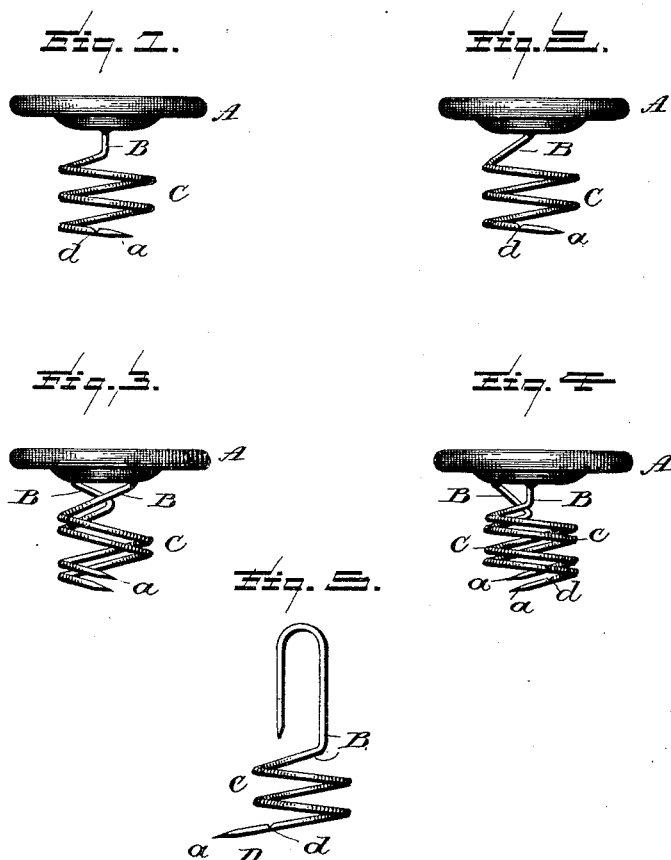


(No Model.)

H. B. LUM.
SPIRAL SCREW BUTTON.

No. 419,206.

Patented Jan. 14, 1890.



Witnesses

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UNITED STATES PATENT OFFICE.

HENRY B. LUM, OF RED BANK, NEW JERSEY.

SPIRAL-SCREW BUTTON.

SPECIFICATION forming part of Letters Patent No. 419,206, dated January 14, 1890.

Application filed April 16, 1889. Serial No. 307,503. (No model.)

To all whom it may concern:

Be it known that I, HENRY B. LUM, a citizen of the United States, residing at Red Bank, in the county of Monmouth, State of New Jersey, have invented a certain new and useful Improvement in Spiral-Screw Buttons, of which the following is so full, clear, and exact a description as will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawings, in which—

Figure 1 is a view of a button provided with my improved spiral fastener, having a straight shank between the button and the spiral. Fig. 2 is a view of a similar button having a shank extending obliquely between the button proper and the spiral. Fig. 3 is a view of a similar button having a pair of spirals and two shanks extending diagonally from the button to the spiral. Fig. 4 is a view of a similar button having a pair of spirals and one shank extending diagonally across between the button and the spiral and the other at right angles to the line of the planes of the button and spiral. Fig. 5 is a detail view of the spiral detached, showing a slight variation in construction, showing the point projecting slightly beyond the coil of the spiral and provided with a slight indentation to facilitate the breaking of the spiral at will, as will be hereinafter explained.

The object of my invention is to provide a button which can be quickly and readily attached by a tourist or any person not particularly skilled in the art of attaching buttons in the shortest possible time, at the least expense of time, material, and physical force.

Another object of my invention is to provide a button which may be readily and easily attached to a fabric or leather or other material, and one by the use of which the least amount of material will be displaced or disfigured.

Another object of my invention is to provide a button which may be quickly attached and the spiral then broken off, so as to prevent any scratching or pricking and consequent discomfort to the wearer or destruction to the garment to which the button is attached.

To that end it consists in providing a button with a helical fastening or holder consisting of a spiral screw beyond the shank, which is

indented and extends in some instances at an angle to the axis of the coil, and by reason of its cheapness, simplicity, ease of attachment, firmness of grip, and the facility with which it may be removed and replaced or its use repeated it will readily recommend itself to the general public as a desirable article.

The button requires no special machinery for fastening any disconnected parts together, it is always ready for use, and can be firmly and easily attached in a moment by any person who may have occasion to replace a lost button at such time and place as the procurement of needle and thread and buttons is impracticable. The button can be made of any suitable material, and this improved fastening of mine can be used on buttons for any kind of garment, although it is more particularly adapted for use as a pantaloons-button. The button may have a straight shank, as shown in Fig. 1; or it may have a shank extending diagonally across between the button and the coil, as shown in Figs. 2 and 3; or a straight and slanting shank may both be combined in the same button, as shown in Fig. 4.

In the accompanying drawings, A designates the button proper. To this is secured the shank B, which is provided at its lower end with a spiral or coil C. The end of the coil C is provided with a point *a*, which is adapted to pierce the garment to which the button is to be attached. Where a straight or square shank is used, the button is held firmly in place. I sometimes provide an inclined shank, as shown in Fig. 2, to facilitate the ready removal of the button from stiffer fabrics.

In Fig. 4 I show one shank extending at right angles to the line of the button and another extending diagonally between the button and the coil. This forms an extremely rigid fastening.

In Fig. 3 I show both shanks extending diagonally between the button and the coil. This style of fastening forms a secure and rigid fastening, and one which would facilitate the ready and easy removal of the button from leather, rubber, or other material which may be stiff and semi-inflexible.

In Fig. 5 I show an extended point D, which is adapted to extend through the garment quickly and facilitate the ease of starting the

button into the garment. A serration of some-
what back of the point will facilitate the break-
ing of this extended end and the removal of
the same, thus leaving a firm fastening with-
out any point to injure the fabric or the
wearer. It will of course be understood that
the fastener may be provided with a hook at
one end and a spiral at the other, in such a
manner that the hook may be inserted through
the eye or eyes of an ordinary button and then
screwed in place, which will form a fastener
which can be used with any button the eye of
which is sufficiently large to permit of the in-
sertion of the fastener. The wire of which
the coil is made will of course be sufficiently
pliable to enable the operator to partially
straighten it out should this be necessary in
placing it through the button. When the
point has been broken away, the remainder
of the coil will spring back up next to the
main portion of the wire, and thus prevent all
possible abrasion of the wearer or the adja-
cent fabric.

I of course understand that shirt-studs have
been provided with blunt spiral screws for in-
sertion through an eyelet. There is nothing,
however, in such a form of button that will
enable it to be used for the purposes for which
my invention is designed.

In attaching the button which is made the
subject of this application the sharp point of
the spiral is forced through the garment. The
button is then brought flat and into the posi-

tion which it should occupy with relation to
the surface of the garment, and it is turned
around until the spiral is entirely beyond the
outer surface of the fabric or garment, care
being taken, of course, not to allow the point
of the spiral to come through on the outside
of the garment. If the fabric is double, it
will be found advantageous to only insert the
spiral through one thickness of the garment.
In some instances, however, it may be found
desirable to put it entirely through the gar-
ment to secure a more rigid fastening.

I do not wish to be understood as limiting
myself to the exact construction shown; but

What I wish to secure by Letters Patent,
and what I therefore claim, is—

1. A helical button-fastener of the charac-
ter described, consisting of a helical holder
ending with a sharp point and provided with
a recess between the point and the upper por-
tion of the fastener, substantially as described.

2. In a button-fastening of the character de-
scribed, the combination of a button and two
coils having sharpened points and shanks ex-
tending at an angle to the axis of the coil, sub-
stantially as and for the purposes specified.

In testimony whereof I affix my signature in
the presence of two witnesses.

HENRY B. LUM.

Witnesses:

WINFIELD S. B. PARKER,
WILLIAM MULLIGAN.