No. 835,867. PATENTED NOV. 13, 1906.

W. S. RICHARDSON.

SNAP FASTENER.

APPLICATION FILED FEB. 1, 1906.

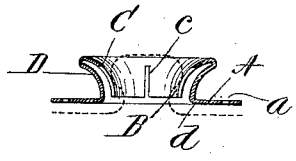

Fig. 1.

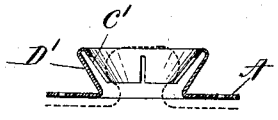

Fig. 2.

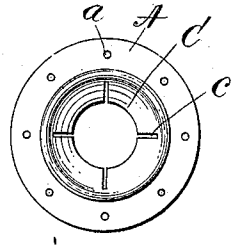

Fig. 3.

WITNESSES:

J. H. Bliss

John Buckler,

INVENTOR:

William S. Richardson

by Donald Campbell

his Attorney

UNITED STATES PATENT OFFICE.

WILLIAM S. RICHARDSON, OF PONKAPOG, MASSACHUSETTS, ASSIGNOR TO UNITED STATES FASTENER COMPANY, A CORPORATION OF MAINE.

SNAP-FASTENER.

No. 835,867. Specification of Letters Patent. Patented Nov. 13, 1906.

Application filed February 1, 1906. Serial No. 298,903.

To all whom it may concern:

Be it known that I, WILLIAM S. RICHARDSON, a citizen of the United States, and a resident of Ponkapog, Canton, Massachusetts, have invented a new and useful Improvement in Snap-Fasteners, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to snap-fasteners, and more particularly to blind fasteners adapted to be secured, as by sewing, to the under side of a garment-flap or the like.

The objects of my invention are to produce a new snap-fastener of this kind which will possess advantages as to durability, efficiency, and compactness over the specific devices which preceded it in the art.

I will first describe a fastener embodying my invention, and then point out the novel features in a claim.

Figure 1 in the drawings is a cross-section of my preferred form of fastener embodying my invention. Fig. 2 is a similar view showing a slight modification of the device illustrated in Fig. 1. Fig. 3 is a plan view.

Similar letters of reference are employed to designate corresponding parts in the several figures of the drawings.

The fasteners illustrated in the figures just mentioned may, perhaps, be best described by a comparison with the fastener shown in United States Patent No. 604,637, issued May 24, 1898, upon which my invention is intended to be an improvement. In the said prior patent there was provided a disk-like member having an upwardly and downwardly curved bead or wall or bend, the disk itself being adapted to be attached in a blind manner to the under side of a garment-flap or the like.

Referring to Fig. 1 of the present application, A represents the flange of a disk, and *a* represents thread-holes which, perhaps, are the most convenient means for securing the disk in a blind manner to the under side of a garment-flap or the like. The sheet metal in the interior is so formed as to constitute a socket mouth or entrance, (indicated by the letter B,) and this mouth or entrance is adapted to receive the bulbous head of a stud or ball of any usual construction, which may be attached to the other flap of the garment. A convenient form of such stud or ball is indicated by dotted lines to better illustrate the operation of my improved fastener. The metal which constitutes the mouth or entrance is formed with an upward and outward flange C, and may be curved, as shown in Fig. 1, or otherwise. Thus far my improved fastener and that illustrated in said Patent No. 604,637 are somewhat similar. As regards the metal which extends from the disk flange A to the flared portion C, I have departed very radically from what is disclosed in the said prior patent. Instead of forming such connecting metal with an inward taper the reverse of the flare which the metal C takes I have formed such connecting metal so as to constitute a second flare, which is substantially parallel with the flare of the metal C, this being shown at D. The result of this construction is that the juncture *d* of the flange A and the flared portion D is brought into close proximity to the socket entrance or opening B. Because of this the flare D forms an efficient backing, as does also the metal at the juncture *d*, whereby when the flare C is made resilient by slits *c* the metal thereof may not be permanently distorted by the action of a stud being attached and detached, or from any other ordinary influence. Therefore my invention is particularly useful with a resilient blind socket adapted to coöperate with a non-resilient stud. A further result of the above-described construction is that compactness is attained because a sufficient width of flange-surface A may be obtained without the necessity of greatly extending its diameter, as would be the case in such a construction as shown in Patent No. 604,637. By reason of the backing formed by the outer flared portion not only is durability and freedom from distortion provided, but also for the same reason the efficiency of the socket and its capability to hold and retain the head of a stud is thereby increased. At the same time, owing to the flare of the metal C, there is provided sufficient space to accommodate the enlarged portion of the head of the stud so that the actual socket mouth or entrance may efficiently grasp and engage the neck portion of the stud below the head thereof.

Fig. 2 shows a modification in which the flared portions C′ D′ are uncurved, which may sometimes be an advantage.

What I claim, and desire to secure by Letters Patent, is—

A blind fastener-socket member consisting

of a single integral piece of metal made in the form of a disk that is adapted to be attached in a blind manner to fabric or other material, and formed with an inner flared portion slitted to afford resilience, and a connecting portion also formed with a flare substantially parallel to that of the inner flared portion, substantially as and for the purposes set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 29th day of January, A. D., 1906.

WILLIAM S. RICHARDSON.

In presence of—
L. S. CASSEY,
F. H. BLISS.