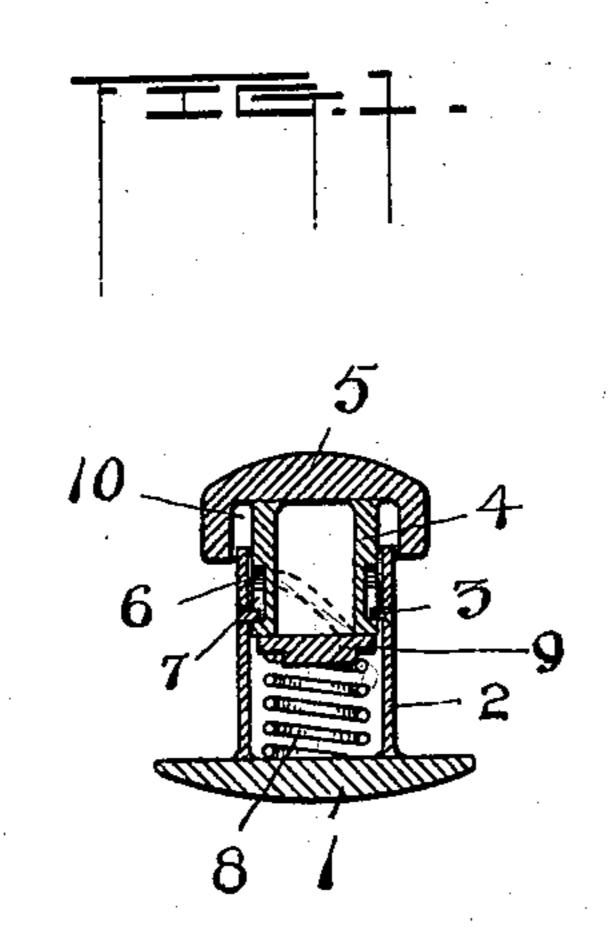
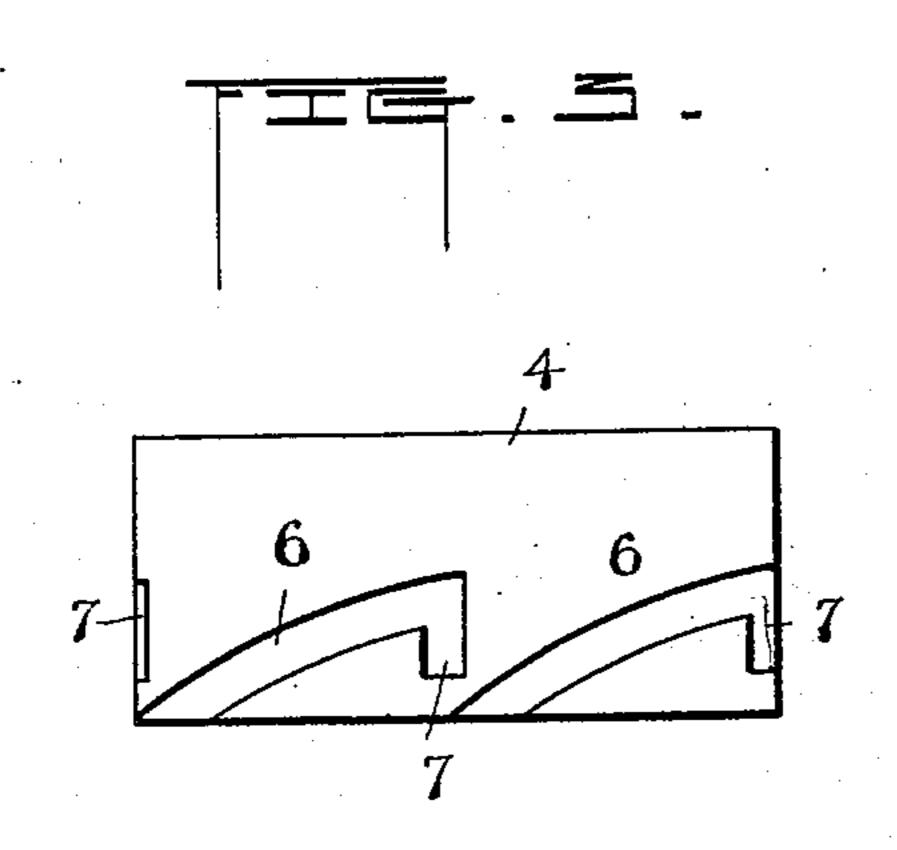
(No Model.)

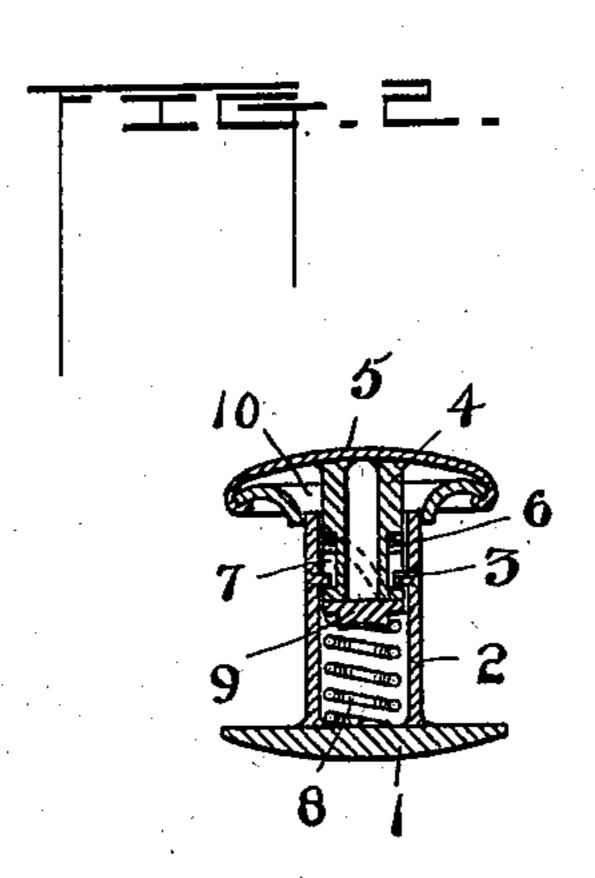
M. HENRY.
COLLAR BUTTON.

No. 506,399.

Patented Oct. 10, 1893.







Witnesses Oud W. Caldun. Mike Heury by Benj. R. Cothu attorney

## United States Patent Office.

MIKE HENRY, OF WESSON, MISSISSIPPI, ASSIGNOR OF ONE-HALF TO WILEY E. OLIVER, OF SAME PLACE.

## COLLAR-BUTTON.

SPECIFICATION forming part of Letters Patent No. 506,399, dated October 10, 1893.

Application filed January 9, 1893. Serial No. 457,748. (No model.)

To all whom it may concern:

Be it known that I, MIKE HENRY, a resident of Wesson, in the county of Copiah and State of Mississippi, have invented certain new and 5 useful Improvements in Collar-Buttons; and Ido hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

The invention relates to collar or sleeve buttons or studs made of separable parts which in practice can be disconnected or joined at pleasure; and it has for its object to provide a simple and economical device of this character that shall combine security of operation with ease and certainty of manipulation; and it consists in the construction hereinafter described and particularly pointed out.

In the accompanying drawings Figure 1 is 20 a central longitudinal section. Fig. 2 is a section of a modification. Fig. 3 is a plan of a blank to form the stem of the part 4 shown in Figs. 1 and 2 to more clearly indicate the form of the groove constituting a part of an im-

25 proved bayonet joint.

The figures are drawn on an enlarged scale. Numeral 1 indicates the head of the button and 2 a tubular stem attached thereto. This is provided with a pin or projection 3 con-30 veniently made by suitably indenting the wall of the tube. This tube firmly secured to the head 1 is large enough to embrace the stem 4 made fast on the under side of the small head or cap 5. The stem 4 is provided with ob-35 lique grooves 6 each communicating at its foot with a vertical recess 7 adapted to receive the projection 3 when the stem 4 is entered in tube 2. Said projection at such time passes down the inclined or oblique groove 6 one or both 40 of the stems being suitably turned. In this operation the spring 8 having a bearing plate or cap 9 is compressed by the pressure thereon of the stem 4. To provide a constant and secure bearing for the spring and prevent the 45 tube 4 from either entering it or being entered by it the plate 9 having a stem projecting into the coils of the spring is placed at the inner end of said tube. The head or cap 5 on its under side is provided with a recess or well 5° to the bottom of which the stem is secured.

stem 4 whereby space is provided for the tubular stem 2 to enter the same far enough to compress the spring 8 and permit the projection 3 to be thrown by said spring into the 55 vertical recess 7 of the groove of the bayonet joint. The recess 10 has such depth and the parts are so proportioned that the end of tube 2 will remain concealed and protected within the recess 9 until the projection is passed out 60 into groove 6 preparatory to the entire separation of the parts. When the stem 4 has thus been entered within the tube 2 and projection 3 passed down to the bottom of the groove 6 said projection is in position to be moved 65 into the recess 7 by the spring when the latter is relieved from pressure. In this position the parts are securely locked and the open ends of the stem covered in manner to exclude lint or dirt. To separate the parts 70 the cap 5 and head 4 are pressed toward each other to compress the spring and pass projection 3 out of its retaining recess so that the stems can be slightly turned and projection 3 drawn out of groove 6 and the parts sepa- 75 rated.

I am aware that the stems of separable buttons have been connected by a bayonet joint and such device is not broadly of my invention. By my improved construction the groove 80 6 is inclined and is in form a regular curve from the mouth of the recess 7 so that the engagement of the parts after the pins are placed at the entrance of said groove 6 is effected by a single movement which movement also 85 compresses the spring. And conversely when the pins are brought to the mouth of the recesses a single movement separates the parts which operations in prior devices required two distinct movements. Further in prior con- 90 structions slots have been formed in the exterior tube cutting through the wall thereof to permit the pin on the inner post to extend through the same whereby an opening to admit dirt was produced. In one instance this 95 open slot was formed in a distinct tube and covered by an exterior one two concentric tubes and a post being employed. In my improvement curved grooves are formed in the wall of an inner tube and corresponding pins 100 on the interior of the exterior tube, and all This recess has a larger diameter than the I lateral openings through the latter avoided.

By making the inner post tubular metal is saved and both these tubes being made of sheet metal the grooves and pins can be readily formed in the blanks such as shown in Fig. 3 before the tubes are formed.

Having thus fully described my invention,

what I claim is—

The button having tubular stem 2 provided with an indentation 3, tubular stem 4 provided on its exterior with the oblique curved groove 6 which communicates with a recess 7

and a spring to hold said projection in the recess said spring having a bearing plate 9, substantially as set forth.

In testimony whereof I have signed this 15 specification in the presence of two subscrib-

ing witnesses.

MIKE HENRY.

Witnesses:

E. H. THOMPSON, MONROE SMITH.