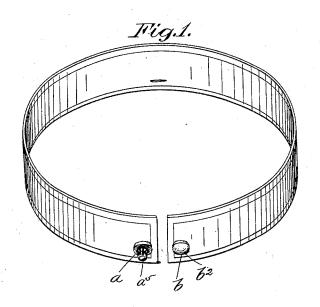
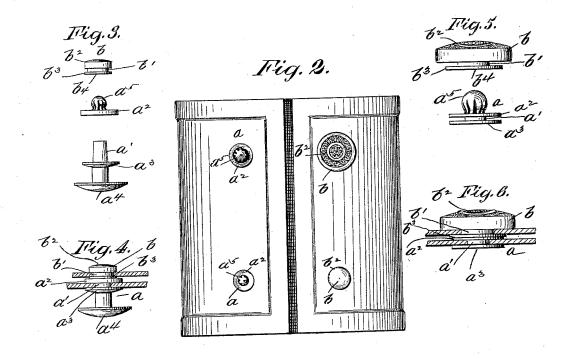
(No Model.)

## H. C. MILLIGAN. WATER PROOF COLLAR OR CUFF.

No. 421,137.

Patented Feb. 11, 1890.





Witnesses: Awlarmen Thas Gardner

Throntor: Newy C. Milligan Mass. Fin

## UNITED STATES PATENT OFFICE.

HENRY C. MILLIGAN, OF SOUTH ORANGE, NEW JERSEY.

## WATER-PROOF COLLAR OR CUFF.

SPECIFICATION forming part of Letters Patent No. 421,137, dated February 11, 1890.

Application filed July 6, 1889. Serial No. 316,704. (No model,)

To all whom it may concern:

Be it known that I, HENRY C. MILLIGAN, a citizen of the United States, residing at South Orange, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Collars or Cuffs, of which the following is a description.

My invention relates to improvements in collars or cuffs of zylonite or other analo-10 gous water-proof material, the object being to provide such collars and cuffs with a permanent fastening medium, and thus avoid the necessity for button-holes.

To this end my invention consists in a col-15 lar or cuff composed of zylonite or other analogous water-proof material provided with a permanent fastening comprising two parts or members, one of which is connected to one flap of the collar or cuff and is adapted to en-20 gage the other member, which is connected to the other flap of the collar or cuff to lock the two together.

My invention also includes a button-shaped extension to one member by means of which 25 the collar or cuff can be attached to the shirt.

In the accompanying drawings, illustrating my invention, Figure 1 is a perspective view of my improvement secured to a collar. Fig. 2 represents my improvement secured to a 30 cuff. Fig. 3 shows the fastener separated into its parts. Fig. 4 is a top view of the fastener connected, the collar or cuff being shown in section; and Figs. 5 and 6 represent a modification of my invention, which I prefer to 35 use for the top button of a cuff.

In carrying out my invention I prefer to employ, as illustrated in the accompanying drawings, a button composed of the two parts or members a b. The part a comprises a 40 shank a', which extends through the collar or cuff and is riveted thereto by the flanges  $a^2$  $a^3$ . The shank a' terminates at one end in a button-shaped extension  $a^4$  and at the other end in a stud  $a^5$ .

In the modification shown in Figs. 5 and 6 the button-shaped extension  $a^4$  is omitted. The part b comprises a shank b', which extends through the collar or cuff, and is riveted thereto by means of a button-shaped

gaged by forcing the stud  $a^5$  into or out of the recess  $b^4$ .

My invention is designed to overcome the disadvantages attending the present con- 55 struction of zylonite or other water-proof detachable collars and cuffs, and which lies in the fact that as at present constructed they are formed with button-holes in their meeting edges, which button-holes are intended 60 to receive some sort of fastening device made separable from the collar or cuff. The ordinary button-hole in this class of goods soon becomes distorted or broken, and in view of the peculiar character of the material of which 65 the collar or cuff is made the auxiliary or separate fastening device is liable when in place to produce a disagreeable rattling noise and tend to discolor the cuff or collar.

With my improvement I provide an article 70 of manufacture which overcomes entirely all the disadvantages experienced in the class of goods referred to, and I produce a detachable collar or cuff which is provided with permanent fastening devices which form a part of 75 the structure as a whole, which are never displaced, and which subserve in a much better manner the function of the ordinary button-holes.

I am of course aware that it is not new to 8c provide a steel collar with a metallic stud and eye similar to a corset-fastening, and that the collar portion of ladies' dresses and military coats have been provided with permanentlyattached means for securing the meeting 85 edges, and that the flexible wrist portion of gloves have been provided with permanent fastening devices. I therefore do not wish to make any such broad claim as would cover any such devices, my invention relating solely 90 to that class of goods or articles of wearingapparel which are made separable from other garments and are specifically known and designated in the trade as "collars" and "cuffs."

What I therefore claim as new, and desire 95 to secure by Letters Patent, is-

1. As a new article of manufacture, a detachable water-proof cuff or collar provided at each of its meeting or overlapping edges with a permanent fastening device interlock- 100 50 head  $b^2$  and a flange  $b^3$ , centrally recessed at  $b^4$ . The two parts a b are engaged or disence on the connecting such overlapping edges in contraing the one with the other for the purpose of

distinction to and in lieu of the usual buttonholes, substantially as hereinbefore set forth.

2. A collar of water-proof material provided with a permanent fastening which takes the place of button-holes and a stud, the said fastening comprising two parts or members, one of which is rigidly and permanently fixed to one flap of the collar and is constructed with an extension a<sup>4</sup> to engage a button-hole in a shirt and the other member of which is rigidly and permanently fixed to the other

flap of the collar and adapted to engage the first-named member to unite the ends of the collar and adapt it to be applied to a shirt, substantially as described.

In testimony whereof, I have hereunto set my hand this 5th day of July, A. D. 1889.

HENRY C. MILLIGAN.

Witnesses:
J. H. CARMIENCKE,
FREDERIC CARRAGAN.