

(No Model.)

D. A. CARPENTER.

GLOVE FASTENER.

No. 370,753.

Patented Sept. 27, 1887.

Fig: 1.

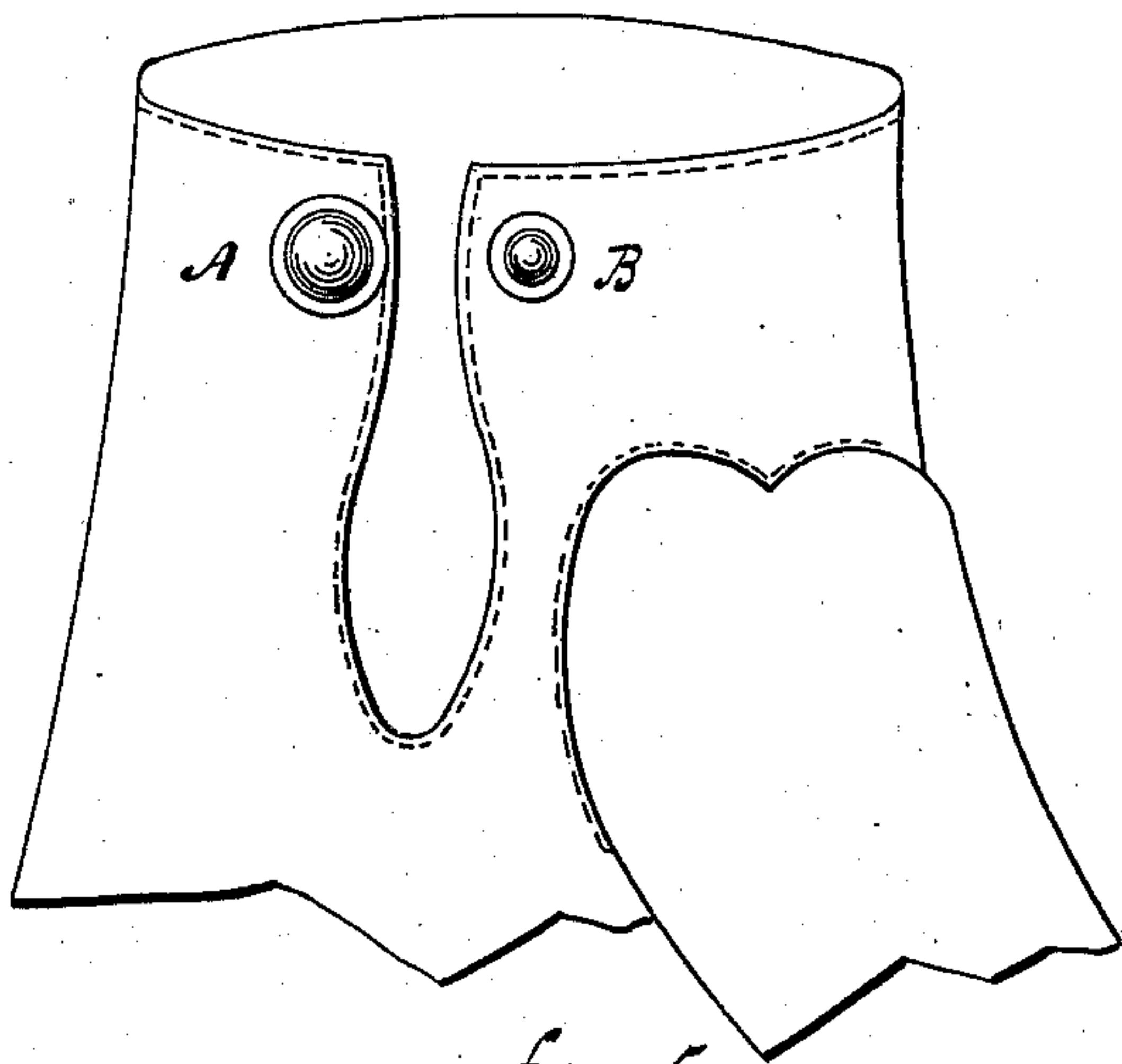


Fig: 2.

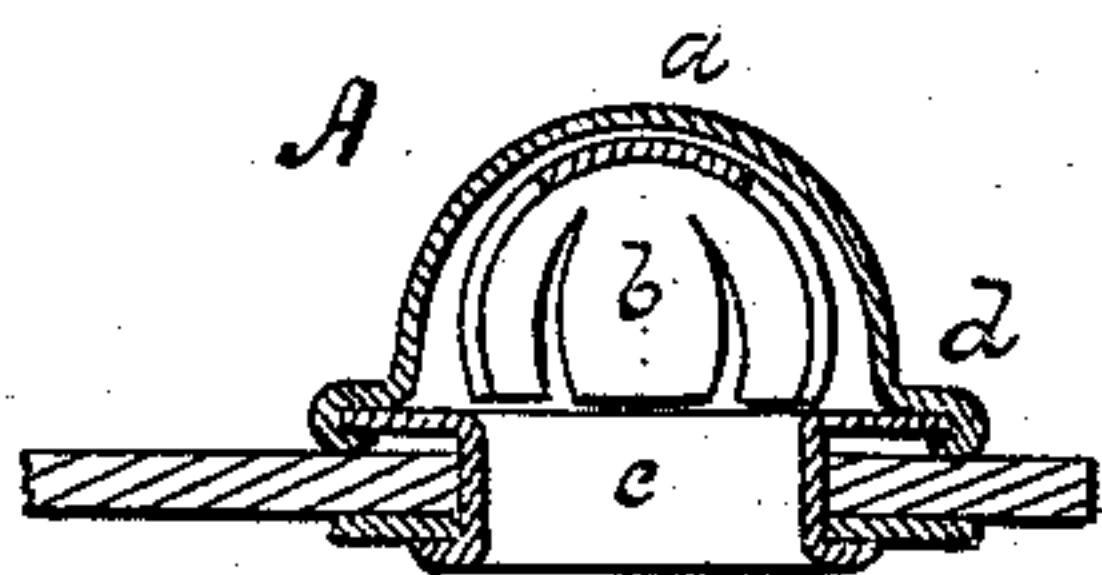


Fig: 5.

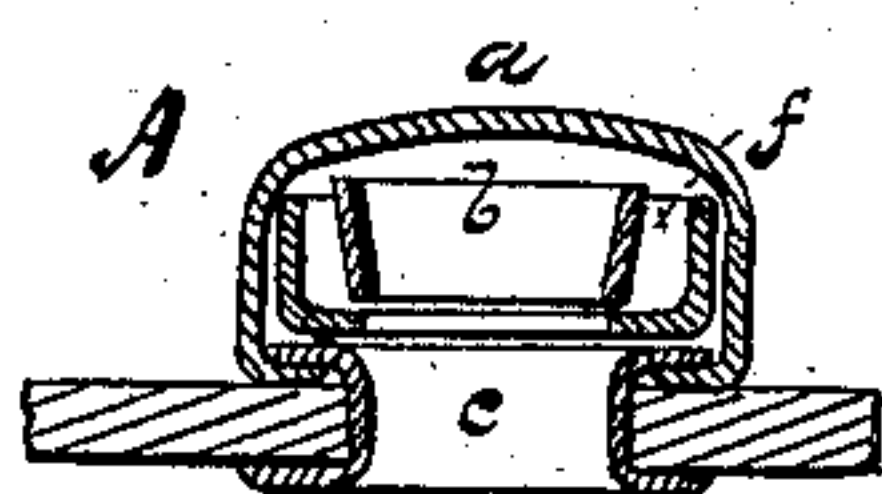


Fig: 8.

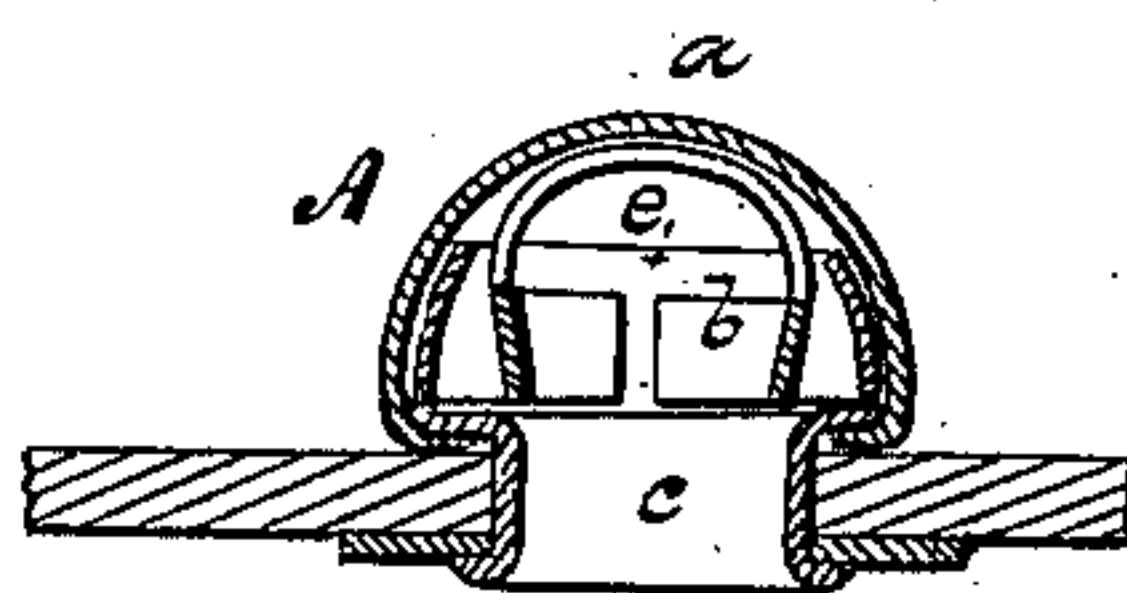


Fig: 3.



Fig: 6.



Fig: 9.

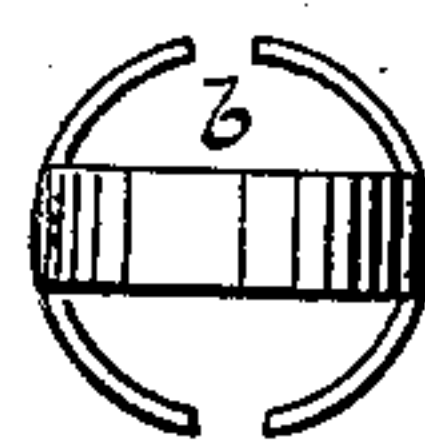


Fig: 4.

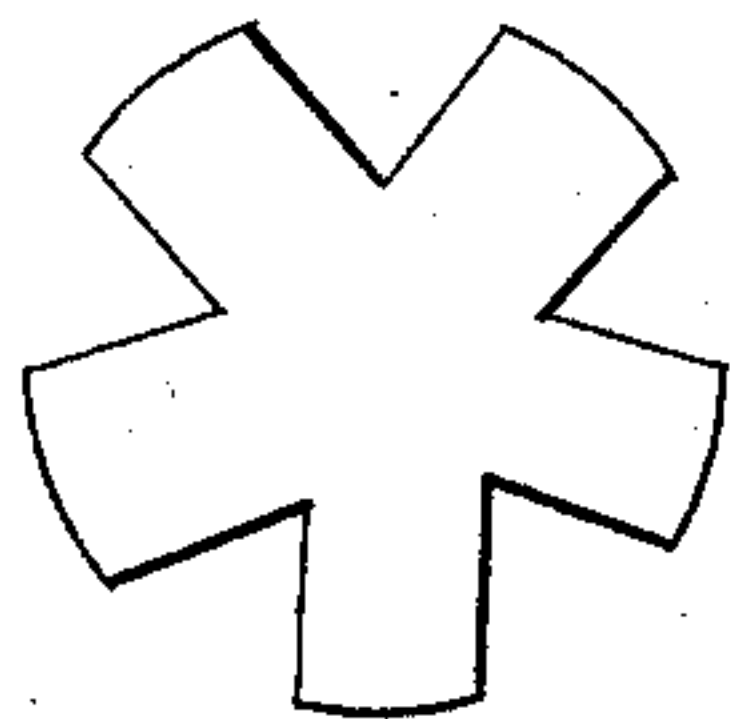


Fig: 7.

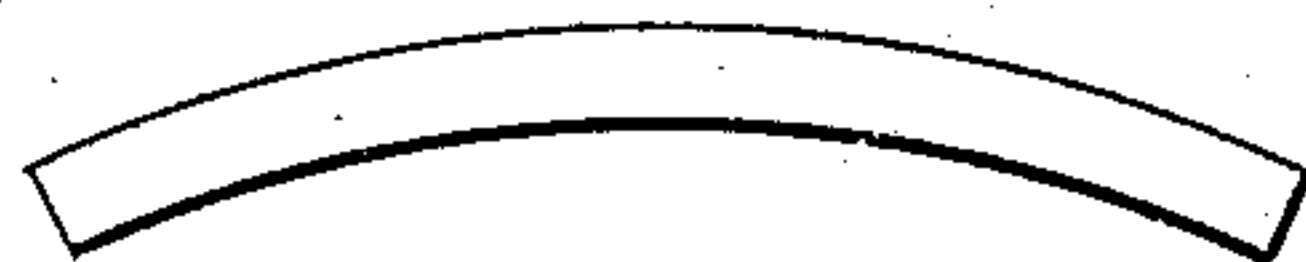


Fig: 10.

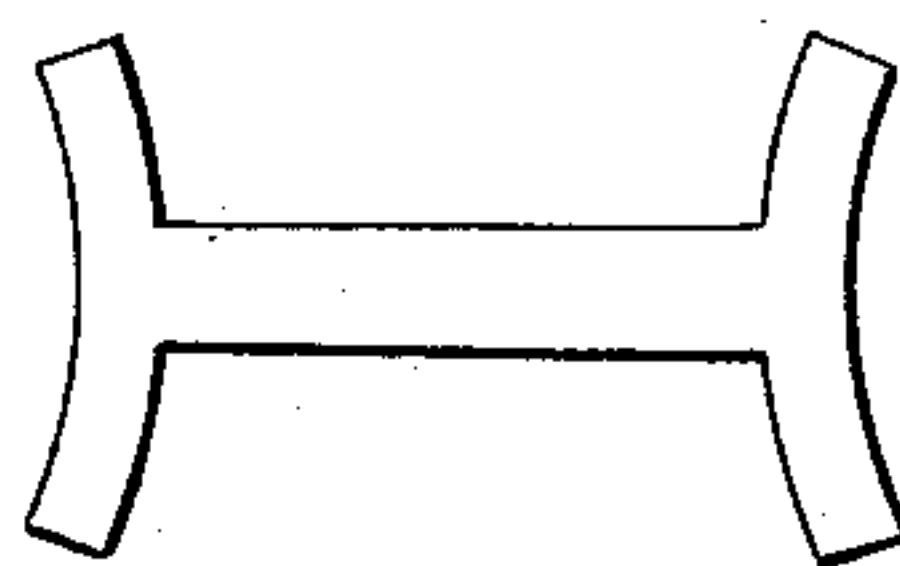
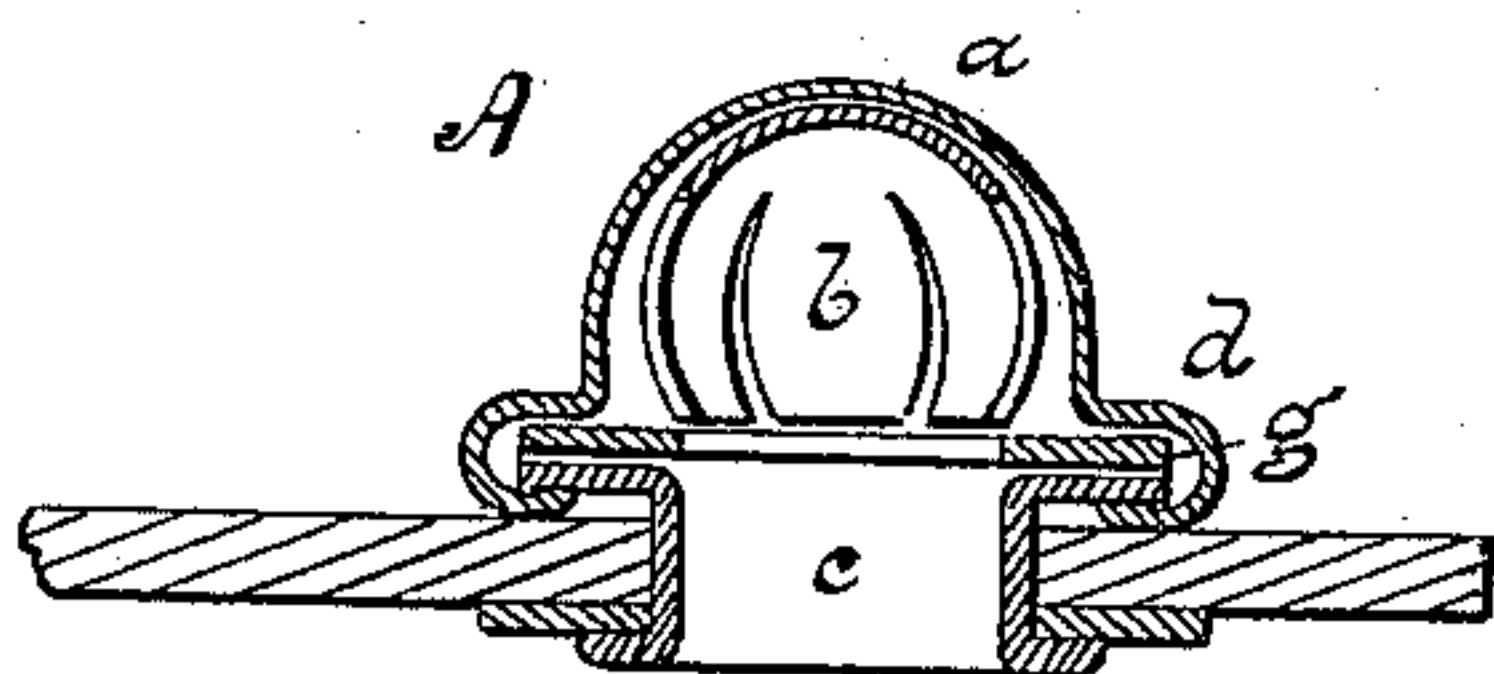


Fig: 11.



WITNESSES:

Onas. Nida
T. G. Earl

INVENTOR

Daniel A. Carpenter

UNITED STATES PATENT OFFICE.

DANIEL A. CARPENTER, OF NEW YORK, N. Y.

GLOVE-FASTENER.

SPECIFICATION forming part of Letters Patent No. 370,753, dated September 27, 1887.

Application filed December 14, 1886. Serial No. 221,507. (No model.)

To all whom it may concern:

Be it known that I, DANIEL A. CARPENTER, of the city, county, and State of New York, have invented a certain new and useful Improvement in Fastening Devices for Gloves and other Articles, of which I declare the following to be a full, clear, and exact specification, reference being had to the accompanying drawings, forming a part thereof.

10 This invention relates to improvements in fastening devices which are adapted specially to be applied to gloves, but generally to a variety of objects; and the invention consists of a fastening device having its several parts constructed and combined as is herein particularly set forth and claimed.

20 In the accompanying sheet of drawings, Figure 1 represents the fastener as it appears upon a glove. Fig. 2 is a vertical section of a head provided with a shoulder. Figs. 5 and 8 are vertical sections of heads having separate rests for the attaching-eyelet. Figs. 3, 6, and 9 represent three varieties of springs. Figs. 4, 7, and 10 show the blanks from which these 25 springs are made, respectively. Fig. 11 is a vertical section of a head which has a washer to help support the attaching-eyelet.

Similar letters of reference indicate like parts in the several views.

30 While the fastening device herein described resembles in some respects others which have already been patented, yet it differs so materially from any of them in the particulars of its construction that both in character and appearance it is readily recognized as a new article.

40 The complete fastening is analogous to a separable button, and consists of a spring-head, A, and a post or stud, B, which engages therewith. The post may be constructed in any desirable manner, and should have a tapering head adapted to spread outward the jaws of the spring, to be hereinafter mentioned, and a reduced part or neck, about which the spring-jaws can afterward contract, so as to hold the 45 head A and post B together. The post may be provided with a shoulder and be attached to a glove, for example, by having its end passed through a washer, then through the material of the glove, and afterward through 50 another washer on the back side of the mate-

rial, and, lastly, upset. Posts or studs of this kind are common, and therefore this invention pertains merely to the head A of the fastener.

To construct the head A, the concavo-con- 55 vex top *a* is formed from sheet-brass or other suitable material, and may have either a plain or an ornamented exterior, within which top is placed the spring *b*, and, finally, the eyelet *c*, with one end widely flanged and whose 60 tubular portion is of a less diameter than the spring *b*, is united with the top *a* by turning the lower edge of the latter over the flange of the eyelet, as illustrated in Fig. 2.

The top *a* may be provided at its base with 65 a slight shoulder, *d*, Fig. 2, or may be formed as represented in Figs. 5 and 8, and have either a plain ring, *e*, Fig. 8, or a ring, *f*, Fig. 5, with a partially-closed end placed within it, by which means a rest is furnished for the eyelet 70 *c*; or the eyelet may be so constructed that it shall supply its own rest by forming it with an enlarged portion above the flange.

In addition to the shoulder *d*, it may be found expedient to employ a washer, *g*, Fig. 75 11, allowing its outer edge to rest upon the shoulder, and after adjusting the eyelet in position, binding all the parts together by turning over the lower edge of the top *a*, as above mentioned. The spring represents substan- 80 tially a section of a hollow sphere, and is shaped to properly engage with the stud before mentioned. Its outlines may be somewhat varied, as appears in the drawings; but this general form of spring is believed to be 85 specially adapted to meet the requirements of a glove-fastener. The three specimens illustrated are formed by striking up blanks, the shape of the blank in each instance being shown in the view directly below that of the 90 spring corresponding with it.

Such being the construction of the head A, it will be observed that the top *a* and the flange of the eyelet *c* form a shell, to the interior of which there is an opening through the 65 neck of the eyelet, and that within this shell the spring *b* is confined solely by the walls of the former, and without any rigid connection therewith, though in such a manner that it cannot escape, because the mouth of the 100 shell is narrower than the spring, and that the mouth and the space between the jaws of the

spring, which are shaped to properly receive and release in turn the stud B, must always register with sufficient exactness, for the reason that the spring, if rightly proportioned, cannot turn over nor move laterally through any considerable distance. Of course care should be taken to have the space between the jaws of the spring narrower than the opening in the bottom of the head, so that a post can be inserted in the latter, which shall be large enough to spread the jaws.

The head is attached to the material of the glove or other article to which it may be applied by perforating the material, passing it and a washer over the end of the eyelet, and upsetting the latter so as to firmly clamp the material between the washer and the head. By this method a smooth surface is left, which cannot abrade or cut anything coming in contact with it. This is one of several advantages not found combined in any other fastener, and some of which separately are peculiar to this one. Further, among them may be mentioned its compactness and the positive way in which it performs its functions, also its neat appearance, all of which are due directly or indirectly to the general form of the spring, together with the manner of securing it in position.

To operate the fastener, the post is brought under the opening in the head and the two parts by pressure are made to engage with one another, the end of the post forcing the jaws of the spring far enough apart to allow the post to enter the head, after which the jaws close about the neck of the post and hold it in place. The parts are separated by tipping the head slightly on one side and pulling it away from the post.

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

1. A fastening device consisting of the following elements: a spring having substantially the form of a section of a hollow sphere and closed at the upper portion, a shell which loosely envelops and retains said spring, but to which the spring is not attached at any point, and a stud with which said spring engages, these elements being so constructed and combined that when the stud is pressed against the bottom of the spring resistance is imparted to the latter through the top of the shell bearing directly upon the highest part of the spring, and the sides of the spring are free to expand and allow the head of the stud to pass between them, in the manner and for the purpose described.

2. A fastening device consisting of the following elements: a spring having substantially the form of a section of a hollow sphere, a shell composed of a top, *a*, and an eyelet, *c*, supplied with a suitable rest, which shell loosely envelops and retains said spring, but to which the spring is not attached at any point, and a stud with which said spring engages, these elements being so constructed and combined that when the stud is pressed against the bottom of the spring resistance is imparted to the latter through the top of the shell bearing directly upon the highest part of the spring, and the sides of the spring are free to expand and allow the head of the stud to pass between them, in the manner and for the purpose described.

DANIEL A. CARPENTER.

In presence of—

T. G. EARL,
FRED HEMMING.