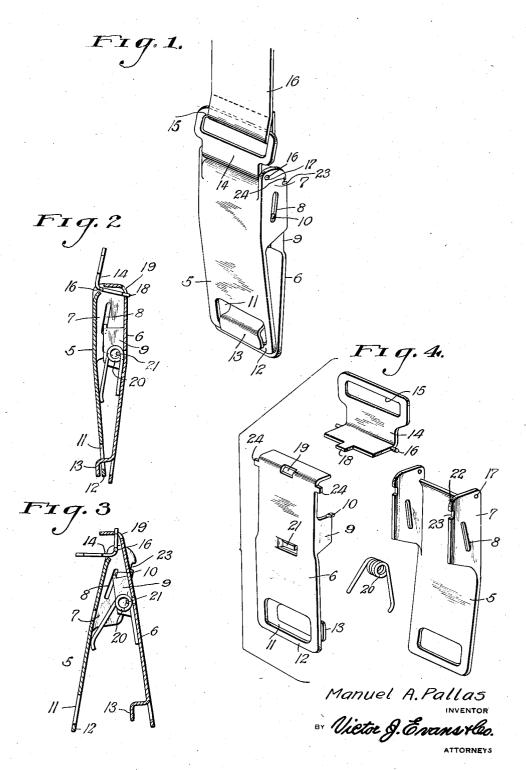
GARMENT CLASP

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## GARMENT CLASP

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5 Claims. (Cl. 24—252)

The present invention relates to clasps particularly adapted for use in conjunction with supporting devices such as garters or suspenders for the support of garments thereby.

The primary object of the invention is to provide a garment clasp including a pair of cooperating jaws and mechanism associated with the clasp whereby the gripping ends of the jaws are swung together and slidably moved relative to each other to cause the gripping ends of the jaws to more securely engage a garment therebetween.

A further object of the invention is to provide a clasp forming part of a garter, the novel arrangement of the clasp being particularly adapted to securely grip hose therein, the gripping end of the clasp presenting a novel arrangement for engagement with the hose.

Another object of the invention is to provide a garment clasp including leverage means for actuating the jaws of the clasp into and out of engagement with each other, the jaws of the clasp being provided with latch means to securely hold the cooperating jaws in locked position thereby preventing accidental release of the garment from same.

A further object is to provide a garment clasp, the respective jaw elements of which are so formed as to present a button element and a slot for cooperation with the button element so as to securely grip a garment therebetween, the clasp including means for moving the mentioned elements into gripping association with each other by the manipulation of a lever thereon.

The invention will be fully and comprehensive-15 ly understood from a consideration of the following detailed description when read in connection with the accompanying drawing which forms part of the application.

In the drawing:

Fig. 1 is a perspective view of the clasp in closed position and showing same suspended on a supporting device;

Fig. 2 is a longitudinal sectional view of the garment clasp, the jaws of same being in closed 45 position;

Fig. 3 is a view similar to Fig. 2 but showing the jaws of the clasp in open position; and

Fig. 4 is an exploded view illustrating the several elements comprising the garment clasp apart  $_{50}$  from each other.

In the preferred embodiment of the invention illustrated in the drawing same comprises a pair of cooperating jaws having at their respective ends knob and slot elements for gripping a garment thereby, the jaws being pivotally and slid-

ably connected and including actuating means for same whereby the mentioned knob and slot elements are moved into garment-gripping association with each other by a pivotal and sliding action of the mentioned jaws.

Reference is now had to the accompanying drawing for a more detailed description thereof in which the numeral 5 indicates the first jaw of the garment clasp, the same being adapted to cooperate with a second jaw 6 for gripping a garment therebetween. As afore indicated the jaws 5 and 6 are pivotally and slidably connected together, the same being preferably carried out by forming side flanges 7 on the first jaw 5 in which are cut elongate slots or guideways 8. The second jaw 6 is similarly provided with side flanges 9, each having a pivot pin 10 formed thereon to engage in the slots 8 so as to provide the pivotal and slidable connection between the jaws 5 and 6.

Adjacent the free end of the first jaw 5 is 20 formed a slot !! bordered in part by a transverse bar 12. The second jaw 6 has mounted on the free end thereof a knob element 13 preferably formed by extruding a portion of the jaw 6 to form an off-set flange extending therefrom in the 25 form of a hook and having the free end of same enlarged in the form of a knob for insertion thru the slot II. During closing of the clasp by means hereinafter described the jaws 5 and 6 are moved so that the knob 13 is first inserted thru the slot 11 30 and thereafter moved longitudinally so that the knob 13 is disposed over the bar 12. A garment being disposed between the jaws 5 and 6 is caused to be securely gripped therebetween, the grip being assured by the mentioned positioning of the 35 knob 13 relative to the bar 12 in which the cloth of the garment is closely disposed around the knob 13 in a manner similar to the well-known garter clasp.

The preferred means for actuating the jaws 5 40 and 6 in their pivotal and sliding action is embodied in the lever 14 having at its actuating end a loop 15 for attachment to a garter or suspender element 16 as shown in Fig. 1. The lever 14 has formed thereon trunnions 16 intermediate its 45 ends, the trunnions 16 being journalled in apertures 17 formed in the flanges 7 of the jaw 5. The lever 14 is formed in an angle, the opposite free end of the lever being flexibly connected to the second jaw 6 by having a lug 18 extending 50 therefrom to be engaged in an aperture 19 cut in the jaw 6. A spring 20 carried on one of the jaws, preferably the second jaw 6, has its free ends disposed to engage the respective jaws 5 and 6 to urge same apart from each other. The 55 spring 20 is preferably carried on a bar 21 extruded from the jaw 6 to be engaged in the bent portion of the spring 20.

In considering the operation of the clasp in 5 gripping a garment, reference is directed particularly to Figs. 2 and 3 wherein it will be noted that the lever 14 in swinging to a substantial angle serves to actuate the jaws 5 and 6 to first move same together and thereafter slide the 10 jaws relative to each other in cooperation with the pivotal and slidable connection embodied in the slots 8 and the pivot pins 10. During the initial swinging of the lever 14, it will be observed that the ends of the jaws 5 and 6 opposite the 15 gripping ends are urged apart from each other and the gripping ends of the jaws 5 and 6 are correspondingly moved toward each other so that the knob 13 is inserted in the slot 11. As the lever 14 continues to rotate after the gripping jaws are 20 moved together, the second jaw 6 is now slidably actuated during which the pivot pins 10 are sliding along the slots 8 and the knob 13 is being moved over the bar 12 so that the respective jaws 5 and 6 are positioned substantially as shown in 25 Fig. 2. It will be apparent that the end of lever 14 flexibly associated with the second jaw 6 causes the swinging of the jaws 5 and 6 together and that the lug 18 engaged in the slot 19 functions to slidably actuate the jaws 5 and 6 after the 30 initial movement of the lever 14, the action of the jaws occurring against the pressure of the spring 20. During opening of the jaws 5 and 6, the lever 14 is swung to the position shown in Fig. 3 whence the reverse action of the elements 35 takes place and the spring 20 serves to urge the jaws 5 and 6 apart.

The closed position of the jaws is yieldably secured by means of a cam-latch arrangement now to be described. As shown more clearly in Fig. 4, 40 the upper corner of each of the side plates 7 is arcuately formed to present a cam 22 terminating in a notch 23. Projecting from the edges of the jaw 6 and disposed to cooperate with the cam 22 and notch 23 are a pair of lugs 24 which in the 45 open position of the clasp are disposed on the top edge of the plates 7. As the jaws 5 and 6 are swung toward each other as previously described. the lugs 24 slide over the arcuate cams 22 and thereafter drop into the notches 23. The cams 22 50 are inclined arcuately to effect a slight resistance to the travel of the lugs 24 so that the portion of the jaw 6 between the pivot pins 10 and the lugs 24 is slightly flexed until the lugs 24 are engaged in the notches 23 as shown in Fig. 1. In 55 this action it will be noted that the slots 8 are inclined slightly so as to more firmly engage the lugs 24 in the notches 23. During the initial opening of the clasp the swinging of lever 14 urges the lugs 24 out of the notches 23 during 60 which the mentioned portion of the jaw 6 is again flexed until the lugs 24 are disposed on top of the plates 7 and the clasp is fully open.

The action of the cams 22 on the lugs 24 may also be considered as supplemental to the lever 65 14 in guiding the jaws 5 and 6 during their swinging action. It will be noted that the cams 22 serve to assist the lever 14 in swinging the jaws together before the sliding action of same takes place so that the free insertion of the knob 13 70 into the slot 11 is had before the jaws 5 and 6 are slidably actuated relative to each other.

It is to be understood that this improvement is capable of extended application and is not confined to the exact showing of the drawing nor 75 to the precise construction described and, therefore, such changes and modifications may be made therein as do not affect the spirit of the invention nor exceed the scope thereof as expressed in the appended claims.

What is claimed as new is:

1. A clasp of the character described comprising a pair of cooperating jaws pivotally connected intermediate their ends and comprising a pivot on one of said jaws journalled in an elongate slot in the other jaw to permit sliding of said 10 pivot, and actuating means associated with the ends of said jaws opposite the gripping ends and adapted to move the mentioned ends of said jaws apart to move said gripping ends together and adapted to move said pivot along said slot to 15 cause said jaws to slide longitudinally of each other, said actuating means comprising a lever fulcrumed on one of said jaws and having its free end flexibly connected with the other jaw by means including a tongue element formed on 20 said lever arm and received in cooperative manner in a recess formed in the jaw element.

2. A clasp of the character described comprising a first jaw having a slot at its free end and a second jaw having an off-set knob at its free end, 25 means including a lever for actuating same for swinging and sliding said jaws into engagement with each other comprising a sliding guideway on said first jaw carrying a pivot on said second jaw, and a cam on said first jaw cooperating with a 30 lug on said second jaw, said guideway and said cam being adapted to cooperatively move said jaws in swinging and sliding together upon actuation by said lever whereby said off-set knob is inserted into said slot and hooked over the free 35 end of said first jaw, said cam including a notch for reception of said lug to substantially lock said jaws in closed position.

3. A clasp of the character described comprising a pair of cooperating jaws pivotally connect- 40 ed intermediate their ends and comprising a pivot on one of said jaws journalled in an elongate slot in the other jaw to permit sliding of said pivot, actuating means associated with the ends of said jaws opposite the gripping ends and adapted 45 to move the mentioned ends of said jaws apart to move said gripping ends together and adapted to move said pivot along said slot to cause said jaws to slide longitudinally of each other, said actuating means comprising a lever fulcrumed 50 on one of said jaws and having its free end flexibly connected with the other jaw by means including a tongue element formed on said lever arm and received in cooperative manner in a recess formed in the jaw element, and spring 55 means carried on one of said jaws to urge said jaws apart from each other.

4. A clasp of the type herein described comprising a pair of cooperating jaws, said jaws being associated with each other by means including 60 pivots formed on upright portions of one of said jaws engaging with elongated slots formed in upright portions of the other of said jaws whereby the jaws can be opened, closed and moved longitudinally relative each to the other, cloth-hold- 65 ing means comprising an offset knob-like member formed near an end of one of said jaws and adapted to be received in and cooperate with a corresponding cut-out portion in the other jaw, means associated with said jaws for operating 70 said cloth-holding means and simultaneously imparting relative longitudinal movement to the elements of said jaws, comprising an L-shaped member, one of the arms of said member presenting a loop for mounting on the garment and 75

the other of said arms presenting a tongue adapted to fit in a recess in one of the jaw elements, the member being mounted in the other jaw element by means including pivots formed on the member at the place of union of the arms, said pivots being received in recesses in upright portions of one of the jaw elements, and resilient means mounted on one of said jaws and acting against the other jaw urging said jaws aparts.

5. A clasp of the type herein described comprising a pair of cooperating jaws, said jaws being associated with each other by means including pivots formed on upright portions of one of said jaws engaging with elongated slots formed in upright portions of the other of said jaws where by the jaws can be opened, closed and moved longitudinally relative each to the other, cloth-holding means comprising an offset knob-like member formed near an end of one of said jaws and adapted to be received in and cooperate with a corresponding cut-out portion in the other jaw,

means associated with said jaws for operating said cloth-holding means and simultaneously imparting relative longitudinal movement to the elements of said jaws, comprising an L-shaped member, one of the arms of said member presenting a loop for mounting on the garment and the other of said arms presenting a tongue adapted to fit in a recess in one of the jaw elements, the member being mounted in the other jaw element by means including pivots formed on the 10 member at the place of union of the arms, said pivots being received in recesses in upright portions of one of the jaw elements, said member having lugs formed thereon and positioned near said pivots whereby the rotative movement of the 15 L-shaped member about said pivots is substantially restricted, and resilient means mounted on one of said jaws and acting against the other jaw urging said jaws apart. 20

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