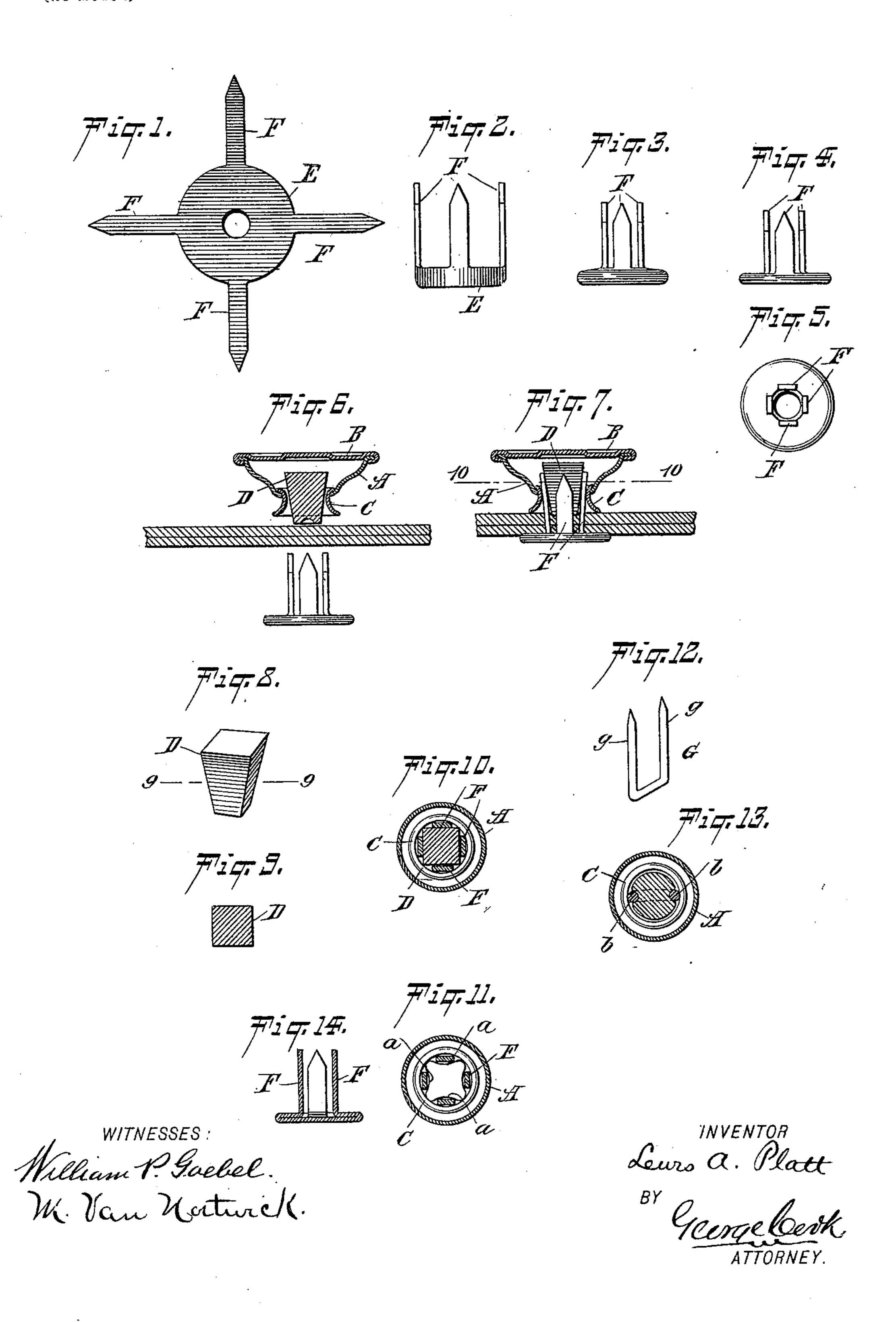
## L. A. PLATT. BUTTON.

(Application filed Mar. 30, 1898.)

(No Model.)



## United States Patent Office.

LEWIS A. PLATT, OF WATERBURY, CONNECTICUT.

## BUTTON.

SPECIFICATION forming part of Letters Patent No. 637,485, dated November 21, 1899.

Application filed March 30, 1898. Serial No. 675,669. (No model.)

To all whom it may concern:

Be it known that I, Lewis A. Platt, a citizen of the United States, and a resident of Waterbury, in the county of New Haven and State of Connecticut, have made and invented certain new and useful Improvements in Buttons, of which the following is a specification.

My invention relates to an improvement in buttons, and more particularly to that kind or class thereof known and generally referred to as "bachelor-buttons"—that is, a button adapted to be secured or attached to a garment, cloth, or fabric by hand and without the use of those machines or setting-tools usually employed for setting buttons, consist-

ing in part of metal fasteners.

My invention further relates to an improvement upon the wedge-button, several kinds or styles of which have already been patented 20 and two kinds or styles of which are now upon the market, wherein a wedge in the form of a truncated cone is employed, which wedge is located in the body or hub of the button and in practice enters a split eyelet used as a 25 fastener and which binds or holds the eyelet against the inner surface of the hub, the effect being that any tendency to withdraw or separate the eyelet-fastener from the button will also tend to draw the wedge in the same 30 direction, and thus more tightly bind said eyelet against the hub. Heretofore the great objection to the use of this eyelet-fastened button has been the fact that a hole or opening has first to be made in the cloth by means 35 of a needle, knife, or other sharp instrument for the passage-way of said eyelet, as the latter is not formed or shaped to pierce its own

The object of my invention is to overcome this objection and so construct the button that a fastener may be employed capable of piercing its way through the fabric and which shall contain a sufficient amount of metal to prevent any bending or distortion thereof when forced through the cloth. The use of such a thickened fastener has heretofore been thought impracticable in view of the fact that the wedge, as above stated, has been made in the form of a truncated cone, leaving but little room or space between the outer surface of the cone and inner surface of the hub, necessitating the use of very thin metal for the fastener.

In my improved button I have formed the wedge of several shapes other than round and preferably of the form of a truncated pyramid, 55 whereby at certain points a greater amount of space is left between the sides of the wedge and the hub of the button and allowing the employment of a fastener with several pointed arms or prongs of considerable thickness, 60 thus lending sufficient strength thereto to be forced through the fabric without bending or spreading the same, which would occur if made of the same thickness of metal as the eyelet heretofore used.

My invention further consists in several novel features of construction and combinations of parts, as hereinafter fully described,

and pointed out in the claims.

In the accompanying drawings, Figures 1, 70 2, 3, 4, and 5 show the fastener in several stages of its formation. Fig. 6 is a sectional view of my improved button prior to being attached to the cloth or fabric. Fig. 7 is a similar view of the button after being at- 75 tached or secured to the material. Fig. 8 is perspective view of the wedge. Fig. 9 is a sectional view of the wedge, taken on the line 9 9 of Fig. 8. Fig. 10 is a sectional view of the button, taken on the line 10 10 of Fig. 7, 80 the cloth or fabric being omitted. Figs. 11 and 13 are sectional views of modified forms of the button, and Fig. 12 a perspective view of a modified form of the fastener. Fig. 14 is a sectional view of the fastener of Fig. 4. 85

By referring to the drawings it will be seen that the button consists of a plate A, to which is secured the face or top plate B and also the hub or spacer C, it being understood, however, that the hub, if desired, may be made 90 integral or in one piece with the plate A. Within the button and extending into the hub C is the wedge D, having the shape or form of a truncated pyramid, the larger end thereof being of such size as to prevent its 95 dropping out of or through the hub of the button. By forming the wedge of this shape it will be seen by reference to Fig. 10 that considerable space is left between the flat or straight faces of the wedge and the inner sur- 100 face of the hub C, thereby permitting the use of a fastener constructed of thicker metal than has heretofore been possible with the round or cone-shaped wedge.

While it is possible to use the old-style fastener with my improved button, I have more especially devised it with a view of using a fastener having two or more arms or prongs 5 and which may be quickly and cheaply made, as illustrated in the drawings, wherein in Fig. 1 is shown the blank consisting of the base E and arms F, the latter being pointed at their outer or piercing ends. This blank is then 10 cupped by means of suitable dies, thereby assuming the form as shown in Fig. 2, after which the base E and arms F are bent inwardly, as shown in Fig. 3. By striking the base E downwardly the fastener will assume 15 the form as shown in Figs. 4, 5, and 14, the completed fastener thus consisting of a base of a double thickness of metal folded over upon itself and having four piercing-arms extending outwardly from the base. In prac-20 tice these arms are forced through the material and into the hub C, passing between the flat or straight faces of the wedge D and the inner surface of the hub C, the wedge entering between the arms as the fastener is forced 25 inwardly and separating them, as shown in Fig. 7. Any strain imposed upon the fastener to withdraw it from the button will also tend to withdraw the wedge, thereby binding the arms F tightly against the hub C. Instead of forming the wedge as shown in Fig. 8—that is, with straight or flat faces—it may be formed as shown in Fig. 11, wherein the sides are curved or bent inwardly, as at a, thereby giving still more room between the 35 hub and wedge and allowing the arms F of the fastener to be made of thicker metal than in the first instance. In those instances where it is unnecessary to provide the fastener with a large or extended bearing surface or base--40 as, for instance, when the button is to be secured to some material not liable to tear—the wedge may be constructed as shown in Fig. 13—that is, in the form of a truncated cone with two or more recesses b extending along 45 the sides thereof, allowing a fastener G, Fig. 12, in the form of a staple to be employed therewith, the arms g of the staple being considerably thicker than the eyelet used with

the perfectly-round wedge, as hereinbefore

that other variations might be made in the

shape of the wedge, whereby the space be-

tween the sides or faces of said wedge and the

It will be evident to those skilled in the art

50 referred to.

inner surface of the hub may be increased, 55 allowing of the use of a fastener having metal arms of considerable thickness, the distinctive feature of my wedge being that prior to the entrance of a fastener it will come in contact at certain points only with the hub, the 60 distance between the wedge and hub being increased at certain points and decreased at other points as compared with the conicalshaped hub.

Having fully described my invention, what 65 I claim as new, and desire to secure by Letters

Patent, is—

1. A button of the character described, consisting of a body and a cylindrical hub, a wedge contained therein, said wedge being of such 70 a shape as to leave comparatively large spaces at several points between said wedge and the cylindrical hub, in combination with a selfpiercing fastener, said fastener being formed with two or more pointed arms of compara- 75 tively thick metal to enter said spaces between said wedge and hub, substantially as described.

2. A button of the character described, consisting of a body and cylindrical hub, a wedge 80 contained therein, said wedge being flat-sided or of an irregular shape in cross-section, thereby leaving comparatively large spaces between said wedge and the cylindrical hub, in combination with a self-piercing fastener, the 85 latter being formed with two or more pointed arms of comparatively thick metal to enter said spaces between said wedge and hub, substantially as described.

3. A button of the character described, con- 90 sisting of a body and a cylindrical hub, a wedge. contained therein in the form of a truncated pyramid, whereby comparatively large spaces are left between said wedge and cylindrical hub, in combination with a self-piercing fas- 95 tener, said fastener consisting of two or more pointed arms or prongs of comparatively thick metal to enter between the sides of said wedge and cylindrical hub, substantially as described.

Signed at New York, in the county of New York and State of New York, this 25th day of March, A. D. 1898.

LEWIS A. PLATT.

Witnesses: GEORGE COOK, JOHN F. FLAGG.

100