July 8, 1930. H. E. DOVE 1,770,129

STOCKING SUPPORTER

Filed April 10, 1928

Fig. 1.

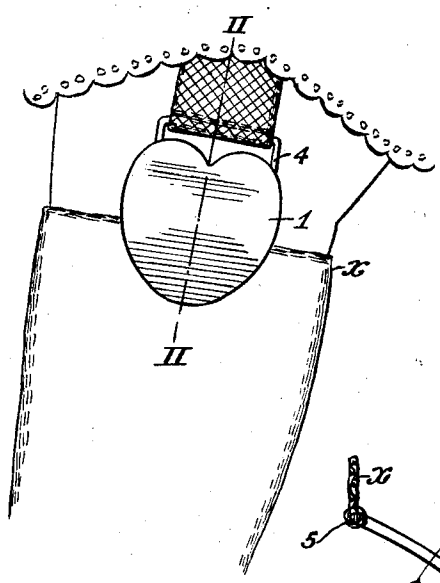


Fig. 2.

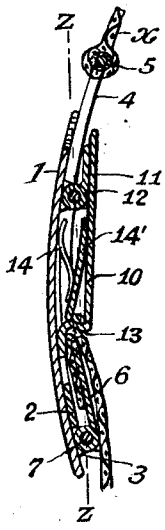


Fig. 3.

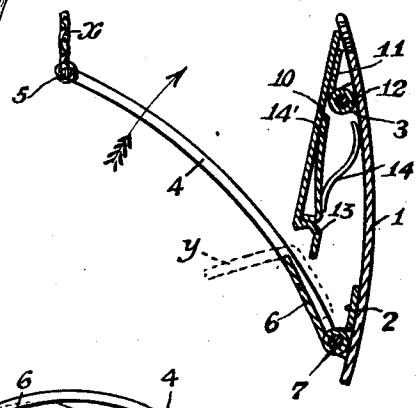


Fig. 4.

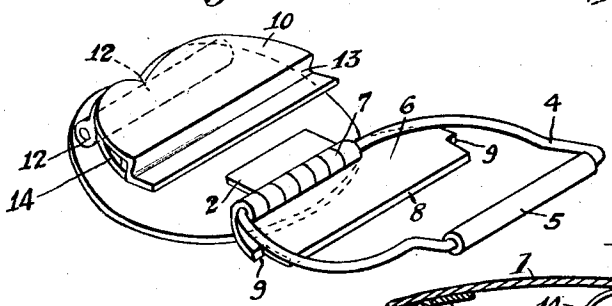


Fig. 5.

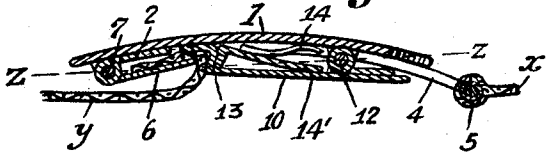
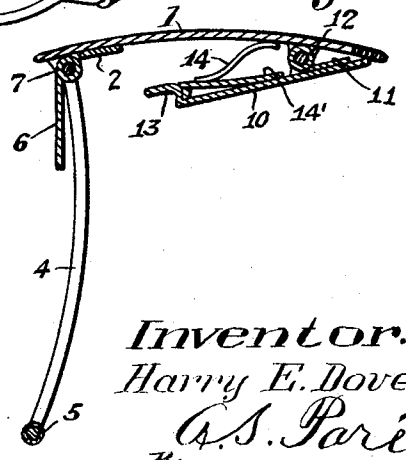


Fig. 6.



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Patented July 8, 1930 1,770,129

UNITED STATES PATENT OFFICE

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STOCKING SUPPORTER

Application filed April 10, 1928. Serial No. 268,835.

This invention relates to improvements in clasps and more particularly to spring clasps for hose supporters and the like.

Among the objects of the invention are to provide a clasp which is easily attached and detached from the article supported, yet so combined and arranged that the normal supporting stress tends to maintain the clasp in the operative position.

Another object is to increase the area of supporting contact without exceeding the desirable thickness and size of the clasp.

A further object is to simplify the construction and operation of the clasp so that its parts may be formed and assembled within reasonable costs, and utilized in an obvious manner. Other objects and advantages will appear as the description progresses.

In this specification and the annexed drawings the invention is illustrated in the form considered to be the best, but I do not wish to be understood as confining it to this form because it may be embodied in other forms, and it is also to be understood that in and by the claims following the description it is desired to cover the invention in whatsoever form it may be embodied.

In the accompanying one sheet of drawings:

Fig. 1 is a front elevation of a hose supporter clasp constructed and applied in accordance with this invention.

Fig. 2 is a longitudinal section taken on the line II—II, of the same in operative position.

Fig. 3 is a similar view of the same in the inoperative position.

Fig. 4 is a perspective view of the reverse side of the clasp in the open or inoperative position.

Fig. 5 is a view similar to Fig. 2, illustrating the use of the clasp as a belt buckle.

Fig. 6 is a similar view showing the clasp or buckle in the open or inoperative position.

In detail the construction illustrated in the drawings comprises the resilient bow plate 1. This plate is formed of sheet metal having a proper degree of spring temper, to cause it to return to its normal form when the clasp is in the open or normal position. This plate may be of any suitable outline and ornamentally decorated.

The transverse hinge straps or bearings 2 and 3 are fixed in spaced relation to the back of the plate 1 at or near its opposite ends.

The support loop 4, has its opposite ends turned inward to extend through the hinge strap 2 to form the pintle of this hinge. The bight of the loop is provided with the tubular sleeve 5, see Fig. 4, to reduce wear on the supporting strap X, looped around it. Hinge straps or bearings 3 are provided with the usual pintle 12.

The jaw 6 has interspaced eyelets interlocking with similar eyelets on the strap 2, and pivoted on the said pintle of the loop 4, to form a hinge 7 for the jaw 6, which is thus pivoted to the plate 1.

The edge 8 of this jaw is preferably narrower than the inner width of the loop 6, to form the shoulders 9—9 which extend outward of the width of the loop, see Fig. 4.

The opposing jaw 10 is provided with the hinge strap 11, having a tube fixed in any desired manner thereto cooperating with pintle 12 and interlocked with the hinge straps or bearings 3, which engage the pintle 12 to form a hinge for the jaw 10 which is thereby pivoted to the plate 1.

The jaw 10 overlaps the edge 8 and is offset to form the transverse channel 13 cooperating with the edge 8 of the opposing jaw 6, to form a clamp.

The combined length of the cooperating jaws 6 and 10, between the pivots 7 and 12, is greater than the normal distance between said pivots on the chord line Z—Z, see Figs. 2–5. This causes the jaws to spring past the chord line, as in Figs. 2–5, against the resilient tension of the curved plate 1. The tension thus exerted tends to lock the jaws in the closed position.

The finger spring 14 is soldered or otherwise secured to the body of the plate 14′, which is fixed in any suitable manner to the back of the jaw 10. This spring bears against the back of the plate 1 and tends to force the jaw 10 outward to meet the jaw 6, so that the edge 8 can engage the channel 13 before

the jaws are sprung into the clamping position.

As a hose supporter this clasp operates substantially as follows, see Fig. 3. The clasp is suspended from the strap X. The hem Y of the hose is looped over the edge 8 of the jaw 6, the elastic strap X transmitting the strain through the loop 4 to the hinge 7. The plate 1, is then swung upward on the hinge 7 until the channel 13 engages the edge 8 with the hem of the hose interposed and tightly clamped when the jaws are forced into the locked position shown in Figs. 2–5.

The hose is released by grasping the lateral edges or the top of the plate 1 and swinging it outward. The shoulders 9—9 being held behind the loop 4 causes the jaws 6 and 10 to separate at the knee 8—13 and swing on their respective pivots 7—12.

The tension or weight applied to the loop 4 is transmitted directly to the hinge 7. The edge 8 of the jaw 6 being behind the chord line Z—Z, no strain applied to the loop 4 can alter the engagement of the edges 8—13 of the jaws.

In the natural use of this clasp no accidental openings of the jaws is probable, yet they may be easily disengaged by pulling the plate 1 outward, as described, or by pushing a finger behind the loop 4 and forcing the jaw 10 outward.

Having thus described this invention what I claim and desire to secure by Letters Patent is:

1. A clasp comprising a resilient plate, a pair of interspaced hinges connected to said plate, a pair of overlapping jaws hingedly connected to said hinges, the combined length of said jaws being greater than the distance between the axes of said hinges, the free ends of said jaws cooperating to form a clamp and the resilient plate being so constructed as to allow locking of said clamp.

2. A clasp comprising a resilient plate having interspaced pivots thereon; a pair of overlapping jaws engaging said pivots and each other with a pivotal action, said resilient plate being so constructed as to allow said jaws to pass dead centre so as to lock said jaws together.

3. A clasp comprising a resilient bow plate having interspaced pivots thereon; a pair of jaws hinged to said pivots respectively and having their free ends overlapping each other to form a clamp, said clamp being adapted to spring past the chord line through said pivot axes, against the resilience of said plate.

4. A clasp comprising a resilient bow plate having interspaced pivots thereon; a pair of jaws hinged to said pivots respectively, the free end of one of said jaws being offset and overlapping the free end of the adjacent jaw to form a clamp which is adapted to be locked against the resilience of said plate.

5. A clasp comprising a resilient bow plate having interspaced pivots thereon; a pair of jaws hinged to said pivots and having overlapping opposed free ends forming a clamp, said clamp being adapted to swing across a chord line between the axes of said interspaced pivots due to the resilience of said plate.

6. A clasp comprising a resilient plate, a pair of interspaced pivots on said plate; a pair of jaws engaging said pivots respectively and having overlapping free ends forming a clamp; and a loop surrounding said jaws and extending from one of said interspaced pivots and operatively engaging one of said jaws.

7. A clasp comprising a resilient plate; a loop pivoted to said plate; a jaw pivoted on said loop pivot and operatively engaging said loop; an opposing jaw pivoted on said plate and having an offset free end overlapping the free end of said other jaw to form a clamp.

8. A clasp comprising a resilient bow plate; interspaced hinges fixed to said plate, a loop adapted to encircle one of said hinges and bent to form the pintle thereof; a jaw pivoted on said pintle and operatively engaging said loop; an opposing jaw engaging said other hinge and having an offset free end overlapping the free end of said other jaw to form a clamp adapted to swing into the bow of said plate past a chord line through the axes of said hinge pivots for locking said clamp; and a spring interposed between one of said jaws and said plate.

In testimony that I claim the foregoing I have hereto set my hand this 5th day of April, 1928.

HARRY EWART DOVE.