UNITED STATES PATENT OFFICE.

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FASTENING FOR BROOCHES OR THE LIKE.


Application filed January 6, 1900. Serial No. 855. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH F. E. LUTHY, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Fastenings for Brooches or the Like, of which the following is a specification.

This invention relates to fastenings, and aims to provide certain improvements particularly applicable for jewelry-fastenings.

Therefore in fastenings for brooches various attempts have been made to produce a safety-fastening for preventing accidental or unauthorized disengagement of the pin-tongue from its holder or hook-piece. Such devices have generally operated on the principle of preventing escape of the pin-tongue from the holder by means of an additional moving part which has been moved into the path of the pin-tongue for preventing its disengagement.

My invention aims to provide a fastening of this general character which shall be simple, cheap, strong, and compact and which can be relied on to effectively resist all ordinary causes of accidental or unauthorized unfastening.

To this end in carrying out the preferred form of my invention as applied to a fastening for a brooch I provide an improved hook-holder, an improved locking part, a screw-thread for adjusting said parts, and certain other features of improvement, all of which will be hereinafter fully set forth.

In the accompanying drawings, Figure 1 is a side elevation of a brooch-frame provided with my improved fastening. Fig. 2 is an enlarged fragmentary side elevation thereof, showing the fastening in the open position. Fig. 3 is a similar view, partly in vertical axial section, showing the fastening in the locking position. Fig. 4 is a side elevation of the lock alone, and Fig. 5 is a fragmentary cross-section cut on the line 5-5 of Fig. 3.

Referring to the drawings, let A indicate the frame of a brooch or other article; B, the hinge-post; C, the pin; D, its hinge-axis; E, its tongue; F, the hook-post or holder, and G its notch. These parts may be of any usual or suitable construction which will permit springing of the pin inwardly until it is opposite the notch G and then laterally out of the notch, as indicated in dotted lines in Fig. 2.

According to the preferred form of my invention I provide an improved locking part II and improved means for manipulating and fastening it. The lock II has a pin-cavity I, open at its inner end for receiving the pin, and a pin-notch J for permitting the pin to pass into and out of this cavity. The lock is adjustably connected to the holder F, preferably so as to be movable rotatively therein and axially thereof. As shown, a screw is provided for adjusting the lock axially of the holder. Preferably the lock is formed of a small metal tube a, having a fixed inner head or collar b at one end and a fixed handle or gnarled cap-nut c at its other end. The tube a has an external screw-thread d cut on it from end to end, and the notch J is cut through the tube and its collar b. The holder is preferably formed of a tube e, connected by a base f to the frame A and provided with an internal screw-thread g, engaging the thread d of the lock. At its inner and outer ends the tube e is formed with faces h and i, the inner face being opposite the face j of the collar b and the outer face being opposite the face k of the handle c. These faces are so proportioned that when the faces h and j come together as the lock is unscrewed they will arrest unscrewing of the lock at the time that the notches J in the lock and G in the holder coincide. These notches are of such relative size and length that when they coincide in the open position of the lock their inner ends will be outwardly of the end of the pin-tongue, so that the latter can be sprung inwardly and laterally for passing into or out of the fastened position. They are also so proportioned that when the lock is screwed to the locked position the notch in the lock will have passed inwardly of the pin-tongue of the pin to such extent that it will be impossible to remove the pin while the lock is locked, as best seen in Fig. 1. In the locked position the faces i and k are in contact with sufficient intimacy to resist any ordinary tendency to unscrewing, and in the un-locked position the faces h and j have the same effect, so that when the lock is set tight...
in either of these two positions it will be main-
tained in the position in which it is set until
sufficient force is applied to it to free it, the
force necessary being such that it could not
be applied accidentally or surreptitiously
without being noticeable to the wearer. The
collar $b$ is preferably screwed on the tube $a$
with a tight fit, and the handle $c$ is preferably
a gnarled cap-nut screwed on the end
of the tube and closing it. The collar is of
the same diameter as the tube $e$, and the up-
per side of its notch is beveled at $f$ similarly
to the bevel $m$ on the tube.

In use the lock will be screwed to one po-
sition or the other for opening or closing.
When open, the pin can be fastened and un-
fastened with ordinary facility, and when
locked the pin cannot be released except by
special manipulation.

It will be seen that my invention provides
improvements which can be readily and ad-

cvantageously availed of, and it will be un-
derstood that the invention is not limited to
the exact details of construction, arrange-
ment, and combination set forth as consti-
tuting the preferred form of my invention,
since it can be employed in whole or in part
according to such modifications as circum-
stances or the judgment of those skilled in
the art may dictate without departing from
the spirit of the invention.

It will be seen that the lock II is not only
a faster for the pin-tongue but is also a
point-protector therefor, inclosing the point
of the pin in its pin-socket and effectively
guarding against injury to the user from con-
tact with the pin-point during all fastening
positions of the fastener; also, that the col-
lar $b$ serves as a means for guarding against
complete unscrewing of the lock from the
holder, so that the possibility of accidental
or unconscious separation of the lock and
holder is avoided.

What I claim is—

1. In fastenings for brooches and other ar-
ticles, the combination with a holder having
a notch for receiving a pin-tongue, and a pin-
tongue entering laterally into said holder
through said notch, of a lock within the holder
and movable longitudinally of the axis there-
of, having a notch coinciding with the notch
in the holder, a socket for receiving the pin-
tongue, and an unbroken cylindrical wall at
rear of said notch surrounding said socket,
said lock having an external screw-thread,
and said holder having an internal screw-
thread engaging that of the lock, and means
for screwing the lock longitudinally of the
axis of the holder for moving the lock toward
and from the position at which said notches
coincide, said lock being of such length rel-
atively to the holder that it can be screwed
along the pin-tongue to a position where its
notch is beyond the holder, and the notch of
the holder is closed by the cylindrical wall
of the lock.

2. In fastenings for brooches and other ar-
ticles, the combination with a frame $A$, pin
$C$, and holder $F$, having an internal thread
and a notch $G$, of a lock II consisting of a
tube having an external thread screwing
through the internal thread of the holder, a
notch $J$ coinciding with the notch in the
holder, and an unbroken cylindrical wall at
rear of said notch, a collar $b$, and a handle
c, said holder having faces $h$ and $i$, and said
lock having faces $j$ and $k$, said faces abut-
ting at the extreme positions of adjustment
of the lock, for holding it in its open and
locked positions respectively, and said faces
$j$ and $k$ being spaced apart such a distance
that when the face $k$ abuts against the face
$i$ said notch $J$ is beyond the holder, and the
notch $G$ is closed by said cylindrical wall.

In witness whereof I have hereunto signed
my name in the presence of two subscribing
witnesses.

ADOLPH F. E. LUTHY.

Witnesses:
GEORGE H. FRASER,
THOMAS F. WALLACE.