

N. A. DIDIERJEAN.
SEPARABLE FASTENER.
APPLICATION FILED JULY 9, 1910.

980,615.

Patented Jan. 3, 1911.

Fig. 1.

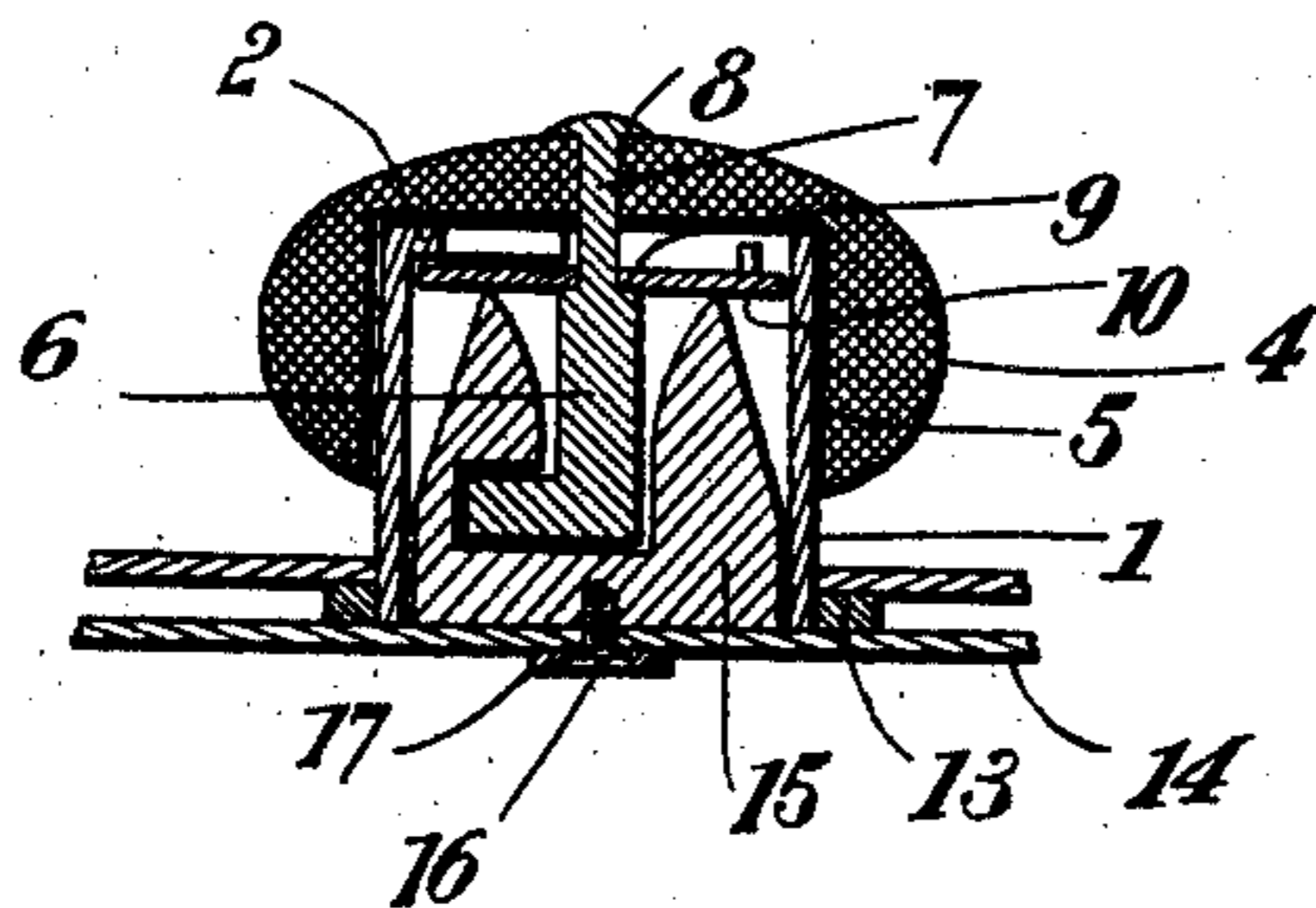


Fig. 2.

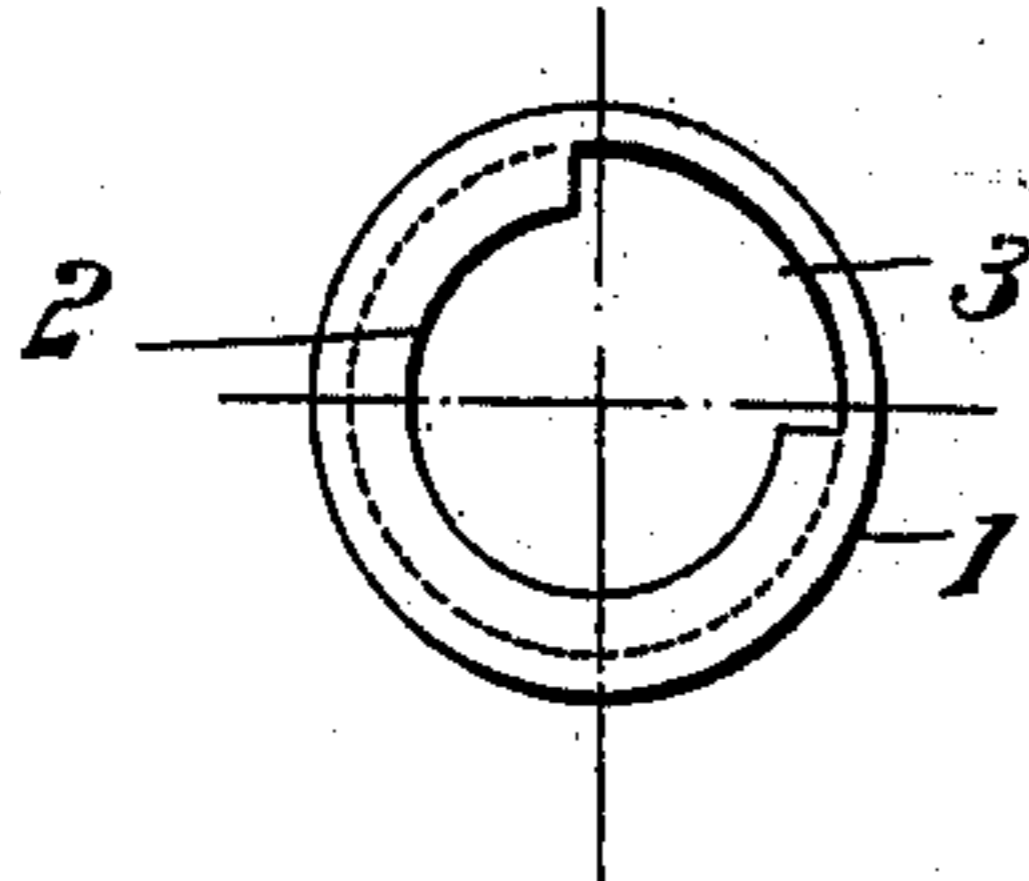


Fig. 4.



Fig. 5.



Fig. 3.

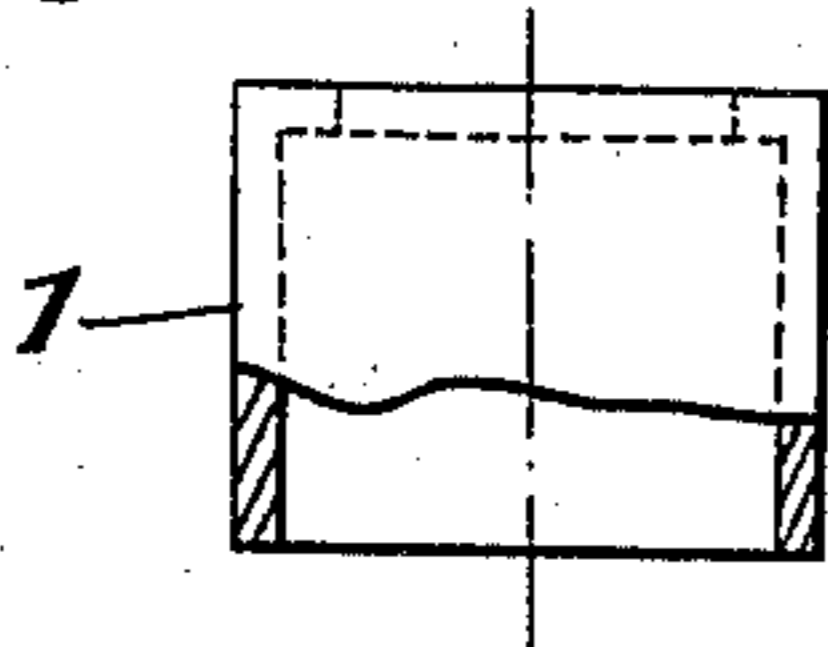


Fig. 6.



Fig. 7.

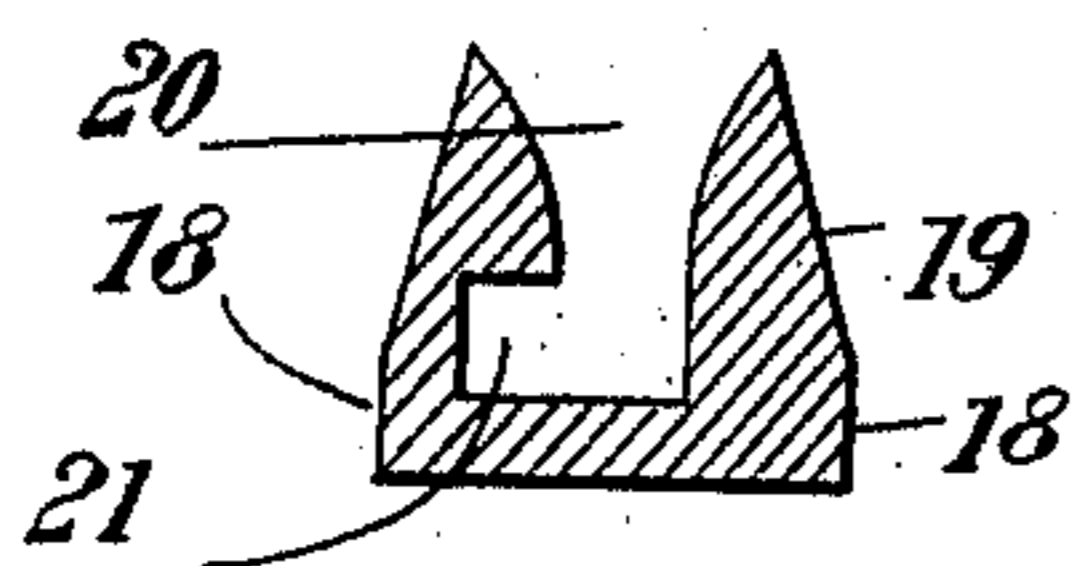


Fig. 9.

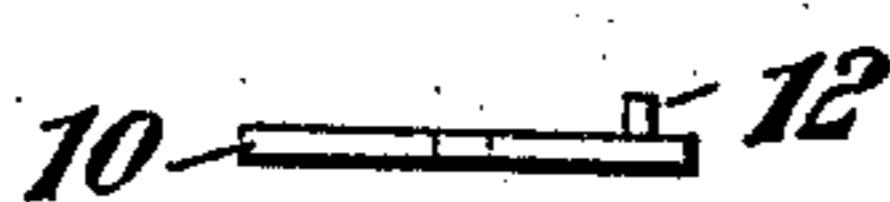


Fig. 8.

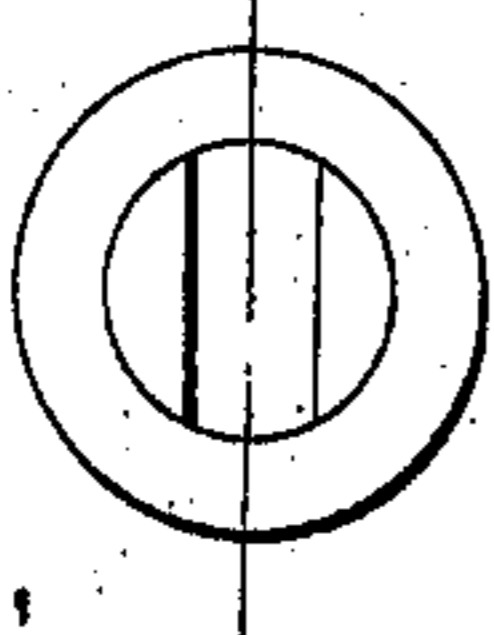
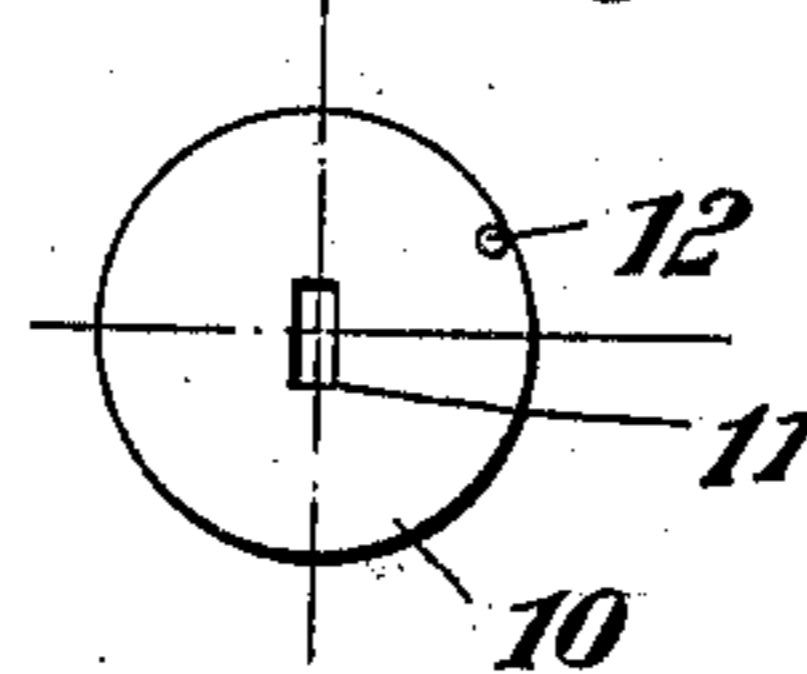


Fig. 10.



Witnesses
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Nicolas Alexis Didierjean.
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UNITED STATES PATENT OFFICE.

NICOLAS ALEXIS DIDIERJEAN, OF ST. QUENTIN, FRANCE.

SEPARABLE FASTENER.

980,615.

Specification of Letters Patent.

Patented Jan. 3, 1911.

Application filed July 9, 1910. Serial No. 571,206.

To all whom it may concern:

Be it known that I, NICOLAS ALEXIS DIDIERJEAN, a citizen of the French Republic, and resident of St. Quentin, France, have invented certain new and useful Improvements in a Separable Fastener, of which the following is a specification.

This invention relates to a button for boots, leggings and gloves the object being to provide a button of this kind which will be simple, rapidly working and have a good holding power.

In the accompanying drawing: Figure 1 is a vertical axial section of my improved button. Figs. 2 to 10 are views showing in detail the various composing parts of the button,—Fig. 2 being a top plan view of the stationary sleeve; Fig. 3 a side elevation view with a sectional view of a part thereof; Figs. 4, 5 and 6 show respectively a side and front elevation as well as a top plan view of a locking hook of one part of the button; Figs. 7 and 8 are respectively a side elevation view and top plan view of the retaining member coöperating with the locking hook. Figs. 9 and 10 are respectively a side elevation and top plan view of the disk employed for limiting the rotation of the hook.

The head of this button for boots, leggings or gloves is in its general lines similar to those in use until now, the shaft only is differently constructed. This shaft is formed of a sleeve 1 intended to be inserted into the head of the button and carrying at its upper end an inwardly directed flange 2. The latter is cut away on an angular distance of about 90 degrees as shown at 3 in Fig. 2. The button head 4 is provided with an axial cylindrical hollow 5 intended to receive with frictional engagement the upper part of the sleeve 1. The button proper still comprises a hook shaped locking member 6 which is provided at its upper end with a shank 7 having a rectangular section and adapted to be passed through a similarly shaped passage provided in the center of the button head 4. The end of the shank 7 which protects from the outside of the button head is riveted down on the said outside as shown at 8 in Fig. 1, so as to rigidly secure the said locking hook to the said button head in such a position that it axially projects into the hollow 5 of the latter.

The shaft of the hook 6 has a circular section so as to provide a shoulder 9 on each side of the shank 7 where the shaft and

the shank meet. Engaged on the said shank 7 so as to rest on the shoulder 9 is a disk 10 provided at its center with an opening 11 the section of which corresponds to that of the shank 7. The diameter of the disk 10 is slightly less than the inner diameter of the sleeve 1 so as to be adapted to rotate in the latter while being prevented from escaping therefrom by the flange 2 of the sleeve. As the relative position of the shoulder and the flange 2 is such that, when the disk is put in position on the shank 7 and the latter secured to the button head 4, only a slight distance is left free between the said flange 2 and the disk 10, it is readily seen that thus the button head 4 is connected with the sleeve 1 so as to allow the rotation of the button head on the said sleeve while preventing it from sliding longitudinally on the latter. The disk 10 carries on its upper side near its periphery a pin 12 which is so positioned that when the button head is put together, it engages the cut away portion 3 of the flange 2 of the sleeve thus preventing the button head from being rotated on the sleeve 1 farther than 90 degrees. The sleeve 1 is secured to the upper of the boot or the corresponding part of the legging or glove by inserting its lower end into a corresponding hole made in said part and by folding the lower edge 13 of the sleeve down in the outward direction on the lower side of said part, as shown by Fig. 1. Secured to the other part 14 of the upper of the boot, legging or glove so as to come opposite the lower opening of the sleeve 1, is the male member 15 of the button the fixation of this male member to the part 14 being effected in any suitable manner for instance by means of a screw 16 passing first through a washer 17, then through a suitable hole provided in part 14 and finally engaging a tapped hole provided in the center of the lower surface of the member 15. The latter is cylindrical at its lower part 18 while its upper part 19 is tapered so as to form a cone facilitating the insertion of the said male member into the sleeve 1. The upper part of member 15 is hollowed out in its center so as to form a vertically descending transverse slot 20 the side walls of which are flared out toward the upper edge of the member 15 as clearly shown by Figs. 1 and 7. At the bottom of the vertical slot 20 is a lateral recess 21 provided in the mass of the mem-

ber 15 and having a length which slightly exceeds that of the locking hook 6.

The function of this button will be easily understood. The male and female members of the button being secured at the required places on the parts of the upper of a boot, legging or glove to be connected, the button head is rotated so as to bring the locking members or hook 6 in parallel relation to the transverse slot of the male member 15. The locking member is then pushed downward into the said slot and the button head then rotated 90 degrees so as to cause the said locking hook 6 to engage the recess 21 whereby the two parts of the button are locked together as shown by Fig. 1.

When it is desired to unlock the parts the reverse operation is carried out, *i. e.* the button head is rotated 90 degrees in the reverse direction so as to again place the locking hook 6 in parallel relation to the transverse slot 20 of the male member when the two parts of the button may be easily separated from each other.

Having now fully described my said invention, what I claim and desire to secure by Letters Patent, is:—

1. A button comprising a member formed with an opening and an undercut recess which communicates with the opening, a sleeve fitting over the member and formed with an overhanging flange, a disk within the sleeve and engaging the overhanging flange, an interlocking hook extending from the disk and fitting in the opening for its hooked end to engage the undercut recess, a head secured to the interlocking hook and fitting over the sleeve, and means for limiting the rotation of the interlocking hook and the head.

2. In a button for boots, leggings, gloves and the like the combination with the parts to be connected together of a sleeve secured to the upper one of said parts to be connected together, a button head having a cylindrical opening adapted to receive the said sleeve, means for securing the said button head to the upper end of said sleeve, a locking hook axially secured to said button head so as to project into said sleeve, a male mem-

ber secured to the lower one of said parts to be connected together and a receiving slot and interlocking recess provided in said male member, substantially as and for the purpose set forth.

3. In a button for boots, leggings, gloves and the like, the combination with the parts to be connected together of a cylindrical sleeve secured at its lower end into an opening provided in the upper one of the parts to be connected, an inwardly directed flange on the upper end of said sleeve, a part cut away on said flange, a locking hook having a shank with a rectangular section and a shaft forming a shoulder where it meets with the said shank, a button head having an axial bore the diameter of which is slightly larger than that of said sleeve so that the latter may be rotatably engaged therein, a rectangular hole provided in the center of the bottom of said button head and adapted to receive the said shank and to allow the latter to be secured to said button head at its free end, a disk having a central rectangular opening adapted to receive the said shank and to rest on the said shoulder, the position of the latter being such as to cause the said disk when in position to bear from below against the flange of said sleeve, a pin secured to the upper surface of said disk and adapted to engage said cut away portion of the said flange, a male member secured to the lower one of said parts to be connected opposite the said sleeve and having its side walls tapered, and a transverse slot provided in the upper part of said male member and having its side walls flared and upwardly, and a lateral recess being provided at the bottom of said transverse slot and adapted to receive the said locking hook when the button head is rotated after the insertion of said hook into said transverse slot, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two witnesses.

NICOLAS ALEXIS DIDIERJEAN.

Witnesses:

VICTOR KELLER,
H. C. COXE.