(No Model.)

H. C. FRANK.

CLASP.

No. 296,827. Patented Apr. 15, 1884.

Fig. 1.

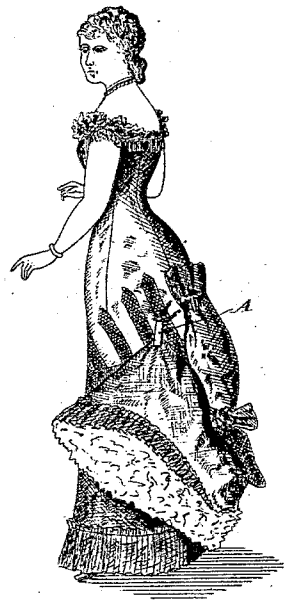


Fig. 2.

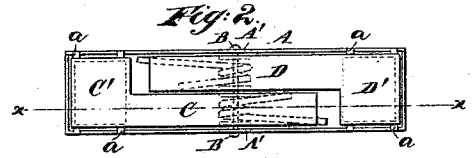


Fig. 3.

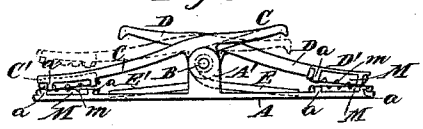
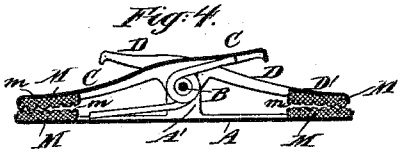


Fig. 4.



WITNESSES—

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by his attorney

Thomas D. Stetson

N. PETERS. Photo-Lithographer. Washington, D. C.

UNITED STATES PATENT OFFICE.

HENRY C. FRANK, OF NEW YORK, N. Y.

CLASP.

SPECIFICATION forming part of Letters Patent No. 296,827, dated April 15, 1884.

Application filed February 6, 1884. (No model.)

To all whom it may concern:

Be it known that I, HENRY C. FRANK, of the city and county of New York, in the State of New York, have invented certain new and useful Improvements in Clasps for Holding Clothing and for other Purposes; and I do hereby declare that the following is a full and exact description thereof.

The invention is more particularly intended for spring-clasps for holding portions of garments, as for supporting the skirts of ladies' dresses at a little elevation in wet weather; but it may be applied with advantage to clasps otherwise operated and used for various other purposes.

I will describe the invention as applied to the dress-supporting clasps described in my patent dated June 6, 1882, No. 259,002.

Instead of presenting roughened metallic surfaces to engage with the dress, I present extended surfaces of soft vulcanized india-rubber. The rubber may be cut from extended sheets, and secured in place by claws formed on the metal portion of the clasp and clinched down and over the edges of the rubber.

The accompanying drawings form a part of this specification, and represent what I consider the best means of carrying out the invention.

Figure 1 shows the improved clasp in use. If, by accident or otherwise, the looped-up dress is forcibly pulled, the nature of the clamping-surfaces allows the clasp to hold with considerable force; but if the pulling force becomes too great to be resisted by the friction of the clamping-surfaces, they allow the material to be pulled out without injury. The remaining figures show the clasp alone on a larger scale. Fig. 2 is an outer or top view; Fig. 3, a side view, and Fig. 4 a longitudinal section on the line *x x* in Fig. 2.

Similar letters of reference indicate corresponding parts in all the figures where they occur.

A is the body or foundation of the clasp. A′ A′ are lugs or ears formed on the edges thereof; B, the pivot, and C D the two levers, mounted as shown, with their broad ends C′ D′ each extending across one end of A, so as to afford a grip or clamping-surface of the flat width of the body. E E′ are springs which actuate the levers C D. The inner or lower faces of the clamping ends C′ D′ and the corresponding adjacent surfaces of the body A are faced with a sheet of soft vulcanized rubber, M, formed in the process of manufacture, with one face cross-grooved, as indicated by *m*. The edges of the body A are formed with claws *a*, which are folded over and clinched down upon the edges of the pieces of rubber, M, which are thereby secured to the body A. The edges of the clamping-surface C′ and D′ are formed with similar claws *a*, which are similarly folded over and clinched upon the pieces of rubber M, which are thereby secured to the levers C D.

When my improved clasp is put in use, one clamping end is engaged with a portion of the dress above, and the other clamping end is engaged with the train or with any required portion of the dress below, and holds the parts properly together, so as to support the lower portion. The rubber faces M take hold of the fabric of the dress with such force as to induce sufficient friction or traction to hold the fabric with the required force; but if any very great pull is exerted by the train from an accidental entanglement of the train with any article of furniture, or from any other cause, the fabric can be drawn out from the clasp without tearing or materially injuring it.

As such clasps have been heretofore made, the metal surfaces were necessarily roughened or formed with points, to allow them to engage the fabric with sufficient force, and when any very great pull was exerted the fabric was liable to be torn. The impressions of the toothed or roughened surfaces in the fabric tended to disfigure the appearance of the goods, even when no more serious injury was inflicted. My improved clasp avoids all these evils.

Modifications may be made. I can equip one end of my double clasp with the rubber face and use the clasp always with the rubber-equipped end downward. In such case I can be assured that when a severe pull is inflicted the clasp will remain engaged at the upper end with the dress and let go at the lower end. Other forms of clasps may be employed—as, for instance, a single end clasp with the other end provided with a hook, safety-pin, or other means of engaging with the dress above. The invention may be used successfully with one of

the faces—as, for example, the part A—smooth metal, while the other face, as the part D′, may be equipped with the soft face M. Such a clasp will hold the fabric, but with less force than if both faces are equipped with the soft material. Parts of the invention may be used without the whole. Cement or other fastening means may be used instead of the claws *a* for holding the rubber face or faces to the hard portions of the clasp. I can use cement in addition to the claws *a* represented. The rubber M may be compounded with any of the ordinary adulterating materials used to improve or cheapen the manufacture. Other soft materials, as soft leather having the proper frictional qualities, may be used in place of rubber. The cross-grooves *m* may be omitted and the device will serve well. I prefer the whole as here shown. It is not essential that the soft surfaces present the large area shown. I prefer the proportions represented; but a narrow line of rubber across the outer edge will grasp the fabric in most cases with sufficient force, and afford the required gentle action in case the fabric is forcibly pulled out of the clasp.

I claim as my invention—

1. The skirt-clasp described, having a single foundation, and two independent levers pivoted thereto, each part having projections, as *a*, to hold cushions M, and each lever having an operating-handle and spring, arranged reversely, as set forth.

2. The foundation A, having lugs A′, and projections *a*, combined with the two independent levers, as C D, having reversely-arranged handles and springs, the pivot B, common to both levers, and the cushions M, as set forth.

3. In a clasp, as described, the combination of a foundation, as A, with two independent levers, as C D, the said levers having a combined width equal to the width of the foundation, and bearing-jaws, as C′ D′, and with springs, as E E′, as set forth.

In testimony whereof I have hereunto set my hand, at New York city, New York, this 4th day of February, 1884, in the presence of two subscribing witnesses.

HENRY C. FRANK.

Witnesses:

W. C. DEY,

CHARLES R. SEARLE.