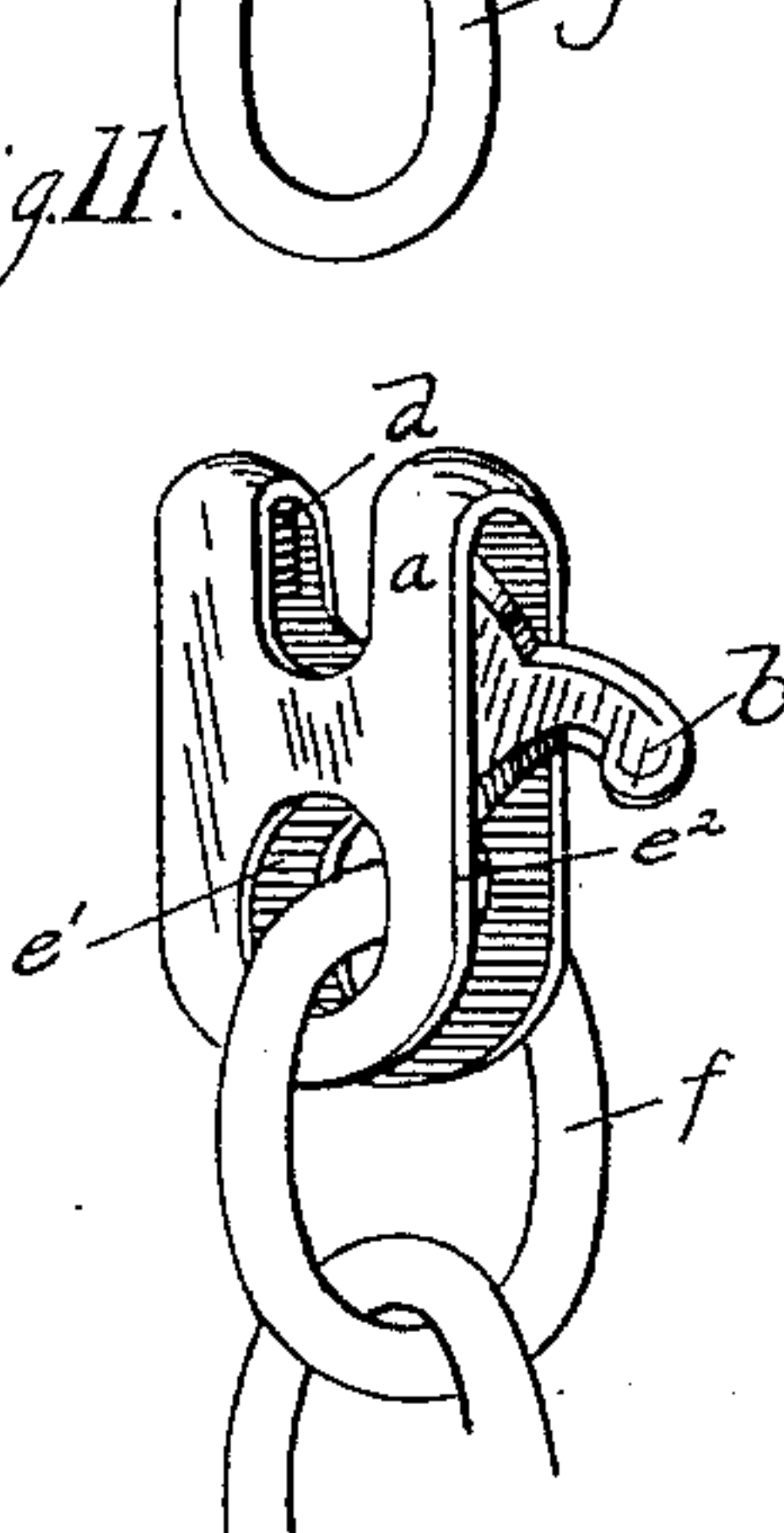
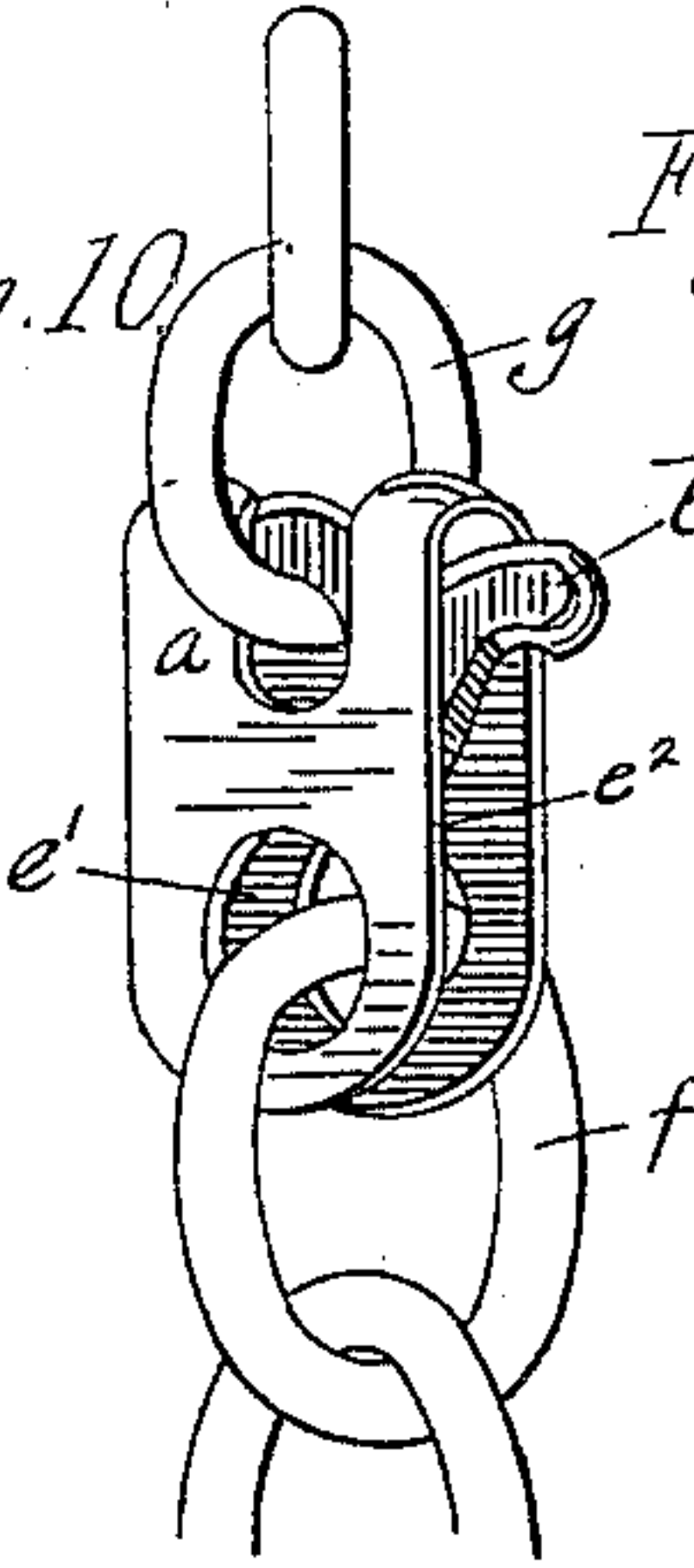
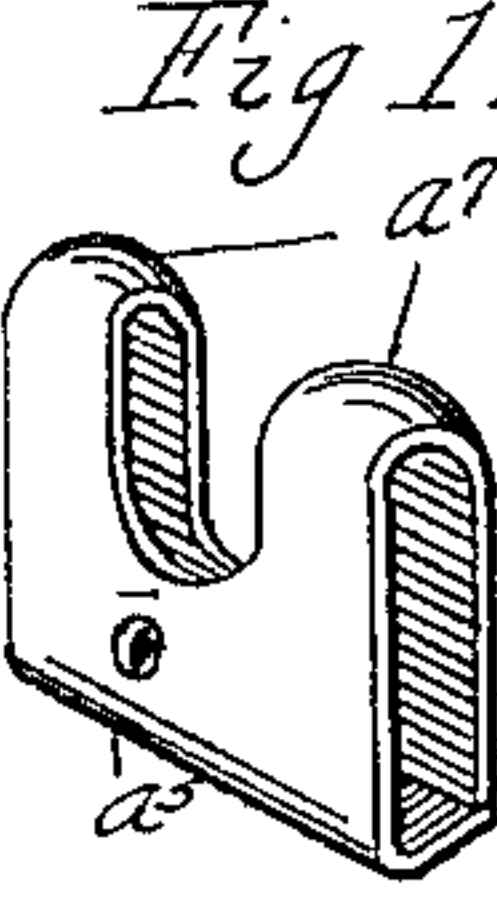
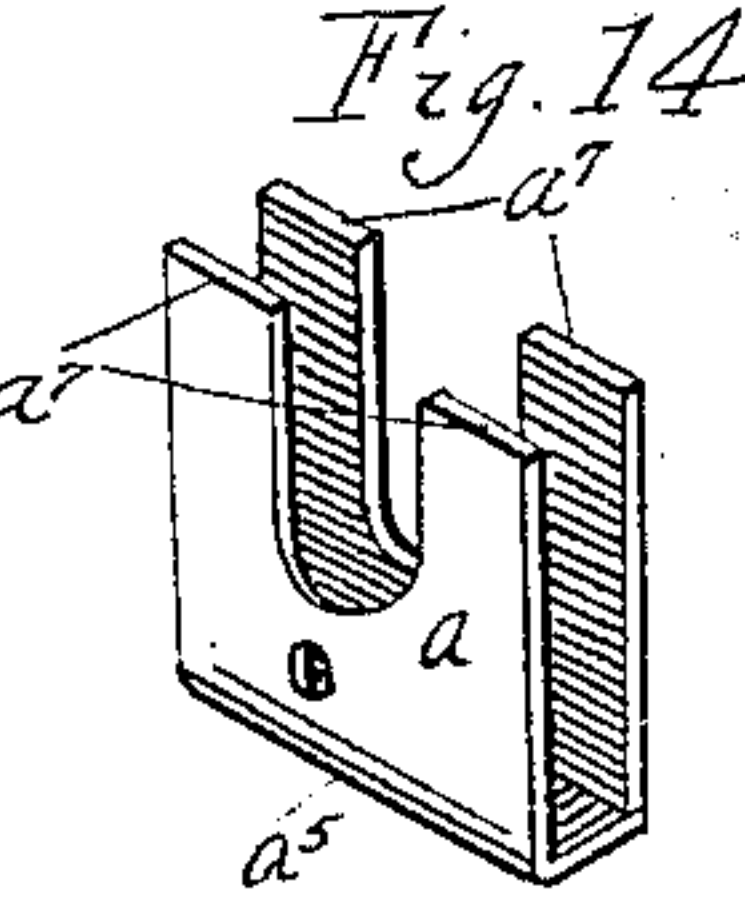
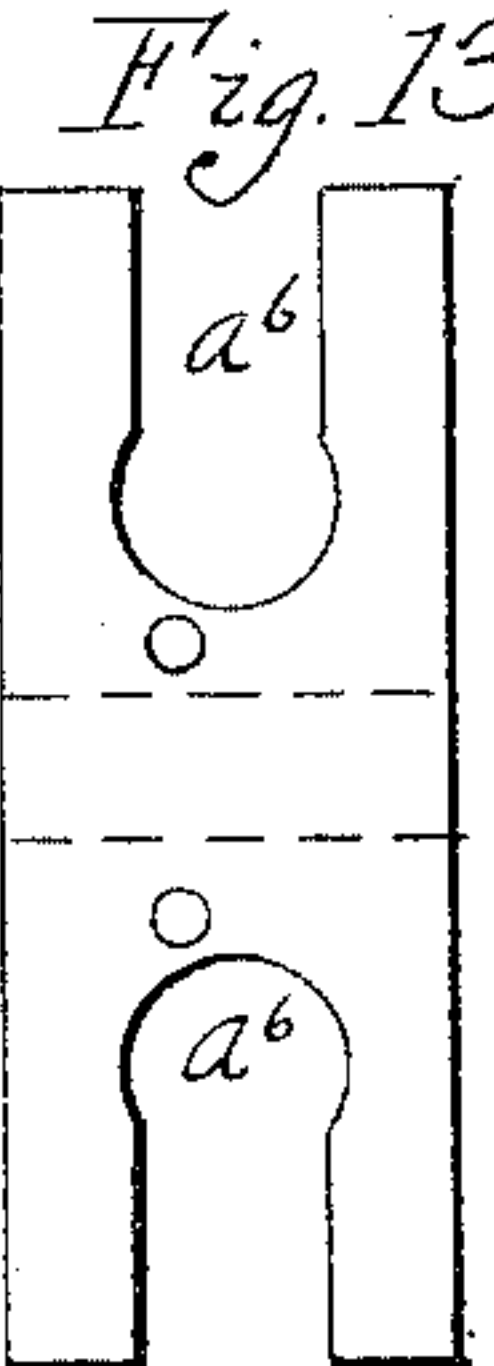
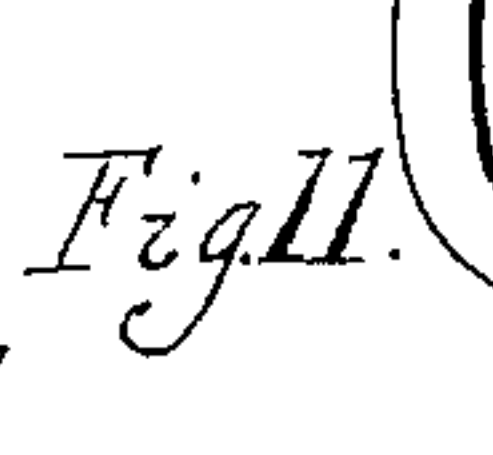
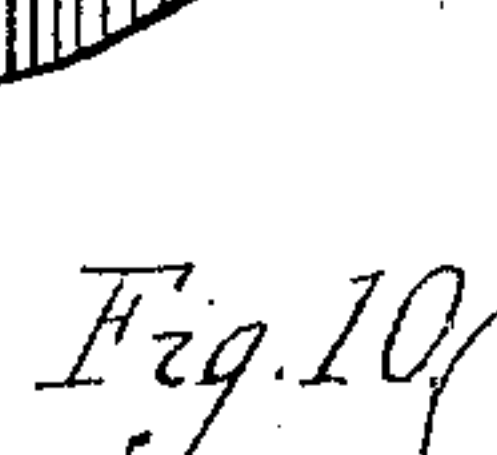
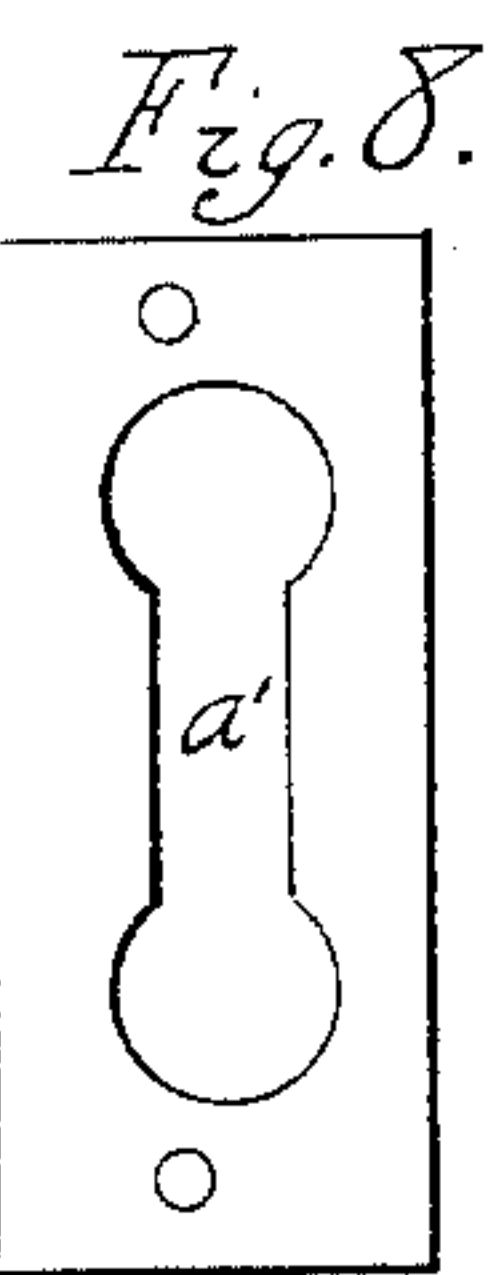
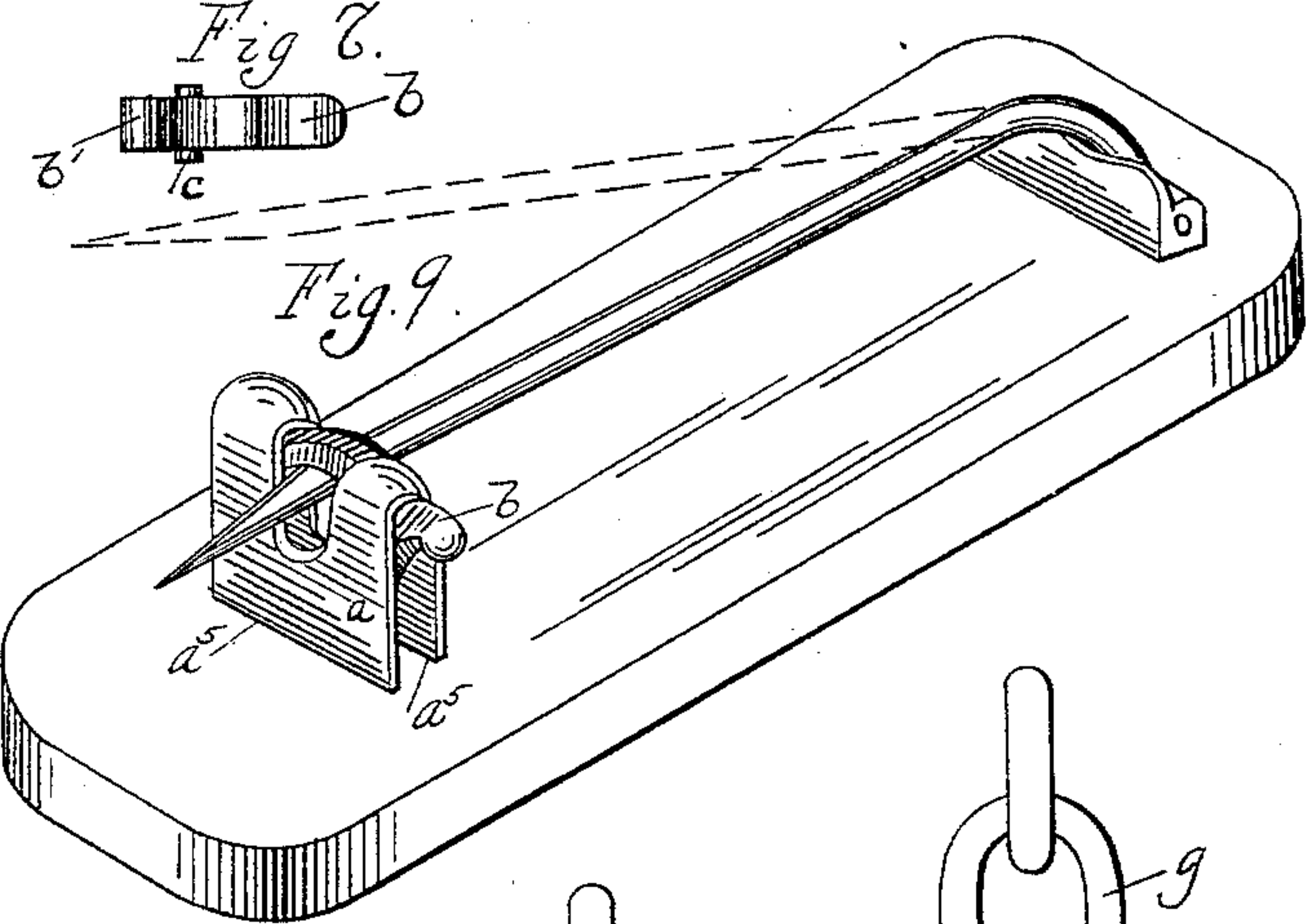
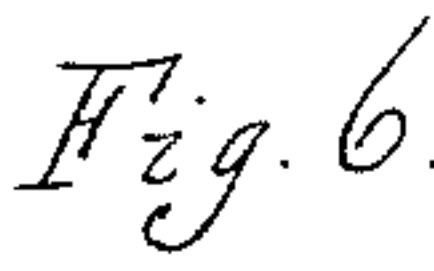
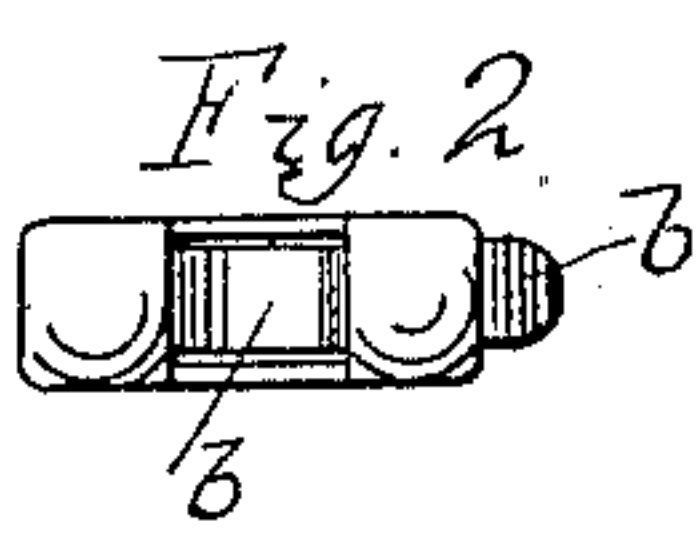
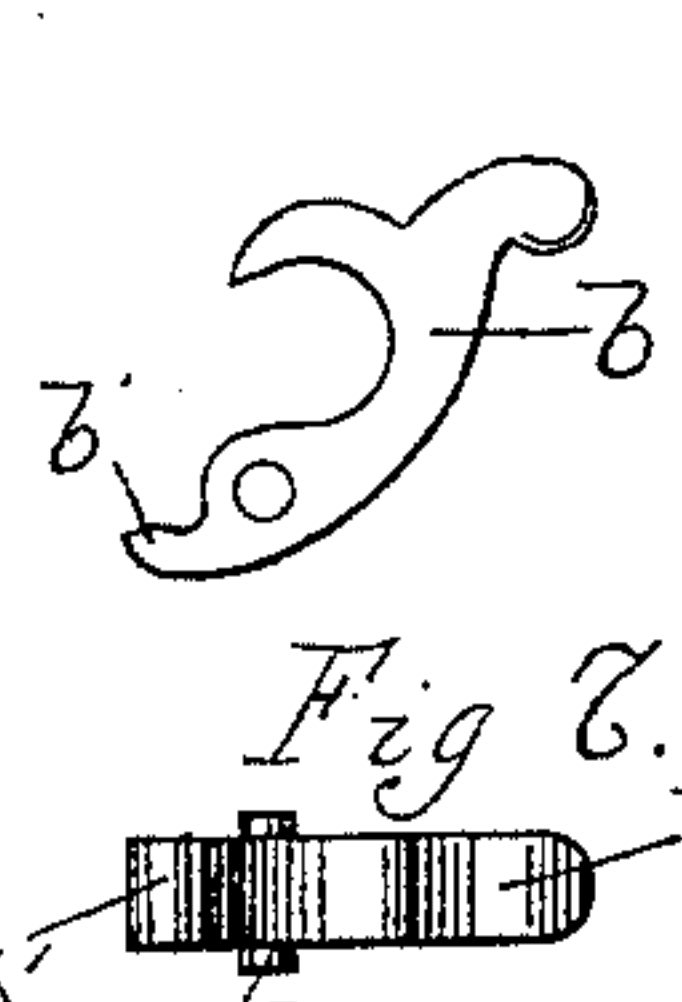
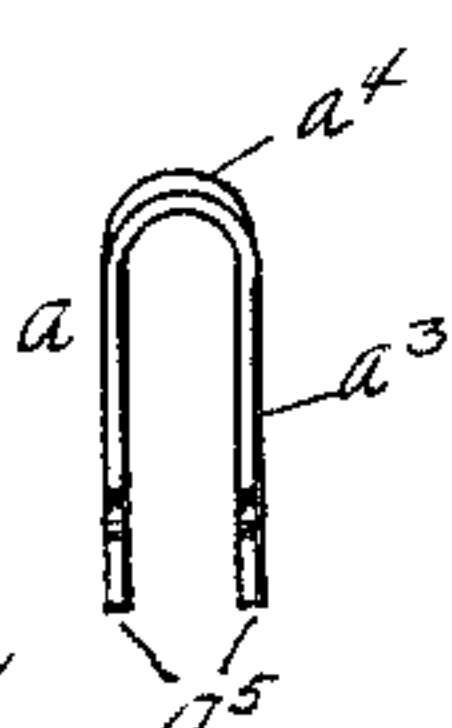
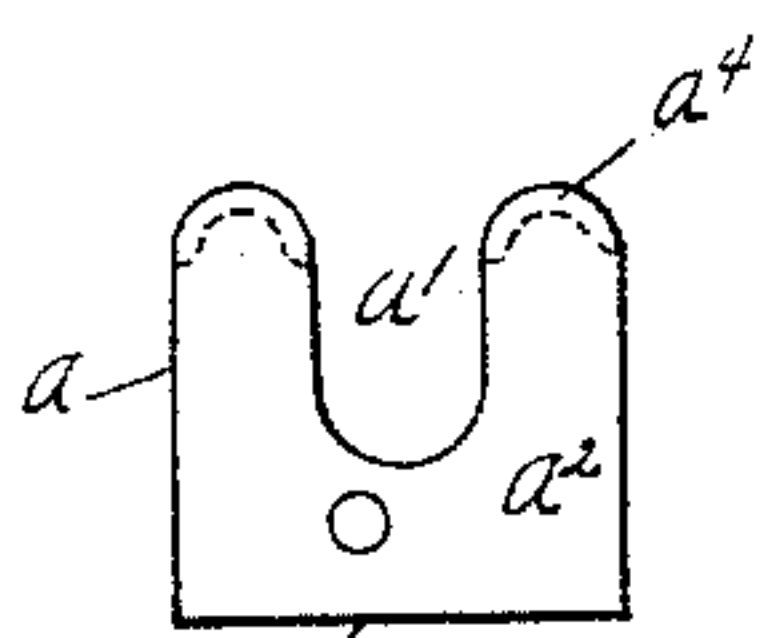
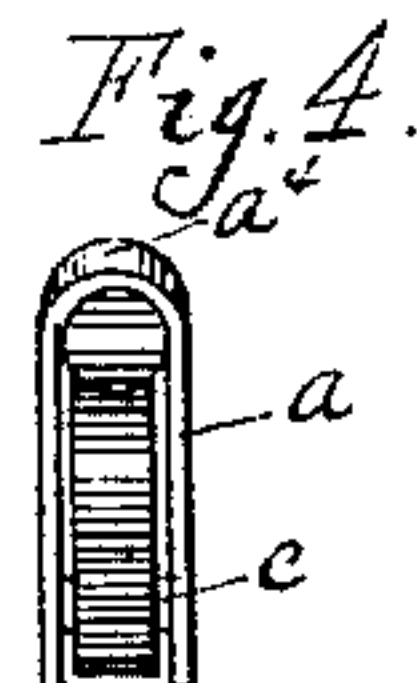
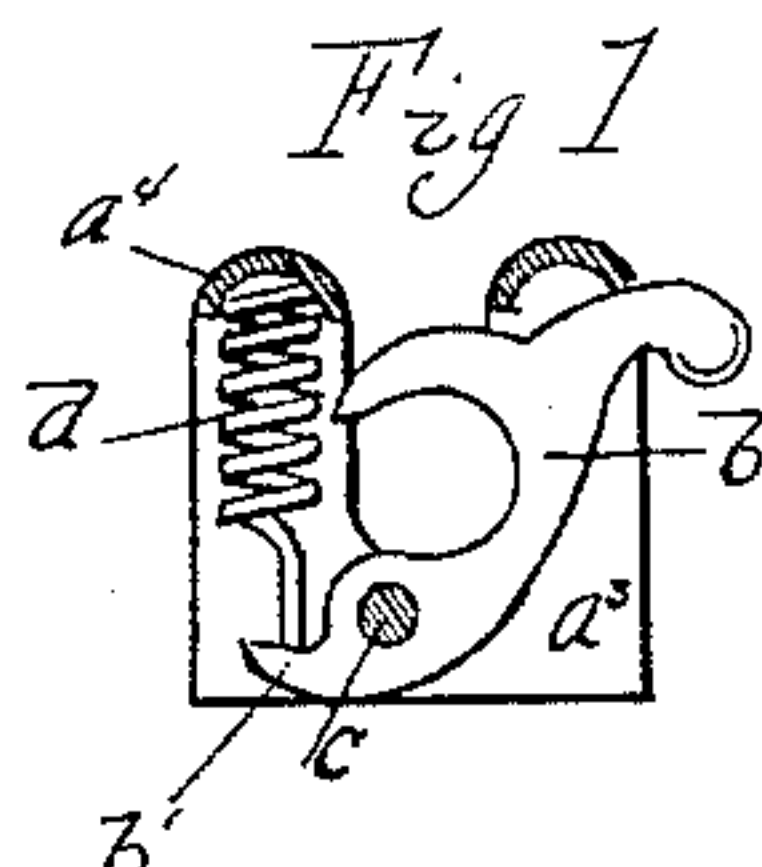
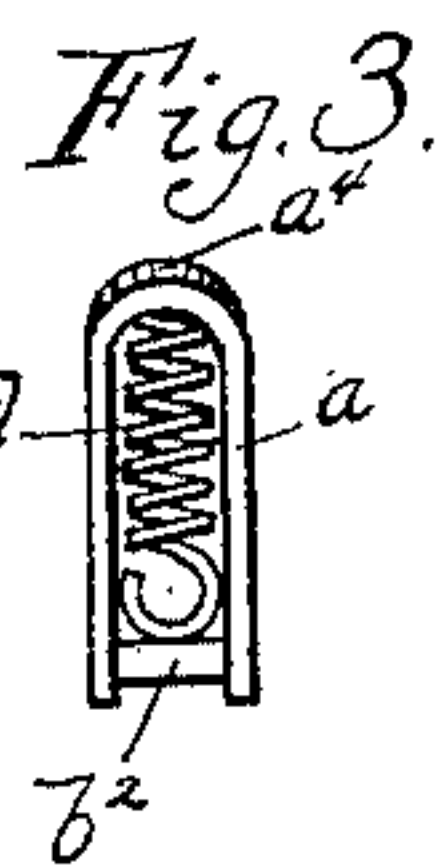
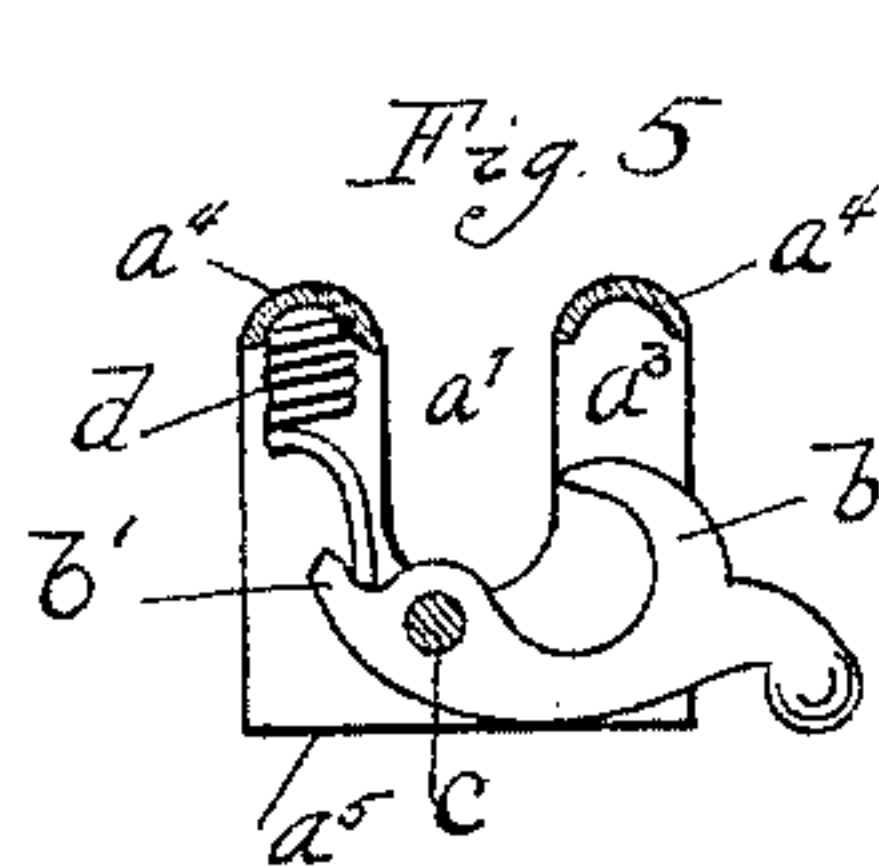


(No Model.)

J. LONG.
FASTENING FOR JEWELRY.

No. 393,993.

Patented Dec. 4, 1888.



Attest.
Walter P. Keene
F. L. Rindallton.

Inventor.
John Long.
by Ellis Spear.
Att'y.

UNITED STATES PATENT OFFICE.

JOHN LONG, OF BRADNINCH, COUNTY OF DEVON, ENGLAND.

FASTENING FOR JEWELRY.

SPECIFICATION forming part of Letters Patent No. 393,993, dated December 4, 1888.

Application filed August 29, 1887. Serial No. 248,235. (No model.) Patented in England October 22, 1886, No. 13,495.

To all whom it may concern:

Be it known that I, JOHN LONG, a subject of Her Majesty the Queen of Great Britain, residing at Bradninch, in the county of Devon, England, have invented certain new and useful Improvements in the Fastenings of Brooches and other Articles of Jewelry, (for which I have obtained an English patent, No. 13,495, dated October 22, 1886,) of which the following is a specification.

This invention has reference to improvements in those fastenings of brooches and other articles of jewelry commonly known as "Long's patent safety-locks," for which Letters Patent were originally granted to me in Great Britain bearing date January 17, A. D. 1857, No. 150. Heretofore, so far as I can ascertain, the outer casing of such a fastening or lock has been constructed as described in the specification and illustrated by the drawing of my hereinbefore-mentioned British Letters Patent, which outer casing consisted of a box of thin metal, (within which were arranged the hooked catch-piece and helical spring), having a plate attached to one side by small screws. An outer casing so constructed is expensive to manufacture, and, moreover, as the said screws require to be riveted over at their ends when in position, so as to prevent their becoming loose, it is a very difficult matter to open the said casing and to remove the coiled spring therefrom. Thus many fastenings have been rendered useless through the said spring being heated and rendered soft during the operation of soldering the casing to the brooch or other article of jewelry with which it is required to be used.

My present invention consists in constructing the said outer casing of a single piece of sheet metal, as hereinafter described, whereby the cost of manufacture is considerably reduced and the necessity of using screws is dispensed with, and the said coiled spring can readily be removed from and replaced in the casing without disturbing any other part of the lock or fastening.

I will describe my invention by referring to the accompanying drawings, Figure 1 of which is a side sectional elevation, and Fig. 2 a plan of my improved fastening closed. Fig. 3 is an end view of the same looking toward the coiled

spring, and Fig. 4 is also an end view looking toward the hooked catch. Fig. 5 represents a similar view to Fig. 1 with the catch open. Fig. 6 represents in side and end elevations and in plan the sheet-metal outer casing of the same separately, and Fig. 7 shows an elevation and plan of the hooked catch separately. Fig. 8 represents a sheet-metal blank for forming the outer casing represented by Fig. 6, and Fig. 9 represents a back view of an inverted brooch with the improved fastening shown by the preceding figures applied. Figs. 10 and 11 show the improved fastening applied for securing the ends of a bracelet, necklet, or other chain. Fig. 12 shows a modified form of outer casing, and Fig. 13 the sheet-metal blank for forming the same; Fig. 14 representing the modified outer casing partly formed.

Similar letters refer to similar parts throughout the several figures.

Referring, first, more particularly to Figs. 1 to 9, both inclusive, *a* is the outer casing of the fastening, *b* is the hooked catch work loosely on a pin, *c*, and *d* is the spring which acts upon the heel of the hooked catch to maintain it closed.

In carrying out my invention as applied to the fastening for a brooch, I take an oblong rectangular sheet-metal blank, (see Fig. 8,) having centrally an oblong hole, *a'*, extending to within a short distance of each end. The said sheet-metal blank is of suitable size to form the outer casing, *a*, of the lock or fastening. I bend the said blank centrally in the direction of its shorter axis into a \cap shape, when viewed from one end, (see Fig. 6,) thus forming two sides, $a^2 a^3$, and the top a^4 of the casing, and the oblong hole *a'* will then form the recess in which the brooch-pin rests when held by the hooked catch. (See Fig. 9.) Between the two sides $a^2 a^3$ thus formed I place the hooked catch *b*, which is pivoted on a pin, *c*, passing therethrough and riveted over at each end. The ends of the said blank or the extremities a^5 of the \cap form the base of the fastening, where it is soldered to the back of the brooch. (See Fig. 9.)

The coiled spring *d*, which acts upon the heel *b'* of the hooked catch in the ordinary manner, reacts against the top a^4 of the \cap -

shaped casing. The top a^4 of the \cap -shaped casing and the heel of the hooked catch are indented (see Figs. 1 and 5) or otherwise formed so that the ends of the spring d will catch thereon and be there maintained by the elasticity of the spring. By merely compressing the spring d its ends can be sprung out of or into the said indentations, so that it can readily be removed or replaced through the end opening of the \cap -shaped casing.

When used as a fastener for bracelets, necklets, or other chains, the sheet-metal blank is preferably made with rounded ends, (see Figs. 10 and 11,) so as to form a rounded base which may be pierced by holes e' e^2 for a ring, f , to pass through to attach it to one end of the bracelet, necklet, or other chain, a ring, g , at the other end being employed for the hooked catch b to take in. The fastening is represented as closed round the ring in Fig. 10 and unfastened therefrom in Fig. 11.

The oblong form of the blank for forming the outer casing, a , may be modified without departing from the nature of my invention. For instance, the blank may be approximately a rectangular oblong, as shown by Fig. 13, and have a deep indentation, a^6 , at each end so that when bent centrally into a \cup shape (see Fig. 14) such central part will form the base a^5 of the outer casing. The extremities a^7 of the \cup are then bent over and soldered

or otherwise fixed together (see Fig. 12) to form the top of the outer casing. The fastening above described operates to hold the brooch-pin within the opening in the plate by means of the hook b , which is operated to unfasten the same by simply depressing the projecting end of the hook against the pressure of the spring, which thus allows the brooch-pin to be drawn out of the catch.

Having now described the nature of my said invention, what I claim is—

1. A fastening for brooches and other articles of jewelry, consisting of a single piece of sheet metal forming the shell of approximately \cup shape in cross-section, a central opening therein for the point of the brooch-pin, and a fastening device pivoted between the walls of said shell, substantially as described.

2. A fastening for brooches and other articles of jewelry, consisting of an outer sheet-metal casing, a , hooked catch b , fulcrum-pin c , and spiral spring d , all arranged and combined together, substantially as and for the purposes hereinbefore described.

In testimony whereof I have signed in the presence of two subscribing witnesses.

JOHN LONG.

Witnesses:

WILLIAM BAKER,
LEONARD JAMES LONG.