Dec. 10, 1957 R. F. JORGENSEN 2,815,557

CLASP

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Fig. 1.

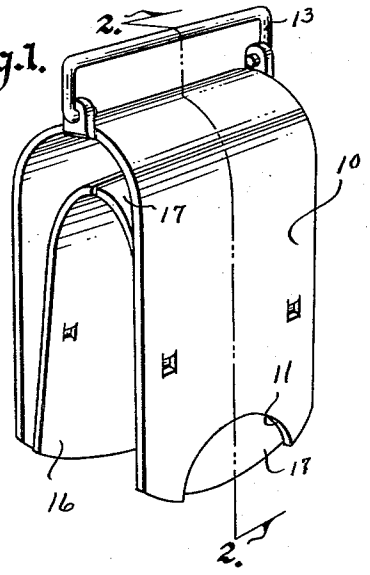


Fig. 2.

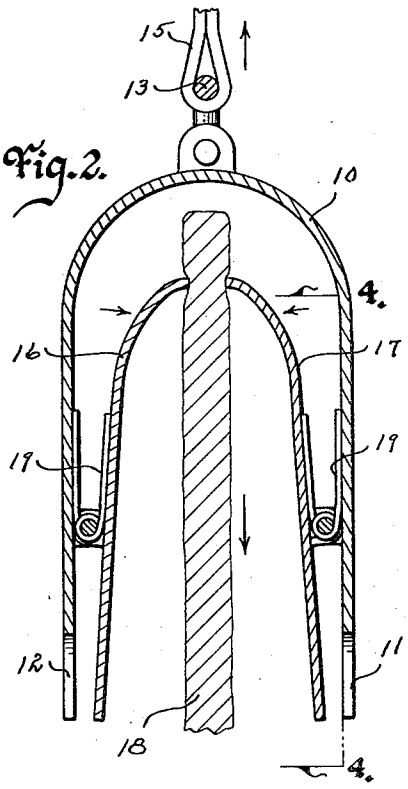


Fig. 3.

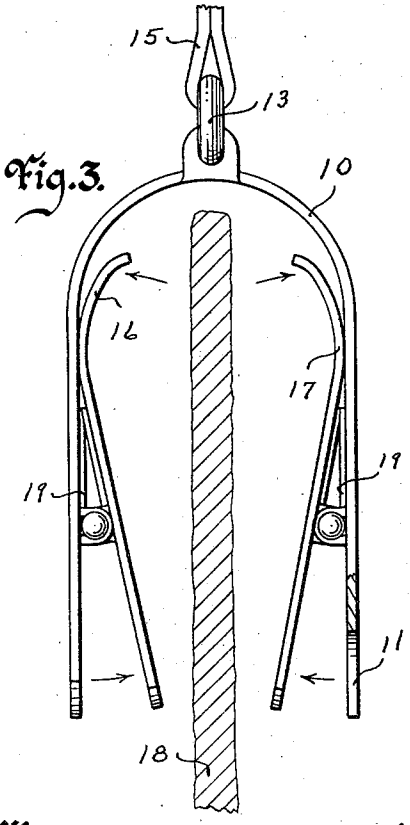
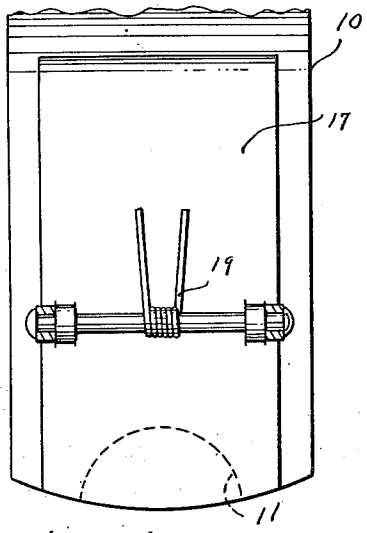


Fig. 4.



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CLASP

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2 Claims. (Cl. 24—252)

This invention relates to manually actuated devices for grasping material and objects such as cloth and like, and is in the field of clasps, catches, clamps, snaps and similar mechanical holding mechanism.

Specifically my invention may be used for such purposes as necktie holders, a suspender clasp and sheet material holders. The snaps herebefore used for such purposes are objectionable in that they readily and easily slip off the material sought to be held. The reason for this is that the pivot points of their jaws are located prior to the jaw contact point on the material being held. Obviously by such a construction and arrangement of parts, any pull on the material operates to spread the jaws and permit the accidental removal of the material from the clamping jaws.

Therefore, the principal object of my invention is to provide a material catching means that is so constructed that any pull on the material being held, or on the catching means will cause the jaws thereof to close even tighter onto the material being held.

A further object of this invention is to provide a clasp that is easily actuated.

A still further object of my invention is to provide a self-tightening clasp means that is compact, economical in manufacture, durable in use, and refined in appearance.

These and other objects will be apparent to those skilled in the art.

My invention consists in the construction, arrangement, and combination of the various parts of the device, whereby the objects contemplated are attained as hereinafter more fully set forth, specifically pointed out in my claims, and illustrated in the accompanying drawings, in which:

Fig. 1 is a perspective view of my clasp ready for use,

Fig. 2 is an enlarged longitudinal sectional view of the device taken on a line similar to line 2—2 of Fig. 1, and shows the device in actual use,

Fig. 3 is an enlarged end view of the snap showing the position of its parts when removing it from or replacing it on an object to be held, and

Fig. 4 is an enlarged side view of a portion of the clasp taken on line 4—4 of Fig. 2 and more fully illustrates its construction.

In these drawings I have used the numeral **10** to designate the clasp base or shell housing which is in the form of an inverted U-member as shown in Fig. 1. This U-member is of suitable width and has a cut-away open passageway **11** and **12** in each of its lower ends respectively. The numeral **13** designates a hinged or otherwise fastened bail on the top of the shell **10**. This member **13** is for possible securing of the device to an object **15** such as a suspender, cable, rope, belt, or like as shown in Fig. 2. The numerals **16** and **17** designate the two jaw portions respectively. These two jaws are hinged by any suitable means on the inner sides of the two downwardly extending leg portions of the inverted U-member **10**, respectively. The forward and effective end of the jaws extend upwardly and toward the inside top of the U-portion with the

pivot points of the jaws at a substantially lower plane as shown in Fig. 3. With the upper free end portions of the jaws curved toward each other to engage a member **18** such as a trouser top, any pull downwardly on the member **18**, would tend to close and tighten the jaws on the member **18**. The reason for this is that the pivot points of the jaws are past the point of material contact, i. e., downwardly and at each side of the material **18**, as shown in Fig. 2. Therefore, any attempted movement of the U-member away from the material **18** or vice versa will cause the upper free ends of the jaws to move toward each other and even more tightly clamp onto the material or object **18**. This pull toward the pivot points of the jaws is exactly opposite to clasps heretofore when the pull was away from the pivot points of the jaws. The numeral **19** designates a coil spring or like spring means for urging each of the hinged jaws toward each other. Each of the jaws extend downwardly from their hinge portions, and beyond the horizontal plane of the cut-out portions **11** and **12**. To manually open the jaws to receive a member **18**, the lower ends of the jaws are manually forced toward each other by the thumb and finger of the user extending through the cut-away passageways **11** and and **12**. This movement of the jaws is shown in Fig. 3 and the jaws have to be also so opened to remove the item **18**. If the material **18** is sufficiently stiff the U-member may be just forced downwardly on the same, and the jaws will automatically open to receive the material and then automatically close and clamp onto the same. The inverted U-housing embraces and protects all the working parts of the device, and provides a neat and attractive apppearance.

Some changes may be made in the construction and arrangement of my clasp without departing from the real spirit and purpose of my invention, and it is my intention to cover by my claims, any modified forms of structure or use of mechanical equivalents which may be reasonably included within their scope.

I claim:

1. In a clasp, an inverted U-shaped base member having a means for attachment, a pair of jaw members hinged to the inside of said base member and having their effective ends extending upward, the effective ends of the jaws curved toward each other in such a manner that when the two jaws are in contact, a line tangent to one jaw at the point of contact will be substantially tangent to the other jaw at the point of contact, the hinges connecting said jaws and said base member being positioned away from the lower ends of said jaws and said base member, and finger passageways in the lower portion of said base member to register with the lower ends of said jaws.

2. In a clasp, an inverted U-shaped base member having a means for attachment, a pair of jaw members hinged to the inside of said base member and having their effective ends extending upward, the effective ends of the jaws curved toward each other in such a manner that when the two jaws are in contact, a line tangent to one jaw at the point of contact will be substantially tangent to the other jaw at the point of contact, the hinges connecting said jaws and said base member being positioned away from the lower ends of said jaws and said base member, and finger passageways in the lower portion of said base member to register with the lower ends of said jaws, and yielding means for urging said two jaw members into engagement.

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