

UNITED STATES PATENT OFFICE.

GEORGE W. MCGILL, OF RIVERDALE-ON-HUDSON, NEW YORK.

BUTTON AND BUTTON-FASTENING.

SPECIFICATION forming part of Letters Patent No. 726,448, dated April 28, 1903.

Application filed January 23, 1903. Serial No. 140,196. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. MCGILL, a citizen of the United States, and a resident of Riverdale-on-Hudson, in the county of New York and State of New York, have invented certain new and useful Improvements in Buttons and Button-Fastenings, of which the following is a specification.

This invention relates to an improvement on the invention patented to me December 16, 1902, by United States Letters Patent No. 716,267, which has for its object the attaching of ordinary buttons—such as bar-buttons, loop-eyed buttons, and buttons of similar construction—to clothing and other fabrics by fastenings wherein there is no direct connection between the button proper and the fabric, the button proper being secured direct to an intervening attaching member, and such intervening attaching member with a button thus attached to it being later secured direct to the fabric to the end of providing always a swivel or flexible linked connection between the button proper and such intervening attaching member independent of the manner by which the latter may be secured to the fabric; and my present invention consists in a novel and convenient way of securing said intervening attaching member to such fabric.

In the accompanying drawings, forming part of this specification and in which similar reference letters and numerals indicate corresponding parts, Figure 1 shows a side elevation, in vertical section, of the button proper connected independently with the intervening attaching member of the device. Fig. 2 represents a side elevation of the device, showing a modification in the interior arrangement of its attaching member, the latter being shown in vertical section. Fig. 3 is a vertical sectional side elevation in perspective, showing one-half of the case of the attaching member. Fig. 4 is a similar view showing one-half of a riveting socketed anvil forming the base part of the attaching member. Fig. 5 is a similar view showing one-half of a clamping-collar used interiorly in the attaching member in connection with its socketed anvil base part. Fig. 6 is a vertical sectional side elevation of a flanged tubular rivet used in securing the attaching

member to a fabric. Fig. 7 represents in vertical section a side elevation of the completed device constructed as shown in Fig. 1 and secured to a fabric in the manner intended. Figs. 8 and 9 are views similar to Fig. 6 and showing the flanged end of the tubular rivet covered with leather or other material.

In the figures of the drawings, A represents the button proper, forming what I designate the "button member" of the device. B represents its flexible button-linking member, and B B the same member made of metal and non-flexible.

C represents the intervening attaching member of the device, and D its tubular riveting member.

e represents the case of the attaching member C, and f represents its interior clamping-collar, and g its riveting socket-anvil.

In Fig. 1 an eye-bar button is shown, a representing the bar of the button-eye, and the button-linking member is shown made of flexible material. The case e of the attaching member has an open base and is provided with an opening 2 in the center of its crown, which may be beaded, as shown in the drawing, and its interior clamping-collar f is fashioned to converge inwardly at its upper edge to correspond with the contour of the inner top surface of the case e. The riveting socketed anvil g, forming the base part of the attaching member C, consists of a metal cup fashioned as shown in Fig. 4—that is to say, having an upward and outwardly flaring rim 3 and provided centrally with a reentrant cavity 4, sunk therein, the base of such cavity being fashioned concavo-convex, so as to provide a central and upwardly-projected conoidal-shaped anvil-surface 5, surrounded by an annular flaring groove 6, the walls of which converge downward. The tubular riveting member D is provided with a flanged base of a diameter approximately equal to the diameter of the bottom of the attaching member C.

The assembling of the parts of the attaching member as thus constructed is as follows: Over the eye-bar of the button proper or member A is passed the flexible link member B in manner to have its center ride such eye-bar, as shown in Fig. 1. The arms or ends of the flexible band composing such member B

are then inserted in the case *e* of the attaching member C, through the opening 2 in the crown thereof, and are spread apart and held therein by the clamping-collar *f*, which is
 5 now inserted in the case in manner to clamp these flexible arms of such linking member at opposite sides in the case between the outer surface of such collar and the inner surface of the case, with the terminals 1 1 of the
 10 band folded in under the collar *f* and up against its inner annular surface, where they are secured by the upwardly-flaring rim of the riveting socketed anvil *g*, which is now inserted in the case *e*, forming therein the
 15 base of the completed attaching member C, whereupon the case *e* is closed inwardly at its base, bringing it and the base of the collar *f* to a convergence corresponding with that of the flaring rim 3 of the riveting-anvil *g*,
 20 clamping the ends of the flexible linking-band B intermediate the case and collar and its terminals 1 1 intermediate such collar and the flaring or diverging rim 3 of the riveting-anvil and securing the clamping-collar and
 25 riveting-anvil in said case, completing the attaching member and independently connecting it permanently with the button proper. The attaching member so constructed and connected with the button proper is
 30 fastened to a fabric by passing the stem of the tubular riveting member D through an opening made in such fabric and inserting its free end in the cavity 4 of the socketed anvil forming the base of the attaching member
 35 C and pressing it up against the conoidal-shaped surface 5 of such anvil in manner to expand its tubular top out and up into the annular flaring groove 6 surrounding such anvil-surface, thereby clenching it therein
 40 and riveting together the attaching member C and the tubular riveting member D, with the intervening fabric E clamped between the bottom of such attaching member C and the flange of the riveting member, as shown in
 45 Fig. 7. The flange of the tubular riveting member may be cloth or leather covered in the manner in which buttons are covered, as shown in Figs. 8 and 9, where 7 represents the cloth or similar covering and 8 an interior
 50 plate capping the flange of the riveting member D, covering its tubular stem opening and clamping the cloth or other covering material thereupon. In Fig. 8 the flange of the riveting member D is shown having an
 55 upwardly-converging rim 9, providing an annular space 10, surrounding the stem of the riveting member D, and in Fig. 9 the flange of the riveting member is shown with its rim diverging downward, as at 11, in manner to
 60 bring the top surface of the flange flush with the covered rim of the capping-plate 8.

Where the button-linking member used in connecting the button proper to the attaching member is made of metal, as is shown in Fig 2, the clamping interior collar *f* of such
 65 attaching member may be dispensed with, as is also shown in Fig. 2, wherein the free ends of such metallic linking member are shown grasping the outside surface of the flaring cup constituting the socketed anvil-base of
 70 the attaching member C.

What I claim herein as new, and desire to secure by Letters Patent, is—

1. As a new article of manufacture a combined button and button-fastening consisting
 75 of a button proper and an attaching member, the button proper being secured in link connection to such attaching member by means of a separate piece of material engaging centrally with the button-eye, and having its end
 80 parts secured to such attaching member directly and without engaging the fabric to which the device may be attached, such attaching member being provided with independent means of securing it to a fabric consisting
 85 of a socketed riveting-anvil adapted to receive and upset and spread flaringly therein the free end of the pillar of a flanged tubular rivet engaging with such fabric in
 90 manner to clamp the latter between the flange of such rivet and the under surface of such attaching member.

2. As a new article of manufacture a combined button and button-fastening consisting
 95 of a button proper and an attaching member, the button proper being secured in link connection to such attaching member by means of a separate piece of material engaging centrally with the button-eye, and having its end
 100 parts secured to such attaching member directly and without engaging the fabric to which the device may be attached, in combination with independent means provided such attaching member for securing it to a fabric, such means consisting of a socketed
 105 riveting-anvil located therein, and a separate flanged tubular rivet, the socketed riveting-anvil adapted to receive and spread on its anvil-face, and to flare outwardly therefrom into its flaring annular socket, the free end
 110 of the pillar of such tubular rivet, the flanged end of such rivet engaging with the fabric in manner to clamp the latter between it and the under surface of the attaching member.

Signed at Riverdale, in the county of New York and State of New York, this 15th day
 115 of August, A. D. 1902.

GEORGE W. MCGILL.

Witnesses:

W. HARRY MCGILL,
 MARY L. H. MCGILL.