

(No Model.)

J. WALDNER.

FLY FASTENER FOR TROUSERS OR OTHER APPAREL.

No. 551,103.

Patented Dec. 10, 1895.

Fig. 1.

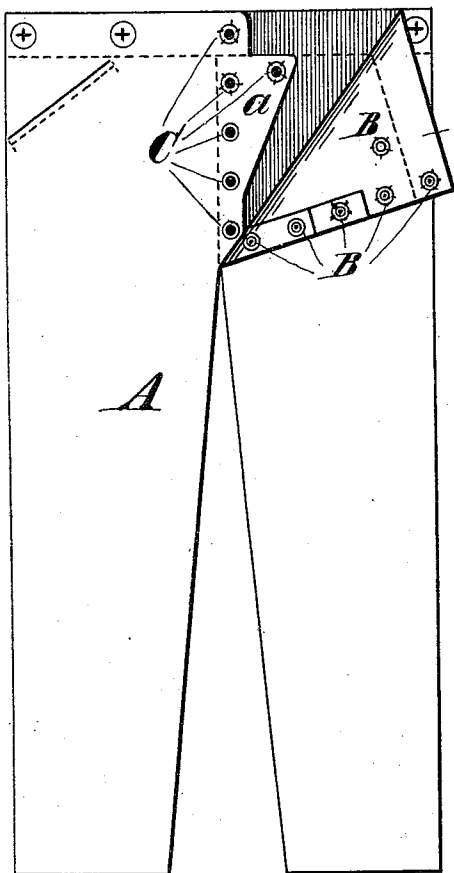


Fig. 2.

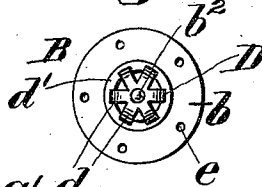


Fig. 3.

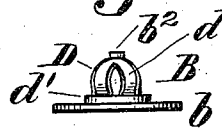


Fig. 4.

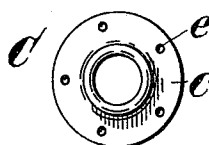


Fig. 5.

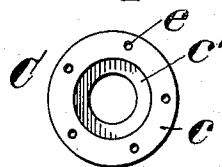


Fig. 6.

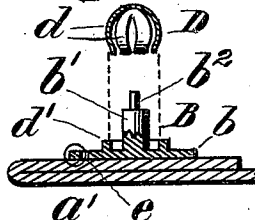


Fig. 7.



Fig. 8.

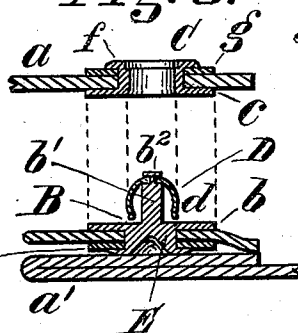
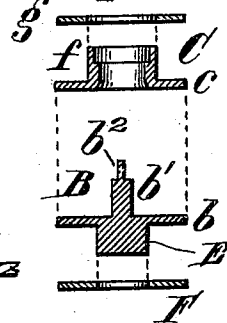


Fig. 9.



Attest
J. H. Johnson
L. M. Jones

Inventor
Julius Waldner,
by John E. Jones,
his attorney.

UNITED STATES PATENT OFFICE.

JULIUS WALDNER, OF CINCINNATI, OHIO.

FLY-FASTENER FOR TROUSERS OR OTHER APPAREL.

SPECIFICATION forming part of Letters Patent No. 551,103, dated December 10, 1895.

Application filed September 7, 1895. Serial No. 561,775. (No model.)

To all whom it may concern:

Be it known that I, JULIUS WALDNER, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented a certain new and useful Improvement in Fly-Fasteners for Pantaloon and the Open Lap-Joints of other Apparel, of which the following is a specification.

My invention relates to that class of fly-fasteners for garments in which a post or male member is attached to the fly or outer flap and a socket or female member detachably engaging said post member is attached to the inner or under flap; and it consists in the novel features of construction hereinafter minutely and fully described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a front elevation of a pair of men's trousers with the fly or flap thrown open and showing a series of my fastening devices attached in several ways thereto; Fig. 2, a plan of the engaging side of the male member of my fastener; Fig. 3, an elevation of Fig. 2; Fig. 4, a plan of the upper or engaging face of the female member of my fastener; Fig. 5, a plan of the back or opposite face of the member seen in Fig. 4; Fig. 6, a central cross-section, partly in elevation, of the member seen in Figs. 2 and 3, showing it applied by means of sewing to the inner face or back of the outer or upper flap, the latter having a broad lap or fold made in the goods, and the open-grated spring-head of the post portion of said member being shown above detached; Fig. 7, a central cross-section of the member seen in Figs. 4 and 5, showing it applied by means of sewing to the face of the inner or under flap; Fig. 8, a central cross-section of the two members of my fastener, showing them apart and applied to the garment by means of upsetting or riveting the projections on their backs over suitable washers instead of by means of sewing, (seen in the other detail views;) and Fig. 9, a central cross-section of the two members seen in Fig. 8 before upsetting or riveting, but omitting the open-grated spring-head and showing the washers detached above and below their respective members.

Figs. 2 to 9, inclusive, are all on an enlarged scale to bring out the features more clearly.

A represents an ordinary pair of men's trousers, having the customary inner or under flap *a* and the outer or upper flap or fly proper *a'*.

B represents the post or male member of my fastening and C the socket or female member thereof. Both members are composed of circular disks or bases *b* and *c*, respectively, disk *b* having a central upright stem or post *b'*, constructed preferably integral therewith, and an open spring-head D, riveted centrally to the upper shouldered end *b²* of said post. Spring-head D is composed of a series of resilient arms or prongs *d*, projecting downward in curve or convex form from a common center, as best seen in Figs. 2 and 6, and the lower ends of each of the arms are free to be depressed toward the post *b'* when the head is in operating place. *d'* is an annulus or circular ridge constructed on the upper face of the disk *b* around the base of post *b'*, the intervening space or annular groove being sufficiently wide to accommodate and guard the said lower free ends of the spring-arms *d* and permit their desired movement toward and from the post. Disk *c* has a central shouldered orifice *c'* to accommodate the spring-head D for locking engagement, the free resilient arms of said spring-head being compressed on entrance therein, and their resiliency holding them fast against normal or ordinary pull or side movement. The shouldered portion of orifice *c'* corresponds in diameter to that of the annulus *d'*, which fits or seats freely therein and prevents any unnecessary lateral movement or wobbling of the two members B and C on each other while in locking engagement.

The disks seen in Figs. 2 to 7, inclusive, each have thread-holes *e*, by which they may be sewed to the garment.

In Figs. 8 and 9 I show the two members of my fastener provided with rear projections, by which they are attached, instead of by means of the sewing-threads seen in said preceding views. The post member has a solid projection E, (see Fig. 9,) which is upset or riveted over a washer F, (see Fig. 8,) and the socket member has an internally-shouldered tubular projection *f*, (see Fig. 9,) which is riveted or spread outwardly over a washer *g*, (see Fig. 8,) the goods intervening between

said disks and their respective washers. In these last views, (Figs. 8 and 9,) I omit the annulus and shouldered socket therefor, leaving the disks perfectly plane on the outer contiguous faces.

5 In Fig. 6 I have shown how my post member may be attached to the inner lap or fold of the upper flap or fly proper of a pair of trousers. (See the middle post member in Fig. 10 1.) In Fig. 7 I show how the female member is sewed to a single thickness of goods, which is also true of the second post member (from the top) on the outwardly-turned flap of the pants seen in Fig. 1. In Fig. 8 I show how 15 the post member is attached to the customary loose inner fly or button-engaging piece on the inner face of the outer flap or fly proper *a'*. (See the two lower post members in Fig. 1.) My sewed members being adapted to be at- 20 tached to the goods direct without any inner fly or a fold or double thickness in the goods being necessary, a saving of goods and extra labor are effected to good advantage, and the garment is not so bulky at the lap-joint.

25 The fastener, as herein shown and described, is very simple, easily constructed and economical to manufacture, and in use is entirely concealed from view. Its several mem- 30 bers readily interlock and become readily disengaged, as desired, and a very close drawing together of the two flaps *a* and *a'* is accomplished and maintained, the two contiguous disks *b* and *c* of each lying in perfectly intimate contact when locked together.

35 I claim—

1. As an article of manufacture, a concealed fastening-device for the overlapping flies of trousers or other apparel, the same consisting of a male-member *B* having a circular

base or disk *b*, an upright post *b'* projecting 40 centrally from one face of said disk, an open, grated spring-head *D*, surrounding said post and centrally attached thereto, at its upper end, and a female or socket member having a 45 centrally-apertured circular disk or base, said spring-head *D* having a circular series of curved or bowed resilient arms or prongs projecting from a common center and all of them free at their other, opposite ends for com- 50 pression toward the base of the internal post, and for reaction therefrom, when the said parts or members are put into and from locking-engagement, substantially as herein set forth.

2. A fastening-device for trousers-flies and 55 other apparel having lap-joints, the same consisting of a male-member composed of a circular disk or base having an annulus and a central, upright post constructed thereon, a free-armed grated spring-head mounted on 60 the upper end of and surrounding or overcapping said central, upright post, and a socket or female-member composed of a circular, centrally-apertured disk, said central aperture or orifice having a shoulder con- 65 structed around it on one side the disk to form a seat for said annulus, and both said members being suitably attached in place, and adapted to operate for engagement and disengagement to and from each other, sub- 70 stantially as and for the purpose specified.

In testimony of which invention I have hereunto set my hand.

JULIUS WALDNER.

Witnesses:

JOHN E. JONES,
L. M. JONES.