E. KLEINMANN.

BUTTON.

APPLICATION FILED JULY 29, 1921.

1,426,651.

Patented Aug. 22, 1922.

Fig. 1.

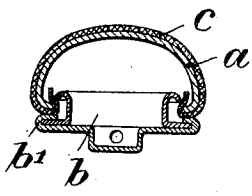



Fig. 2.

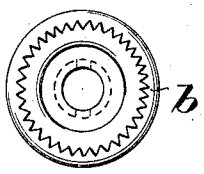



Fig. 3.

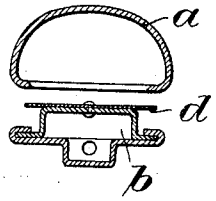



Fig. 4.

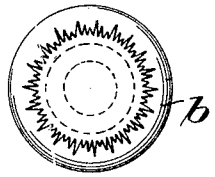



Fig. 5.

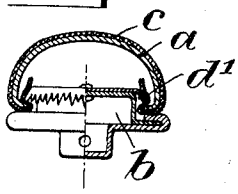
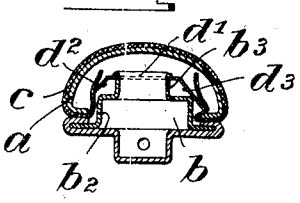



Fig. 6.




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# UNITED STATES PATENT OFFICE.

ERNST KLEINMANN, OF BERLIN, GERMANY.

## BUTTON.

1,426,651. Specification of Letters Patent. Patented Aug. 22, 1922.

Application filed July 29, 1921. Serial No. 488,387.

*To all whom it may concern:*

Be it known that I, ERNST KLEINMANN, a citizen of the German Republic, residing at Berlin, Germany, and State of Prussia, have invented certain new and useful Improvements in Buttons, of which the following is a specification.

This invention relates to buttons with an outside coating or covering of any suitable kind of material such as cloth or the like which completely incloses the whole top portion of the button. Durable buttons of this kind could hitherto only be made with the aid of machinery. Therefore it was not possible for dressmakers, housewives, etc., to make such buttons themselves.

In distinction from these known types of buttons the present invention enables the button with its covering to be made by anybody without the aid of tools. To render this possible the button is composed of two spring parts adapted to engage with one another and between which the material forming the covering is clasped or clipped.

Some constructional forms of the invention are shown in the drawing in which—

Fig. 1 is a section of a finished button,

Fig. 2 is a plan view of the bottom or base portion of the button,

Fig. 3 is a section of a button with a spring clipping plate,

Fig. 4 is a plan view of the base portion of a button provided with serrations of a special kind,

Fig. 5 is a modification of Fig. 3 and

Fig. 6 is a modification of Fig. 5.

As shown in Figs. 1 and 2 the upper half of the button is covered with cloth $c$. The base portion $b$ of the button is made of two parts and has an annular shoulder $b'$ and an upper indented portion which, when it is pushed into the upper half, has its outer edge turned downward so as to turn the cloth back over a ledge at the bottom of the upper part $a$ as shown in Fig. 1. The ring of teeth on the base portion firmly holds the cloth $c$ clipped in between the base $b$ and the upper part $a$.

In the modification shown in Fig. 3 the base portion $b$ is provided with a special spring plate $d$ which is pressed into the top portion $a$ and then causes the cloth covering (not shown) to be clipped or clasped between the top and base portions of the button.

Fig. 4 illustrates a special manner of shaping the teeth of the base portion $b$ according to which the teeth are not all uniform as in Fig. 2, but are arranged in groups of teeth of different lengths, three different lengths being shown in the case illustrated. This arrangement ensures that cloth coverings of very different thicknesses will always be seized by at least some of the teeth, the longest teeth taking effect if the cloth is very thin and shortest if the stuff is very thick. In the latter case the long teeth would be bent back so far that their points would not afterwards enter the cloth.

In the modification shown in Fig. 5 the base portion $b$ is equipped with a spring plate $d'$ with a ring of downwardly extending flaring teeth which are not uniform but of different lengths for the reason mentioned above.

A special type of the kind of button shown in Fig. 5 is illustrated in Fig. 6 in which the base portion $b$ is formed with steps $b_2$ so that it has a conical shape and may be pressed more easily into the top portion. The steps $b_2$ also enable the teeth $d_2$, $d_3$ of the spring plate $d'$ to move out of the way.

In order to avoid the danger of the thread passed through the transverse hole of the base portion $b$, and by which the button is sewed on, from being damaged by the button being rotated, the lower part of the base portion, i. e. the part that receives the thread, may be adapted to rotate freely relatively to the part of the base portion that grips the cloth covering $c$ of the upper portion $a$ of the button. This may be accomplished by adapting the thread-receiving part $b_1$ of Fig. 1 to loosely embrace the lower flange-shaped part of the serrated gripping or clipping member $b$, or by adapting the spring plate $d$ of Figs. 3, 4, 5, 6 to revolve freely on the rivet or neck $b_3$ by which it is attached to the lower part of the base portion. Of course the thread receiv-

ing part of Fig. 6 could also be made to loosely embrace and revolve upon the flange of the stepped part *b*.

I claim:—

1. A button comprising, an upper portion, a pliable covering on the upper portion, and a base portion with a member projecting into a cavity of the upper portion and having a turned-back end that engages with the upper portion and is adapted to form a connection therewith.

2. A button comprising, an upper portion with a cavity and a ledge projecting into the said cavity, a cloth covering on the upper portion, and a base portion with a member projecting into the said cavity and having a turned-back end adapted to engage with one side of the said ledge and a shoulder adapted to engage with another side of the said ledge.

3. A button comprising, an upper portion with a cavity and a ledge projecting into the said cavity, a cloth covering on the upper portion, and a base portion with a serrated member projecting into the said cavity and having turned-back teeth adapted to engage with one side of the said ledge and a shoulder adapted to engage with another side of the said ledge.

4. A button comprising, an upper portion with a cavity and ledge projecting into the said cavity, a cloth covering on the upper portion, and a base portion with a spring plate pushed into the said cavity and its margin engaging with one side of the said ledge, and a shoulder adapted to engage with the opposite side of the said ledge.

5. A button comprising, an upper portion with a cavity and a ledge projecting into the said cavity, a cloth covering on the upper portion, and a base portion with a serrated member projecting into the said cavity and having turned back teeth of different lengths adapted to engage with one side of the said ledge, and a shoulder adapted to engage with the opposite side of the said ledge.

6. A button comprising, an upper portion with a cavity and a ledge projecting into the said cavity, a cloth covering on the upper portion, and a base portion comprising a lower stepped portion and a spring serrated member with teeth of different lengths adapted to engage with one side of the said ledge, while a part of the stepped lower portion is adapted to engage with the opposite side of the said ledge.

7. A button adapted to be fixed in position by thread comprising; an upper portion; a pliable covering on the upper portion; and a base portion consisting of a gripping member arranged in a cavity in the upper portion and having turned-back teeth of different lengths adapted to grip the pliable covering, and a thread-receiving member adapted to rotate relatively to the said gripping member.

8. A button comprising, an upper portion with a cavity and a ledge projecting into the said cavity, a cloth covering on the upper portion, and a base portion comprising a serrated spring member with teeth of different lengths adapted to engage with one side of the said ledge, and a thread-receiving stepped member adapted to rotate relatively to the serrated spring member and to engage with another side of the said ledge.

In testimony whereof I affix my signature in presence of a witness.

ERNST KLEINMANN.

Witness:

GEORGE RIELING.