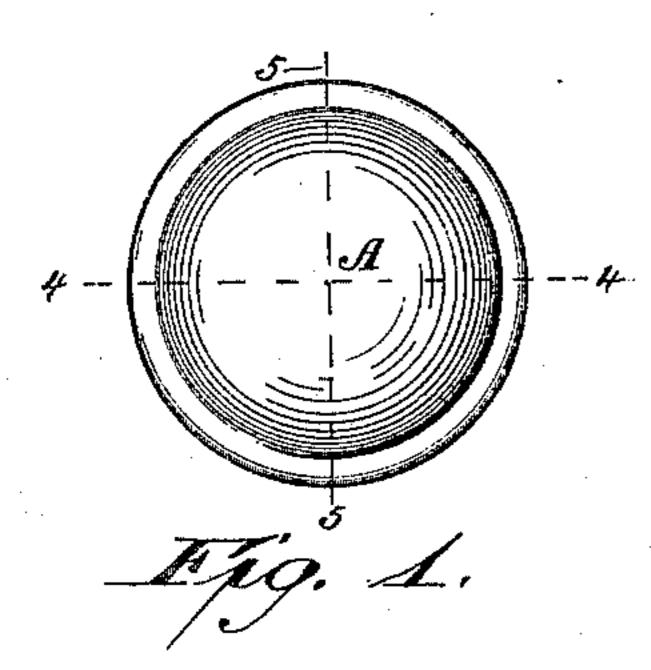
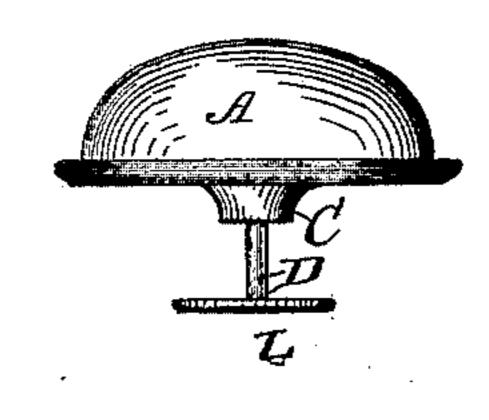
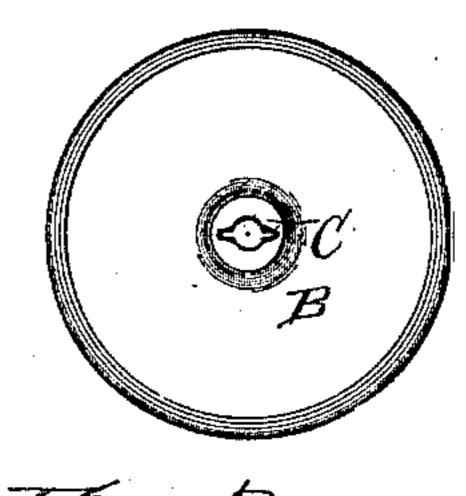
## G. B. KEPLINGER. BUTTON.

No. 467,662.

Patented Jan. 26, 1892.

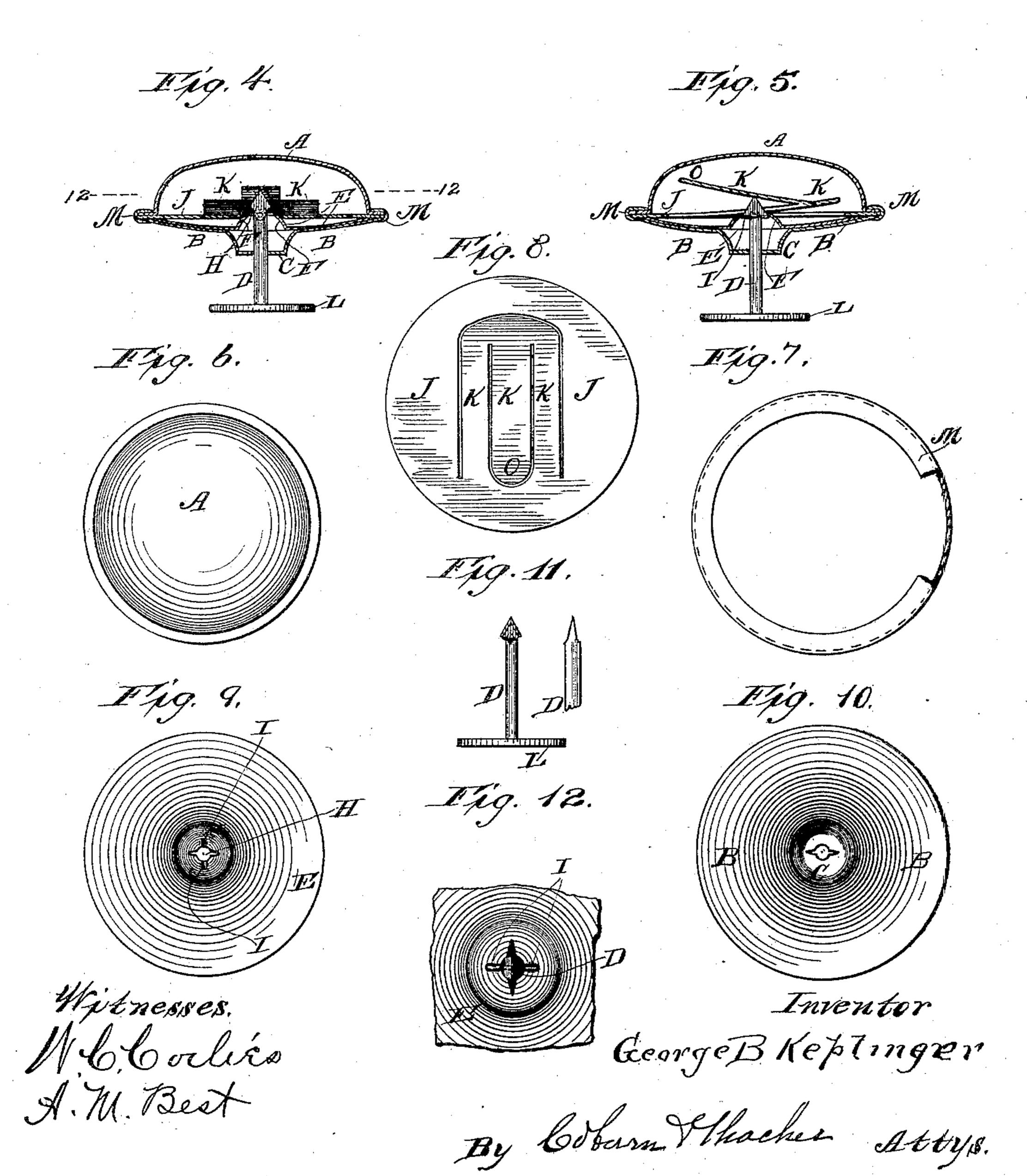






Tig. 2

Tig. 3.



## UNITED STATES PATENT OFFICE.

GEORGE B. KEPLINGER, OF CHICAGO, ILLINOIS.

SPECIFICATION forming part of Letters Patent No. 467,662, dated January 26, 1892.

Application filed March 30, 1891. Serial No. 386, 965. (No model.)

To all whom it may concern:

Be it known that I, GEORGE B. KEPLINGER, a citizen of the United States, residing at Chicago, in the county of Cook and State of 5 Illinois, have invented a certain new and useful Improvement in Buttons, which is fully set forth in the following specification, reference being had to the accompanying draw-

ings, in which— Figure 1 is a top view of my improved button; Fig. 2, a side elevation; Fig. 3, a bottom view of the button with the button-post removed. Fig. 4 is a vertical central sectional view taken at the line 4 4, Fig. 1. Fig. 5 is a 15 transverse sectional view taken at the line 5 5, Fig. 1. Fig. 6 is a bottom view of the top plate of the button. Fig. 7 is a view of the metallic ring partly formed which is used to hold the different parts of the button together. 20 Fig. 8 is a plan view of the spring-plate. Fig. 9 is a top view of the bottom plates of the button with the spring-plate removed. Fig. 10 is a bottom view of the bottom plate of the button. Fig. 11 are two views of the 25 button-post, showing the shape of the head of the post. Fig. 12 is an enlarged top view of the two bottom plates of the button with the button-post inserted.

My invention relates to a removable but-3° ton which is attached to a garment without being sewed permanently thereto and can be

readily removed therefrom.

My invention consists in the shape of the end of the button post or stem which adapts 35 it to readily penetrate the cloth and be withdrawn therefrom without catching on the eloth.

It further consists in the construction of the bottom portion of the button proper, by 40 means of which the post or stem of the button passes through the bottom of the button and is locked therein by being turned partly around, as hereinafter described.

It further consists in the spring which is 45 secured in the interior of the button which presses upon the end of the button post or

stem to hold it in a locked position.

It further consists in certain combinations of different parts hereinafter fully set forth 50 and made the subject-matter of the claims.

In the accompanying drawings, A repre-

sents the top or face plate of the button, which may be made in any of the well-known forms, either entirely of metal or be covered with cloth. I preferably make a metal button 55 stamped with initials or letters, such as are used on uniforms for coachmen, policemen, firemen, soldiers, or any society uniforms; but it will be readily perceived that I can use covered buttons with equal facility.

B is the bottom plate of the button, preferably stamped of the requisite size, according to the size of the button I wish to make and with a downwardly-projecting boss C. Through the center of this boss there is a hole 65 adapted to receive the post or stem D of the button, and it is of such shape as to allow the flattened and widened end of the post to

pass through it.

E is a plate which I preferably stamp of 70 the same size in its circumference as the plate B and of the same shape, so that it will rest upon said plate B, and it also has a central boss F stamped upwardly or in the reverse direction from the boss C on the plate D 75 when the two are in position, as shown in Fig. 4. This upwardly-projecting boss F is provided with a hole H, which is adapted to allow the flattened head of the stem or post D of the button to pass through it. It also has 80 upon its upper side recesses II to receive the flattened end of the head of the post or stem D of the button when it is turned partially around after being inserted, as shown in Figs. 4 and 5.

J is a thin metal plate cut, as shown in Fig. 8, to make a double-acting spring KK at its center. This spring-plate J is preferably cut as large in circumference as the plates D and E, and it extends across the button di- 90 rectly above the boss F on the plate E, and the spring portion K is thrown into position (shown in Figs. 4 and 5) and constantly presses upon the end of the stem or post D of the button to hold it locked in position in the 95 notches I. The pointed end of the stem or post D has thin edges, so that it readily penetrates the cloth when it is desired to attach the button thereto. The button is placed upon the pointed end after penetrating the cloth, 100 the button being turned so that the widened end will pass through the holes in the bosses

C and F and raise the spring K, as shown. The stem or post D is then turned partly around, so that the projecting portion of the pointed end will pass into the recesses or 5 notches I, the spring serving to hold the projecting portions of the pointed end of the post or stem in said notches and prevent the

button from turning on the post and keeping it locked in the button. To remove the button from the post, it is necessary to press the stem or post into the button sufficiently far to raise the projecting flattened head of the post from the notches I, then turning the button directly around on 15 the post, when the button can be readily removed from the post or stem D. The under sides of the projecting flattened end of the post D are also inclined and made thin, so that the button-post can be readily removed 20 from the cloth of the garment to which the button has been attached. This construction of the flattened end of the post D is fully illustrated in Fig. 11 of the drawings. The post D has at one end of it a flat metal plate L, 25 which is rigidly attached to the post D and rests on the under side of the cloth of the garment to which the button is attached to hold the button-post or stem securely in place. The various parts of the button are secured together 30 by the metal ring M, swaged over their edges, clamping them all together, as clearly shown in Figs. 4 and 5. The button stem or post D when in place has two bearings, one bearing being in the downwardly-projecting boss C 35 and the other in the upwardly-projecting boss F. The spring-plate J may be cut out, as indicated in dotted lines, so as to save metal, and it need not be a complete circle. Its form may be varied; but it must be of such shape 40 as to be secured readily in place to press against the top of the sharpened end of the post or stem D of the button to keep it locked. The end O of the spring K should be so formed as to strike against the face of the button 45 when it is pressed sufficiently to allow the post to turn to and from the notches as the button is placed on the post or removed therefrom, as above described. In this way the spring will serve as a stop and not admit of 50 the button being pressed upon the post too

far. I am able to make a very cheap and durable button that is attached to and removed from garments without materially injuring the gar-55 ment and without sewing. I find that there is a great demand for a button of this kind,

and that I can construct a button so simply and cheaply and that it can be so readily applied to and removed from garments that it has a ready sale.

Having thus fully described the construction and operation of my invention, what I claim, and desire to secure by Letters Patent, is-

1. In a separable button, the button-post D, 65 having a circular stem provided with a pointed and sharpened end made wider than the circular stem, the under part of said widened portion also having sharpened edges projecting downward from the widest point to the 7° post, this widened portion being adapted to penetrate and pass readily through the cloth in either direction, and the plate L, attached to the lower end of said circular post, in combination with the plate E, secured in the button 75 and provided with a central boss H, having an opening adapted to receive the widened head of the post D and provided with recesses I, in which the post is locked, and a spring secured within the button and resting on the 80 end of the post to hold it locked, all substantially as specified.

2. In a detachable button, the combination of the plates B and E, provided with central bosses C and F, projecting in opposite direc- 85 tions, said bosses having circular openings to receive the post, provided with lateral slots opposite each other for the projecting sides of the widened head of the post to pass through, the boss F being provided with re- 90 cesses or notches I to receive the widened end of the post when turned in the button and hold it locked therein, the reverse bosses in said plates forming two bearings for the stem or post D to hold the button in position, and 95 the stem or post D, substantially as specified.

3. In a detachable button, the combination of the plates B and E, having their reverse central bosses C and F and circular openings, the boss F being provided with recesses for 100 locking the post in the button when turned therein, and a spring K, arranged to press upon the top of said post and hold its widened portion in the notches H to lock it, but being capable of yielding sufficiently to admit of 105 the post being unlocked and the button removed, and the post D, substantially as specified.

GEORGE B: KEPLINGER.

Witnesses: ALOYSIA HELMICH, L. L. COBURN.