

No. 826,608.

PATENTED JULY 24, 1906.

J. PUSEY, DEC'D.

C. S. PUSEY, ADMINISTRATRIX.

CAST-OFF FOR SUSPENDERS AND THE LIKE.

APPLICATION FILED AUG. 3, 1905.

2 SHEETS—SHEET 1.

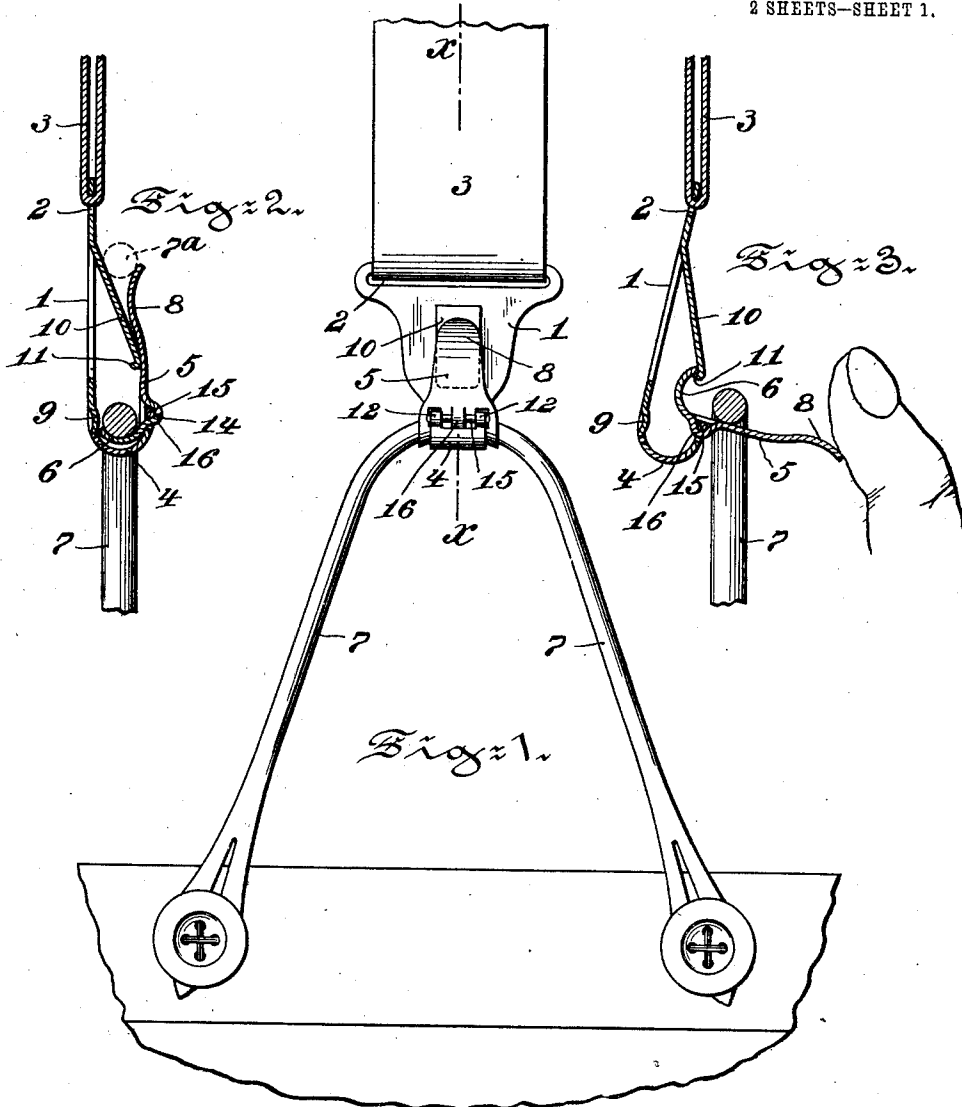
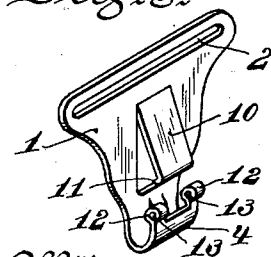


Fig. 5.



Witnesses:
Jas. C. Woburnsmith
Walter C. Pusey

Fig. 4.

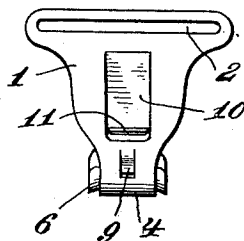
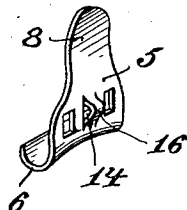


Fig. 6.



Inventor:
Joshua Pusey.

No. 826,608.

PATENTED JULY 24, 1906.

J. PUSEY, DEC'D.

C. S. PUSEY, ADMINISTRATRIX.

CAST-OFF FOR SUSPENDERS AND THE LIKE.

APPLICATION FILED AUG. 3, 1905.

2 SHEETS—SHEET 2.

Fig. 7.

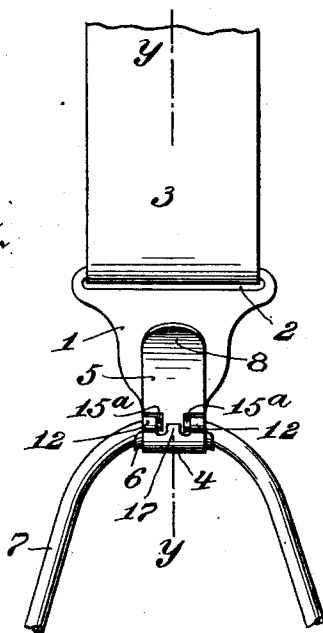


Fig. 8.

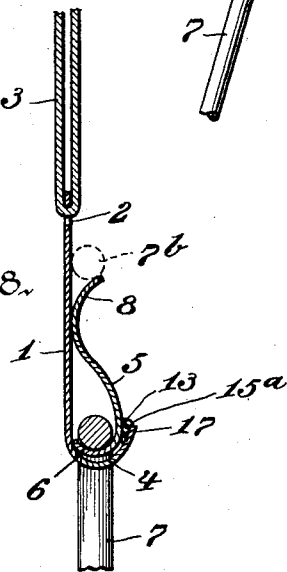
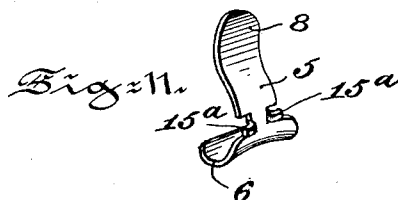
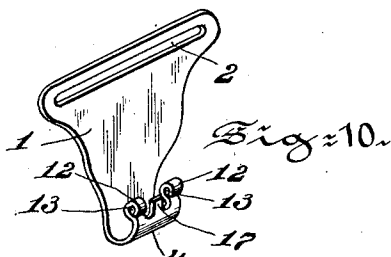
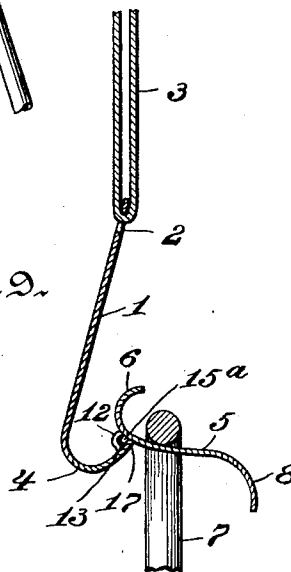


Fig. 9.



Witnesses
Jas. C. Woburnsmith
Walter C. Pusey

Inventor
Joshua Pusey.

UNITED STATES PATENT OFFICE.

JOSHUA PUSEY, OF MEDIA, PENNSYLVANIA; CAROLINE S. PUSEY
ADMINISTRATRIX OF SAID JOSHUA PUSEY, DECEASED.

CAST-OFF FOR SUSPENDERS AND THE LIKE.

No. 826,608.

Specification of Letters Patent.

Patented July 24, 1906.

Application filed August 3, 1905. Serial No. 272,479.

To all whom it may concern:

Be it known that I, JOSHUA PUSEY, a citizen of the United States, residing at Media, in the county of Delaware and State of Pennsylvania, have invented certain new and useful Improvements in Cast-Offs for Suspenders and the Like, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, of which—

Figure 1, Sheet 1, is a front elevation of the invention as in use; Fig. 2, a section on line X X, Fig. 1; Fig. 3, a similar section, but showing the cast-off lever in the open or casting-off position; Fig. 4, a rear elevation of the device; Fig. 5, a perspective of the plate to which the cast-off lever is pivoted, the latter being detached; Fig. 6, a perspective of said lever detached. Fig. 7, Sheet 2, is a front elevation of a modified form of the invention; Fig. 8, a section on line Y Y, Fig. 7; Fig. 9, a similar section, but showing the cast-off lever in the open position; Fig. 10, a perspective of the plate to which said lever is pivoted, the latter being detached; Fig. 11, a perspective of said lever detached. Figs. 7 to 11, inclusive, correspond, respectively, to Figs. 1, 2, 3, 5, and 6.

Where the same or similar parts occur in the several figures, they are denoted by the same numerals.

The object of this invention is to provide a cast-off device for suspenders or the like that shall be simple, durable, and not liable to get out of order, yet will permit of the quick and easy casting off as also the casting on of the usual trousers-strap or other connection, also preventing liability of the latter to become accidentally detached.

The precise nature of the invention will clearly appear from the following specification, in connection with the accompanying drawings.

Referring first particularly to Figs. 1 to 6, inclusive, of these drawings, which figures illustrate the most complete and preferred form of the invention, 1 is a plate of suitable metal, the upper end of which is designed to be connected to the usual suspender strap or webbing, as by a transverse slot 2, through which the webbing 3 is passed. The lower end 4 of the plate is bent outwardly and upwardly, as shown. This plate constitutes one member of the device. The other mem-

ber consists of a plate 5, hereinafter termed the "cast-off lever," or the lever whose lower end 6 is bent similarly to that of plate 1. The said lever is pivoted to the free end of the part 4 of plate 1, the bent end 6 being directed toward said plate, and when the lever is in the closed position the said end 6 lies within the end 4 of plate 1, as more clearly seen in Fig. 2. Thus said lever consists of a short arm 6 for the reception of the trousers-strap 7 and a long arm 8 for operating the lever, as hereinafter described. The free extremity of the bent end or arm 6 of the lever is below the line of the pivoting of the lever when the latter is in the closed position, as also seen in Fig. 2. Struck out from the plate 1 is a spring or spring-catch 9, whose lower portion extends beyond the inner side of the body of said plate, so that when the lever is rotated from the open position, Fig. 3, to the closed position the extremity of the arm 6 will in passing below the center press back the spring 9, and when the lever has reached the closed position, Fig. 2, said spring will maintain it (the lever) in that position, but yieldingly, so that by forcing the long arm 8 of the lever outwardly to open out the same the spring will readily be retracted by the movement of the short arm 6.

Extending outwardly from the plate 1 is a projection 10, which in this instance is struck out of the body of the plate. This projection, hereinafter termed the "guard," is preferably, for a purpose appearing farther on, inclined downwardly and extends toward the line of the pivot of the cast-off lever. On the under side of the free end of this guard is a flange or shoulder 11, against which the free extremity of the lever-arm 6 is adapted to stop when the lever is brought to the open position, as seen in Fig. 3. When said lever is in the closed position, its arm 8 will rest against or adjacent to the guard 10.

The particular means for effecting the pivotal connection of the cast-off lever to the outwardly-turned end of plate 1 may vary. In this instance I bend over lateral strips 12 of the said end to form eyes 13 and provide the lever with an eye 14, through which and the eyes 13 a pivot-pin 15 is passed. It is desirable, however, that the plane of the upper or inner side of the said lever adjacent to the eyes 13 shall be above, or at least flush with, the top of the wall of said eyes, so that

in the casting-off and casting-on operations the trousers-strap may slide freely on the lever and not catch on the wall of the said eyes 13. To this end I have the eye 14 on the
 5 under or outer side of the lever. Said eye is conveniently formed by forcing out by suitable dies a portion or strip 16 of the body of the lever beyond the plane of latter, as more clearly seen on Fig. 6.

10 Having described the construction of this preferred form of my invention, I proceed to explain the mode of operation thereof, assuming the parts to be in the normal position, as in Figs. 1 and 2—that is, the
 15 trousers-strap having been cast on. Normally the stress of the suspender-webbing tends to cause the trousers-strap 7 to maintain the cast-off lever in the closed position; but should the wearer of the suspenders take
 20 a position that would release the said stress the lever is prevented from possibly opening and permitting the escape of the trousers-strap therefrom by the spring or catch 9. Further, in case the said strap should move
 25 or be forced upwardly it could not pry open the lever by pressure against its arm 8, and thus escape, but would merely press up against the guard 10. Thus, while it is practically impossible for the trousers-strap to
 30 accidentally become detached from the device it may be readily and quickly cast off therefrom by merely forcing the arm 8 of the lever outwardly by the thumb or finger, thereby rotating the lever on its pivot, and so
 35 causing its arm 6 to raise the said strap to a plane above the line of the pivot of the lever—that is, to a position to permit it (said strap) to slide down the arm, as in Fig. 3, the thumb or finger being quickly removed when
 40 the strap has reached the end of said arm, so as to permit the strap to escape from the latter.

The strap may be readily cast on by bringing it over and upon the arm 8 when the lever is in the open position and then rotating the
 45 latter to the closed position, or one may seize hold of the upper part of plate 1, the lever being in the open position, and swing the device outwardly in a manner to cause the lever-arm 8 to catch under the trousers-strap
 50 and slide against the arm 6, and thus rotate the lever to the closed position, or, if the lever be closed, the said strap may be cast on by bringing it back of the free end of arm 8, as indicated by the dotted circle 7^a in Fig. 2, and
 55 then raising the device or allowing the elastic webbing to do so, whereupon the strap will slide between the arm 8 and the guard 10, pushing outwardly said arm, and finally seating on the arm 6.

60 Both of the two cast-off devices (one for each of the suspender-webs) may be operated simultaneously, one by one hand, the other by the other hand, to cast off or cast on the respective trousers-straps.

65 In the form of the device illustrated in Figs.

7 to 11, both inclusive, the said guard is dispensed with, and the arm 8, which when the cast-off lever is in the closed position rests against the guard in the first form, rests
 70 against the face of plate 1 in this second form. The particular spring 9 is also absent in the latter form, the spring operating to maintain said lever yieldingly in the closed position, Fig. 8, residing in the elasticity of
 75 the bent end 4 of plate 1—that is, the distance of the free end of the arm 6 of said lever to the pivot of the latter is somewhat greater than the distance between this pivot and the face of plate 1 opposite the pivot, so that the
 80 said end of arm 6 in passing on below the center when the lever is rotated from the open to the closed position forces outwardly the upturned end of plate 1, and when the said lever end has passed sufficiently below the center
 85 the elastic stress of said end of plate 1 will maintain the lever in the closed position. I also show in this second form of my device a modified way of making the pivotal connection of the cast-off lever 5 to the end of
 90 the plate 1—that is to say, instead of using the separate pivot-pin 15 and the eye 14, in addition to the eyes 13, I provide the lever with two pivot-pins or projections 15^a—one for each of the eyes 13 of plate 1—that are
 95 integral with the body of the lever—that is, they are struck up from the latter. These pins or projections are bent to extend in a plane beyond that of the outer face of the body of the lever, as seen in Figs. 8, 9, and
 100 11, so that, as in the first form before described, the plane of the adjacent part of the inner face of said lever will be above the line of the wall of the eyes 13. The outward movement of the lever is limited by a stop
 105 17, formed by the part of the free end of the part 4 of plate 1 between the said eyes. A similar stop may be used in the first form of the device in lieu of the shoulder 11 of the guard 10. It is, however, essential when the
 110 latter is used that the outward movement of the cast-off lever shall be so limited as to prevent the free end of the arm 8 from passing beyond the free end of the guard or rather not too far beyond the same. Otherwise the
 115 guard would not perform its most important function, which is to prevent liability of the trousers-strap from getting back of the arm 6 of the cast-off lever in the operation of casting on said strap, and thus preventing closing
 120 of the lever, and so defeating the purpose of the invention. It therefore requires more care in casting on the strap in the form of the device shown in Figs. 7 to 11, in which the guard is dispensed with, although if the
 125 cast-off lever be first brought to the closed position the strap may be readily cast on by bringing it between the outwardly-turned free end of the arm 8 on the side of plate 1, as indicated by the dotted circle 7^b in Fig. 8,
 130 and then drawing the device upwardly or the

strap downwardly, and thus cause the latter to open out the lever sufficiently to allow it (said strap) to pass down and become seated upon the arm 6. I, however, bend the end of the arm 8 outwardly, mainly for convenience in operating the same in the casting-off operation.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A cast-off device, comprising, in combination, the plate adapted to be connected to a suspender-webbing, or the like, and having the outwardly-turned lower end; the two-arm lever pivoted to said end of said plate, the lower arm of said lever being turned inwardly, means for maintaining said lever yieldingly in the closed position and means for limiting the outward throw of the same.

2. A cast-off device comprising, in combination, the plate adapted to be connected to a suspender-webbing, or the like, and having the outwardly-turned lower end, the two-arm lever pivoted to said end of said plate, the lower arm of said lever being turned inwardly, and a spring adapted to maintain said lever yieldingly in the closed position.

3. A cast-off device comprising, in combination, the plate adapted to be connected to a suspender-webbing, or the like, and having the outwardly-turned lower end, the two-arm lever pivoted to said end of said plate, the lower arm of said lever being turned inwardly, the guard projecting from said plate, and means for limiting the outward throw of said lever.

4. A cast-off device, comprising, in combination, the plate adapted to be connected to a suspender-webbing, or the like, and having the outwardly-turned lower end; the two-arm lever pivoted to said end of said plate; the lower arm of said lever being turned inwardly; the guard projecting from said plate; means for limiting the outward throw of said lever, and means for maintaining the latter yieldingly in the closed position.

5. A cast-off device, comprising, in combination, the plate adapted to be connected to a suspender-webbing, or the like, and having the outwardly-turned lower end; the two-arm lever pivoted to said end of said plate, the lower arm of said lever being turned inwardly, the downwardly-inclined guard projecting from said plate, said guard having the shoulder for preventing the free extremity of said inwardly-turned end of the lever-arm from passing beyond the free end of said guard, when said lever is rotated to the open position.

6. A cast-off device, comprising, in combination, the plate adapted to be connected to a suspender-webbing, or the like, and having the outwardly-turned lower end; the two-arm lever pivoted to said end of said plate, the lower arm of said lever being turned inwardly, the downwardly-inclined guard projecting from said plate, said guard having the shoulder for preventing the free extremity of said inwardly-turned end of the lever-arm from passing beyond the free end of said guard, when said lever is rotated to the open position, together with means for maintaining the lever yieldingly in the closed position.

7. A cast-off device, comprising, in combination, the plate adapted to be connected to a suspender-webbing, or the like, and having the outwardly-turned lower end; the lever pivoted to said end, and having the upper arm, and the inwardly-turned lower arm extending below the line of the pivoting of said lever, the free end of this lever-arm passing below said pivot-line when said lever is rotated to the closed position, and a spring adapted to act upon said free end of said arm to maintain said lever yieldingly in the closed position.

In testimony whereof I have hereunto affixed my signature.

JOSHUA PUSEY.

Witnesses:

GEO. L. ROTE,
ANNA G. FLANAGAN.