(No Model.)

D. O. FOSGATE.

SUSPENDERS.

No. 364,168. Patented May 31, 1887.

Fig. 1.

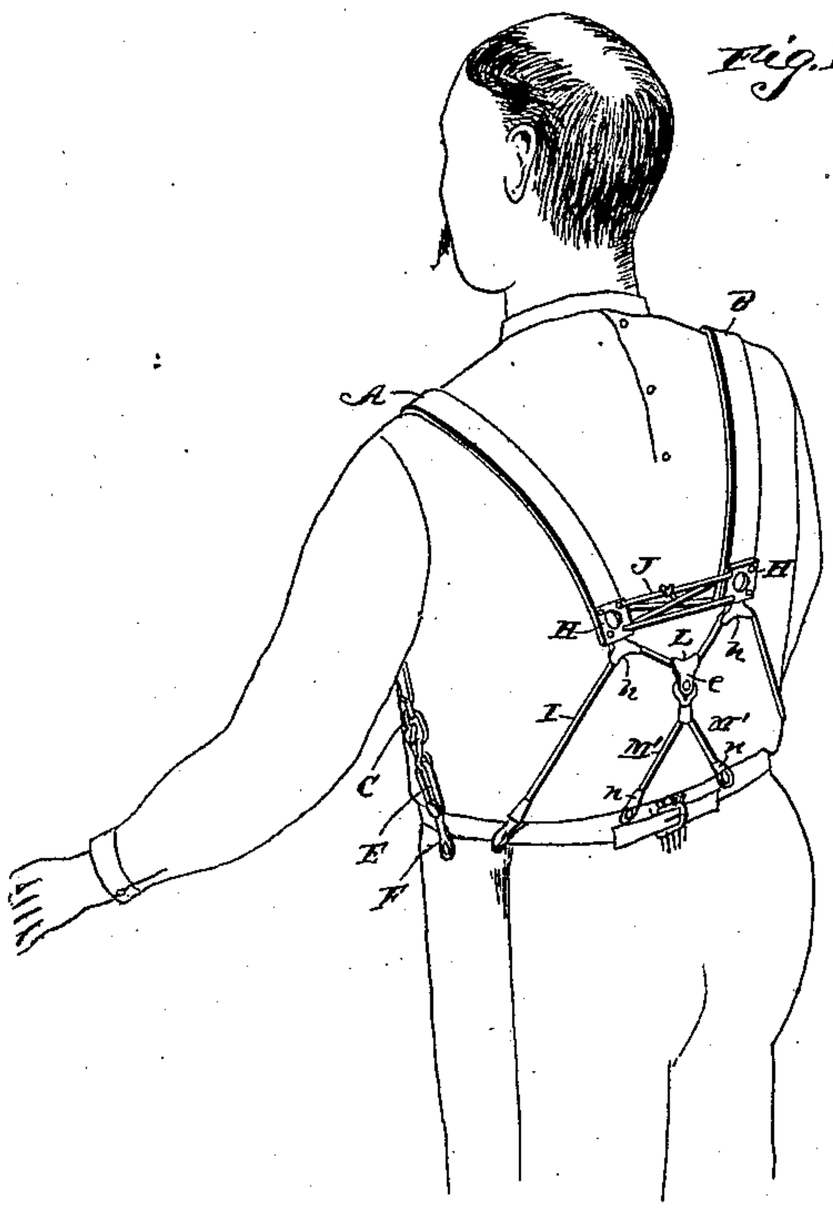


Fig. 3.

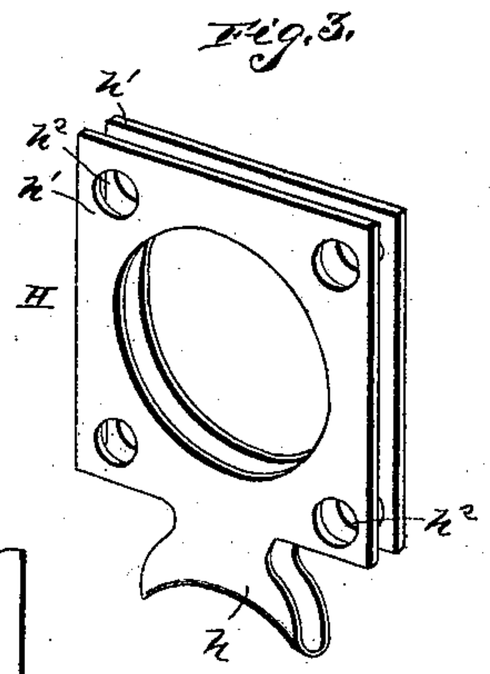


Fig. 5.

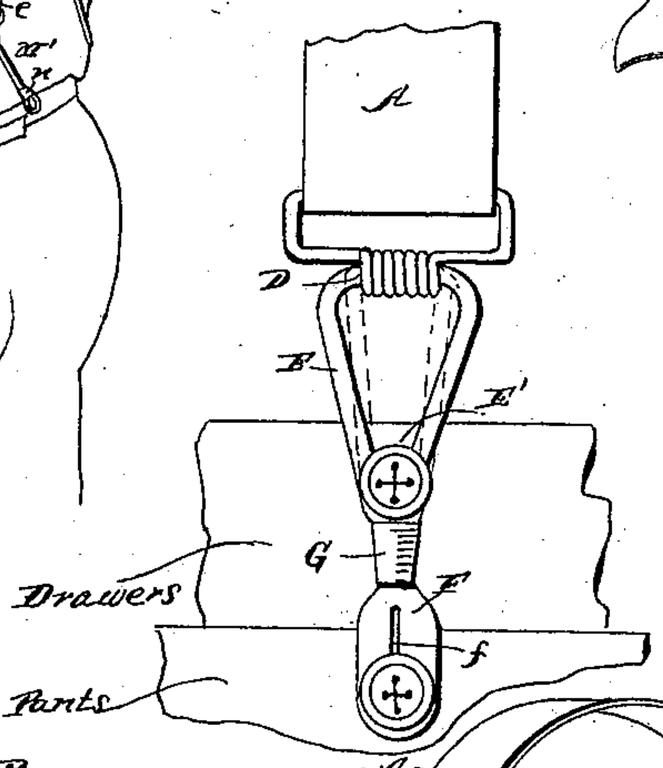


Fig. 4.

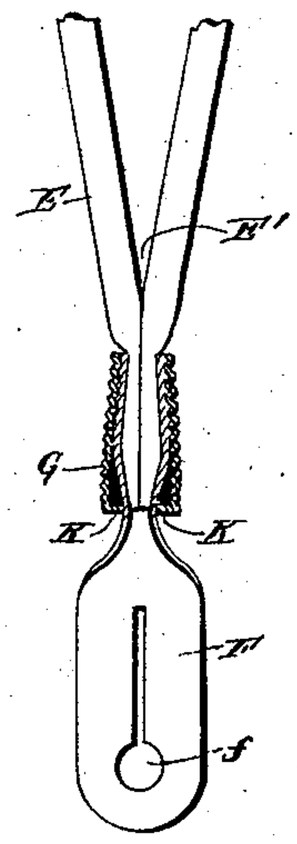
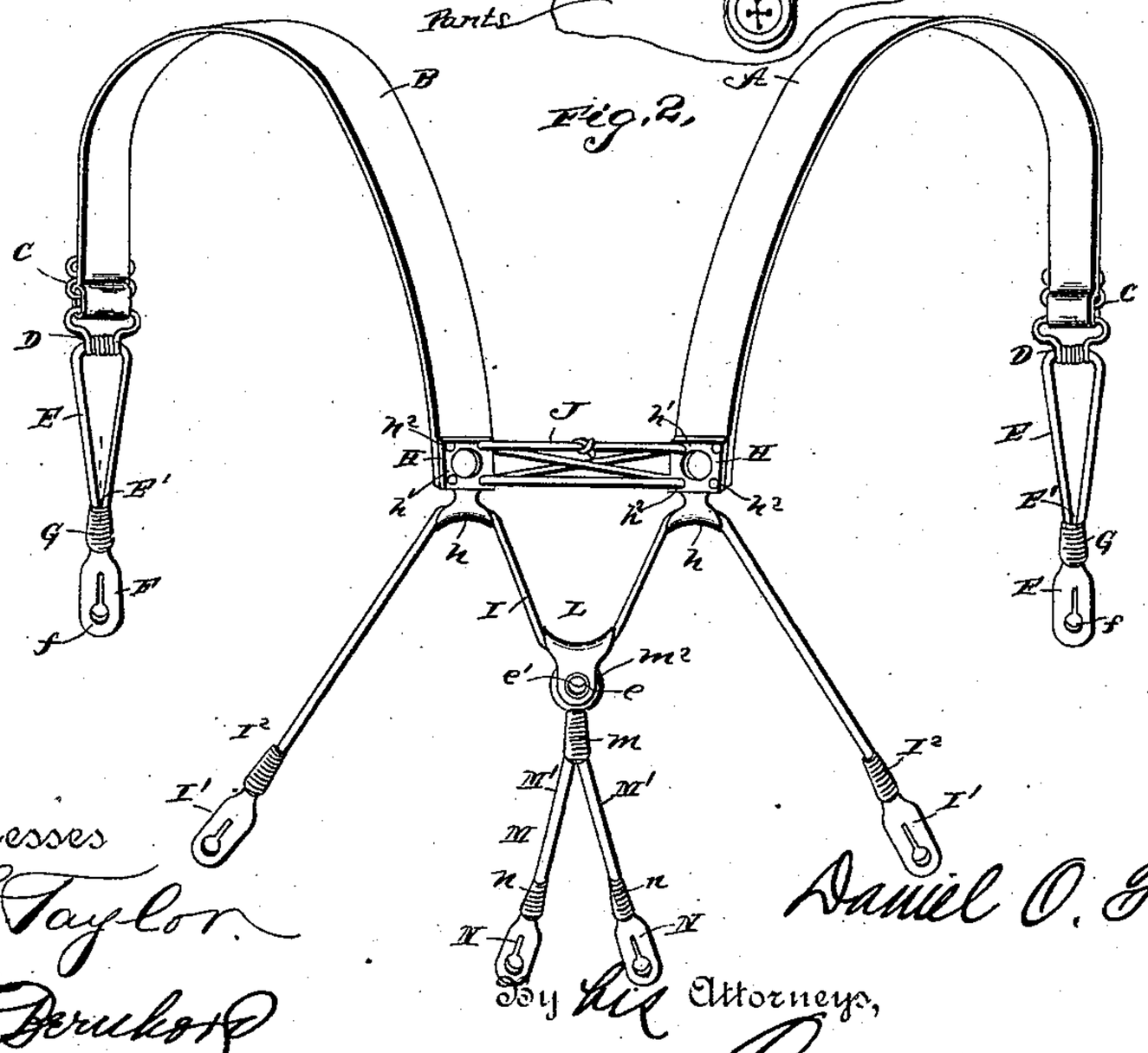


Fig. 2.



Witnesses

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DANIEL O. FOSGATE, OF AURORA, ILLINOIS.

SUSPENDERS.

SPECIFICATION forming part of Letters Patent No. 364,168, dated May 31, 1887.

Application filed April 1, 1887. Serial No. 233,286. (No model.)

To all whom it may concern:

Be it known that I, DANIEL O. FOSGATE, a citizen of the United States, residing at Aurora, in the county of Kane and State of Illinois, have invented a new and useful Improvement in Suspenders, of which the following is a specification.

This invention relates to improvements in suspenders; and it consists of the peculiar combination of devices and novel construction and arrangement of parts, as will be hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a view showing my invention adapted for use. Fig. 2 is a detached perspective view. Fig. 3 is a detail perspective view of one of the guide-plates. Fig. 4 is a sectional view through the lower ends of one of the tips, on the line *x x* of Fig. 1, to show the manner of connecting the tip and the strap. Fig. 5 is a detail view illustrating more clearly the connection of the suspenders to the pantaloons and drawers.

Referring to the drawings, in which like letters of reference denote corresponding parts in all the figures, A and B designate the usual shoulder-straps, which in my improved suspenders I make of non-elastic webbing to increase the durability of the suspenders, as it is well known to those skilled in the art to which my invention relates that an elastic webbing will become worn out much sooner than non-elastic webbing. To the front ends of the said shoulder-straps are connected buckles C, of any preferred pattern, by which the straps can be lengthened or shortened at will, and to the lower front extremities of the said straps are fitted suspending-loops D, through which are loosely passed the continuous suspending-cords E. Each of these suspending-cords is made of non-elastic material—such as webbing—and in a single continuous piece, and the free ends of each suspending-cord are brought together to form a loop, E′, said ends of the cords being clamped together and to a flexible tip, F, by a single metallic clamp, G. This tip F is made of leather or other suitable material, and its upper end is fitted around the free ends of the cord, while the clamp G is fitted around the upper end of the leather tip. The lower end of the tip is formed or provided with a button-hole, as *f*, through which is passed a button on the pantaloons of the wearer, to thereby provide a support for the pantaloons as well as for the drawers, the button on the latter being fitted in the lower portion of the loop E′. The clamp G is made or formed of a single piece of sheet metal and in the shape of a cone, as shown, and it is clamped very firmly and securely around the tip and the free ends of the cords, to thereby connect the several parts together in a very simple and secure manner.

Each of the shoulder-straps A B is provided at its rear end with a supporting-plate, H, which is made or stamped from a single piece of sheet metal for cheapness and simplicity. Each plate comprises a curved guide, *h*, and two leaves or sections, *h′*, which are arranged parallel with and a short distance from each other to leave an intermediate space, into which the free end of the strap is fitted, suitable securing devices, such as eyelets h^2, being formed through both the leaves of each plate and the end of the shoulder-strap to securely connect the several parts together. The curved guides *h* of the supporting-plates depend from the plates and the lowermost extremities of the shoulder-straps, and the rear supporting-cord, I, is thereby adapted to pass freely through the guides without hinderance from the shoulder-straps.

In order to provide a flexible and adjustable connection between the rear ends of the shoulder-straps, I pass a lacing-cord, J, through the eyelets h^2 in the approximate edges of the supporting-plates H, as shown, the free ends of the said cord being securely connected or tied together.

To the free ends of the rear supporting-cord, I, are secured tips I′, of leather or other preferable material, and metallic clasps I^2 are fitted around the said tips and ends of the cord in a similar manner to the method employed for the ends of the front suspending cords and tips.

Each of the clasps or clamps I^2 and G is provided at its lower edge with one or more inwardly-extending teeth or prongs, K, which take into the leather tips beneath the lower extremity of the cord, to thereby more securely connect the parts together.

A sliding plate, L, is fitted on that portion of the rear suspending-cord, I, between the curved guides of the supporting-plates, and this plate L is normally arranged below the plane of the curved guides *h* when the device

is in use. This plate L is curved to adapt it to fit snugly to that portion of the cord I on which it is arranged; and it has depending arms *l*, which are connected together at their lower ends, beneath the cord I, by a transverse rivet or eyelet, *l'*. A suspending-cord, M, is passed between the arms of the sliding plate and over the rivet or eyelet connecting said arms; and the said cord is connected together at a point immediately below the rivet by a clasp, *m*, having the prongs *m'*, that fit or take in the cord. By this arrangement a small loop, m^2, is provided in the cord M, which fits over the eyelet or rivet *l'*, and two diverging arms or sections, M', are also formed of the cord M, the free ends of the said arms being provided with leather tips N, which are firmly secured thereto by clasps *n*, having the prongs *n'*, which fit or take into the tips, and thereby more securely connect the parts together.

When the device is in use, the loop E' of the front cords, E, are fitted over the buttons at the front of the drawers and the tips F thereof over suitable buttons on the pantaloons of the wearer. The tips I' on the free ends of the cord I are connected to buttons on the sides of the pantaloons, and the tips N on the cord M are connected to the buttons on the rear side of the pantaloons, all as clearly shown in Fig. 1. In this arrangement of parts the drawers are supported by the suspenders as well as the pantaloons, and the latter are suspended equally at all points, so that one side of the pantaloons will not be higher than the other side and the lower ends of the pantaloons will be of equal height. The continuous cord I slides freely through the curved guides *h* of the supporting-plate, and the sliding plate L can move freely on the cord, so that one side of the suspenders will be lengthened or shortened, according to the movement of the body of the wearer, the object in thus allowing the cord to slide being to insure an equal suspension of the pantaloons at all points, without reference to the position of the wearer.

The lacing-cord intermediate the free ends of the shoulder-straps enables the latter to change their positions relatively of each other and accommodate themselves to the motions of the body without unduly straining the connection between the straps. This cord can also be lengthened or shortened at will, to adjust the suspenders to persons of different sizes. The cord can be readily removed when worn, and another substituted therefor at a trifling expense.

My improved suspenders are very durable in construction, as the straps A B are made of non-elastic webbing, and hence are not liable to soon become worn out, and the connections between the several parts are very firm and secure and not liable to become easily broken or detached.

The suspenders are also exceedingly cheap and easy of manufacture, and I have found them very efficient for the purposes designed.

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

1. In suspenders, the combination of the shoulder-straps, the plates rigidly affixed to the rear ends of the straps, the lacing-cord intermediate the plates, and the suspending-cords connected with the shoulder-straps, as and for the purpose described.

2. In suspenders, the combination of the shoulder-straps, the fixed plates at the rear ends of the said straps having the depending guides, and adjustable flexible connection secured to and between the fixed plates, a continuous cord passing through the depending guides of the plates, and a sliding plate fitted on the cord between the guides and having the depending suspending-cord, substantially as described.

3. In suspenders, the combination, with the straps A and B, of a suspending-cord, E, having its ends connected together to form a loop, and a tip, F, connected to the lower portion of and depending from the ends of the cord forming the loop, substantially as and for the purposes set forth.

4. In suspenders, the combination of the shoulder-straps, the plates secured to the straps by eyelets and having the depending curved guides, the lacing-cord passing through the eyelets to flexibly and adjustably connect the straps, the sliding continuous cord passing through the depending guides, and a sliding plate fitted on the cord between the guides and having the depending tips, as and for the purpose described.

5. The combination, with the straps A and B, of the plates H, having the depending guides *h'*, as herein set forth, and for the purposes specified.

6. The combination, with the straps A and B, of the plates H, of the construction herein set forth, connected to said straps, and the adjustable flexible cords J, connecting the said plates H, in the manner set forth, substantially as described.

7. The combination, with the straps A and B, of the plates H, having the depending guides *h*, constructed from a single piece of metal and bent into form to inclose and be secured to the ends of the said straps A and B, substantially as described.

8. The suspenders herein set forth, comprising the straps A and B, the plates H, having the depending end *h*, the continuous cord I, the sliding plate L, mounted on said cord I and having the suspending-cord M M', the loop E, secured to the front ends of the straps formed from a single piece of cord, the tip F, and the connecting-plate G, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

DANIEL O. FOSGATE.

Witnesses:

STEPHEN C. GILLETT,

RUNICE P. GOODWIN.