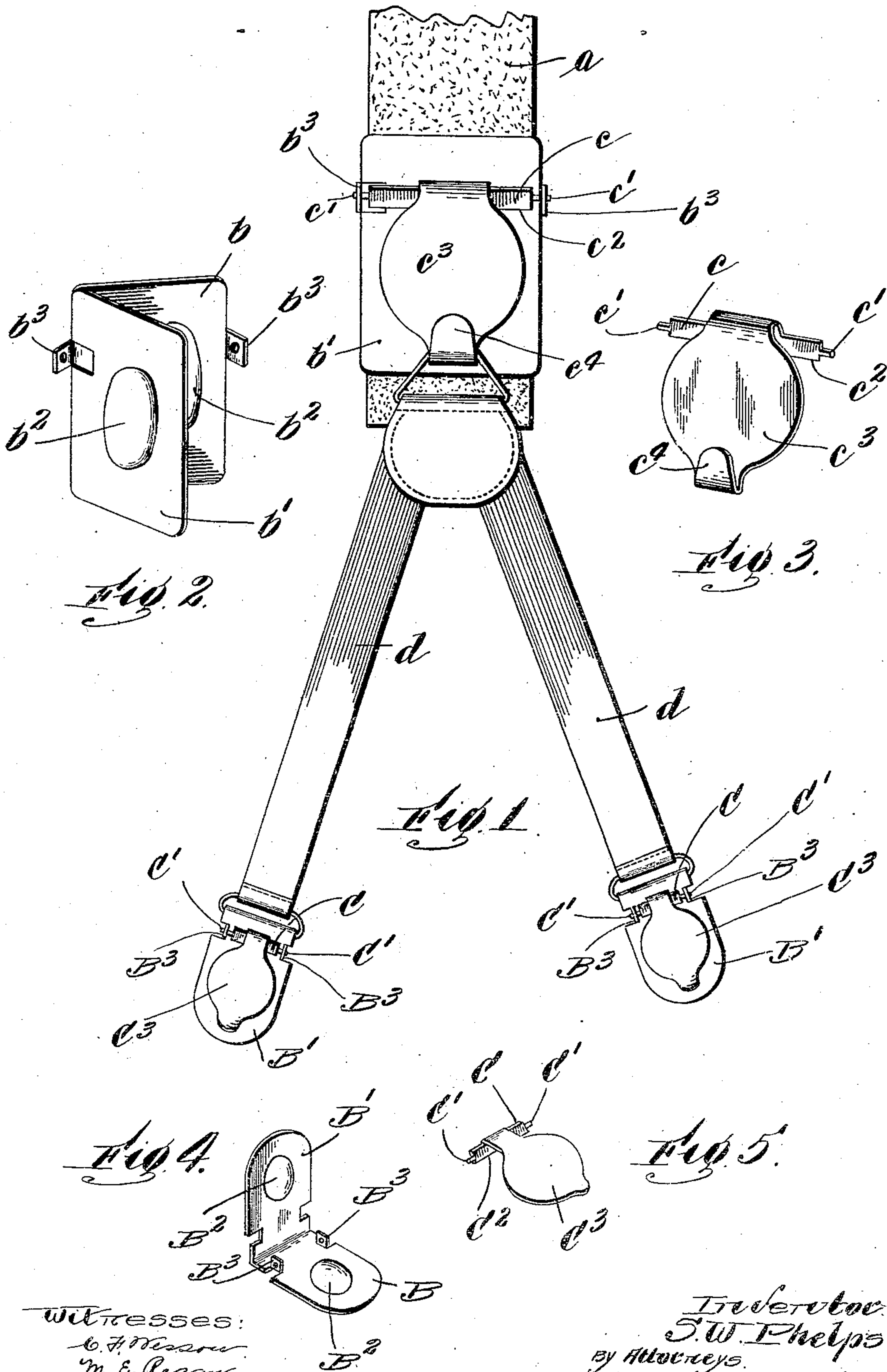


No. 854,758.

PATENTED MAY 28, 1907.

S. W. PHELPS.
SUSPENDERS.

APPLICATION FILED MAY 23, 1906.



WITNESSES:
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SIDNEY W. PHELPS, OF GLOBE VILLAGE, MASSACHUSETTS, ASSIGNOR OF
ONE-FOURTH TO JOHN A. HALL, OF SOUTHBRIDGE, MASSACHUSETTS.

SUSPENDERS.

No. 854,758.

Specification of Letters Patent.

Patented May 28, 1907.

Application filed May 23, 1906. Serial No. 318,354.

To all whom it may concern:

Be it known that I, SIDNEY W. PHELPS, a citizen of the United States, residing at Globe Village, in the county of Worcester and State of Massachusetts, have invented new and useful Suspenders, of which the following is a specification.

My invention relates to certain improvements especially adapted for use on suspenders and similar articles, such as garters, for example and the principal objects thereof are to provide simple and efficient means for accomplishing the ordinary function of the suspender and at the same time do away with the necessity of using buttons.

The objects are accomplished by the provision of embossed plates, the embossed portion of one adapted to enter that of the other, to press the cloth or suspender between them, and the use of an improved clamp for forcing the two plates together. This construction I employ, not only on the tabs in place of the ordinary button-holes, but also on the main part of the suspender for connecting the tabs thereto. It may also be employed in any other convenient place without departing from the spirit of my invention.

Reference is to be had to the accompanying drawings which show certain forms in which my invention may be embodied and the application thereof to suspenders.

In these drawings, Figure 1 is a front elevation of a portion of a suspender supplied with two clamps each embodying the principle of my invention. Fig. 2 is a perspective view of a portion of one of said clamps. Fig. 3 is a perspective view of the remaining portion of the other clamp, and Figs. 4 and 5 are perspective views of the two parts of another clamp shown in Fig. 1.

I have shown the elastic *a* of a suspender as constructed in the usual or any desired manner and provided with a pair of plates *b* and *b'*. Each of these plates is provided with an embossed portion *b²*, one embossed portion extending outwardly and the other inwardly so that one projects toward the other and is seated therein when the plates are brought together.

The two plates are movably connected together and may be formed of an integral piece of metal bent at the edge so as to permit a slight movement between the plates.

They are intended to be placed on opposite sides of the elastic or main portion *a* of the suspender and when they are forced together by any desired means, the embossed parts *b²* will grip the elastic between them and securely hold it in position without the use of projecting sharp points or any other of the undesirable fastening means which are ordinarily employed in articles of this character. For the purpose of so clamping the plates together, I have provided the following mechanism: Extending at substantially right-angles from the plate *b* are a pair of ears *b³*, each having a perforation. Fitting between these ears is a bar *c*. This bar has a pair of projections *c'* for entering the perforations so that the bar is pivoted in the ears. The lower surface *c²* of this bar engages the surface of the plate *b'* and when the bar is turned on its pivots so as to bring the surface *c²* as far down as possible, an efficient clamping action is secured in a way that will be well understood. The bar *c* is provided with a plate *c³* which serves as a handle for operating the clamp. This plate may also be embossed if desired, to add to the clamping action, but in ordinary cases it is plain and is provided with a hook *c⁴* on which a tab *d* may be hung. It will be seen that with a construction of this character, the plates *b* and *b'* can be forced together with sufficient pressure by the use of the handle *c³* and the bar *c* to cause the embossed portions to engage the elastic *a* between them and securely hold the same in position with respect to the plates. Also the clamping action is readily released by the manipulation of the handle and this permits the plates *b* and *b'*, which constitute a slide, to be moved to any desired point of the suspender. Furthermore, when the tab is placed on the hook *c⁴*, the weight of the trousers will come upon the latter and consequently the locking action of the bar *c*, which is ordinarily sufficiently strong on account of the friction of the parts, is reinforced by the pull of the trousers.

I have also employed the same principles on the tabs themselves to form a substitute for the button-hole or eye usually employed and to enable the suspender to be used without the employment of buttons on the trousers. For this purpose a pair of plates *B* and *B'* are provided with embossed portions *B²* and with perforated ears *B³*. A locking bar

C, having pins C' and a bearing surface C² with a plate or handle C³ is employed. These parts operate in the same manner as above, except that in this case, the part to be
5 clamped extends horizontally between the plates, while in the other, it extends directly through them from the top to the bottom. A further description of the details of this part of the device therefore need not be given.

10 It is to be observed that the two plates of the clamping device can be formed as above; integral with each other or may be pivoted together. It will be seen that by the employment of a construction of this character
15 conforming to this invention as expressed in the claims, whether in the forms illustrated or otherwise, a most efficient fastening device is secured which can be employed at several different points of the suspender and for
20 slightly different purposes. Furthermore, that the buttons of the suspenders are done away with and the sharp projecting points usually employed on fastenings of this kind are avoided. These results are accomplished
25 by the use of a very simple and inexpensive construction which can be easily applied and very readily released when desired.

While I have illustrated and described a particular form in which my invention may
30 conveniently be embodied, I am aware that changes may be made therein by any person skilled in the art without departing from the scope of the invention as expressed in the claims. Therefore, I do not wish to be limited to the exact construction shown, but
35

What I do claim and desire to secure by Letters-Patent is:—

1. The combination of a pair of plates having embossed portions and adapted to clamp
40 a sheet between them, one of said plates being pivotally mounted with respect to the other to swing on an axis beyond the surface thereof, said pivotal connection including a bar having a bearing surface adapted to engage one of the plates, and a handle for turning the bar on its pivot, said handle being provided with a hook at the lower end thereof for supporting a suspender tab or the like.

2. The combination of a pair of plates
50 adapted to engage each other for clamping a sheet between them, said plates being movably mounted with respect to each other, one of said plates being provided with perforated ears extending toward and beyond the
55 other plate, a bar having pins adapted to enter the perforations in said ears, said bar having a bearing surface located between the pins and the plates for engaging one of the latter, and means for turning the bar on its

pivot, said means being provided with a hook 60 at the end thereof for supporting a tab for a suspender or similar article.

3. The combination of a pair of plates each having an embossed portion, said embossed portions extending from the surface of the 65 plates in the same direction and being of substantially the same size and shape, whereby one of them will enter the other, said plates being movably mounted with respect to each other, one of said plates being provided with 70 a pair of perforated ears extending toward and beyond the other plate, a bar having pins at its ends adapted to enter the perforations in said ears, said bar having a bearing surface located between the pins and the 75 plates for engaging one of the latter, and a handle for turning the bar on its pivot.

4. The combination of a pair of plates each having an embossed portion, said embossed portions extending from the surface of the 80 plates in the same direction and being of substantially the same size and shape, whereby one of them will enter the other, said plates being movably mounted with respect to each other, one of said plates being provided with 85 a pair of perforated ears extending toward and beyond the other plate, a bar having pins at its ends adapted to enter the perforations in said ears, said bar having a bearing surface located between the pins and the 90 plates for engaging one of the latter, and a handle for turning the bar on its pivot, said handle being provided with a hook at the end thereof for supporting a suspender tab.

5. In a suspender, the combination of a 95 main ribbon or elastic, a slide thereon comprising a pair of embossed plates, one plate located on each side of said ribbon or elastic, said plates being movably connected together and one of them having a pair of per- 100 forated ears extending beyond the other, a clamp pivotally mounted in the perforations of said ears, said clamp having a hook depending therefrom, a suspender tab hung from said hook, a fastening device on said 105 tab comprising a pair of embossed plates movably connected together, a pair of perforated ears extending from one of said plates beyond the other, and a clamp pivotally mounted in the perforations of said 110 ears.

In testimony whereof I have hereunto set my hand, in the presence of two subscribing witnesses.

SIDNEY W. PHELPS.

Witnesses:

EVA B. SCHESLER,
MARY E. VINTON.