

(No Model.)

L. D. FRENOT.
CONVERTIBLE BUTTON.

No. 363,738.

Patented May 24, 1887.

Fig. 1

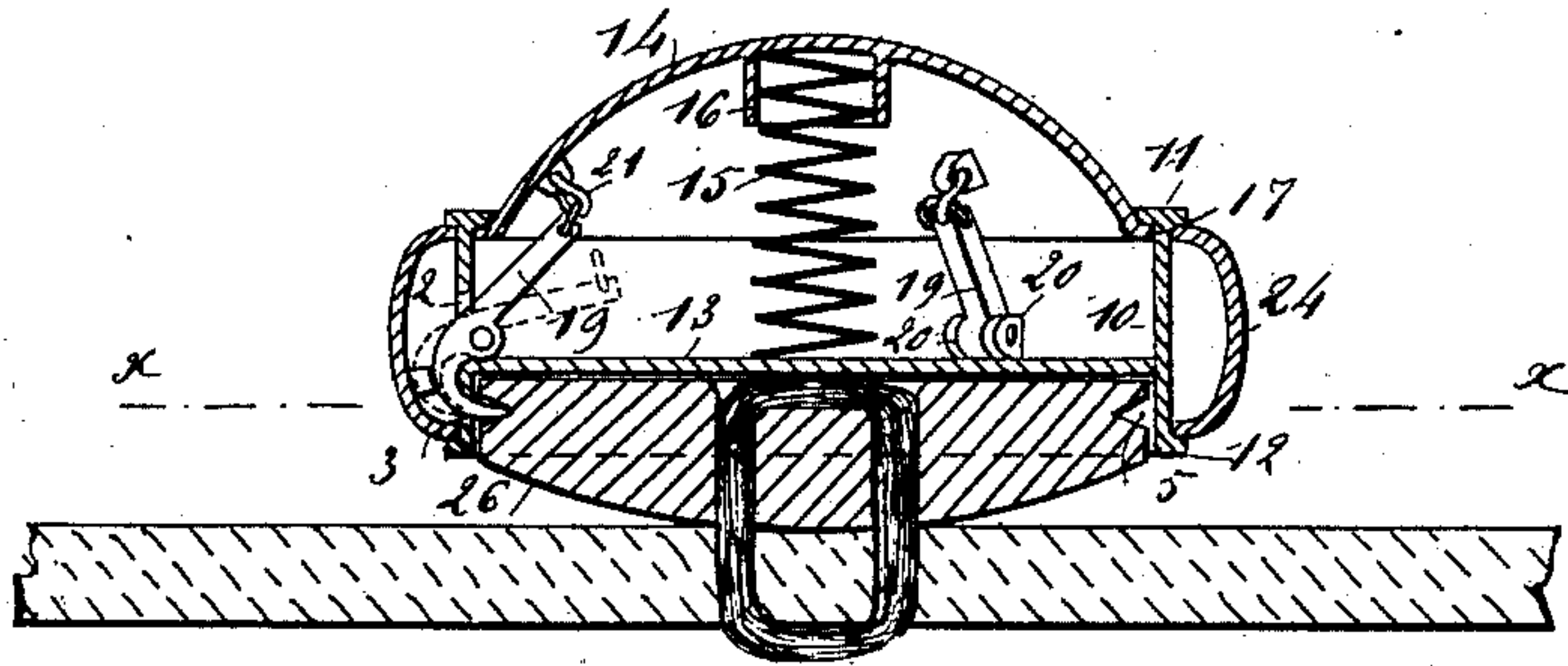


Fig. 2

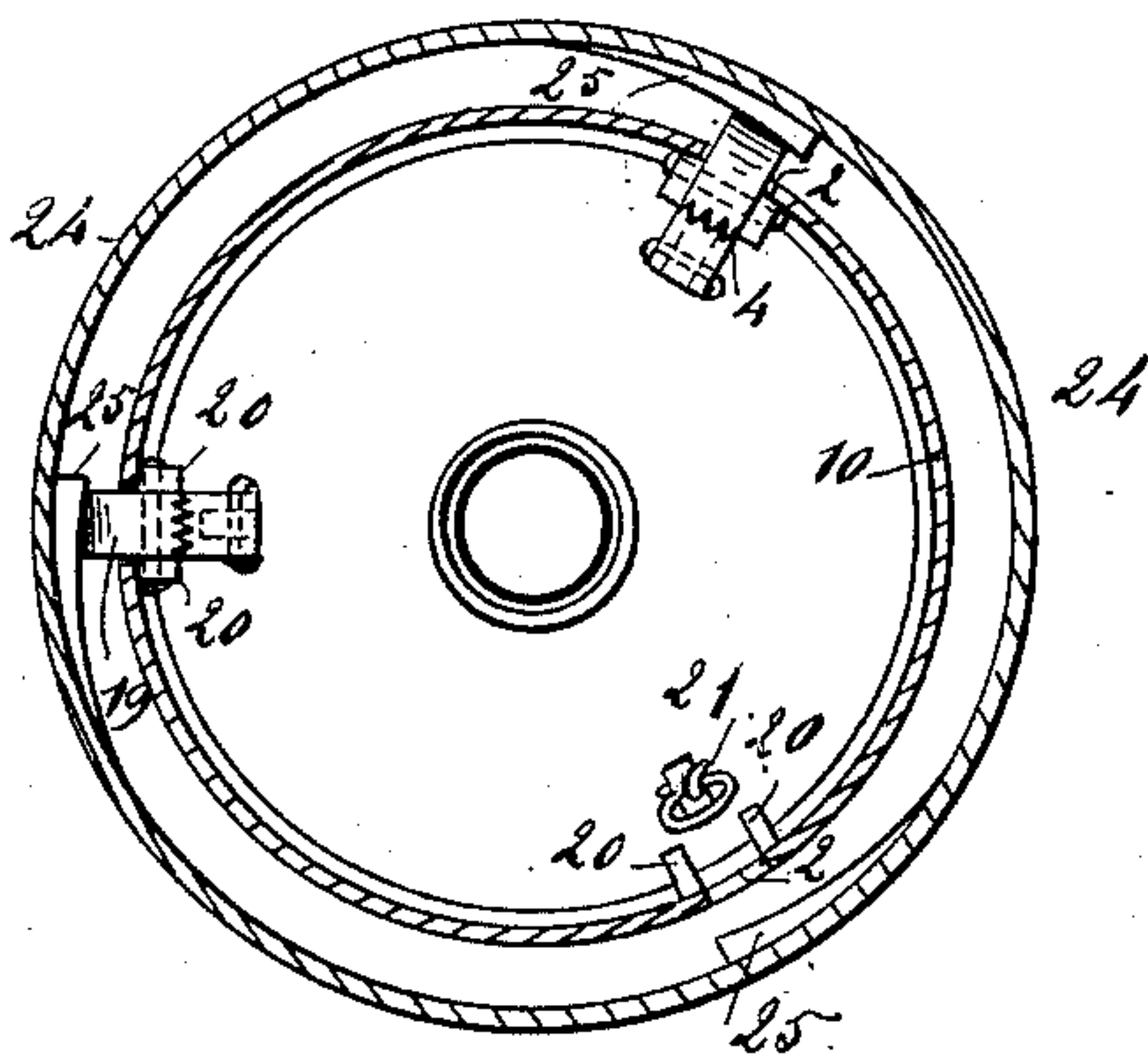
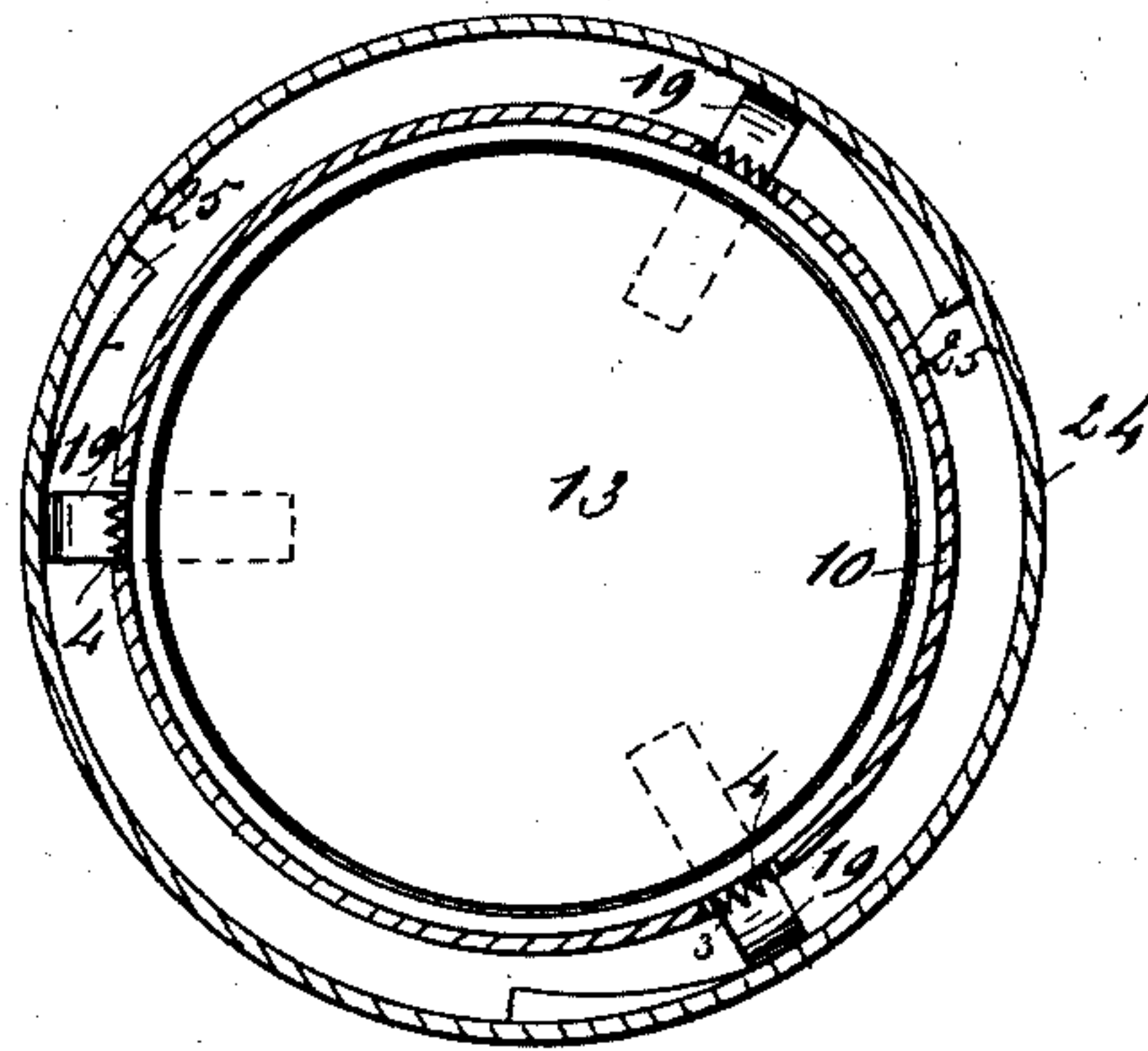


Fig. 3



WITNESSES:

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UNITED STATES PATENT OFFICE.

LOUIS D. FRENOT, OF NEWARK, NEW JERSEY.

CONVERTIBLE BUTTON.

SPECIFICATION forming part of Letters Patent No. 363,738, dated May 24, 1887.

Application filed March 28, 1887. Serial No. 232,718. (No model.)

To all whom it may concern:

Be it known that I, LOUIS D. FRENOT, of Newark, in the county of Essex and State of New Jersey, have invented a new and Improved Convertible Button, of which the following is a full, clear, and exact description.

This invention relates to that class of buttons that is employed upon the garments of those who at times are required to appear in an official capacity, the object of the invention being to provide a button which may be quickly changed from a civilian's button to an official's button, and vice versa.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a central sectional elevation of my improved form of button. Fig. 2 is an inverted sectional plan view of the detachable portion of the button, the view being taken upon a line corresponding approximately with that of the line *xx* of Fig. 1, the clamping-hooks shown in the figure being represented as they appear when in their locked position, one of the clamping-hooks, however, being removed in order to disclose the construction of the link by which the hook is connected to the dome of the drum; and Fig. 3 is a view similar to the one given in Fig. 2, except that the clamping-hooks are represented as they appear in their unlocked position and after the dome of the button has been depressed to throw the hooks out of engagement with the civilian's button, the lower facing-plate being represented in this figure.

In constructing such a button as the one illustrated in the drawings above referred to, I provide a main supporting-ring, 10, that is formed with a double upper flange, 11, and a single outwardly-extending lower flange, 12. A facing-plate, 13, is secured to place in any proper manner within the ring 10, and above this plate there is mounted a dome, 14, that is normally held in the position in which it is shown in Fig. 1 by a spiral spring, 15, the upper end of said spring being fitted within a housing, 16, that is secured to the under or concave side of the dome, the dome being held against displacement by a flange, 17, that is formed about its lower edge and arranged to

bear against the under side of the inner portion of the upper double flange, 11, of the ring 10.

Three or more clamping-hooks, 19, are mounted between lugs or ears 20, that are secured to the inner face of the ring 10, said hooks extending outward through apertures 2, formed in the ring 10 above the plate 13, and then inward through apertures 3, formed in said ring below the plate 13, the inner ends of the hooks being preferably serrated, as shown best at 4 in Figs. 2 and 3. The upper ends of the hooks 19 are connected by links 21 to the under side of the dome 14, so that as the dome is forced downward against the tension of the spring 15 the hooks will be carried to the position in which the hook on the left is shown in dotted lines in Fig. 1.

Between the two outwardly-extending flanges of the ring 10, I fit a ring, 24, upon the inner face of which there are formed wedge-like projections 25, there being as many of these projections as there are hooks 19.

The civilian's button 26, in connection with which the parts above described are to be employed, is formed with a groove, 5, in its peripheral face, said civilian's button being arranged for attachment to the garment upon which the combined button is to be employed; and any means for attaching said civilian's button to the garment may be employed. For instance, the button may be stitched to the garment, as represented in the drawings.

In applying the official attachment to the civilian's button 26 the ring 24 is turned so that the wedge-like projections 25 will be moved to a position out of line with the hooks 19. The dome 14 is then depressed and the detachable portion of the button is applied to the civilian's button. The pressure upon the dome is then released, and as the dome rises to the position in which it is shown in Fig. 1 the hooks 19 will be thrown into engagement with the civilian's button, the points of the hooks entering the groove 5 formed in said button. After the parts have been so adjusted a slight turn to the right will bring the wedge-like projections 25 to a position to bear against the outer faces of the hooks 19, and said hooks will be thereby locked to place in the position in which they are shown in Fig. 2, and when

in this position it will be seen that any pressure upon the dome 14 will not affect the position of the hooks 19.

When it is desired to remove the detachable portion of the button, the ring 24 is turned backward to the left, and the projections 25 are thereby carried to a position clear of the hooks 19, so that if pressure be applied to the dome 14 the hooks may be thrown from engagement with the civilian's button and the detachable portion of the button removed, it being of course understood that the detachable portion of the button may be made of any proper pattern, said patterns varying in accordance with the office of the wearer.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. In a detachable button, the combination, with a ring, of a dome mounted therein, hooks pivotally connected to the ring and loosely connected to the dome, a facing-plate fitted within the ring, and a spring arranged between the facing-plate and the dome, substantially as described.

2. In a detachable button, the combination, with a ring, of hooks pivotally connected thereto, a dome mounted within the ring, to which the hooks are loosely connected, a fac-

ing-plate mounted within the ring, a spring arranged between the facing-plate and the dome, and an outer ring loosely mounted upon the first-named ring and provided with wedge-shaped internal projections, substantially as described.

3. The combination, with a button formed with an annular groove in its peripheral face, of a detachable section provided with hooks that are adapted to enter said peripheral groove, and a means, substantially as described, for operating the hooks, as and for the purpose stated.

4. The combination, with a button, 26, formed with a groove, 5, of a detachable section consisting of a ring, 10, carrying a facing-plate, 13, and formed with a double upper and a single lower flange, hooks 19, pivotally connected to the ring 10, a dome, 14, to which the hooks are loosely connected, a spring, 15, arranged between the plate 13 and the dome, and a ring, 24, provided with internal wedge-shaped projections, 25, that are arranged to bear against the hooks 19, substantially as described.

LOUIS D. FRENOT.

Witnesses:

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