No. 635,369. Patented Oct. 24, 1899.

F. C. BOWEN.

THIMBLE.

(Application filed July 13, 1899.)

(No Model.)

Fig. I

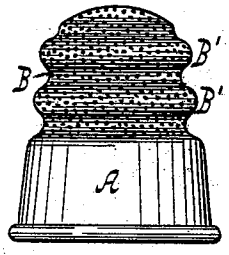


Fig. III

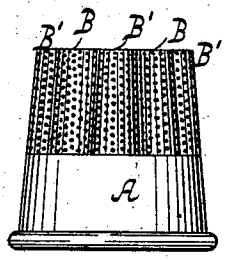


Fig. IV

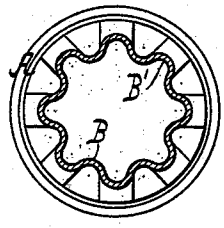


Fig. V

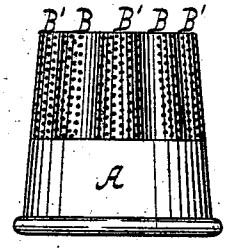


Fig. II

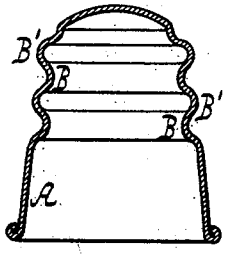
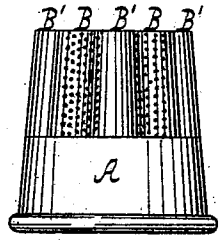


Fig. VI



WITNESSES:

Jas. L. Ewbank

Chas. Wahlers

INVENTOR.

Francis C. Bowen

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

FRANCIS C. BOWEN, OF MADISON, NEW JERSEY, ASSIGNOR TO THE CONSOLIDATED SAFETY PIN COMPANY, OF BLOOMFIELD, NEW JERSEY.

THIMBLE.

SPECIFICATION forming part of Letters Patent No. 635,369, dated October 24, 1899.

Application filed July 13, 1899. Serial No. 723,668. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS C. BOWEN, a citizen of the United States, and a resident of Madison, in the county of Morris and State of New Jersey, have invented certain new and useful Improvements in Thimbles, of which the following is a specification.

The general object of my invention is to promote the utility of the thimble as to its holding effect on the needle to which it may be presented in use; and to this end it consists, essentially, in providing the thimble with one or more alternating grooves and elevations which are adapted to engage with the head of the needle as generally employed for sewing purposes, as hereinafter more fully set forth.

In the accompanying drawings, Figure 1 represents a side view of a thimble embodying my invention with circumferential grooves and elevations. Fig. 2 represents a longitudinal section of the thimble shown in the preceding figure. Fig. 3 represents a side view of the thimble with alternating grooves and elevations. Fig. 4 represents an end view thereof. Fig. 5 represents a side view of the thimble with alternating grooves and elevations, the elevations being indented, leaving the grooves plain. Fig. 6 represents a side view of the thimble with alternating grooves and elevations, the grooves being indented, leaving the elevations plain.

Similar letters of reference indicate corresponding parts.

The letter A indicates the body of the thimble, B the grooves, and B′ the elevations thereof. Said grooves and elevations alternate with each other and may be one or more in number, as may be found more expedient in practice.

In the examples shown in Figs. 1 and 2 the alternating grooves and elevations extend circumferentially of the thimble, while in the remaining figures these parts extend longitudinally of the article.

The body of the thimble is composed of sheet metal or other suitable material and may be brought into the required shape by spinning, molding, or other mechanical means which will readily suggest itself to a skilled mechanic.

The general plan of the thimble is usually and preferably that of a truncated cone, and for the purpose of increasing the efficiency the grooves and elevations both are indented, as shown in Figs. 1 and 3, or either the grooves or elevations may be indented, as shown in Figs. 4 and 5, respectively. When the thimble is closed at the top, this part is also indented, as shown in Fig. 1; but it may be here remarked that the thimble may be left open at that point, as in a tailor's thimble, the purpose of these indentations being to receive the head of the needle in a well-known manner, to which the thimble may be presented in use.

The contour of the thimble is curvilinear in one example in the longitudinal section and in the other example in the transverse section thereof, according to the direction of the alternating grooves B and elevations B′, which are respectively concave and convex. The grooves and elevations, moreover, are continuous with each other on that portion of the thimble where they are located and are of corresponding area or diameter to each other. An important advantage resulting from the continuous arrangement of the alternating grooves and elevations is that the surface of the thimble thus affords a series of contacting points for the head of the sewing-needle instead of a single contacting point, as in the ordinary thimble. Another peculiarity of the alternating grooves and elevations is the arrangement thereof in relation to the surface of the thimble as determined by the outer diameter of the lower plain portion thereof below the grooves and elevations which are concomitant to the upper portion of the thimble—that is to say, the grooves are situated in a line or plane within the surface of the thimble and the elevations situated in a line approximately coincident with the surface thereof, and it will be observed that by this means both the grooves and elevations are adapted for effective presentation to the sewing-needle in the use of the thimble, in contradistinction, to a presenta-

tion arising from an indefinite arrangement of the grooves and elevations in relation to the thimble-surface.

What I claim as new, and desire to secure by Letters Patent, is—

A thimble of frusto-conical shape formed integral with a lower plain portion and an upper portion divided into alternating grooves and elevations, which are respectively concave and convex, of uniform area and continuous with each other, the grooves situated in a line within the surface of the thimble, and the elevations situated in a line coincident with the surface thereof, whereby both the grooves and elevations are adapted for effective presentation to the sewing-needle, substantially as shown and described.

FRANCIS C. BOWEN.

Witnesses:
CHAS. WAHLERS,
JAS. S. EWBANK.