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H. C. GILES & W. W. WHITE.
HOSE SUPPORTER.

APPLICATION FILED MAY 15, 1906.

Fig. 1.

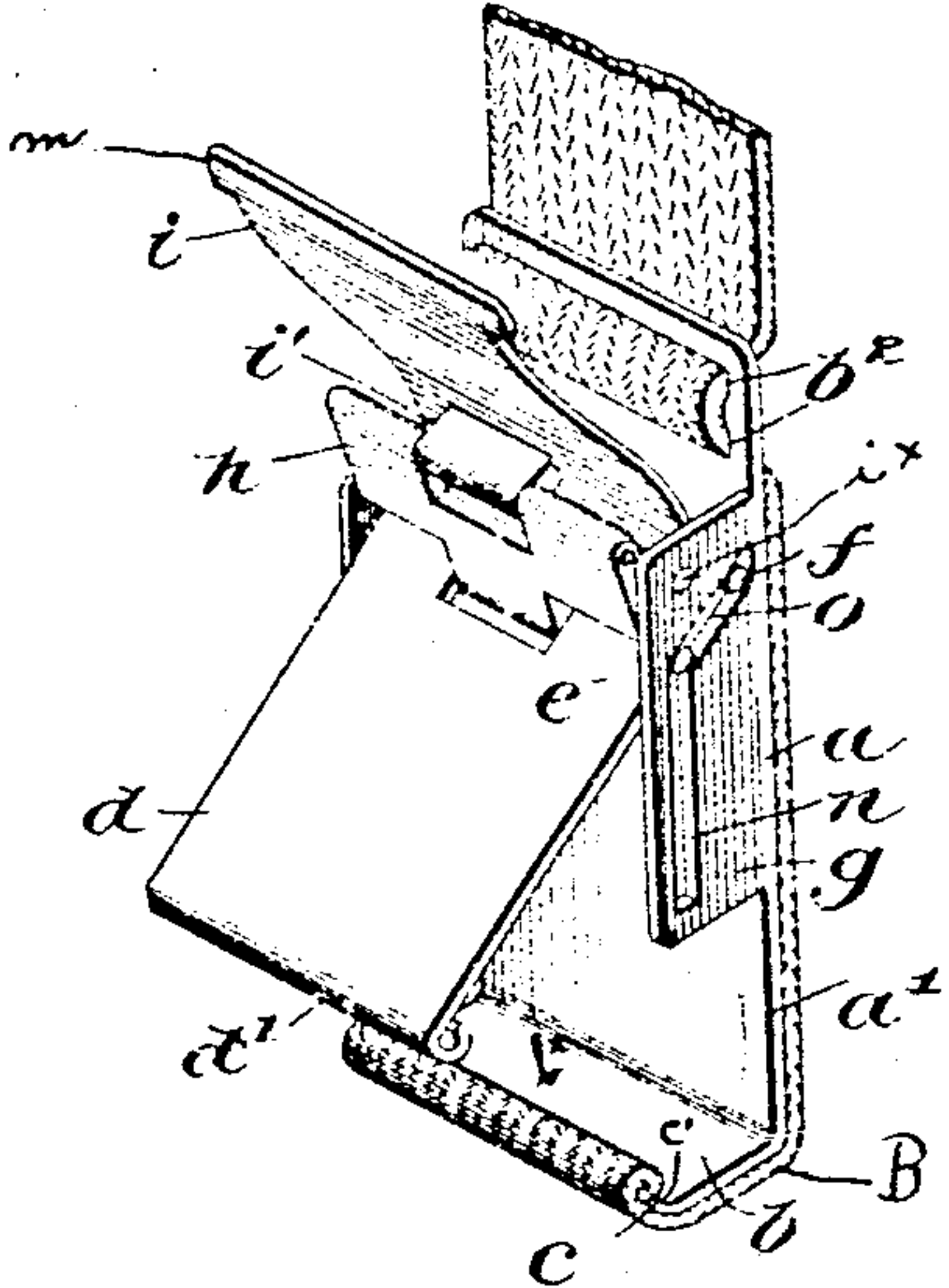


Fig. 2.

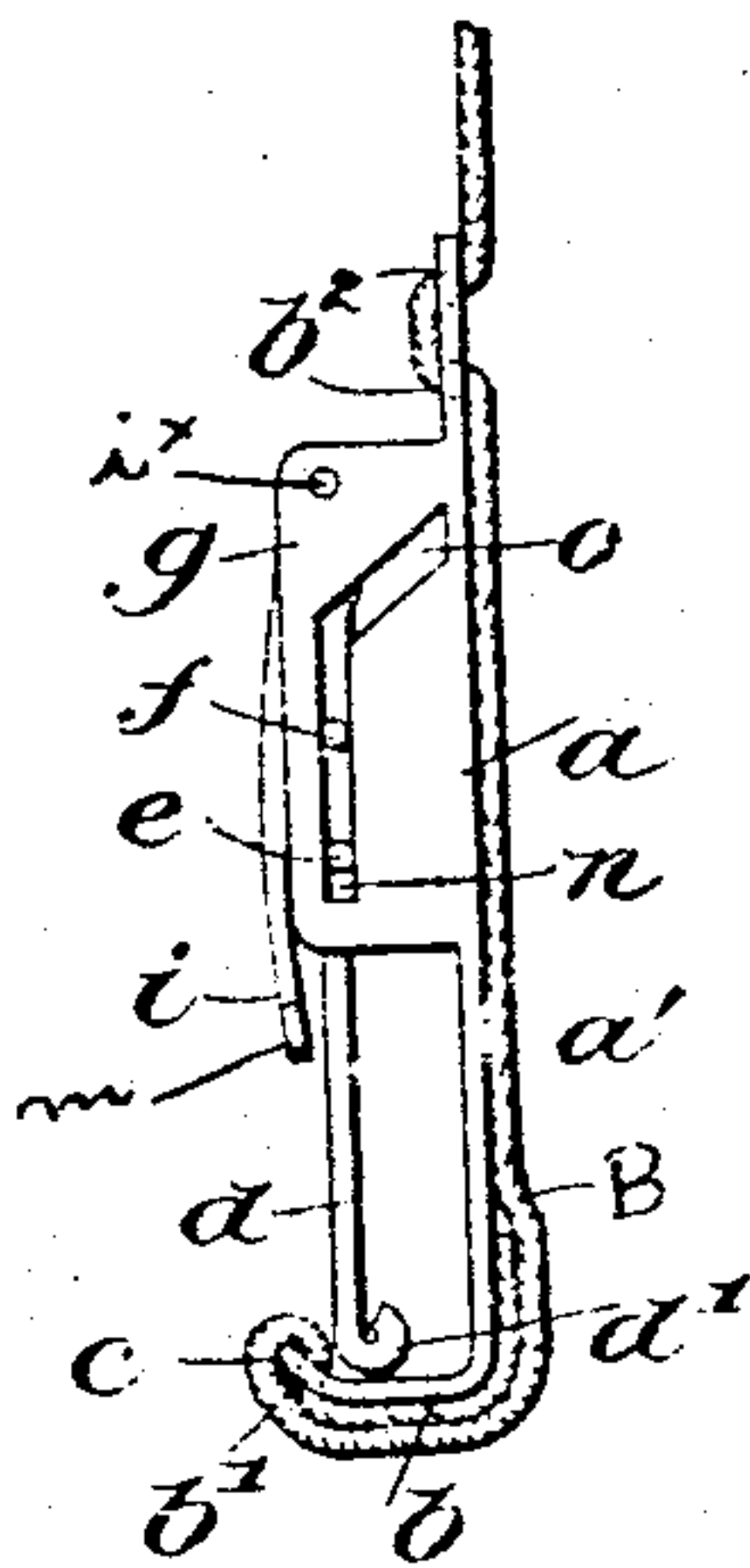


Fig. 3.

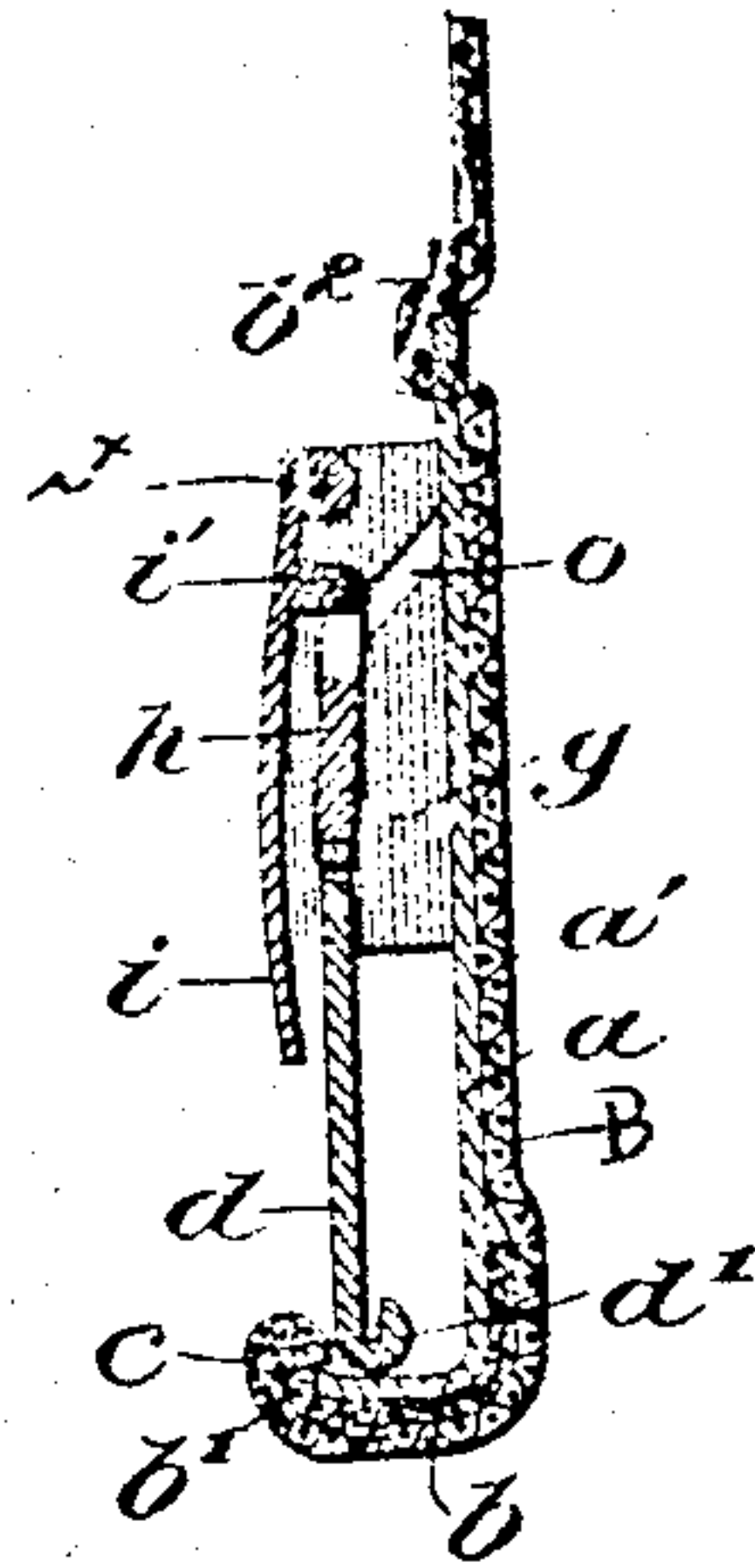


Fig. 4.

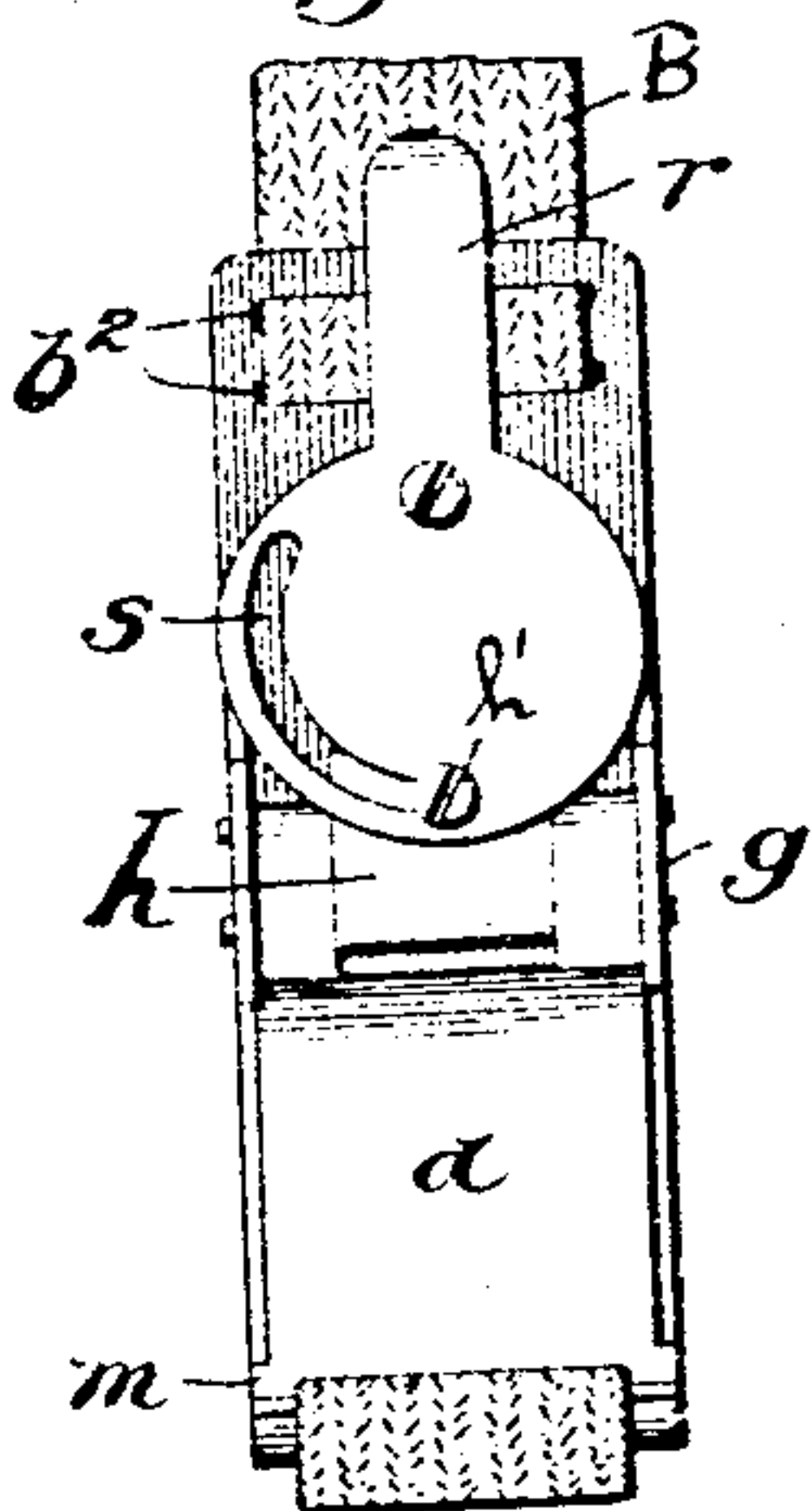


Fig. 5.

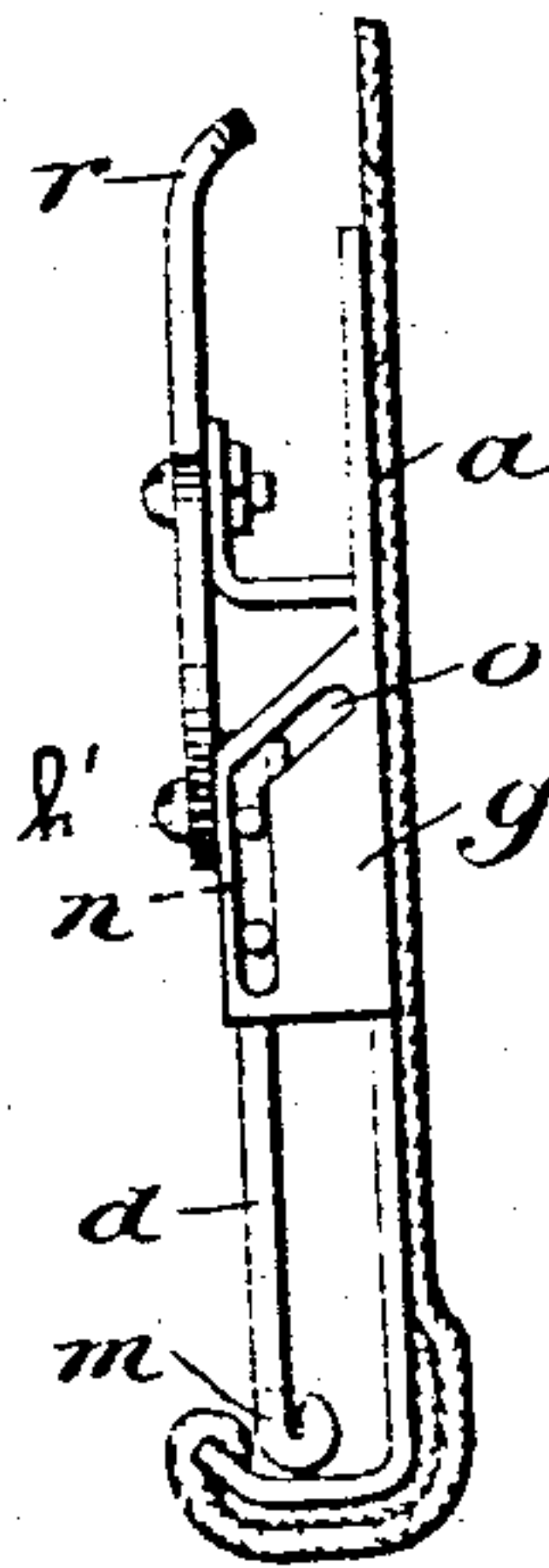
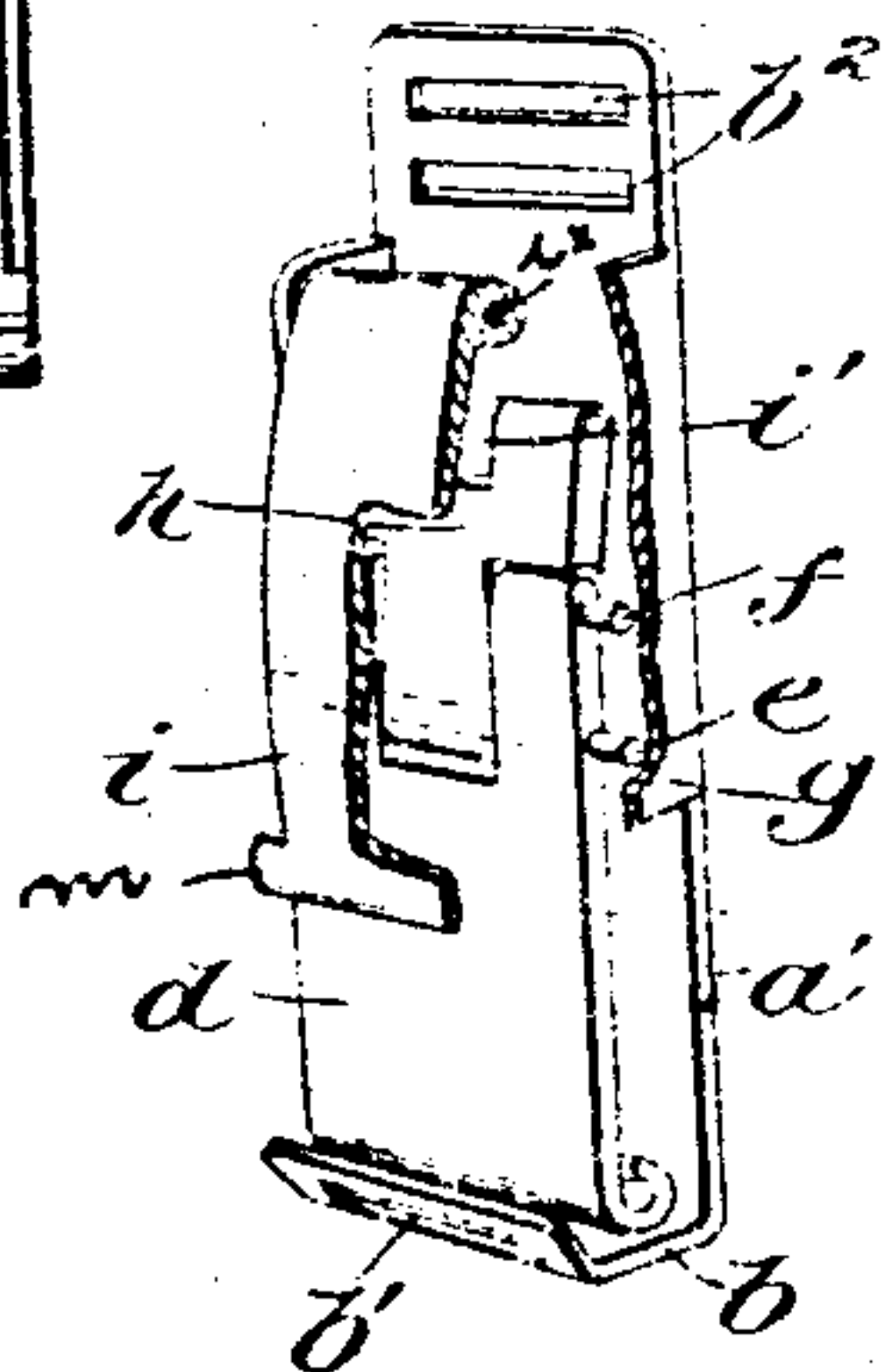


Fig. 6.



Witnesses:
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UNITED STATES PATENT OFFICE.

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HOSE-SUPPORTER.

No. 845,349.

Specification of Letters Patent.

Patented Feb. 26, 1907.

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To all whom it may concern:

Be it known that we, HERBERT C. GILES and WILLIAM WALLACE WHITE, citizens of the United States, residing at 213 Santiago avenue, Rutherford, New Jersey, and 579 West One Hundred and Forty-fifth street, New York, N. Y., respectively, have invented new and useful Improvements in Hose-Supporters, of which the following is a specification.

The invention relates to hose-supporters, and more particularly to the clasp or hose-engaging member thereof.

The object of the invention is to provide a hose-clasp which is simple and durable in construction and highly efficient in use; and it includes the combination and arrangement of parts to be hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, which illustrate the invention, Figure 1 is a perspective view of one embodiment of the invention, showing the clasp in open position. Fig. 2 is a side elevation. Fig. 3 is a transverse sectional view. Fig. 4 is a front elevation of a modification. Fig. 5 is a side elevation of Fig. 4. Fig. 6 is a perspective view, with parts broken away, of the clasp shown in Figs. 1, 2, and 3.

The invention includes generally a relatively immovable back plate or jaw member embodying means for the attachment of the ordinary webbing thereto and provided with a pocket or channel to receive the edge of the hose or with substantially horizontally and vertically disposed clamping-surfaces and a movable clamping plate or jaw having an end designed to enter the pocket to clamp the edge of the hose therein or to coact with said horizontally and vertically disposed clamping-surfaces and means coacting with said movable plate for moving the same in a substantially rectilinear direction while within the pocket or in register therewith and for giving it a swinging movement when entirely out of the pocket, said means being constructed and arranged to retain the movable member in clamping position against accidental displacement.

In the exemplification of the clasp illustrated in the accompanying drawings the back plate or relatively stationary jaw member is designated *a*, is provided with a flat rear face or surface *a'* and with a laterally-

projecting part *b* at its lower end which terminates in an upwardly-extending part *c*, forming a substantially vertically disposed shoulder or clamping-surface, as will be hereinafter described. The part *b* is preferably provided with a slot *b'* at the base of the part *c*, through which the end of the webbing *B'* is threaded, and a double slot *b²* is provided at the upper end of the plate, through which the webbing is passed. In attaching the clasp to the webbing the lower end of the latter is passed through the double slot *b²*, is then brought down along the rear face of the plate *a*, against which it lies and for which it provides a covering, and its end portion is brought around under the part *b* and over the part *c* and passed down through the slot *b'*, the free end being held between the bottom portion of the plate and the main part of the webbing. As the webbing is passed around the part *c*, it provides a protecting-covering therefor, so that the likelihood of tearing the fabric of the hose is diminished.

The described means for attaching the clasp to the webbing is found to possess many features of merit and forms an incidental part of the invention; but this particular manner of securing the webbing to the clasp is not essential to the operation of the clasp, as will be hereinafter described, nor does it have any material bearing on the inventive thought embodied in the clasp proper.

The movable clamping plate or jaw member is designated *d* and is illustrated as a flat bar having an enlarged lower end *d'*, designed to enter the pocket or channel formed at the lower end of the plate *a* or to enter between the rear face of the part *c* and the front face of part *a* with its lower edge in close juxtaposition to the upper face of the part *b*. As before premised, means are provided for moving this plate *d* in a rectilinear direction on the initial retractile movement thereof and when within the pocket or in register therewith and for swinging the lower or clamping end thereof outwardly on the final retractile movement and when said end has been sufficiently raised from the part *b* to easily clear the upper edge of the part *c*. The illustrated means for effecting this movement includes pintles *e f*, projecting from opposite edges of the plate *d*, adjacent the upper end of the latter, which enter and are guided in ways or slots provided in ears *g*,

turned up from the opposite edges of the plate *a* at right angles to the face of the latter, between which ears the plate *d* is confined, a hand-operated member, and a link *h*, pivotally connected at its lower end to the plate *d* and suitably connected at its upper end to the hand-operated member, so as to be reciprocated, as will be hereinafter described.

In the embodiment of the invention shown in Fig. 1 the hand-operated member is a lever *i*, pivotally mounted, by means of rod *i'*, between the ears *g* and provided on its under face with a lug *i''*, to which the upper end of the link *h* is pivotally connected. This lever is designed when in closed position to lie flat against the outer face of the plate *d*, is provided at its lower end with ears *m* or other projections to facilitate it being grasped by the fingers, and is so arranged relative to the guide-pintles for the plate that when down it is automatically locked in closed position against release under the strain of the article clamped within the clasp. To bring about this result, the pintles *f* are beyond the plane of the clamping member *d* when the parts are in closed position.

The slots in the ears *g* are each provided with a lower portion *n*, extending substantially parallel with the face of the plate *a* or in line with the greatest length of the plate *d* when the latter is in clamping position, and with continuations *o*, disposed at oblique angles to the part *n*. The pintles *f* are preferably arranged adjacent the upper of the plate *d*, while the pintles *e* are arranged coincident with the pivotal point between the link *h* and said plate, or the latter pintles may be formed by the projecting ends of the pivot-pin used in said pivotal connection, as shown by Fig. 6. It will be understood that when the plate *d* is down in clamping position the pintles will be in the parts of the slots designated *n*, and during the initial part of the opening movement of the plate they will continue in the straight portion of said slots, so that as the plate is moved upwardly it will travel in a rectilinear line, and this will continue until the pintles *f* strike the upper wall of the portion *o* of the slots, whereupon these pintles will travel in the oblique portions, which will cause the plate *d* to tilt upon the pintles *e*, thus throwing the free end of the plate outwardly as said plate is moved rearwardly. Exactly the reverse action occurs in closing the clasp or in moving the plate *d* into clamping position. When applying the clasp to the hose, the plate *d* occupies the position shown in Fig. 1, and the upper end of the hose is then placed over the laterally-extending end *b* of the plate *a*. The hand-lever is then operated, which in the initial movement through the mechanism described swings the plate *d* inwardly and then forces it down in a rectilinear direction to securely clamp the edge of the hose between the bot-

tom *d'* of the plate *d* and the upper surface *h'* of the part *b* and the upper side of the plate *d* and the contiguous side *c'* of the part *c* as well as between the rear side of the plate *d* and the adjacent portion of the inner face of the plate *a*.

In the modification of the invention illustrated in Fig. 4 a lever *r*, provided with a cam-slot *s*, is substituted for the lever *i*. In this latter embodiment of the invention the rear end of the link *h* is provided with an abutment *h'*, which projects into the slot *s*, so that as the lever *r* is manipulated the link will be reciprocated and will operate the plate *d* in a manner similar to that described.

The construction and operation of the device will be readily understood upon reference to the foregoing description and accompanying drawings, and it will be appreciated that the parts and combinations disclosed may be modified or varied within a wide range without departing from the spirit and scope of the invention.

We claim—

1. In a garment-clasp and in combination a relatively stationary back plate having a channel or pocket therein, a movable member, and means for moving said member in a direction substantially parallel with the back plate while within said channel or pocket or in register therewith and for afterward swinging the member away from the back member, substantially as described.

2. In a garment-clasp and in combination a relatively fixed plate having a laterally-extending clamping portion and a clamping member having a swinging movement to bring the same into and out of register with said laterally-extending clamping portion and a sliding movement toward and from said clamping portion and means for giving said member said movements, substantially as described.

3. In a garment-clasp and in combination a relatively fixed plate having a laterally-extending clamping portion and a movable member associated with the fixed plate, with means for giving said movable member both a rectilinear and a swinging movement, substantially as described.

4. In a garment-clasp and in combination a relatively fixed plate having a laterally-projecting portion terminating in an upward extension, a movable plate designed to coact with said lateral extension, and rear face of said upward extension, and means for moving said movable plate in a rectilinear direction to shift the lower end of the same into and out of coaction with the rear face of the upward extension and for also giving the plate a swinging movement when out of coaction with said upward extension, substantially as described.

5. In a garment-supporter and in combination a relatively fixed plate and webbing

secured thereto, said plate having a channel or pocket at the lower end thereof opening outwardly, a member associated with the back plate and means for giving said member a sliding movement into and out of the pocket or channel and also an additional swinging movement, substantially as described.

6. In a garment-clasp and in combination a relatively fixed plate having a receiving pocket or channel at the lower end thereof, a movable clamping member and means in the initial retractile movement thereof for shifting the same in a rectilinear direction and for afterward swinging the same upon a pivot in the final retractile movement, substantially as described.

7. In a garment-clasp and in combination a relatively fixed plate having a horizontal clamping-surface terminating in a substantially vertical clamping-surface and a clamping member having an end designed to occupy a position between said vertical clamping-surface and the opposing surface of the fixed plate, means for moving said clamping member in a lengthwise direction into and out of said position last named and for giving said member an additional swinging movement, substantially as described.

8. In a garment-clasp and in combination a backing plate provided with a laterally-extending portion, a clamping-plate, guide-ways on the backing plate, pintles on the clamping-plate coacting with said guide-ways, a hand-operated member and a link connection between the moving plate and hand-operated member, substantially as described.

9. In a garment-clasp and in combination a relatively fixed plate, ears on the opposite sides thereof having guide-slots therein with portions extending in different directions, a plate movably mounted between said ears provided with pintles working in said slots, a hand-operated member and a link between the same and the movable plate, substantially as described.

10. In a garment-clasp and in combination a relatively fixed plate having a laterally-extending clamping portion, ears extending outwardly from opposite side edges of the plate provided with slots having portions extending substantially parallel with the face of the plate, and other portions extending obliquely to the first-named portions from the upper ends of the same inwardly and upwardly, a clamping-plate mounted between said ears provided with two sets of pintles guided in said slots, a hand-operated lever, a link connected at one end thereto and pivotally connected at its other end to the clamping-plate, one set of said pintles being in alignment with the pivotal point between said link and plate and the other set of said pintles being located adjacent the end of the plate, substantially as described.

11. In a garment-clasp and in combination, a relatively fixed plate having a laterally-extending clamping portion and webbing secured to the plate, means projecting from the plate having guideways therein, a clamping-plate provided with two sets of pintles guided in said ears, a pivoted hand-operated member and a link connecting between the clamping-plate and said hand-operated member, substantially as described.

12. In a garment-clasp and in combination a relatively fixed plate having a laterally-extending clamping portion, ears on the plate provided with guide-slots having portions extending in different directions, a clamping-plate provided with pintles coacting with said guide-slots, a lever pivoted between the ears and a link pivoted at one end to the clamping-plate and at its other end to said lever, substantially as described.

13. In a garment-clasp and in combination a relatively fixed plate having a laterally-extending clamping portion, ears on the plate having guide-slots therein, a clamping member provided with pintles guided in the slots, a lever pivoted in the upper ends of the ears and a link pivoted at its lower end in the clamping member and at its upper end to said lever, the latter pivotal connection being designed to occupy a position substantially in alignment with or within the initial direction of movement in the clamping-plate in the opening movement thereof, when the lever is in closed position, whereby said lever will be locked in closed position against lengthwise strain on the clamping member, substantially as described.

14. In a hose-supporter, a relatively fixed member having a flat rear face and a laterally-extending part at the lower end thereof, with an upward continuation providing a clamping-shoulder, said plate having slots at its upper end and a slot in said extension, a webbing threaded through the slots at the upper end of the plate extending down along the rear face of the latter, under the extension, over the deflected part and through the slot in the extension, the end of the webbing terminating between the lower part of the plate and the intermediate part of the webbing and the latter providing a covering for the rear face of the plate and for said upward continuation, a clamping-plate associated with the fixed plate coacting with the upward continuation and means for operating the clamping-plate, substantially as described.

15. In a garment-clasp and in combination a relatively fixed plate having a laterally-extending clamping portion, ears on the plate having guide-slots therein, a clamping member provided with pintles guided in the slots, a lever pivoted in the upper ends of the ears and a link pivoted at its lower end in the clamping member and at its upper end to

said lever, the latter pivotal connection in the closed position of the clasp being beyond the plane of the clamping member whereby said lever will be locked in closed position
5 against lengthwise strain on the clamping member, substantially as described.

In testimony whereof we have signed our

names to this specification in the presence of two subscribing witnesses.

HERBERT C. GILES.

WILLIAM WALLACE WHITE.

Witnesses:

ELLA L. GILES,

JOHN A. PERCIVAL.