarranged, and when once applied to a suspender-web, a very secure attachment is obtained.

As regards the buckle or clasp-frame having the end flanges bent round and provided with orifices, and the tie-plate having tongue-pieces engaged with said orifices, and the whole adapted to be secured to the end of a suspender-web in the manner explained, I do not confine myself to the use of the clamping-lever and the pivot-supporting lugs therefor.

Having thus described my invention, what I claim is—

1. A suspender-buckle or clasp, consisting of a sheet metal plate having a toothed lower edge and end flanges which are bent around toward one another and are each formed with a slot or orifice, and a connecting tie-plate having a toothed edge and provided at its ends with projecting tongue-pieces inserted into the slots or orifices of the said end flanges, said end flanges and tie-plate being adapted to be compressed upon the end of a suspender-web, substantially as and for the purposes described.

2. A suspender-buckle, consisting of a sheet metal plate having a toothed lower edge, lateral, pivot-supporting lugs at its upper portion, and end flanges which are bent around toward one another and are each formed with a slot or orifice, a connecting tie-plate having a toothed edge and provided at its ends with projecting tongue pieces inserted into the slots or orifices of the said end flanges, and a flanged clamping-lever pivoted to said pivot-supporting lugs, said end flanges and said tie-plate being adapted to be compressed upon the end of a suspender-web, substantially as and for the purposes described.

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

DAVID L. DURAND. [L. S.]

Witnesses:
JOHN J. MCCABE,
A. H. NORRIS.