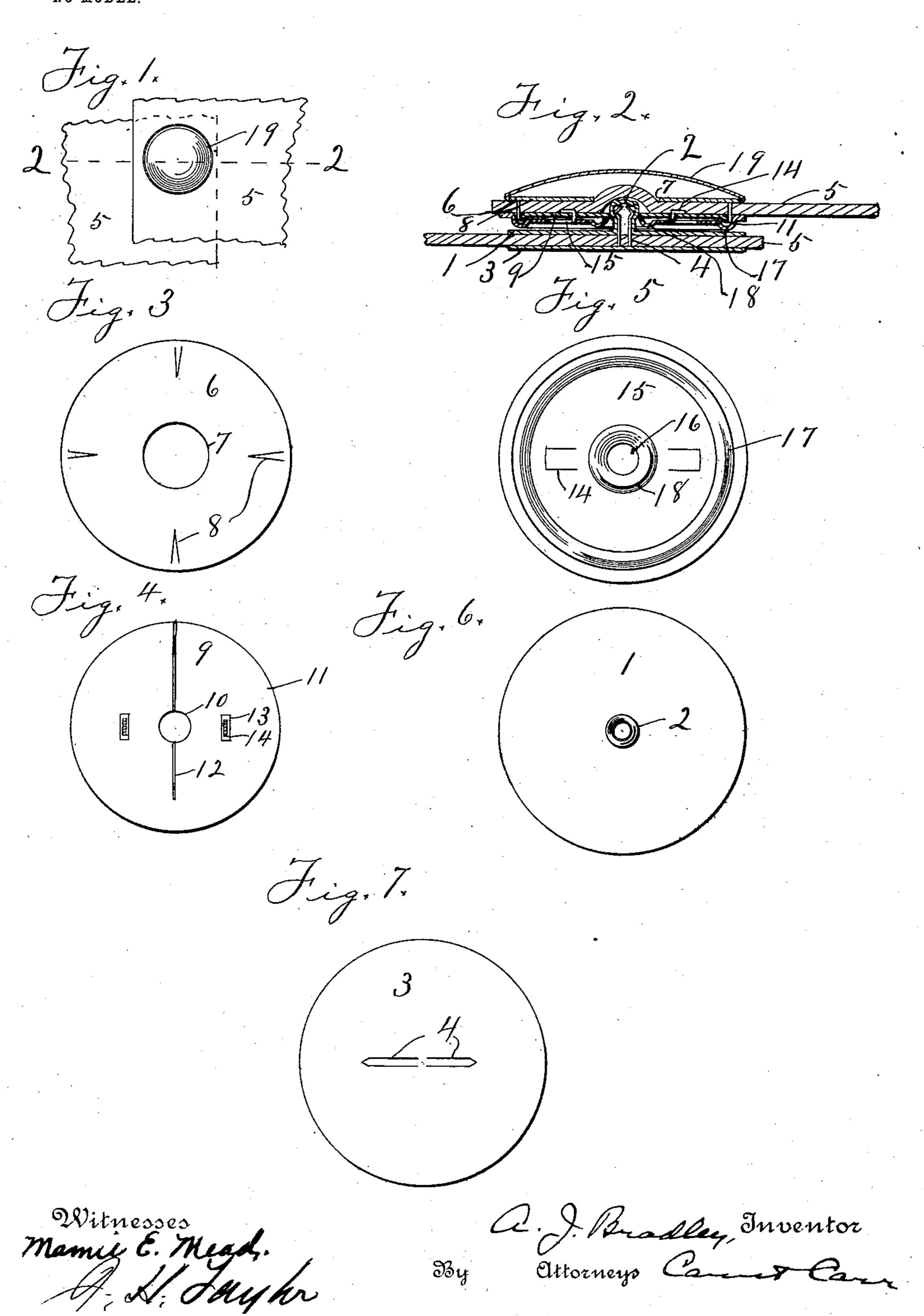
## A. J. BRADLEY. GARMENT FASTENER. APPLICATION FILED JULY 24, 1901.

NO MODEL.



## United States Patent Office.

ANDREW J. BRADLEY, OF NEW YORK, N. Y.

## GARMENT-FASTENER.

SPECIFICATION forming part of Letters Patent No. 735,653, dated August 4, 1903.

Application filed July 24, 1901. Serial No. 69,606. (No model.)

To all whom it may concern:

Be it known that I, Andrew J. Bradley, a citizen of the United States, and a resident of the city, county, and State of New York, have invented a certain new and useful Garment-Fastener, of which the following is a specification.

My invention relates to garment-fasteners, and has for its principal object to avoid the mutilation of the garment fabric.

My invention consists in the arrangement and combination of parts hereinafter described and claimed.

In the accompanying drawings, which form parts of this specification, and wherein like symbols refer to like parts wherever they occur, Figure 1 is a front view of my device applied to a garment. Fig. 2 is a cross-sectional view of said fastener applied to a garment. Figs. 3, 4, 5, 6, and 7 are detail views of the several disks constituting parts of my fastener, Fig. 4 also showing in section the fastening-prongs shown in Fig. 5.

My invention comprises two members, each composed of thin sheet-metal plates or disks and adapted to be attached to the overlapping edges of the garment. One of said members comprises a disk 1 of thin sheet metal, having the central portion thereof drawn or otherwise shaped into a hollow-headed shank 2.

This disk 1 is laid flatwise on one side of the fabric with its head projecting. A second disk 3 has sharp prongs 4 struck up at the center thereof at right angles thereto. The 35 two disks 1 and 3 together constitute one member of the fastening. In use the two disks are fastened together with the fabric 5

clamped between them. For this purpose the prongs 4 are made longer than the depth of the shank plus the thickness of the fabric. When the prongs are forced through the fabric into the shank, said prongs will strike the end of the shank and buckle sidewise beyond the edge where the shank widens into the head.

The prongs thus buckled securely fasten the two disks 1 and 3 together. In order not to injure the fabric, said prongs are made as thin as practicable. The other member of the fastener comprises a disk 6, having a central

50 opening 7 and a series of sharp marginal prongs 8 struck up therefrom and adapted to be inserted through the fabric 5 and project

a slight distance above said fabric. On the opposite side of the fabric is a spring-disk 9, having a central opening 10 and its edge 11 55 turned out or down, as shown in Fig. 2, the diameter of said spring-disk 9 being barely equal to the distance between opposite prongs of the disk 6. This spring-disk 9 is slit radially, as shown at 12, Fig. 4, so as to allow 60 the central portion thereof to expand and contract, and it is provided with slots 13, through which prongs 14 on a third disk 15 may pass, said slots being large enough to permit the expansion and contraction of said disk 65 9. The third disk 15, above mentioned, has a central opening 16 of larger diameter than the opening in the spring-disk 9, and both its inner and its outer margins are beaded, as shown at 17 and 18, Fig. 5, to give it rigidity. 70 The side of the bead constituting the inner edge of the disk 15 projects beyond the plane of the disk 15 and constitutes an abutment against which the spring-disk 9 bears, whereby said spring-disk 9 is otherwise clear of the 75 disk 15 and free to move as its spring function requires. The outer portion of the outer bead is of a diameter equal to the distance between opposite prongs of the disk 6, whereby when the three disks 6, 9, and 15 are as- 80 sembled concentrically and forced together the prongs 8 of the disk 6 will bear against the incline of the outer bead 17 and be bent over the downturned edge of the spring-disk. As the top disk 15 is fastened to the spring- 85 disk 9 by means of the prongs 14, extending through said spring-disk, the three disks 6, 9, and 15 are firmly fastened together, with the fabric 5 intervening between the springdisk 9 and the bottom disk 6. These three 90 disks 6, 9, and 15 thus constitute the second member of the fastening. In practice, however, it is desirable to mount an ornamental top or cover 19 over the second member.

In order to apply my fastener to a garment, 95 it is preferable to use a tool specially provided for the purpose. This tool comprises a pair of pliers having recesses for holding the sections of the respective members of the fastener concentrically. In using the tool the recess of one jaw and the upper member or members are set in the recess of the other jaw with the fabric intervening. When properly

positioned, the pliers are manipulated to force their jaws together. In the case of the one member this movement results in forcing the prongs through the fabric and buckling said 5 prongs in the head of the shank, thus fastening the two sections of the member together. In the case of the other member the prongs are forced through the fabric and are bent by the head over the edge of the spring member.

In operation, one member being fastened upon one lap or edge of a garment and the other member being upon another lap or edge of the garment, it is merely necessary to force the head of the one member into the central 15 opening of the spring-disk of the other member after the manner of an ordinary balland-socket fastener. In order to allow the head to pass said spring-disk, the fabric is raised within the opening 7 in the disk 6.

The principal advantage of the foregoing construction is that it does not mutilate the fabric. In case it is desired to remove or reset either member of the fastener it is merely necessary to force the sections thereof apart 25 and straighten the prongs or take a new prong-section and apply as hereinbefore described.

This fastening may be applied with great facility, and it is simple and inexpensive.

What I claim is—

1. A garment-fastener comprising a disk having a hollow-headed stud, and a second disk having sharp prongs struck up therefrom near its center and adapted to enter and 35 buckle in said headed stud, substantially as described.

2. A garment-fastener comprising a disk having sharp prongs, a second disk centrally perforated and slitted to cooperate with a 40 headed stud, and a third disk fastened concentrically to said second disk, and having a bead arranged to turn the sharp prongs of the first disk over the edge of the second disk, substantially as described.

3. A garment-fastener comprising a centrally-perforated disk having sharp marginal prongs, a second disk centrally perforated and slitted to coöperate with a headed stud and having slots therein, and a third disk having 50 prongs engaging said slots, and having a bead arranged to turn the sharp prongs of the first i

disk over the edge of the second disk, substantially as described.

4. A garment-fastener comprising a disk having sharp marginal prongs, a second disk 55 centrally perforated and slitted to coöperate with a headed stud and having slots therein, and a third centrally-perforated disk having prongs adapted to engage said slots, and having its inner margin project beyond the plane 60 of the disk to form a bearing for said second disk, and having a bead arranged to turn the sharp prongs of the first disk over the edge of the second disk, substantially as described.

5. A garment-fastener comprising two 65 members, one of said members comprising a disk having a hollow-headed stud and a second disk having sharp prongs struck up therefrom near its center and adapted to enter and buckle in said headed stud, and the 70 other member comprising a centrally-perforated disk slitted to coöperate with said stud, said members being adapted to be fastened to the fabric without mutilation thereof, sub-

stantially as described.

6. A garment-fastener comprising two members, one of said members comprising a plate having a hollow-headed stud, and a second plate having sharp prongs adapted to enter and buckle in said headed stud, the sec- 80 ond member comprising a disk having sharp marginal prongs, a second disk centrally perforated and slitted to coöperate with the headed stud of the first member, and a third disk fastened concentrically to said second 85 disk, and having a bead arranged to turn the sharp prongs of the first disk over the edge of the second disk, substantially as described. 7. A garment-fastener comprising one

member having a headed stud, and a second 90 member comprising a disk having sharp marginal prongs, a second disk centrally perforated and slitted to coöperate with said headed stud, and a third disk arranged to fasten said first and second disks together, substantially 95

as described.

New York, N. Y., July 22, 1901.

ANDREW J. BRADLEY.

In presence of— WM. ROTCHFORD, J. MILTON SHAY.