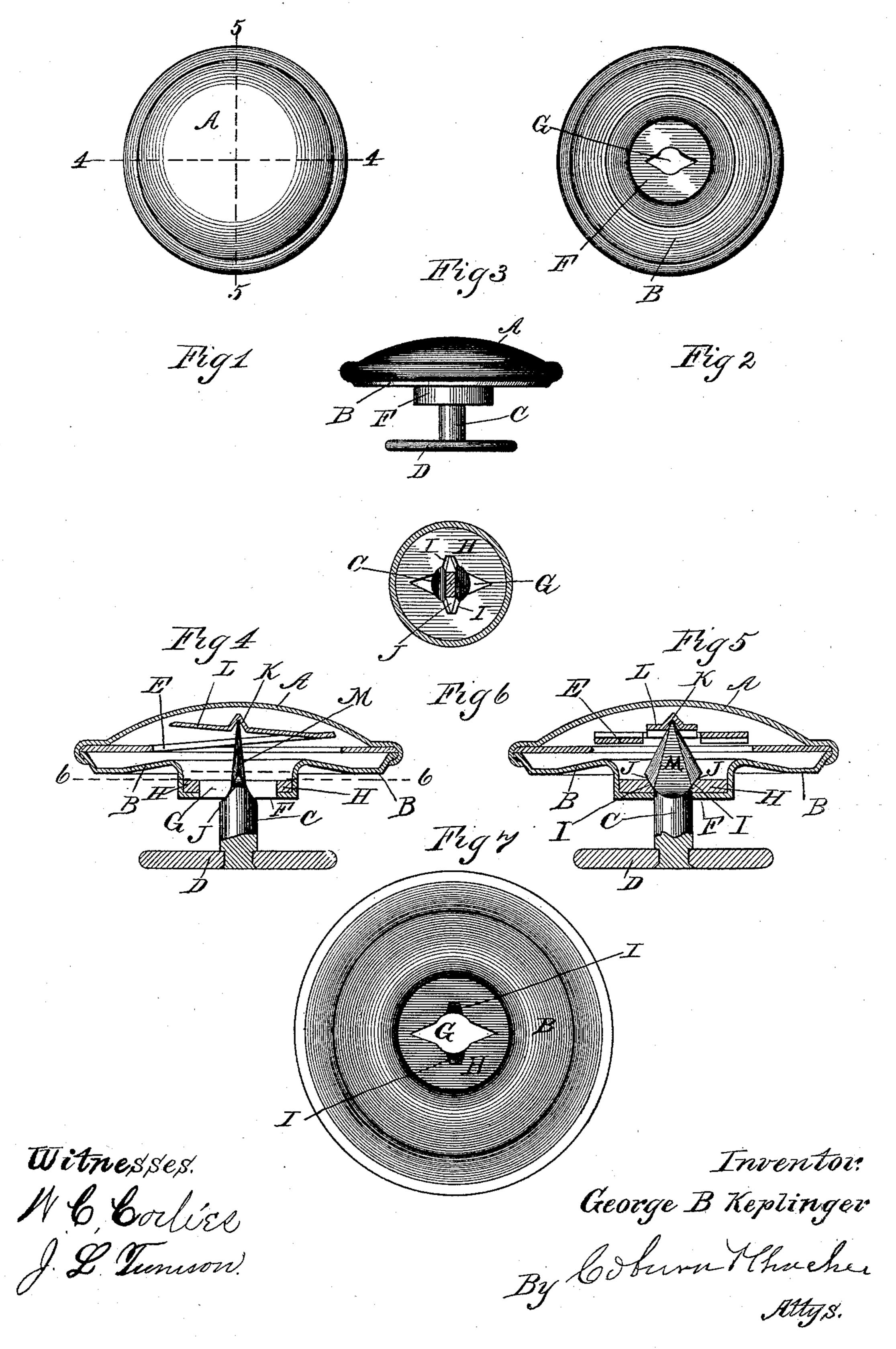
## G. B. KEPLINGER. BUTTON.

No. 467,671.

Patented Jan. 26, 1892.



## United States Patent Office.

GEORGE B. KEPLINGER, OF CHICAGO, ILLINOIS.

## BUTTON.

SPECIFICATION forming part of Letters Patent No. 467,671, dated January 26, 1892.

Application filed April 20, 1891. Serial No. 389,699. (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 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 drawings, in which—

Figure 1 is a top or plan view of the button; Fig. 2, a bottom view with the removable post or shank of the button removed; Fig. 3, a side elevation of the button complete; Fig. 4, a vertical central sectional view taken at the line 4 4, Fig. 1; Fig. 5, a vertical sectional view taken at the line 5 5, Fig. 1. Fig. 6 is a transverse sectional view taken at the line 6 6, Fig. 4, looking down. Fig. 7 is a top view of the bottom disk or plate of the button.

My invention relates to a removable button; and it consists in certain improvements in the button shown in my application, Serial No. 386,965, filed March 30, 1891. In the for-25 mer application Iusea separate interior disk plate, which forms the lock for the detachable post or shank of the button, and make one bearing for said shank or post. In the present application the lock for the shank or 30 post is made in the bottom disk plate of the button, and the spring is made to constitute a top bearing for the post or shank of the button, in addition to its function as a spring, as hereinafter described. By this construc-35 tion I am able to make a thinner button, suitable for pantaloons and other garments, which require a button as thin as possible.

In the accompanying drawings, A represents the top plate of the button; B, the bottom plate of the button; C, the detachable post or shank which is rigidly attached to the plate D.

E is the spring which holds the post or shank C locked, and also forms a bearing for the top of said post or shank when it is locked and holds it firmly in a perpendicular position in the button. The drawings show the buttons enlarged or exaggerated, so as to show all the parts distinctly and clearly, and 50 I contemplate making small buttons of the construction herein shown. The bottom disk plate B of the button has a central boss F,

with an opening G, of the shape shown in Fig. 2, through which the spear-headed post or shank C passes when the button is attached 55 to or removed from the garment. This boss I contemplate reinforcing by metal or an additional plate H, in which the recesses I I are made to receive the shoulders J J of the spear-head of the shank or post C to lock the 60 shank or post C in the button when it is turned partly around after being inserted in the button.

K is a recess in the spring-plate L of the spring E, which receives the pointed end of 65 the shank or post C as it is pressed into the button, and is of such shape as to allow it to turn in said recess K till the shoulders J pass into the recesses I I, said spring pressing it down with sufficient force to hold it securely 70 locked in said recesses, and the point of the post or shank still remains in the recess K, whereby it is prevented from moving laterally, forming a bearing for the upper end of the post or shank, the lock forming a lower 75 bearing, both together serving to keep the post or shank in its proper vertical position in the button. The button is removed from the garment by pressing the post or shank C sufficiently hard to overcome the tension of 80 the spring-plate L, thereby raising the shoulders J from the recesses H and turning the button on the shank or post until the shoulders J are over the opening G. The shank or post C will then be readily removed from the 85 top of the button.

I prefer to make this button by turning the edge of the top plate or disk A over the edges of the bottom disk plate B and the spring E, then swaging them, as clearly 90 shown in Figs. 4 and 5. I make the edges of the spear-head M of the button post or shank thin or sharp, so that it can be readily inserted through the garment, and I also make the shoulders J beveled and quite thin, so 95 that the post or shank C can be readily removed from the garment without injury thereto. This construction of the post or shank C is clearly shown in my former application, above referred to. I elongate the 100 spear-head somewhat in this button for the purpose of having the two bearings to support the post or shank at the top and bottom of the spear-head of the post, instead of at

two points on the post below the head, as in my former application. I provide two bearings for the shank or post, one of which is in the spring, which I obtain by means of the recess or boss K, the spring serving the double purpose of holding the shank or post down in the recess in the bottom plate or disk and preventing the top of the post from moving laterally without carrying the top of the button with it.

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

In a separable button, the post or shank 15 provided at its top with the flattened sharpened head adapted to penetrate the cloth in both directions, the spring provided with the boss K, adapted to form a bearing for the point of the head of the post or shank, and 20 the bottom plate B, provided with recesses H to form the bottom bearing of the post, substantially as described.

GEORGE B. KEPLINGER.

Witnesses:
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