

No. 784,258.

PATENTED MAR. 7, 1905.

F. FRANZ.
GARMENT FASTENER.
APPLICATION FILED MAY 5, 1904.

FIG. 1.

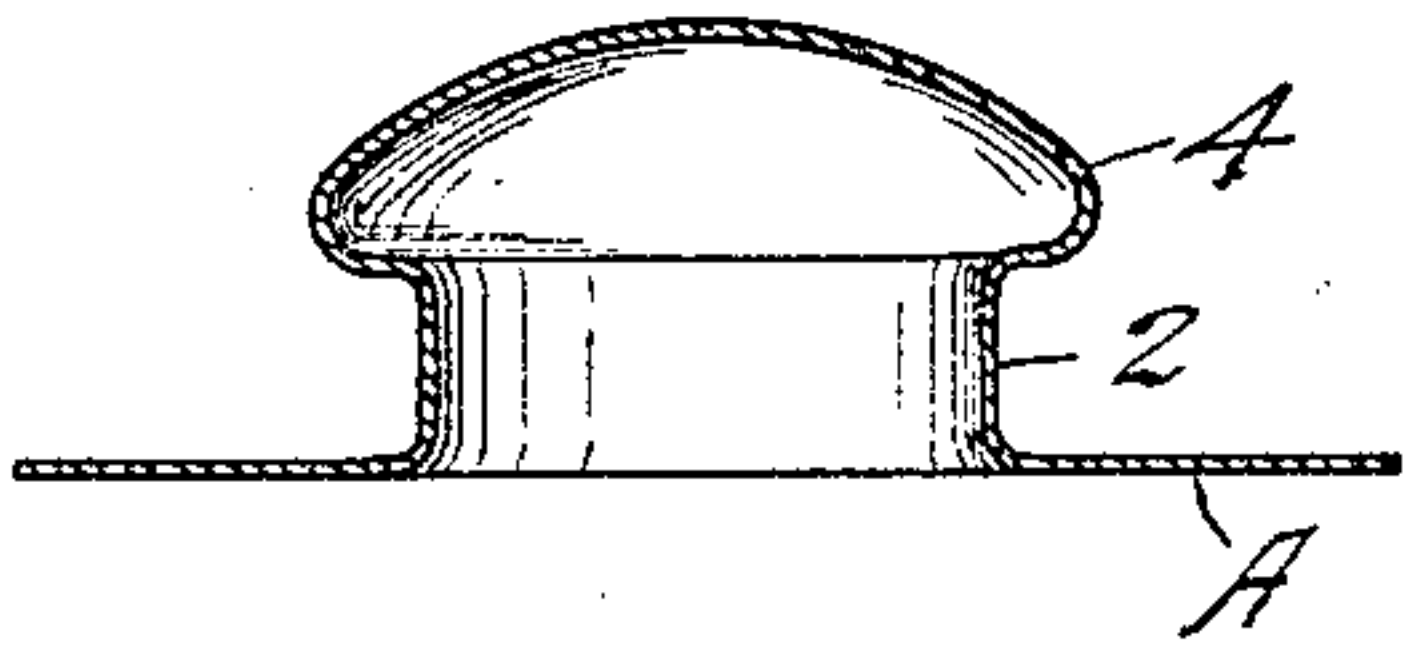


FIG. 3.

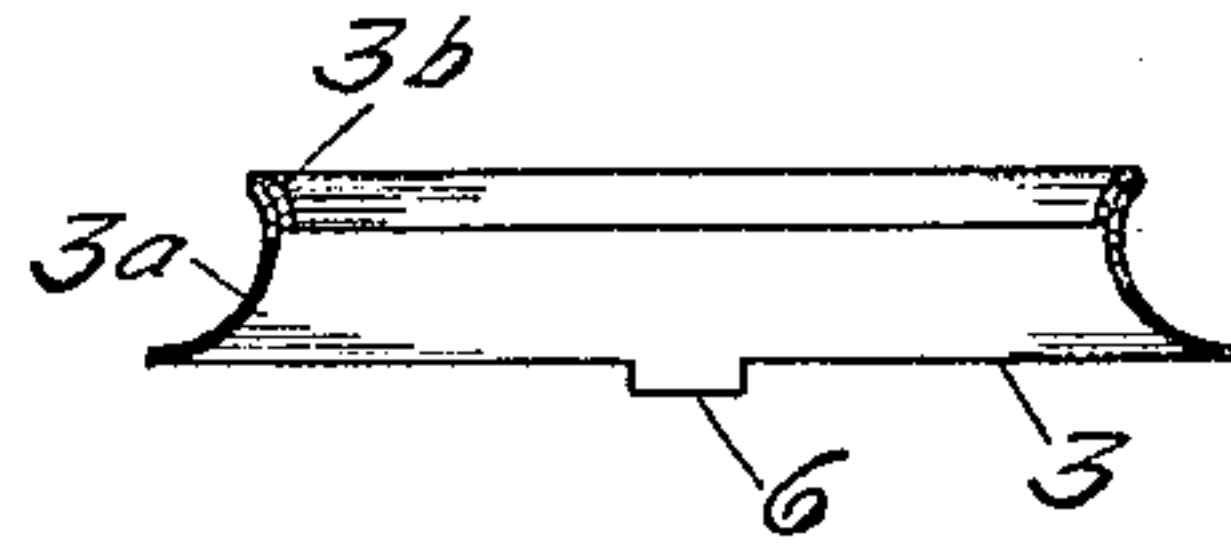


FIG. 2.

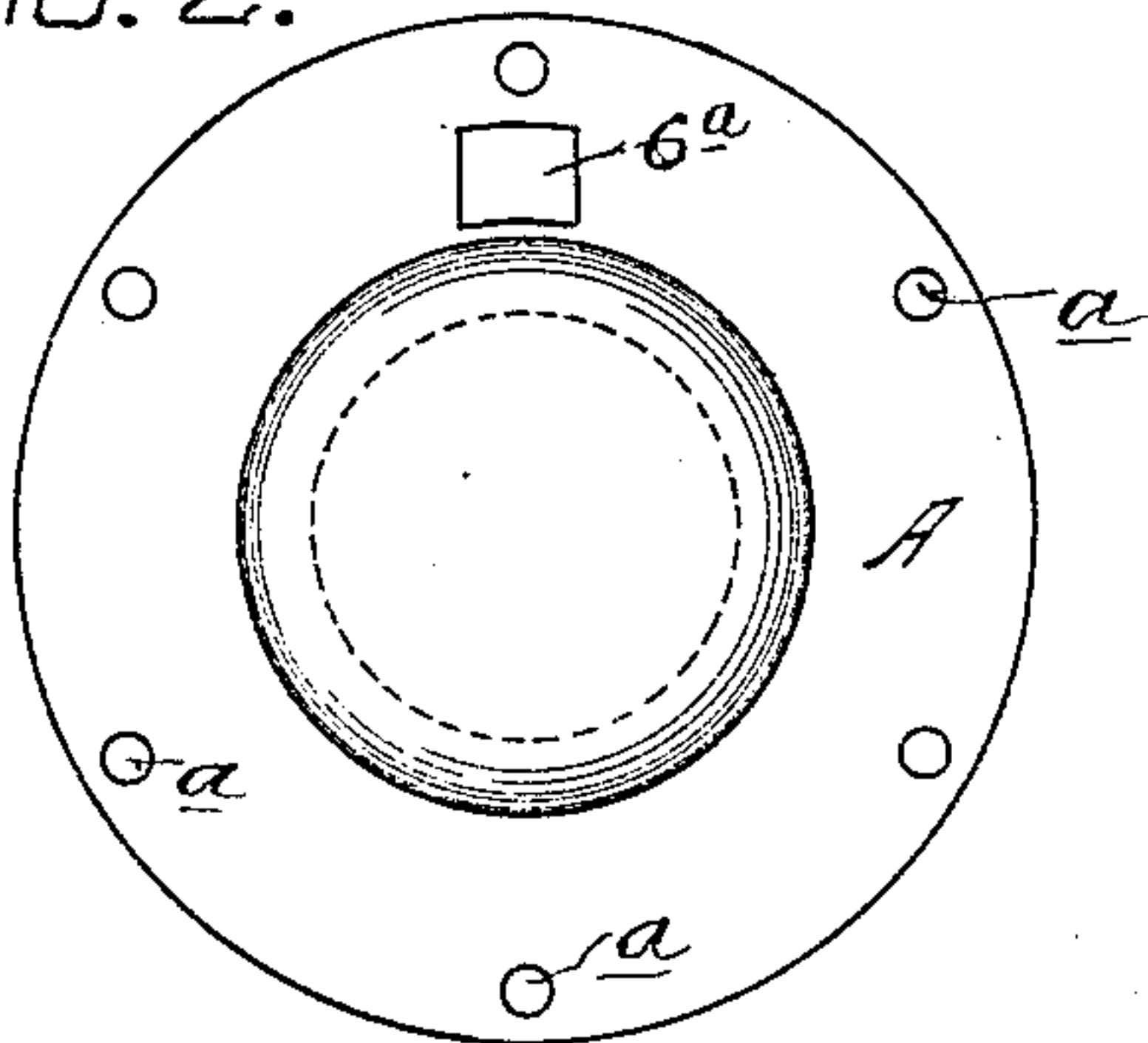


FIG. 4.

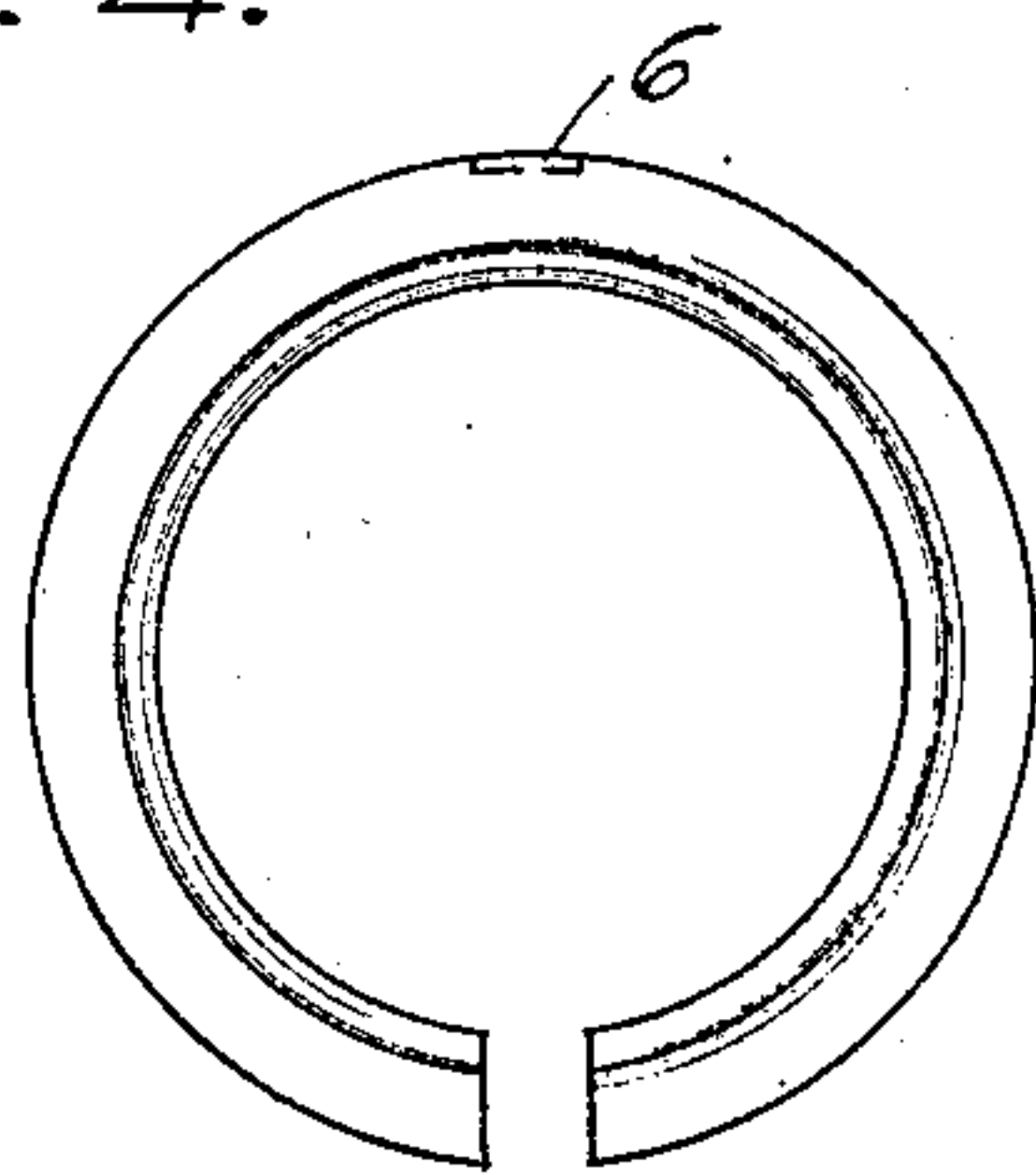


FIG. 5.

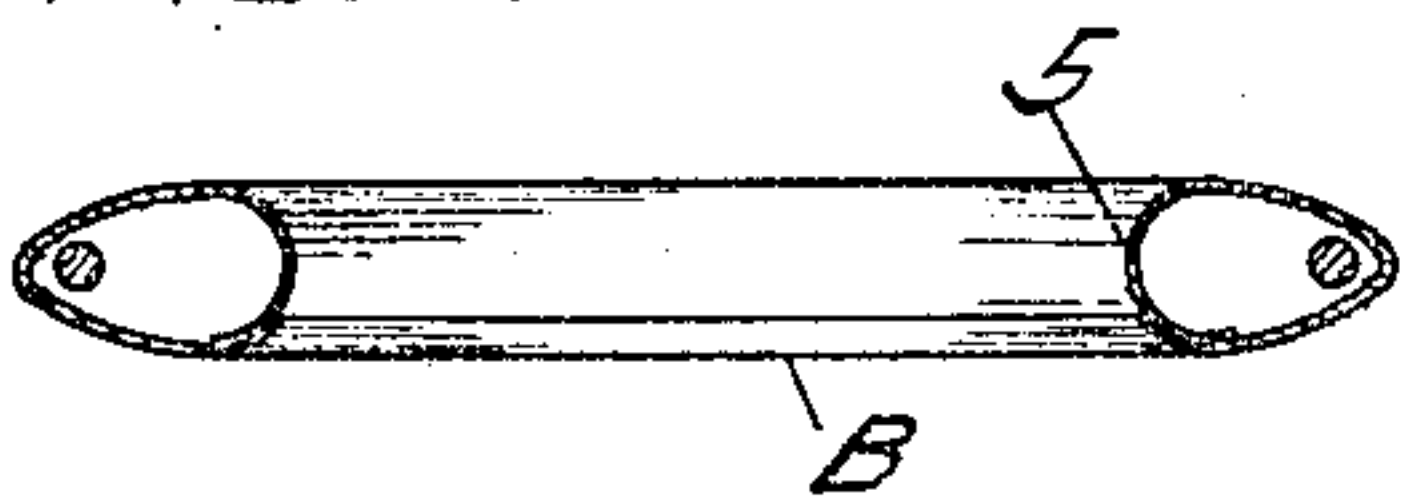


FIG. 6.

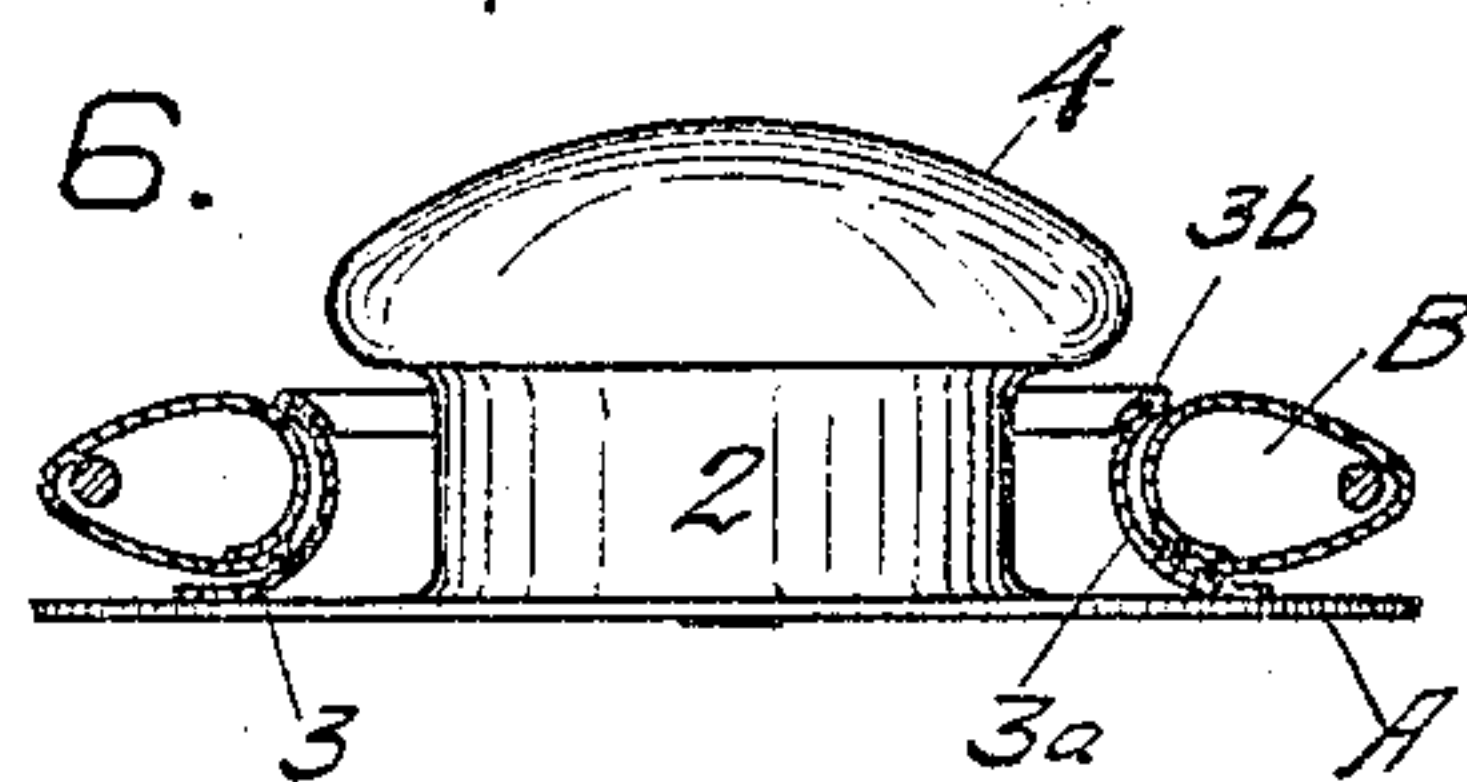
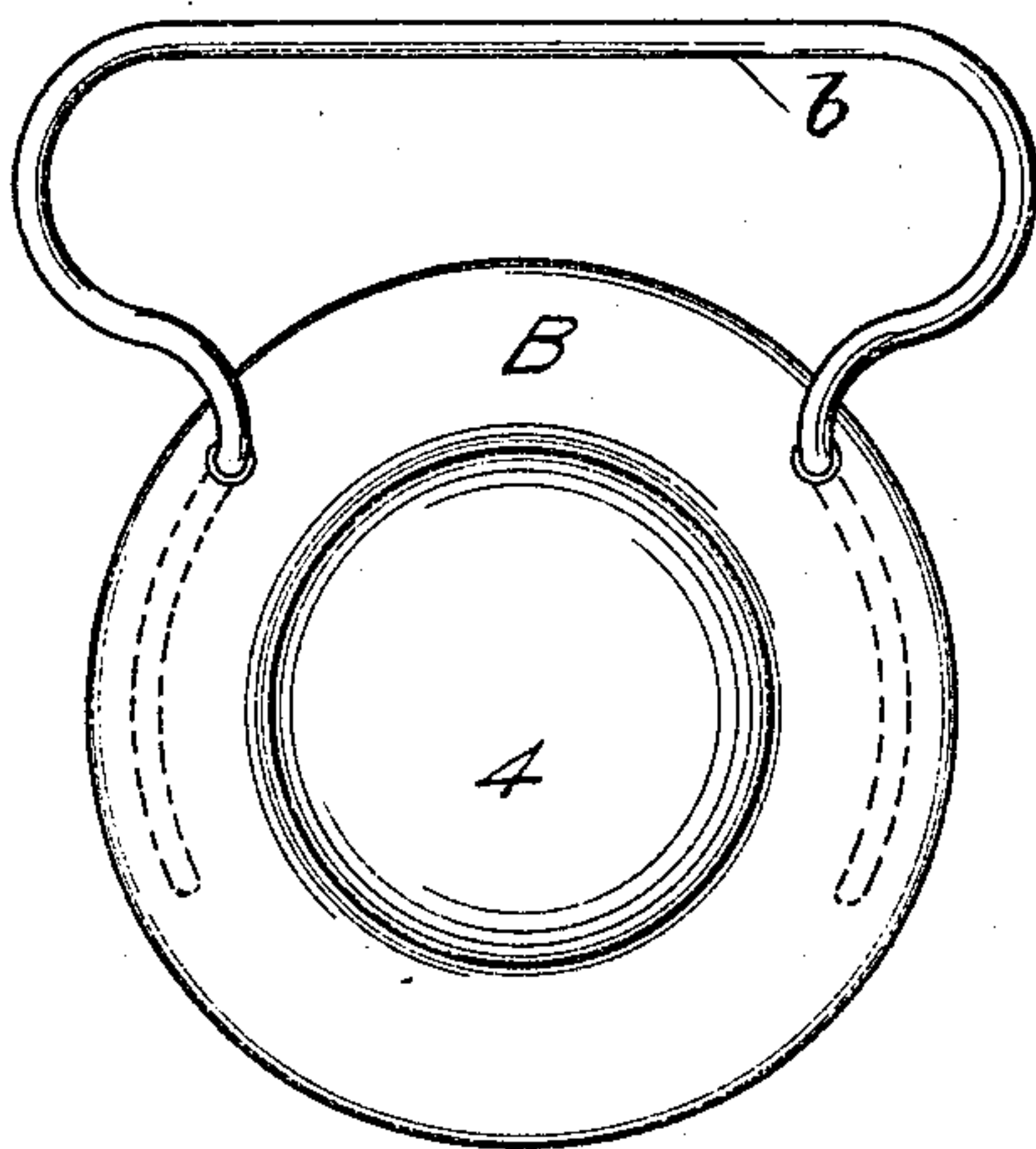


FIG. 7.



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FERDINAND FRANZ, OF SAN FRANCISCO, CALIFORNIA.

GARMENT-FASTENER.

SPECIFICATION forming part of Letters Patent No. 784,258, dated March 7, 1905.

Application filed May 5, 1904. Serial No. 206,482.

To all whom it may concern:

Be it known that I, FERDINAND FRANZ, a citizen of the United States, residing in the city and county of San Francisco and State of California, have invented new and useful Improvements in Garment-Fasteners, of which the following is a specification.

My invention relates to a fastening device which is especially designed for securing parts of garments and attachments thereto.

It consists in the combination and arrangement of parts and in details of construction which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a section of the part A with its flange or head and shank. Fig. 2 is a plan view of same. Fig. 3 is a section of spring-ring. Fig. 4 is a plan of same. Fig. 5 is a section through other member of fastener. Fig. 6 is a view, partly in section, showing fastener united. Fig. 7 is a plan of same.

Various forms of garment supports and fasteners have been devised so as to mechanically interlock by pressure, said devices consisting generally of a chambered head and an elastic-sided button which can be forced into the head by temporary compression of the elastic sides, these elastic sides afterward expanding within the chamber with the design of retaining these parts interlocked. Any heavy pull upon such fastenings is liable to disengage them by the compression of the springs, so as to allow the button to escape from its containing-cavity. In my invention I overcome this difficulty by fitting an independent elastic ring of peculiar construction to encircle a stem or shank, so that when said stem or shank is introduced into a socket of a companion part the edges of said part will clasp the ring while the latter is freely turnable about the stem, and such devices may be used for connection of parts of clothing or other equivalent purposes. As shown in the drawings, A is the stud member of such a fastening and B is the other or socket member. The stud member A has a shank or standard 2 of sufficient depth to receive an elastic surrounding ring 3, and said shank has a head 4 of sufficiently larger diameter than the shank, so that when the elastic ring 3 has been sprung

over the head 4 it will loosely inclose the shank and be prevented from ready removal. This elastic ring is made with a concaved exterior periphery, as shown at 3^a, one edge being expanded to a larger diameter than the other to prevent the ring being forced over said edge when applying the socket member and to more perfectly seat the said member in the concaved periphery of the ring, and the opposite edge of the ring is preferably turned in, as shown at 3^b, so as to give more strength and stiffness to the ring. The ring is separated at the ends sufficiently to allow of the necessary or desired compression.

The socket member B has a hole made through the center, the inner edges of which hole are rounded or beveled, as shown at 5, and is of such diameter that it will pass freely over the head 4 of the stud member A, and when it comes in contact with the narrower edge or flange 3^b of the elastic ring the pressure of the beveled or rounded inner edges 5 compresses the ring until these rounded edges of the socket member B have passed into the smaller diameter of that portion of the ring intermediate between the opposite expanded edges or flanges. The ring will then immediately expand into the hole in the socket member B and will hold the latter firmly in place. At the same time the ring is sufficiently loose upon the shank 2 to turn freely in any direction, and thus the respective parts A B and the garment or other article to which they are secured will be freely movable with relation to each other, and no direct pull upon these parts will serve to separate the fastening.

For convenience in putting the parts together or separating them it is preferable that the elastic ring lie in such a relative position to the stud member A and the material to which the latter is attached that it is easily compressed for the connection or disconnection of the socket member B. In order to effect this, I form the part 3 with a small projecting tongue, as at 6, and this tongue is adapted to move in a slot or channel 6^a, formed radially in the stud member A and of sufficient length to allow for all required compression and expansion of the ring. The ring will thus be kept in the position most favor-

able to its proper contraction and expansion when the socket member B is to be connected or disconnected and at the same time to prevent the separation of the two parts by any strain which may be brought upon them. The stud member A may also be provided with holes *a*, by which it may be secured to the material to which this member is to be attached, and the socket member may have a loop or similar part *b* to engage the material to be supported or the material to which said member is attachable.

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

1. A garment and like fastener comprising a stud member having a base-plate, a head and an intermediate shank; a socket member having an opening through which the head of the stud member may freely pass; and an independent compressible ring loose on the shank of the stud member and having a concaved periphery, said socket member having the wall of its opening convexed to substantially conform to the concaved periphery of the ring.

2. A garment and like fastener comprising a stud member having a base-plate, a head and an intermediate shank of reduced diameter; a socket member having an opening through which the head of the stud member may freely pass, said opening having a convex wall; and a split ring loose on the shank of the stud member and having a concaved periphery to substantially conform to and receive the con-

vex wall of the socket-member opening, said ring compressible to allow the socket member to be forced into engagement therewith.

3. A garment or like fastener comprising a stud member having a base-plate, a head, and an intermediate shank; a split ring loose on said shank and having a concaved periphery with one edge extended beyond the plane of the opposite edge, said opposite edge being reinforced; and a socket member having an opening through which the head of the stud member protrudes, said opening having a convex surrounding wall substantially conforming to the concaved periphery of the ring, and adapted to seat in said periphery.

4. A garment or like fastening comprising a stud member having a base-plate, a head, and an intermediate shank; an elastic ring with separated ends, said ring loose on said shank having a concaved periphery and a projecting tongue adapted to engage a guide in the base-plate of the stud member; and a socket member having a hole with a substantially convex surrounding wall, said socket member adapted to pass loosely over the head of the stud member and to interlock with the ring.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FERDINAND FRANZ.

Witnesses:

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JESSIE C. BRODIE.