

(No Model.)

T. GRAINGER.

FASTENING AND ATTACHING DEVICE FOR BROOCHES, JEWELRY, &c.

No. 533,008.

Patented Jan. 22, 1895.

Fig. 1.

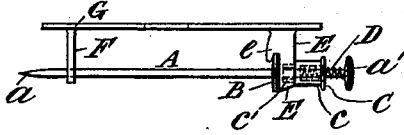


Fig. 2.

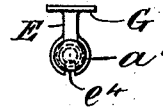


Fig. 3.

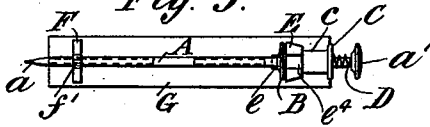


Fig. 4.

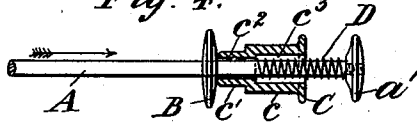


Fig. 5.



Fig. 7.



Fig. 6.

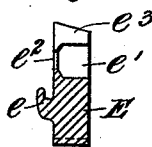


Fig. 8.



Fig. 10.

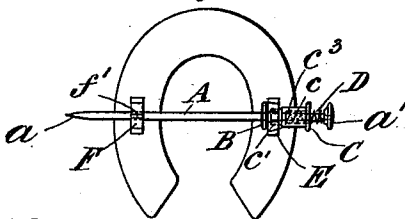


Fig. 9.



Witnesses:

J. B. McGirr.
W. M. Carthy

Inventor:

Thomas Grainger.

By Francis L. Ayer,
Attorney.

UNITED STATES PATENT OFFICE.

THOMAS GRAINGER, OF HOBART, TASMANIA.

FASTENING AND ATTACHING DEVICE FOR BROOCHES, JEWELRY, &c.

SPECIFICATION forming part of Letters Patent No. 533,008, dated January 22, 1895.

Application filed September 18, 1894. Serial No. 523,381. (No model.) Patented in England January 21, 1894, No. 1,458.

To all whom it may concern:

Be it known that I, THOMAS GRAINGER, a subject of the Queen of Great Britain, residing at Hobart, in the Colony of Tasmania, have invented new and useful Improvements in Fastening and Attaching Devices for Brooches, Jewelry, and the Like, (for which I have received Letters Patent in Great Britain the 21st day of January, 1894, No. 1,458,) of which the following is a specification.

This invention relates to a new or improved means or method for attaching and fastening brooches, jewelry, and the like ornaments to dresses and other articles of wearing apparel, such as cloaks, mantles, bonnet strings, collars, and the like, all of which are hereinafter termed dresses, and it may also be employed for pinning on or fastening portions of such garments together.

Hitherto in brooches as at present constructed, the pin or fastening device is hinged at one end to the back of the brooch, while the opposite and pointed end of the pin is made to pass through the garment and it is held by a catch or hook. This method of fastening and attaching the brooch to the garment is very liable to get out of order by the pin becoming strained or broken off at the hinge, thereby rendering the brooch useless until a new pin is attached thereto.

According to this invention the pin for fastening the brooch or other piece of jewelry or ornament, hereinafter termed brooch, is made so as to be detachable from the main portion of the brooch.

It consists of a straight pin provided with a head and armed with a fixed collet or collar arranged at a suitable distance from the head of the pin. Between the fixed collet and the head of the pin is mounted, on the pin, a sliding bolt, preferably, though not necessarily so, of two diameters, arranged to engage with a hooked and slotted bracket fixed to the back of the brooch for connecting and fastening the two pieces, that is, brooch and pin, together. The sliding bolt is retained in connection with the slotted and hooked bracket by means of a helical spring. The pointed end of the pin is arranged to be passed into and held by a second slotted bracket which forms a catch.

In the drawings hereunto annexed, Figure

1 is an elevation, Fig. 2 an end elevation, and Fig. 3 a plan of the pin and means for attaching and fastening it to the brooch; Fig. 4, 55 an enlarged part sectional elevation, and Fig. 5 an enlarged end elevation of detachable pin. Figs. 6, 7, and 8 are, respectively, a sectional elevation, and back and front elevations of the hooked slotted bracket; Fig. 9, 60 an enlarged elevation of bracket for receiving the pointed portion of the detachable pin. Fig. 10 shows the application of the slotted brackets directly to the back of a brooch.

A is the detachable pin, which may consist of a piece of steel or other wire pointed at the end *a*, and provided with head *a'* and armed with a collet or collar B (hereinafter termed collet) fixed at a suitable distance from the head of the pin. On the pin A is mounted, between the head *a'* and the collet B, a sliding bolt C. The periphery of the bolt C is preferably made of three diameters, not necessarily so, C, *c*, *c'*, as shown at Fig. 4. The bolt C is bored with a hole of two diameters *c*², *c*³, to form a recess and a shoulder for receiving the end of a helical spring D, which is mounted on the pin between the head and the internal shoulder portion of the bolt C. The smaller diameter *c*² of the hole in the bolt is of such a size as to slide freely upon the pin A.

E is the slotted bracket for receiving the reduced end *c'* of the bolt C. The bracket E is provided with a hook *e* projecting from its front portion as shown at Fig. 6, for receiving the collet B as shown at Fig. 1. In the bracket E is formed a hole of two diameters, *e'*, *e*², the larger one of which is arranged to pass from the back of the bracket to near its front portion as shown at Fig. 6. The hole *e'* forms a recess for receiving the reduced end *c'* of the sliding bolt C, while the diameter of the hole *e*² is such that the pin A may freely pass into it. The bracket E is also slotted as shown at *e*⁴ (Figs. 7 and 8) for allowing the pin A to be readily passed into or withdrawn from the bracket E.

When the bracket E is formed say out of a solid piece of brass or other metal, the following process of manufacture may be adopted, but I wish it to be distinctly understood that I do not limit myself to this or any other particular method of producing the said brack-

ets: A hole such as e^2 is first drilled to admit the pin A. This is then enlarged to form the recess or countersunk portion e' . The top edge may then be filed or otherwise removed to form the inclined plane e^3 and the slot e^4 , may then be cut. The hook e , may either be formed on or attached to the bracket E as desired, and the shape of the bracket may be arranged to suit the fancy of the manufacturer or wearer.

F is the bracket for receiving the pointed end of the pin A and it is provided at its upper end with a hole f , suitable to receive the pointed end of the said pin A; and a slot f' . The slot f' is of such a size at the point at which it joins the hole f that only the pointed portion of the pin will pass through it. By this means a catch is formed for the small end of the pin.

The brackets E, and F may either be fixed directly to the back of the brooch as shown at Fig. 10, or they may be cast on or fixed to a backing piece or stretcher G, as shown in Figs. 1 to 3.

The mode of attaching the brooch to a dress or other article of wearing apparel is as follows: The pin A is first detached from the brooch and is then passed through the dress or portions thereof into the position in which it is to be worn. The pointed end a of the pin is then inserted within the hole f of the catch bracket F until the collet B is in a position to be passed down at the front edge of the bracket E for engaging with the hook e . The sliding bolt C is then withdrawn in the direction of arrow, from the position shown at Fig. 4, and in so doing its reduced end c' slides upon the inclined surface e^3 of the bracket E. When the sliding bolt C has been withdrawn sufficiently far to permit of the outer end of the reduced part c' to be clear of the bracket, the pin A can then be pressed down slot e^4 to the position shown at Fig. 1. After which, on the sliding bolt C being released, it will be returned by the expansion of spring D, until the reduced end c' passes within the recess e' of bracket E for firmly attaching the pin and brooch together and for fastening the latter in position.

To unfasten the brooch and disconnect it from the pin may be readily accomplished by

withdrawing the reduced end c' of the sliding bolt C from its engagement with the bracket E.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. In a fastening for brooches, the combination of a pointed pin armed with a head and a collet fixed at a distance therefrom, a sliding bolt mounted on said pin between the head of the pin and the fixed collet, and a spring mounted on the pin, and interposed between the head and the rear end of the sliding bolt, as set forth.

2. In a fastening for brooches, the combination with the back of a brooch of a detachable pin armed with a head and a fixed collet at a distance therefrom, a bolt sliding on the pin between the fixed head and collet, and a spring encircling the pin and interposed between the fixed head of the pin, and a recess in the sliding bolt, as and for the purposes set forth.

3. In a fastening for brooches, the combination of a brooch armed at its back with two slotted and recessed brackets, one of said brackets being also armed with a hook for receiving a collet fixed to a detachable and pointed pin armed with a fixed head and having a bolt sliding on it between the head and the collet, as set forth.

4. In a fastening for brooches, the combination of a brooch armed at its back with slotted brackets for receiving and holding a detachable pin, said pin being armed with a fixed head and a collet fixed at a distance therefrom, a bolt reduced at one end to fit one of said brackets and sliding on said pin between the head and fixed collet, and a spring encircling the said pin and interposed between the fixed head of the pin and a recess in the sliding bolt, as and for the purposes set forth.

In testimony whereof I have hereunto signed my name to this specification in presence of two subscribing witnesses.

THOMAS GRAINGER.

Witnesses:

W. FAIRBURN-HART,
ADAM CLARK HART.