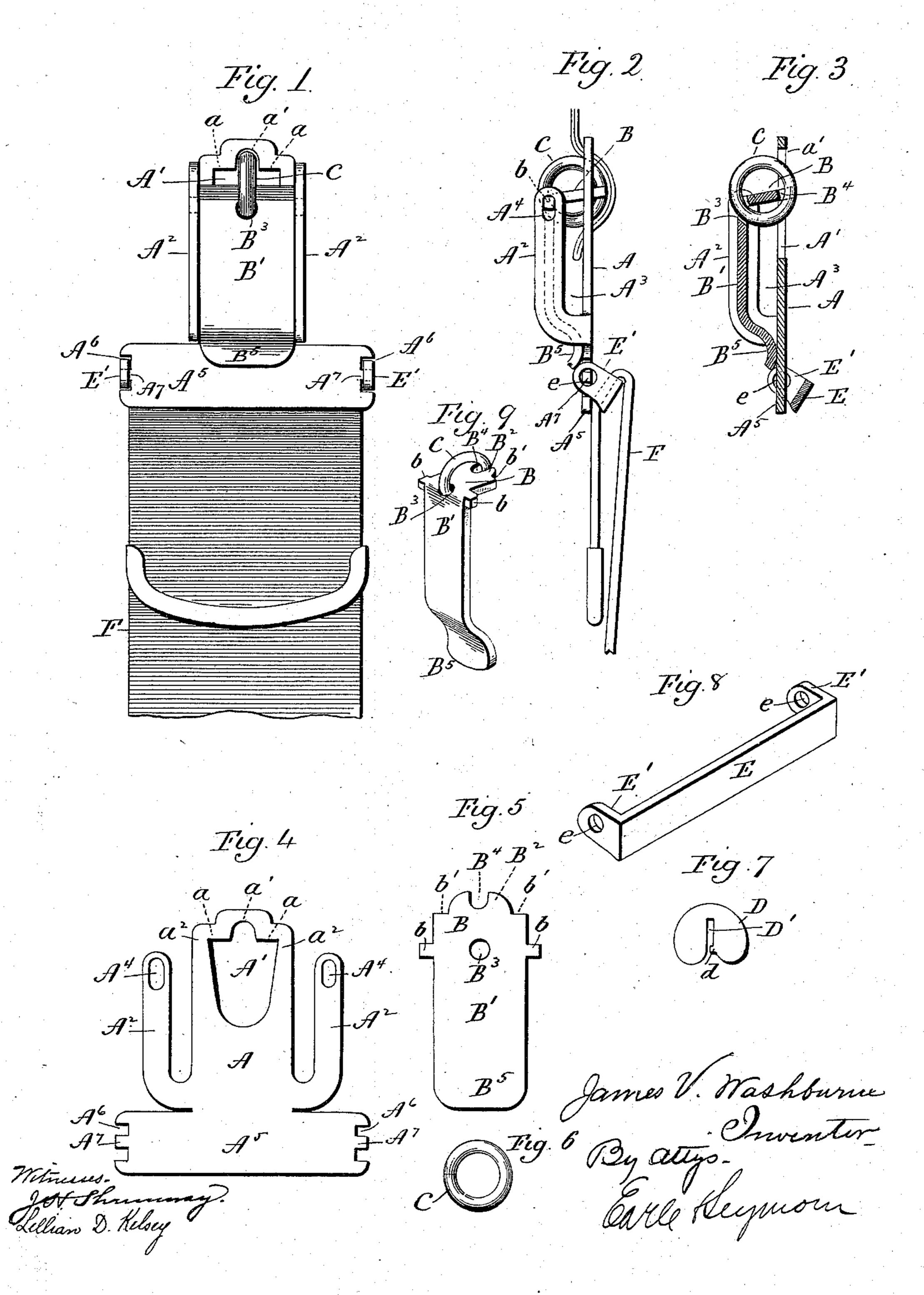
J. V. WASHBURNE. GARMENT CLASP.

No. 565,869.

Patented Aug. 11, 1896.



United States Patent Office.

JAMES V. WASHBURNE, OF WATERBURY, CONNECTICUT, ASSIGNOR OF ONE-HALF TO GEORGE A. UPHAM, OF SAME PLACE.

GARMENT-CLASP.

SPECIFICATION forming part of Letters Patent No. 565,869, dated August 11, 1896.

Application filed January 28, 1896. Serial No. 577,118. (No model.)

To all whom it may concern:

Be it known that I, James V. Washburne, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new 5 Improvement in Garment-Clasps; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a face view of the clasp applied to one end of a webbing; Fig. 2, a sectional view on the line a b of Fig. 1; Fig. 3, a sectional view of the device detached from the webbing; Fig. 4, a detached plan view of the blank for the body of the clasp; Fig. 5, a detached plan view of the blank of the lever; Fig. 6, a detached side view of the clearer; Fig. 7, a similar view of one of the modified forms which the clearer may assume; Fig. 8, a detached perspective view of the gripping-loop; Fig. 9, a detached perspective view of the pivoted lever and its clearer.

This invention relates to an improvement in garment-clasps, the object being to produce a simple, convenient, and effective device designed with particular reference to preventing the gripping-arm of its lever from hooking into the fabric, to application to materials of varying thickness, and to provide such a clasp with simple and reliable means for adjustably securing it to the webbing upon which it is used.

With these ends in view my invention consists in a garment-clasp having its lever provided with a clearer for preventing the gripping-arm of the lever from hooking into the fabric.

My invention further consists in a pivotal lever having longitudinal movement in the plane of the frame.

My invention further consists in certain details of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In carrying out my invention as herein shown I by preference employ a sheet-metal frame A, the upper end of which is constructed with a central longitudinally-arranged fabric-opening A', formed at its upper

end with two corresponding gripping-edges aa, which are separated by a notch a', leading out of the forward end of the opening, as clearly shown in Fig. 4. The said frame is 55 also provided, as shown, with two corresponding lever-supporting arms A² A², and standing in a plane at a right angle to its plane and extending upward in parallel lines. These arms are connected at their lower ends 60 with the frame and separated therefrom by clearance-spaces A³, which permit the clasp to be passed over the edge of the fabric or garment to which it is applied. The upper ends of these arms are constructed with elon- 65 gated openings A⁴ A⁴, which receive the trunnions b b of the gripping-lever, which is thus permitted a longitudinal movement in the plane of the frame within the limits set by the length of the said openings A⁴ A⁴, whereby 70 the clasp is adapted to be applied to garments or materials varying in thickness. The said gripping-lever comprises a short or gripping arm B and a long or operating arm B', which constitutes a finger-piece, the said arms 75 standing at about a right angle to each other. Preferably the lever is made from a single piece of sheet metal. The gripping-arm of the lever is constructed with two grippingedges b'b', which coact with the inner face of 80 the plate at about the points $a^2 a^2$ thereon, the said points being located opposite the upper end of the fabric-opening A' and just in rear of the gripping-edges a a of the said opening. The end of the said gripping-arm B is con- 85 structed with a rounded nose B2, somewhat narrower in width than the width of the upper end of the fabric-opening A', which it enters and into which it crowds the fabric. The outer face of this nose coacts with the 90 gripping-edges a a of the frame to grip and hold the fabric, which is also gripped and held, as before explained, by the grippingedges b b of the gripping-arm B acting upon the frame at the points $a^2 a^2$ thereon. I may here remark that unless provision is

made for the longitudinal movement of the

lever it cannot be completely shut down into

its closed position in case the cloth is thick,

sition, it does not grip the cloth, which is lia-

ble to be drawn away, under strain, from the

and, failing to shut down into its closed po- 100

device. Furthermore, by adapting the lever to be moved in the plane of the frame, it is made automatically adjustable to the thickness of the cloth, so that if the cloth is very 5 thin the lever may be drawn by the cloth toward the outer end of the fabric-opening in the frame, so as to close upon the cloth, as it were, and grip it tightly in a plane at a right

angle to the plane of the frame. To prevent the fabric from being hooked into by the gripping-arm of the lever when the same is turned into its open position, I provide the lever with a clearer, which, as shown, consists of a wire ring C, mounted in 15 its gripping-arm of the lever, which is thereto provided with a perforation B3, formed in its inner end, and a notch B4, formed in the center of its nose B2. This ring is flush or substantially flush with the edge of the nose B² 20 of the said arm of the lever, and rides, so to speak, upon the fabric. When the lever is turned down into its closed position, the said clearer-ring enters the clearer-notch a' in the frame and assists in gripping the fabric by 25 forcing the same downward against the edge of the said notch. The chief function of the clearer, however, is to prevent the fabric from being hooked into by the short grippingarm of the lever and drawn back thereupon 30 when the lever is being opened, and so as to interfere with the removal of the clasp. The said clearer also prevents the gripping-arm from hooking into the fabric as the lever is turned into its closed position and drawing 35 and pushing it upward out of the frame. It is not necessary that the clearer be in the form of | a ring, as shown. It might, for instance, consist of a flat sheet-metal disk, the construction of which is too obvious to require illus-40 tration; or it might consist of a flat sheetmetal cam-like plate D, such as is shown in Fig. 7, the said plate having a deep notch D' to adapt it to be set over the gripping-arm of the lever, and furnished with a small projec-45 tion d for engaging it with the said arm of the lever, as, for instance, by springing into an opening like the opening B³, provided for the ring C. The clearer might assume still other forms. Thus, it might be formed in-50 tegral with the arm and bent over into curved form, so as to present a curved or cam-like surface to the fabric. The operating-arm or finger-piece B' of the lever is bent inward at its lower end to form a tailpiece B5, which

fabric, as shown in Fig. 3. With reference now to the second part of my invention, the same consists in a grip-60 ping-loop E, which, as herein shown, is made of flat sheet metal and has its ends turned inward at a right angle to form arms E' E', each of which contains a perforation e. This gripping-loop is applied to the lower end and 65 opposite the inner face of the frame, which is constructed, as shown, with a cross-bar A5, the length of which corresponds to the length of

55 engages with the frame so as to support the

said arm in a position in which it clears the

the gripping-loop, including the arms thereof. The ends of the said cross-bar are by preference formed with notches A⁶ A⁶ to receive the 70 arms E' E' of the loop, so that the outer faces of the said arms will be flush with the ends of the bar. Integral trunnions A⁷A⁷, projecting outward from the central portions of the said notches, extend into the perforations e e of 75 the arms E' E' and form the trunnions upon which the gripping-loop swings. The arms of the said loop are constructed in length so that when the loop is swung into the plane of the frame the webbing F will freely pass un- 80 der it and may be easily let out or taken up as desired. As soon, however, as the webbing is drawn downward against the upper edge of the loop, as shown in Fig. 2, the loop will be tilted, so that its lower edge will bite 85 into the webbing and force the same against the inner face of the frame. After this the greater the downward draft upon the webbing the more firmly will the same be held by the biting action of the gripping-loop. It is not 90 essential that the gripping-loop be made of sheet metal, though I prefer that construction. It might, for instance, be made of wire.

In view of the modifications herein shown and described, and of others which may ob- 95 viously be made, I would have it understood that I do not limit myself to the exact construction set forth, but hold myself at liberty to make such alterations as fairly fall within the spirit and scope of my invention. I 100 would also have it understood that I do not limit myself to using the two features of my invention in the combination as herein shown, for, if desired, they may be used independently of each other in different devices. Thus 105 in a garment-clasp which did not call for the taking up and letting out of the webbing the pivotal gripping-loop would be omitted, and on the other hand that loop might be used to advantage in other devices than garment- 110 supporter clasps. The fabric-gripping feature of the device might, for instance, be employed in the manufacture of a drawers-clasp or of a fastener for securing key-chains to the waistbands of trousers, &c.

Having fully described my invention, what I claim as new, and desire to secure by Letters

Patent, is—

1. The combination with a frame, of a lever pivoted therein and having a gripping-arm co- 120 acting with the frame to grip the fabric, and a clearer coacting with the said arm to prevent the same from hooking into the fabric, substantially as described.

2. The combination with a frame, of a lever 125 pivoted therein and having a gripping-arm coacting with the frame to grip the fabric, and a clearer mounted in the lever to prevent the fabric from being hooked into by the said arm, and consisting of a ring, substantially 130 as described.

3. The combination with a frame constructed with an opening to receive the fabric, of a lever pivoted in the frame, and having a

gripping-arm which crowds the fabric into the said opening and coacts with the frame

to grip it, substantially as described.

4. The combination with a frame having an opening to receive the fabric, of a lever pivoted in the frame and having a gripping-arm constructed with a nose adapted to force the fabric into the said opening, and shaped to form one or more shoulders engaging with the inner face of the frame for gripping the fabric on one or both sides of the said opening while the outer face of the arm grips the fabric on the forward edge of the opening, substantially as described.

an opening for the reception of the fabric, and a notch leading out of the forward end thereof, of a lever pivotally mounted in the frame and having a gripping-arm adapted to force the fabric into the said opening and grip it between its outer face and the forward edge thereof, and a clearer carried by the said lever and extending into the said notch, and gripping the fabric therein in addition to the grip secured between the outer face of the arm and the forward edge of the opening, substantially as described.

6. The combination with a frame having an opening to receive the fabric, and constructed with two corresponding lever-supporting arms; standing in a plane at a right angle to its plane, extending upward in parallel lines, separated from the body of the frame by clearance-spaces, and having formed in them elongated bearing-openings parallel

in them elongated bearing-openings parallel with the plane of the frame; and a lever piv-

oted in the frame, having a gripping-arm constructed with a nose adapted to force the fabric into the said opening, and provided with trunnions entering the said bearing-openings of 40 the frame, whereby the lever is permitted to have limited longitudinal movement bodily in the plane of the frame, in addition to its pivotal movement.

7. The combination with a frame having 45 an opening to receive the fabric, of a lever pivoted in the frame, and having a gripping-arm adapted to crowd the fabric into the said opening, and a cast-off carried by the lever and preventing the said arm from hooking 50 into the fabric as the lever is opened, sub-

stantially as described.

8. The combination with a frame having clearance-notches formed opposite each other in its edge, and each notch containing a trun-55 nion; of a gripping-loop located opposite one face of the frame and formed at its ends with perforated arms which enter the said notches, and which are perforated to receive the said trunnions, and whereby when the loop is 60 turned into the plane of the frame it permits the webbing to slide freely under it, but when tilted by a strain upon the webbing grips the same between the frame and its adjacent edge.

In testimony whereof I have signed this specification in the presence of two subscrib-

ing witnesses.

JAMES V. WASHBURNE.

Witnesses:

FRED C. EARLE, LILLIAN D. KELSEY.