No. 642,174. Patented Jan. 30, 1900.

P. B. TINGLEY.

CLASP.

(Application filed June 29, 1899.)

(No Model.)

Fig. 1.

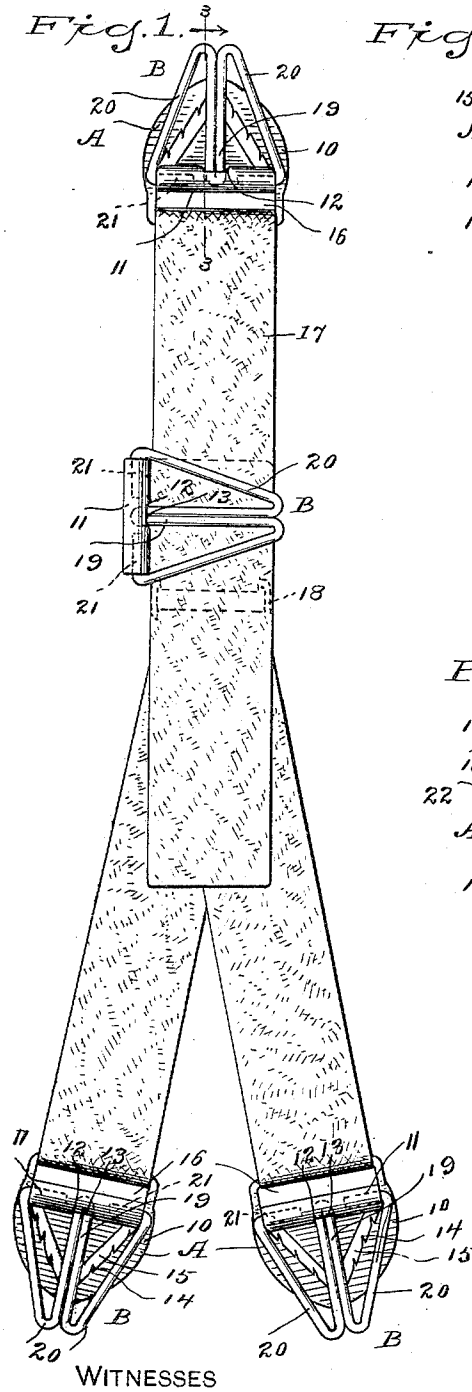


Fig. 3.

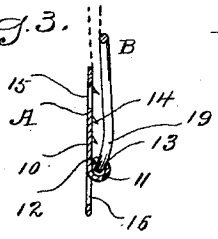


Fig. 2.

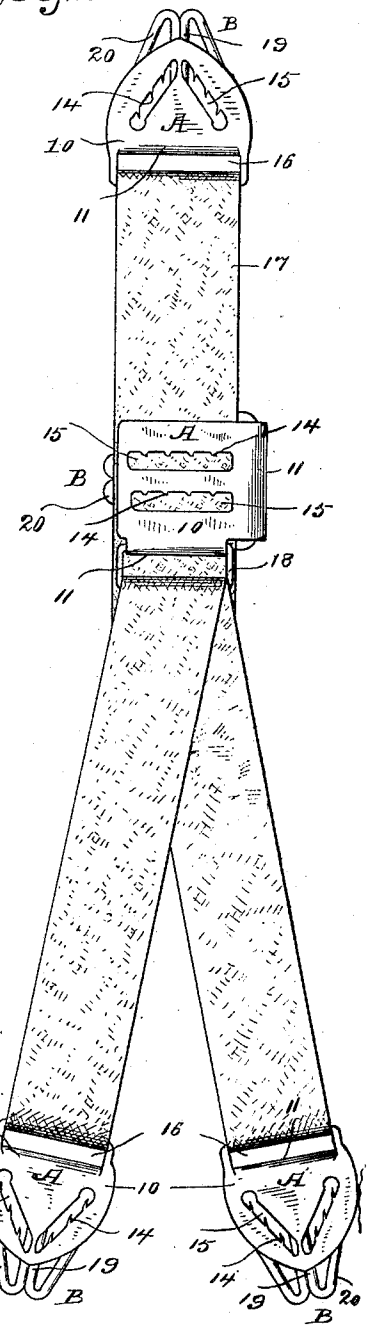
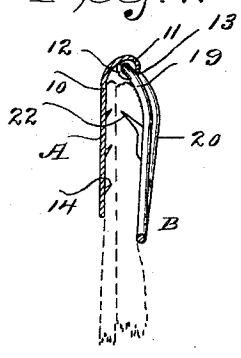
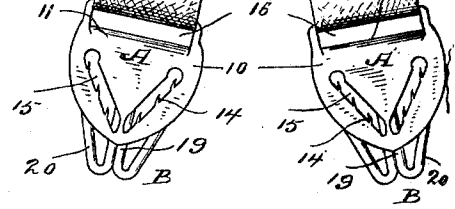


Fig. 4.





WITNESSES

H. A. Lamb,
N. Elwood.

INVENTOR

Philo B. Tingley
By A. M. Wooster
Atty.

UNITED STATES PATENT OFFICE.

PHILO B. TINGLEY, OF NEW YORK, N. Y.

CLASP.

SPECIFICATION forming part of Letters Patent No. 642,174, dated January 30, 1900.

Application filed June 29, 1899. Serial No. 722,278. (No model.)

To all whom it may concern:

Be it known that I, PHILO B. TINGLEY, a citizen of the United States, residing at New York, county of New York, State of New York, have invented a new and useful Clasp, of which the following is a specification.

My invention relates to clasps for garment-supporters, and has for its object to provide a simple and inexpensive clasp of this type which shall be adapted for general use—as, for example, to attach men's drawers and trousers together at the top, or to attach stocking-supporters to stockings or to corsets, or as a clasp for adjusting stocking-supporters, garters, suspenders, belts, &c. In order to provide an article of this class of the simplest possible construction and in which the cost of construction shall be reduced to the minimum, which may be easily attached to and detached from a garment, but which until released in the proper manner will engage and hold a stocking or other garment firmly but without tearing, I have devised the simple and novel clasp which I will now describe, referring by reference characters to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an elevation of a stocking-supporter, illustrating three applications of my novel clasp—to wit, as a means for attaching a stocking-supporter to a stocking, as a means of attaching it to a corset or waist, and as a clasp or buckle for adjusting the supporter; Fig. 2, a rear view corresponding with Fig. 1; Fig. 3, a detail sectional view on the line 3 3 in Fig. 1; and Fig. 4 is a view, partly in section, illustrating the use of my novel clasp in securing drawers and trousers together at the top.

My novel clasp consists of two members, which I have designated, respectively, as A and B, member A being made of sheet metal and member B of spring-wire.

Member A consists of a plate 10 of sheet metal, which may be of any desired size, shape, or configuration, depending upon the special use for which it is intended. The essential features of this member are eyes 11, formed from the metal of the plate itself and which are engaged by member B, as will be more fully explained, between said eyes an opening 12, having a wall 13, the purpose of which will presently be explained, and short sharp teeth or projections 14, which are also formed from the metal of the plate and extend outward obliquely from the plate, so that in use it will be practically impossible for the teeth to bend in the direction of the strain or for the fabric to slip off the teeth. In fact, as the teeth extend obliquely in the opposite direction to the strain it follows that the fabric instead of slipping off will slip down to the base of the teeth, which is their point of greatest strength. In practice in forming these teeth I preferably strike out slots 15 in the plate, leaving the metal which is removed to form the slot attached at one side, and form the short outwardly-extending oblique teeth or projections 14 from the metal struck out in forming the slot. The shape, size, number, and arrangement of these slots or the number of teeth formed from the metal struck out are not of the essence of my invention, the essential feature of the teeth being that they are short and sharp and extend obliquely from the plate in the opposite direction to the strain in use. In Figs. 1 and 2 the upper and lower plates 10 are provided with slots 16 for the attachment of a piece of web, which I have indicated by 17. In this form the metal which is removed to form slots 16 is left attached at one end and is utilized to form the eyes 11. In the same figures the plate A of the middle clasp is shown as provided with a hinged loop 18 for the attachment of a web 17—in the present instance a web for attachment to a stocking.

Member B is formed from a blank of wire, the central portion of which forms a spring-tongue 19, the wire being then curved outward and recurved backward to form side pieces 20, the ends 21 of which are bent inward and engage eyes 11, whereby the two members are secured together.

The two members of the clasp are pressed tightly together and caused to grasp any garment or fabric closely by means of the spring action of tongue 19. The end of this tongue lies in opening 12 between eyes 11 and bears against wall 13. The relative position of wall 13 and eyes 11 is such that when the parts are in the normal position the end of the tongue is in line with the ends 21 of the side pieces which engage the eyes, the tongue lying sub-

stantially parallel with the side pieces. When the free end of member B, however, is moved away from member A, or vice versa, wall 13 is engaged by the end of the spring-tongue and springs the tongue out of the plane of the side pieces. The farther member B is swung away from member A—*i. e.*, the farther the members are separated the more the spring-tongue will be turned out of the plane of the side pieces and the greater will be the spring action tending to return the members to their normal position.

In use the operator separates the free ends of the two members, places them on opposite sides of the garment to be grasped, and releases them, the spring action of the tongue causing them to close together and engage the garment firmly, whether it be a corset or waist, for which the upper clasp is adapted in Figs. 1 and 2, or a stocking, for which the lower clasps are adapted in said figures, or whether the clasp is used as a buckle in a belt, suspender, or garter, as at the center in Figs. 1 and 2.

In Fig. 4 I have illustrated a form unprovided with a slot 16 or a hinged loop 18. In this form the connected ends of the two members are curved outward away from each other to adapt them to engage thick heavy garments—as, for example, trousers and drawers simultaneously. In this form the tongue of member B is preferably provided on its inner side with one or more teeth or projections 22. These teeth may be made of wire and soldered or otherwise rigidly secured to the spring-tongue. The tooth in this form extends upward obliquely from the tongue in the same manner that teeth or projections 14 do from the plate of member A, so that when strain is applied the garment will slip down to the base of the teeth, but will not slip off, and there will be no danger of the teeth or projections bending.

Having thus described my invention, I claim—

1. A clasp comprising a member A made from sheet metal and a member B made from wire, said member A having eyes 11 with an opening 12 having a wall 13 between them and said member B consisting of a spring-tongue the end of which lies in opening 12 and engages the wall and side pieces 20 having ends 21 which engage the eyes, the tongue and the side pieces normally lying in the same plane but the tongue being sprung out of the plane of the side pieces when the free ends of the members are separated whereby the members are caused to grasp and hold a garment firmly.

2. A clasp comprising a member A made from sheet metal and having eyes 11, opening 12 with wall 13, and teeth formed from the metal of the plate and extending obliquely outward from the plate in the opposite direction to the strain in use and a member B consisting of a spring-tongue lying in opening 12 and engaging the wall, and side pieces having ends 21 which engage the eyes, said tongue and side pieces lying normally in the same plane but the tongue being turned out of the plane of the side pieces by separation of the free ends of the members so that the clasp is caused to engage and hold a garment firmly.

In testimony whereof I affix my signature in presence of two witnesses.

PHILO B. TINGLEY.

Witnesses:
JOHN F. MURCH,
ALTHINA C. MURCH.