

No. 610,545.

Patented Sept. 13. 1898.

C. W. LATIMER.
SUSPENDER BUCKLE.

(Application filed Sept. 13, 1897.)

(No Model.)

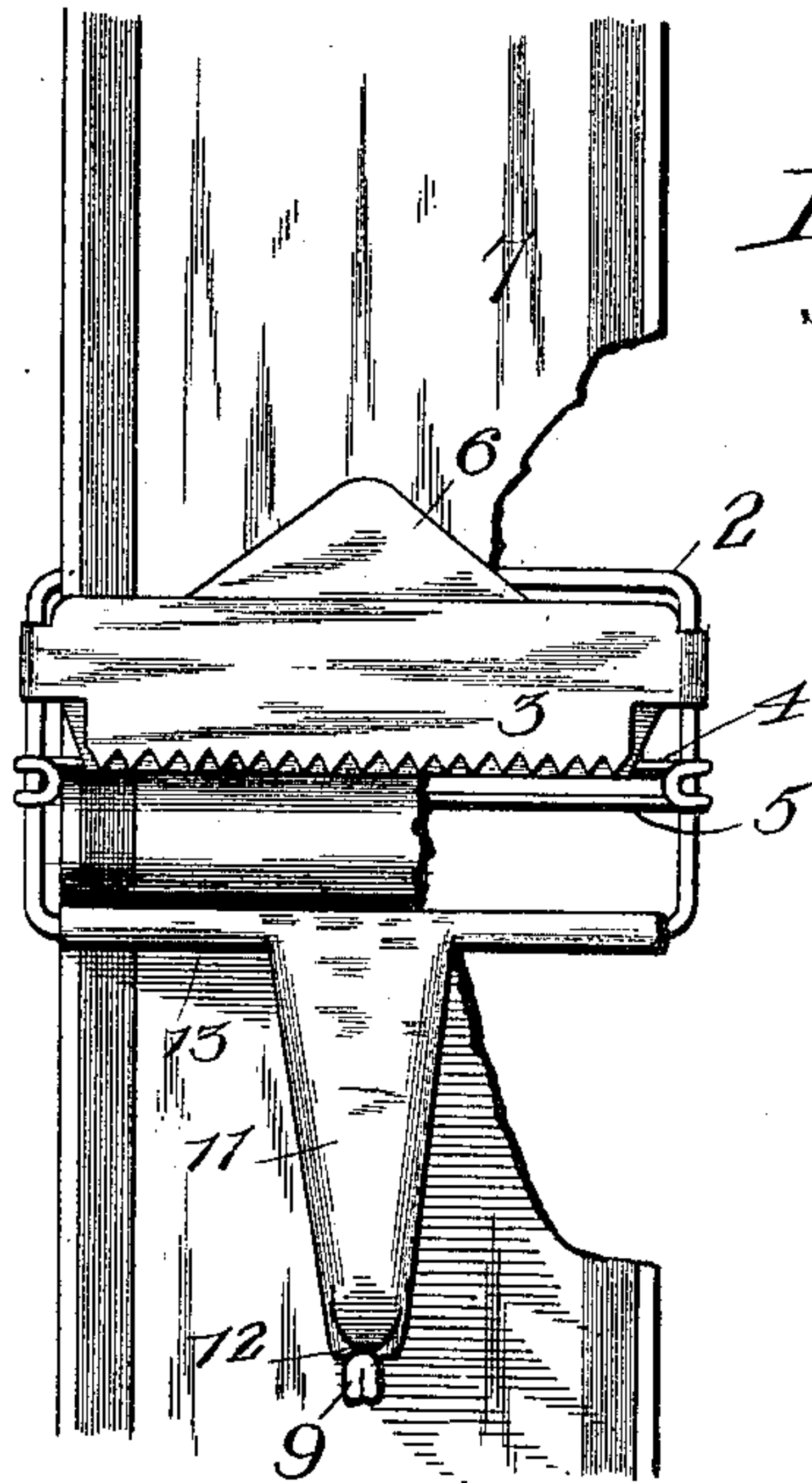


Fig. 1.

Fig. 2.

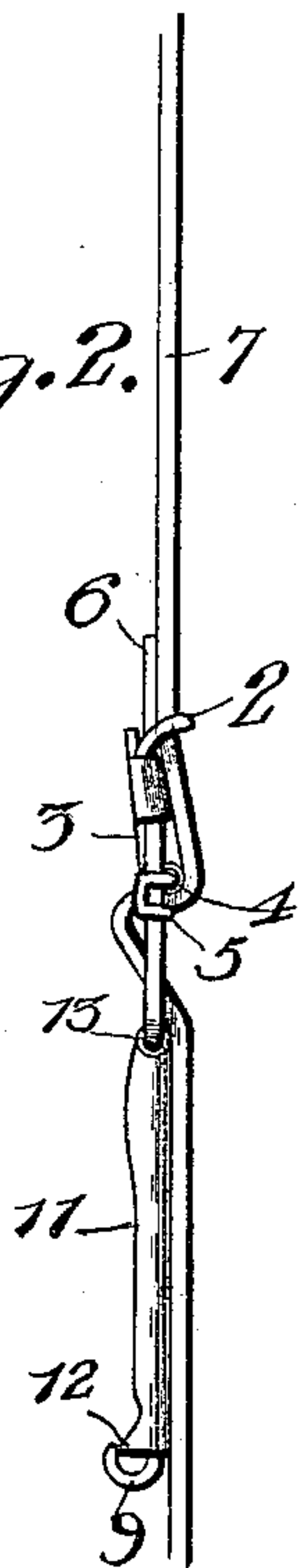


Fig. 3.

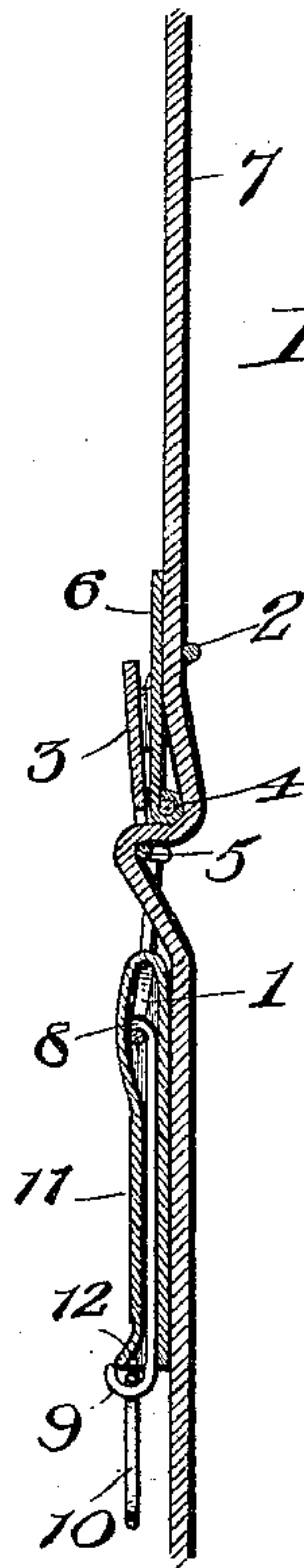


Fig. 4.

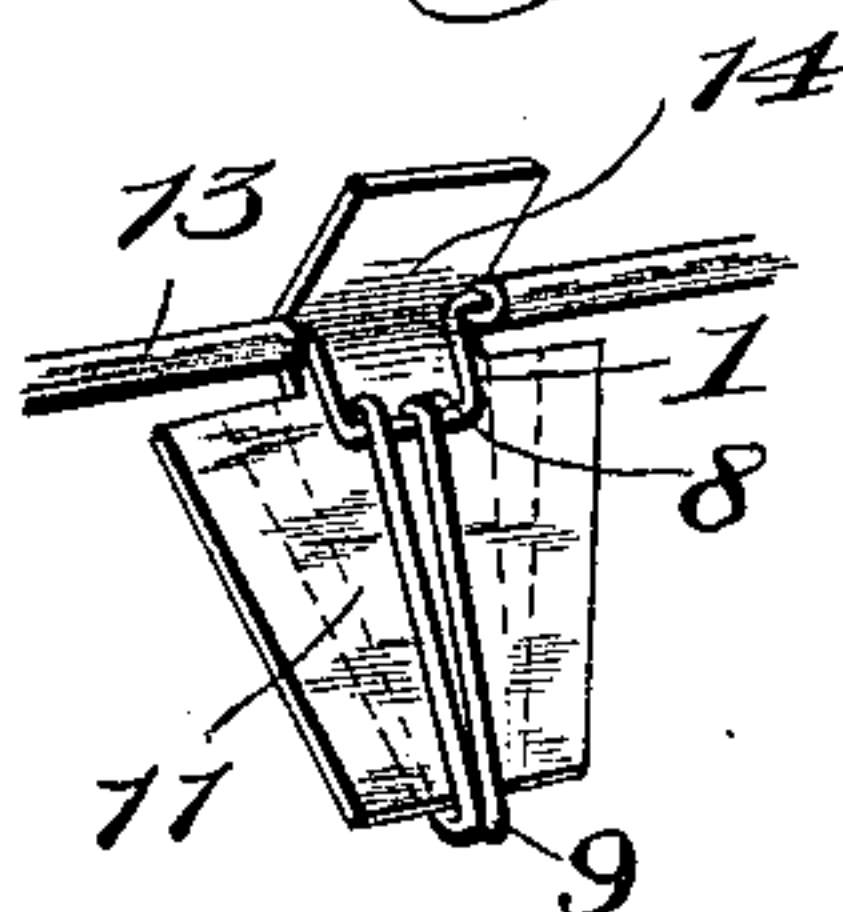
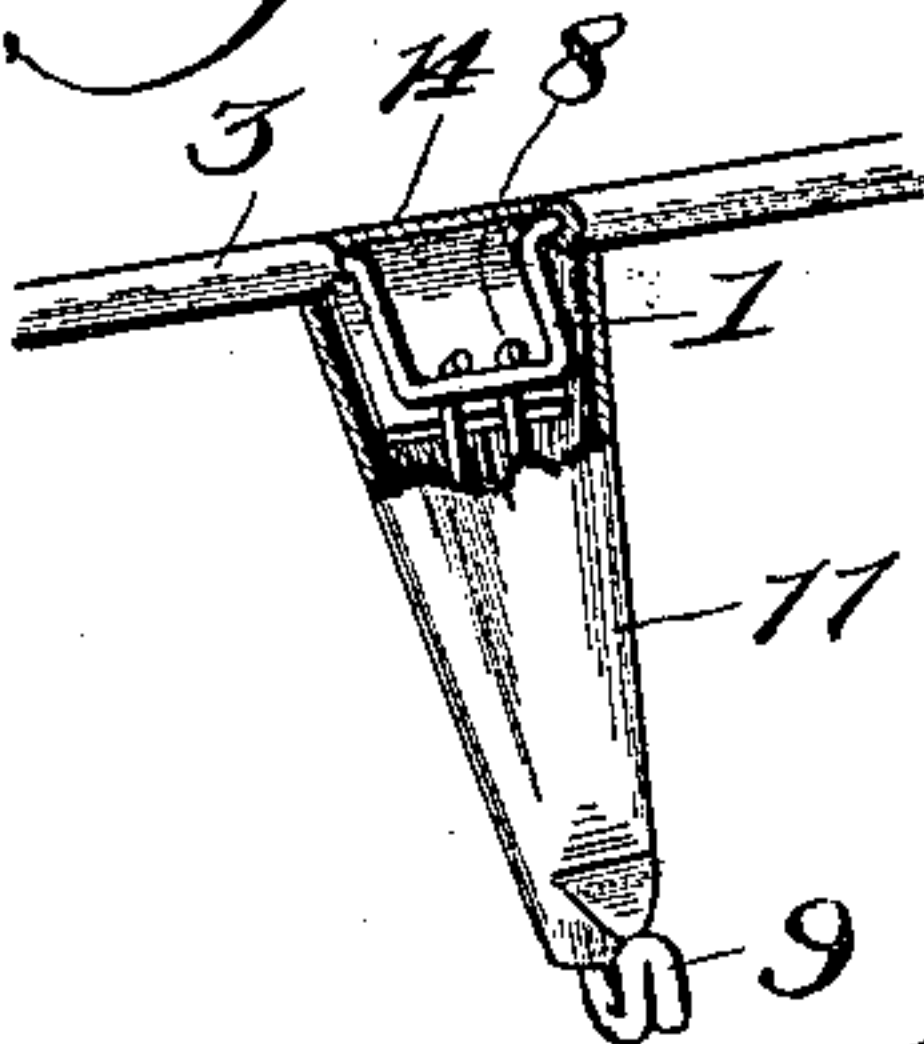


Fig. 5.



Inventor

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Witnesses

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UNITED STATES PATENT OFFICE.

CLARK W. LATIMER, OF PORTAGE, WISCONSIN.

SUSPENDER-BUCKLE.

SPECIFICATION forming part of Letters Patent No. 610,545, dated September 13, 1898.

Application filed September 13, 1897. Serial No. 651,493. (No model.)

To all whom it may concern:

Be it known that I, CLARK W. LATIMER, a citizen of the United States, residing at Portage, in the county of Columbia and State of Wisconsin, have invented a new and useful Suspende-Buckle, of which the following is a specification.

This invention relates to buckles designed primarily for use in connection with suspenders and various types of supporters and which can be applied to tapes or straps in any relation or for any required purpose.

An essential feature of the improvement is to combine with the buckle a stationary cross-bar toothed at its lower edge, and a slide to which the tape or web is applied and which is moved by the strain or pull upon the tape or web to bring the latter into engagement with or disengagement from the toothed cross-bar, according as it is required to fix the position of the web when adjusted or permit it to be shifted to any required position.

The improvement also aims to simplify the general construction of the buckle, increase its effectiveness, and guard against any accidental slipping of the tape or web when the parts are moved to their required position.

For a full understanding of the merits and advantages of the invention reference is to be had to the accompanying drawings and the following description.

The improvement is susceptible of various changes in the form, proportion, and the minor details of construction without departing from the principle or sacrificing any of the advantages thereof, and to a full disclosure of the invention an adaptation thereof is shown in the accompanying drawings, in which—

Figure 1 is a front view of the improved buckle, showing it applied to a web or tape, a portion of the latter being broken away to expose the adjacent end of the buckle. Fig. 2 is an edge or side view of the buckle. Fig. 3 is a vertical central section thereof. Fig. 4 is a detail view in perspective, showing the means for connecting the hook with the buckle-frame. Fig. 5 is a detail perspective view of the parts illustrated in Fig. 4, parts being broken away.

Corresponding and like parts are referred

to in the following description and indicated in the several views of the drawings by the same reference characters.

The buckle-frame in front elevation is of rectangular and oblong form, and its lower bar is provided intermediate of its ends with a drop-loop 1, and the top bar 2 is deflected rearwardly in the plane of the frame, as illustrated most clearly in Figs. 2 and 3. A cross-bar 3 is toothed at its lower edge and secured at its ends to the side bars of the buckle-frame in any substantial manner, preferably by having its end portions bent therearound, the portions of the side bars receiving the terminals of the cross-bar 3 being bent, as shown most clearly in Fig. 2, to prevent any vertical movement of the cross-bar 3.

A slide is applied to the buckle-frame and secured to the side bars thereof, so as to move in the space formed between the cross-bar 3 and lower bar of the buckle-frame, and this slide comprises parallel bars 4 and 5, the upper bar 4 being in the rear of the plane of the buckle-frame and the lower bar 5 in advance of the said plane. This slide may be suitably constructed and is preferably formed of wire bent to provide a narrow frame and having its terminal portions recurved or bent, so as to embrace the side bars of the buckle-frame, so as to slide thereon and be held in place thereby. A plate 6 projects from the upper portion of the slide and comes in the rear of the cross-bar 3 and in front of the top bar 2 and prevents the tape or web coming in contact with the toothed edge of the cross-bar 3 when the slide is moved, so as to admit of the free adjustment of the web to the desired position. The plate 6 has its lower edge formed into a roll, which receives the upper bar 4, whereby a pivotal or hinge connection is had between the slide and plate, whereby the latter can turn when required.

The tape or web 7 when applied to the buckle passes in front of the top bar 2, in rear of the plate 6 and cross-bar 3, beneath the upper bar 4, over and in front of the lower bar 5, and thence in rear of the bottom bar of the buckle-frame. Upon holding the buckle-frame and pulling downward upon the lower end of the tape 7 the slide will move away from the cross-bar 3 and admit of the tape being drawn through the buckle, and upon

drawing upward on the upper portion of the tape the slide will move upward and bring the tape into engagement with the toothed edge of the cross-bar 3, thereby securing it in the adjusted position. By moving the slide away from the toothed cross-bar 3 and holding it and the buckle-frame the tape or web may be moved freely up or down, and when properly adjusted is held fast by releasing the slide, which, moving toward the toothed cross-bar, will secure the tape or web in the manner set forth.

The hook is formed of a length of wire, which is doubled upon itself and has its end portions extending about parallel and bent, as shown at 8, the folded end of the doubled wire being bent to provide the hook 9, which receives the ring or link 10 of the end or part to be attached to the buckle. The bent ends 8 engage with the drop-loop 1 and sustain the strain imposed upon the hook when in service. A casing incloses the upper portion of the hook and the drop-loop 1 and holds the bent ends 8 in engagement with the drop-loop, but does not grip the shank members of the hook with sufficient force to prevent the hook from turning laterally when it is required to engage or disengage the ring, link, or part 10 therefrom. This casing 11 has its lower end deflected and formed into a point 12, which comes opposite the extremity of the hook 9 and projects across the space thereof, so as to retain the ring 10 in position against accidental displacement. The hook 9 is turned aside to permit of the ring 10 being coupled thereto or removed therefrom, and when released is brought into a normal position by the torsional action of its shank members, which latter are subjected to tension when turning the hook 9 to one side or the other of a normal position, as will be readily understood.

The casing 11 is constructed of a sheet-metal blank having lateral extensions which are formed into a roll 13 and receive the portions of the lower frame-bar upon opposite sides of the drop-loop 1. An end portion of the sheet-metal blank is bent over the open end of the drop-loop and closes the latter, as indicated at 14, and the opposite end has its longitudinal edge portions folded to receive the shank members of the hook 9 and overlap the bent end portion 14, whereby the casing 11 is provided, as indicated.

Having thus described the invention, what is claimed as new is—

1. In a buckle, the combination with the

frame, and an upper cross-bar having its lower edge toothed, of a slide having loose connection at its ends with the side bars of the said frame and comprising upper and lower transverse bars spaced apart and arranged in different planes with respect to each other and the buckle-frame, substantially as set forth for the purpose specified.

2. In a buckle, the combination with the frame, and an upper cross-bar having its lower edge toothed, of a slide applied to the buckle-frame and comprising upper and lower parallel bars, and a plate having connection with the upper portion of the slide and movable therewith, and having its upper portion coming in the space formed between the toothed cross-bar and the top bar of the buckle-frame, substantially as specified.

3. In a suspender-buckle, the combination of a hook having the terminals of its shank members bent, a loop receiving the bent terminals of the hook, and a casing inclosing the loop and shank members of the hook and having a pointed end to extend across the space of the hook and retain a ring or link in engagement therewith, substantially as set forth.

4. In a suspender-buckle, the combination of a hook comprising shank members having their terminals bent, a casing inclosing the said shank members, and a projecting portion forming an extremity of the casing projecting across the throat or space of the hook to retain a ring or link in engagement therewith, substantially as set forth.

5. In combination, a buckle-frame having a drop-loop, a hook having shank members formed with bent terminals engaging with the drop-loop, and a plate or blank having a portion formed into a roll and receiving the parts of the frame-bar upon opposite sides of the drop-loop, and having an end portion bent over and inclosing the said drop-loop, and having longitudinal edge portions of its opposite end bent to form a case, substantially as shown for the purpose set forth, said case having a pointed end to extend over the throat of the hook to retain a ring or part in engagement therewith.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

CLARK W. LATIMER.

Witnesses:

J. H. ROGERS,

R. B. WENTWORTH.