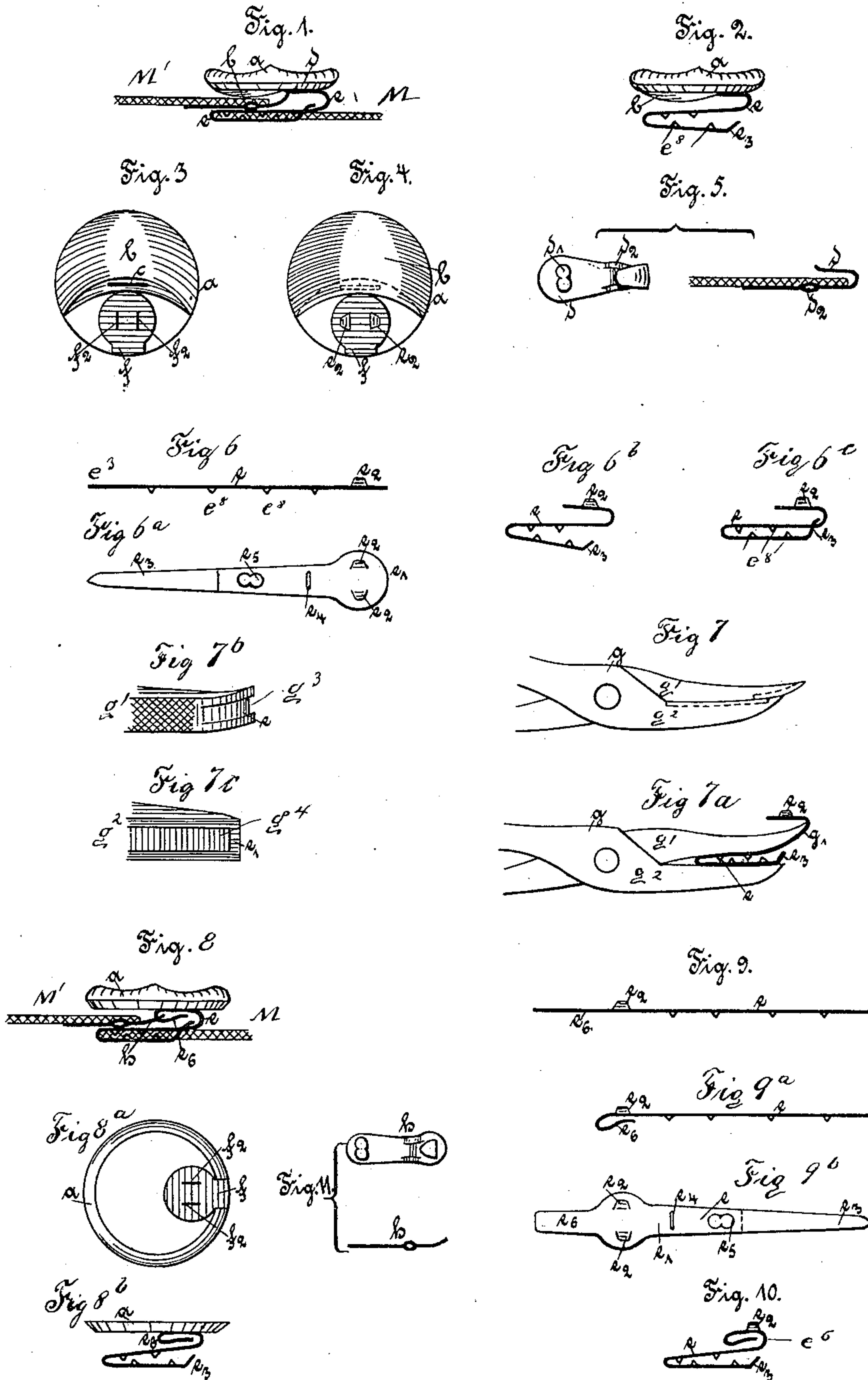


(No Model.)

F. H. THIER.
BUTTON.

No. 379,742.

Patented Mar. 20, 1888.



Witnesses:
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UNITED STATES PATENT OFFICE.

FRIEDRICH HERMANN THIER, OF KÖNIGSTEIN, SAXONY, GERMANY.

BUTTON.

SPECIFICATION forming part of Letters Patent No. 379,742, dated March 20, 1888.

Application filed December 20, 1887. Serial No. 258,449. (No model.)

To all whom it may concern:

Be it known that I, FRIEDRICH HERMANN THIER, of the town of Königstein, Saxony, Germany, have invented certain new and useful Improvements in Buttons, of which the following is a specification.

This invention relates to certain new and useful improvements in buttons; and the object of my invention is to provide a new and improved button of such construction that the same can be fastened without being sewed to the article, and which button does not require a button-hole.

The invention consists in a button having an attaching-strip secured to its underside, which attaching-strip is clamped on the garment.

The invention further consists of the construction and combination of parts and details, as will be fully described hereinafter, and finally be pointed out in the claims.

In the accompanying drawings, Figure 1 is a vertical longitudinal sectional elevation of my improved button and hook, parts being in elevation and the fabric to which the button and hook are fastened being in section. Fig. 2 is a side view of my improved button. Fig. 3 is a bottom view of my improved button. Fig. 4 is a top view of the bottom plate of my improved button. Fig. 5 is a top view and longitudinal vertical section of the hook to be used with the button. Fig. 6 is a side view of the blank for making the attaching device for the button. Fig. 6^a is a top view of said blank. Fig. 6^b is a side view of the attaching device. Fig. 6^c is a side view of the same, showing the locking-prong secured in place. Fig. 7 is a side view of the jaw end of the pliers used for securing the button on the material. Fig. 7^a is a similar view of the same and a side view of the button-fastening device between the jaws, which are partly separated. Fig. 7^b is a bottom perspective view of the end of the upper jaw of the pliers. Fig. 7^c is a top perspective view of the bottom jaw of the pliers. Fig. 8 is a side view of the button, showing a modified construction, the fabric being in section. Fig. 8^a is a bottom view of the button without the fastening device. Fig. 8^b is a side view of the bottom plate of the button and the attaching device thereon. Fig. 9 is a side view of the blank for making the fastening de-

vice shown in Figs. 8^a and 8^b. Fig. 9^a is a side view of this blank, one end being bent. Fig. 9^b is a top view of said blank. Fig. 10 is a side view of the attaching device made from the blank shown in Figs. 9, 9^a, and 9^b. Fig. 11 is a top and side view of an eye to be used with the attaching device shown in Figs. 8, 8^b, 9, 9^a, 9^b, and 10.

Similar letters of reference indicate corresponding parts.

The button *a*, which may be of any well-known construction, is provided on its under side with a hollow meniscus-shaped enlargement or projection, *b*, having in its segmental concave edge a slot, *c*.

The button is provided in its under side in that part not occupied by the meniscus-shaped projection *b* with a recess, *f*, in which two slots, *f*², are formed in the bottom plate of the button.

The attaching device *e*, for attaching the button to the garment or other article, is composed of a strip of metal bent approximately in the shape of a reversed letter S. Said strip *e* of metal is provided with an enlargement, *e*¹, at one end, parts of said enlargement being punched out to form two upwardly projecting ears or lugs, *e*². A short distance from said lugs the strip is provided with a transverse slot, *e*⁴, and a short distance from the slot with one or two apertures, *e*⁵, and the opposite end, *e*³, of the strip is tapered and pointed. Prongs *e*⁸ are formed in the side edges of the strip and extend in a direction opposite to that of the jaws or lugs *e*². The strip is then bent in the shape of a reversed letter S and the point of the tapered end *e*³ is bent upward, the prongs *e*⁸ projecting toward each other, as shown. The enlargement *e*¹ is placed in the recess *f* in the under side of a button, the ears or lugs *e*² passed through the slots *f*², and are then bent down or clinched on the upper surface of the bottom plate of the button, whereby said attaching device *e* is secured to the button. The bottom arms of the attaching device are then placed between the two jaws *g*¹ and *g*² of a pair of pliers, the upper jaw, *g*¹, being provided at its end with a curved recess, *g*³, in its inner surface, the bottom jaw, *g*², being provided with a longitudinal recess, *g*⁴, in its inner surface.

The attaching device *e* is held between the jaws in the manner shown in Fig. 7, the edge of the fabric *M* introduced between the bottom arms of the attaching device, and the two jaws of the pliers then pressed together, whereby the prongs *e*³ are forced into the fabric and the tapered end *e*³ of the fastening device is forced through the slot *e*⁴ of the upper shank of said fastening device and bent or clinched, as shown in Figs. 1 and 6. The button is thus securely attached to the garment a short distance from the edge. It may also be further secured by sewing it on, the needle passing through the aperture *e*⁵.

To the opposite edge, *M'*, of the garment a hook, *d*, is fastened, which is provided with apertures *d'* and with loops *d*², through which the thread can be passed for securing said hook on the garment. To close the garment, the prong of the hook *d* is passed through the slot *c* in the inner or concave edge of the meniscus-shaped enlargement *b*.

If desired, the button may be constructed without the meniscus-shaped enlargement, and in such case the attaching device *e* is provided with an extension forming a hook, *e*⁶, on the under side of the button, which hook can be passed through an eye formed on the clip *h*, that is secured to the opposite side edge of the garment, the attaching device being secured to the button in the manner previously described.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A button provided with an attaching device composed of an S-shaped metal strip having one end secured to the under side of the

button and the other end adapted to be passed through a slot in the strip near that end of the strip secured to the button, substantially as set forth.

2. The combination, with a button, of the bent metal strip *e*, having the end prong, *e*³, and the slot *e*⁴, substantially as set forth.

3. The combination, with a button having the recess *f* and two slots, *f*², in its under side, of the bent metal strip *e*, having the lugs or ears *e*², substantially as set forth.

4. The combination, with a button, of the metal strip *e*, secured to its under side and provided with the prongs *e*³, and the slot *e*⁴, and the bent end *e*³, substantially as set forth.

5. The button herein described, provided on its under side with a projection having a slot in one edge, and an attaching-strip for attaching the button to the garment, one end of the attaching-strip being held in the above slot, substantially as set forth.

6. The combination, with a button provided on its under side with a projection having a slot in its inner edge, of an attaching-strip on the under side of the button for securing it to one edge of the garment, and a hook on the opposite edge of the garment, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

FRIEDRICH HERMANN THIER.

Witnesses:

RUDOLF SCHMIDT,
PAUL DRUCKMÜLLER.