

(No Model.)

W. F. WHITING.
GRIP BUTTON.

No. 501,981.

Patented July 25, 1893.

Fig. 1

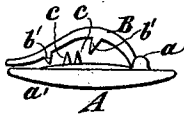


Fig. 2

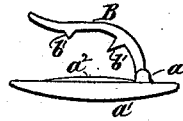


Fig. 3

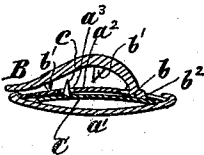
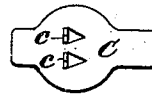


Fig. 4



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM F. WHITING, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR, BY
MESNE ASSIGNMENTS, TO THE HOWARD & SON COMPANY, OF SAME
PLACE.

GRIP-BUTTON.

SPECIFICATION forming part of Letters Patent No. 501,981, dated July 25, 1893.

Application filed June 28, 1890. Serial No. 357,077. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. WHITING, of Providence, in the county of Providence and State of Rhode Island, have invented a certain new and useful Improvement in Grip-Buttons, of which the following is a specification.

My improvement relates to a type of buttons called grip buttons consisting essentially of clips whereby two articles may be gripped and held together.

I will describe a button embodying my improvement and then point out the novel features in a claim.

In the accompanying drawings, Figure 1 is a side view of a button embodying my improvement. Fig. 2 is a similar view with the parts in different relations. Fig. 3 is a transverse section. Fig. 4 is a top or face view of a spring which is combined with said button.

Similar letters of reference designate corresponding parts in all the figures.

A designates the head of the button. It is composed of a bottom plate or outer plate a' , made preferably of a concavo-convex form and a top or inner plate a^2 which will preferably be made concavo-convex. When so made, it will be arranged with its concave side toward the concave side of the plate a' . The plate a^2 is provided with bearings a for the pintles of a grip lever B. As here shown, the bearings a are struck up from the plate a^2 and this plate is slotted intermediately of said bearings.

The grip lever B has pintles b near one end and is bent at about a right angle intermediately of its ends. It is provided with prongs b' by suitably notching and bending over the side edges.

In the head A is a spring C consisting of a strip of spring metal of a length substantially corresponding to the diameter of the interior of the head A. It has a bearing at its ends and is held between the two plates forming the head. It is bowed between the ends toward the plate a^2 of the head. The grip lever has an extension or lugs b^2 below its pin-

ties and this is deflected at an angle. Hence when the grip lever is swung into the position shown in Fig. 1 it will press the spring toward the bottom plate or outer plate a' , and when the grip lever is adjusted to the position shown in Fig. 2 it will allow the spring to move toward the top or inner plate a^2 of the head.

The spring C is provided with prongs c which, as here shown, are formed by making V-shaped slits in the spring and turning up the portions of metal bounded by these slits. In the top or inner plate a^2 is a slot a^3 . This slot is opposite the prongs c of the spring C. When the grip lever is swung into the position shown in Fig. 1 for the purpose of detaching the grip button from any article, the act of so adjusting the lever will of course tend to withdraw its prongs from the article, and, as this movement of the lever will occasion a downward movement of the prongs c of the spring, the latter will also be disengaged from the article.

When the grip lever is adjusted into the reverse position, shown in Fig. 2, its prongs will engage with articles which are intermediate of it and the head and the prongs c of the spring C will be moved upward so that they can engage with the articles, at a distance from the prongs of the lever so that material engaged will not be crowded between the teeth b' c and prevent the closing of the lever upon the head.

It will be seen that by my improvement I provide a very simple grip button which has two sets of prongs both movable for engaging with and disengaging from articles upon which the button is to be used.

What I claim as my invention, and desire to secure by Letters Patent, is—

In a grip button the combination with the outer plate, of the inner plate having a concave inner surface, a spring plate corresponding in length to the diameter of the outer plate and having its end secured between the edges of said two plates, and having a curve from end to end corresponding approximately

to the concavity of the inner plate, prongs
on said spring plate intermediate of its ends
and constructed to extend through an opening
in the inner plate, and a grip lever having a
5 pivotal connection with the inner plate and
having its inner end bearing upon the spring
plate, substantially as specified.

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

WILLIAM F. WHITING.

Witnesses:

JOHN DODD,
E. F. HEDLY.