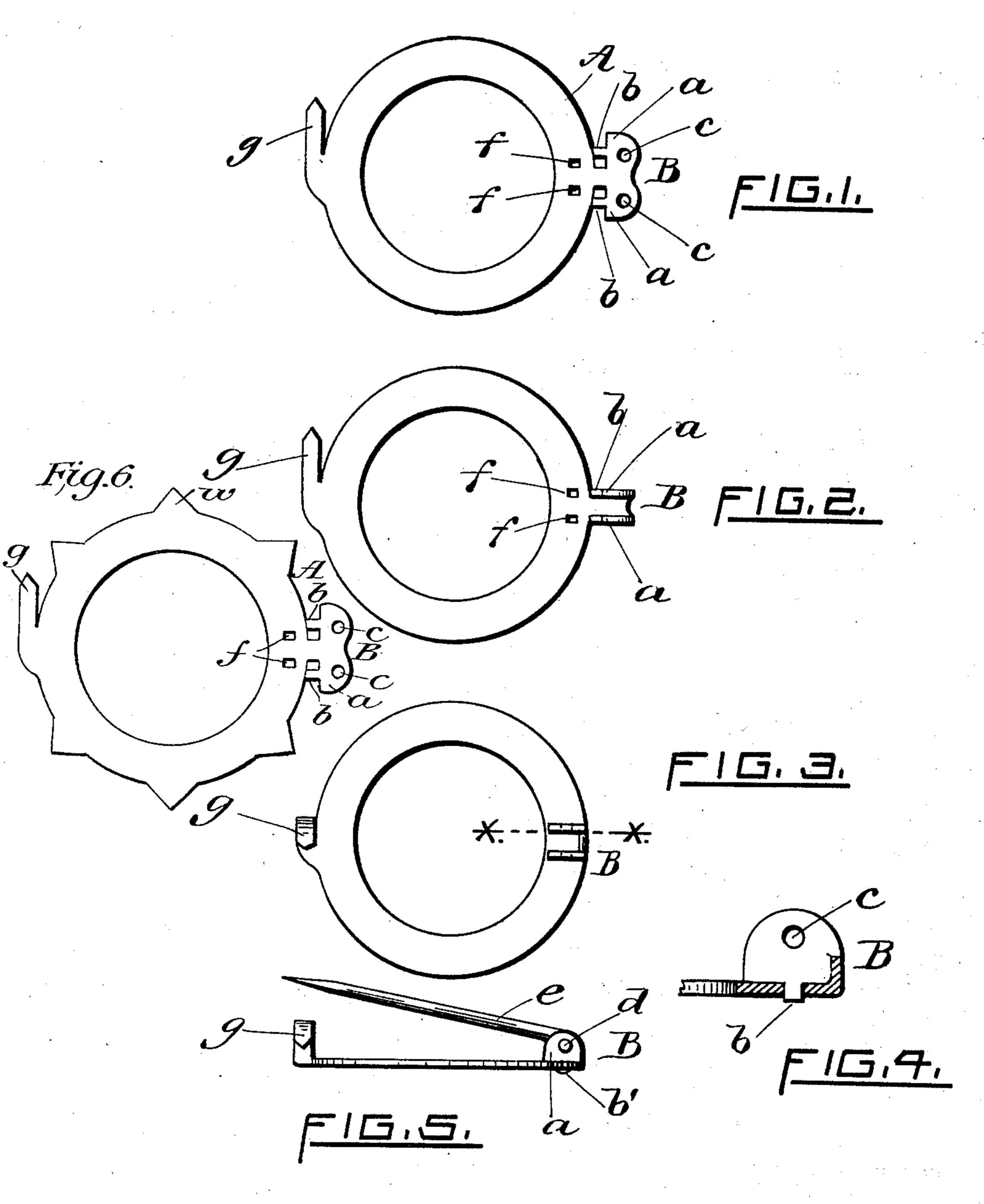
G. W. DOVER.

PIN.

(Application filed May 7, 1902.)

(No Model.)



WITNESSES,

/VENTOR:

Charles I. Hannigan.

y Horatio E. Bellons

## United States Patent Office.

GEORGE W. DOVER, OF CRANSTON, RHODE ISLAND.

## PIN.

SPECIFICATION forming part of Letters Patent No. 711,152, dated October 14, 1902.

Application filed May 7, 1902. Serial No. 106,320. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. DOVER, a citizen of the United States, residing at Cranston, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Pins, of which

the following is a specification.

My invention relates to brooches and other pins adapted for securing fabrics, and has for its objects the ends commonly sought in this class of articles, including strength and cheapness of manufacture. Hitherto the joints or catches of these pins, or both, have been soldered to the pin-body. The soldering process has involved the expense of operators for this purpose, as well as the cost of solder. Furthermore, the greatest strain upon the parts of the pin are at the catch and joint, particularly the latter. Hence separation of the joint from the body is usual at this point.

My invention overcomes the evils above recited and attains the ends desired by means of the structure hereinafter described, and illustrated in the accompanying drawings,

wherein-

Figure 1 is a face view of a blank from which my improved pin is formed; Fig. 2, a similar view of the same with the walls of the joint 30 partially bent; Fig. 3, a like view with the walls of the joint and the catch in final position; Fig. 4, a transverse section of the same on line x x of Fig. 3, and Fig. 5 a side elevation of the completed pin-body. Fig. 6 is a modified form of blank.

Like letters of reference indicate like parts

throughout.

An embodiment of my invention is as follows: A blank A of any desired shape and 40 size is cut from a sheet of brass or other metal by means of cutters and dies. The blank has projecting from its side or end a lug B, consisting of two laterally-projecting ears a. Depending from these ears are pro-45 jections b, which contact with the periphery of the pin-body A. Each of the ears a is pierced at c to form a bearing for the pivot d, upon which the pin-tongue e is to be mounted. The pin-body A is also pierced by so the original cutting with two openings f near the lug B in such a position as to receive the projections b at a subsequent stage of the operation. Diametrically opposite the lug B, projecting from the blank A, is a pointed ex-55 tension g. The blank cut as above described 1

from a single piece of metal in one operation is next treated as follows: The two ears a are bent upright, forming two parallel walls with inwardly-directed projections b, Fig. 2. The lug B is next folded inwardly until it assumes 60 a position at right angles to the plane of the main body of the blank A, as shown in Figs. 3 and 5. In so doing the projections b enter and traverse the openings f, above described, projecting slightly below the face of the blank 65 A, Fig. 4. The projecting portions are riveted at b' upon the face of the blank opposite the joint, as shown in Fig. 5, thus permanently holding the completed joint B in position. The extension g is bent upwardly and 70downwardly to form the catch.

As suggested above, the pin-tongue e is mounted in the usual way upon a pivot d, bearing in the openings c of the walls a of

the joint.

It will be observed that in the structure above described the use of solder is entirely dispensed with and that the required operations are few, simple, and inexpensive.

It is obvious that when it is desired that a 80 stone or other auxiliary ornament be superimposed upon the face of my pin-body the end may be attained without the use of solder by cutting the original blank A with peripheral prongs w. (Shown in Fig.6.) These 85 prongs may be subsequently bent over the edge of the auxiliary ornament to retain the same.

Having thus described my invention, what I claim as new, and desire to secure by Letters 90 Patent, is—

1. In a pin, the combination with the body provided with perforations near its margin, of a joint integral with the body, projections upon the under side of the joint and travers- 95 ing the perforations, and means for retaining the projections in place.

2. In a pin, the combination with the body provided with a perforation near its margin of a joint integral with the body, a projection ico upon the under side of the joint and traversing the perforation, and a head upon the free end of the projection formed by riveting.

In testimony whereof I have affixed my signature in presence of two witnesess.

GEORGE W. DOVER.

Witnesses:

HORATIO E. BELLOWS, MICHAEL J. BLESSING.