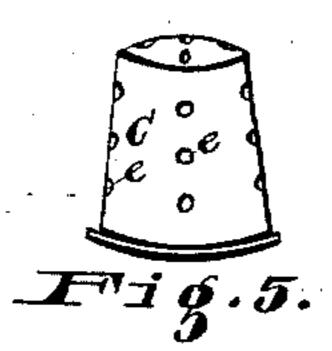
M. BEATY.

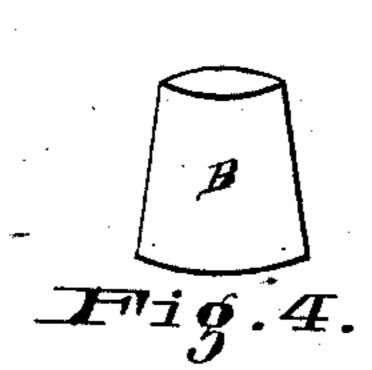
THIMBLE.

No. 279,524.

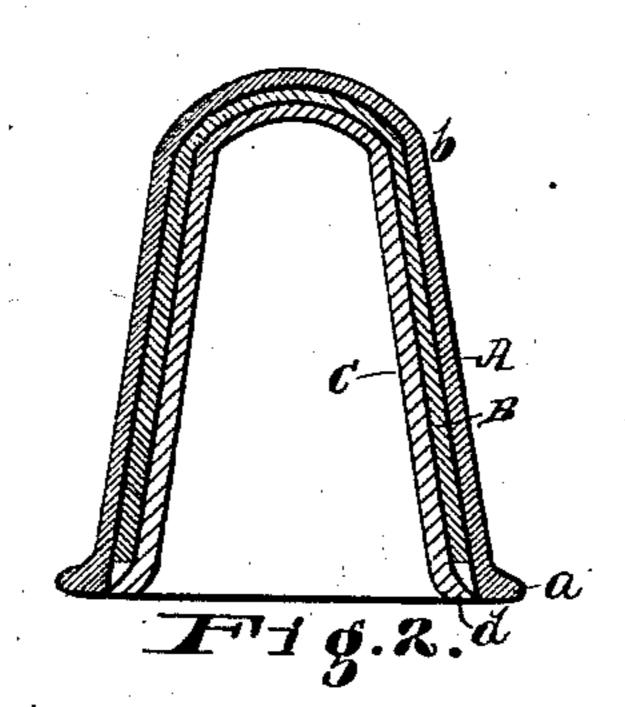
Patented June 19, 1883.

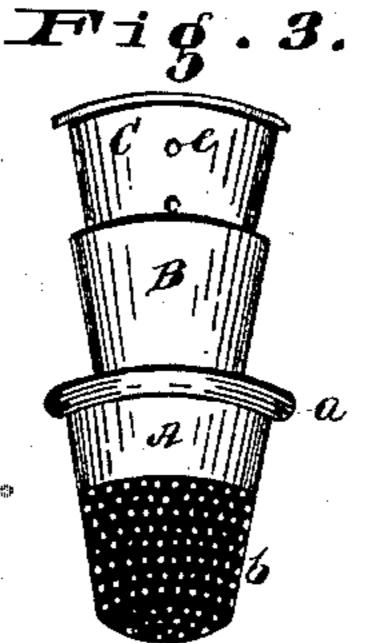












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MARSHAL BEATY, OF CINCINNATI, OHIO.

THIMBLE.

SPECIFICATION forming part of Letters Patent No. 279,524, dated June 19, 1883.

Application filed January 29, 1883. (No model.)

To all whom it may concern:

Be it known that I, MARSHAL BEATY, of the city of Cincinnati, in Hamilton county, and State of Ohio, have invented certain new and 5 useful Improvements in Thimbles, of which the following is a specification.

The principal objects of my invention are to provide a thimble which can be placed upon the finger, and which at all times when worn 10 will operate as a generator of galvanic electricity, and can also be used in the manner in which a thimble is commonly employed.

The various features of my invention, and the several advantages resulting therefrom, will 15 be apparent from the following specification.

In the accompanying drawings, forming part of this specification, Figure 1 is a side elevation of the exterior of the preferred form of thimble constructed so as to embody my in-20 vention. Fig. 2 represents a vertical central section of the same. Fig. 3 represents the three portions of which said thimble is preferably composed, partially separated from one another, but showing the preferred order in 25 which they are placed. Fig. 4 represents the preferred shape of the central shell or thimble, and Figs. 5 and 6 show the preferred construction of the inner shell or thimble.

A indicates the outer shell or thimble proper, 30 made of copper, preferably provided with the usual flange, a, and the usual indentations or

corrugations, b.

B indicates a cup or thimble of zinc, made to fit closely within and to touch preferably 35 at all points the surface of shell A. The sides of the shell B are preferably shorter than the sides of shell A, for reasons hereinafter stated. Within shell B is another shell, C, preferably of copper or brass, arranged to fit closely to 40 the interior of shell B, and it is desirable that this shell C touch the shell B at all points. The sides of this shell C are extended down and bent out in a flange, d, which latter overlaps the bottom edge of shell B and shell A, form-45 ing a tight and almost imperceptible joint with the flange a of shell A. This shell C is preferably perforated with holes e to allow the finger to come into contact with the surface of the zine, and also to allow the moisture (per-50 spiration—principally chloride of sodium) thrown out from the finger to reach the zinc and pass between and into contact with the

shell B and shell C. This moist chloride of sodium assists in the generation of an electric current.

This thimble may be worn upon the finger. When so worn it acts as a battery or pile, and the electricity it generates is communicated to the finger, hand, arm, and body of the person using it, and operates as a medicinal agent to 60 benefit the fingers, hand, and arm, and body of the one wearing it; and when the purpose

last named is the sole one for which it is employed, the indentations or corrugations b may be omitted. The flange a may also be omitted 65 whenever desired.

The medicinal or curative effect produced by the use of this thimble is to cure a person of paralysis of the fingers or hand or arm, or of two or more of these-more particularly 70 that description of paralysis arising from the excessive use or strain of said portions of the body. Another effect it has is to prevent paralysis of these portions of the body from the use of same, especially in sewing or similar 75 occupations.

My invention also imparts a more healthful tone to the nervous system not only of the fingers, hand, and arm, but to the whole person, thereby generally benefitting the party wear- 80

ing said thimble.

I prefer that the thimble be not only useful as a medicinal curative agent, but also as an ordinary thimble, as this obviates the necessity of two thimbles, and also enables the conjoint ac- 85 tion of the steel or metal needle commonly employed in sewing to co-operate to generate and increase the action of the electric current.

Obvious modifications of my invention may be made. Thus but two shells may be used, and 90 the inner shells may be open at top or sides, and be shaped somewhat differently from the form in which they are here shown. When preferred, the outer shell, A, may be shortened, so as not to extend down to the bottom 95 of the inner shell or shells, and it may consist of a band or hollow cylinder open at each end, the upper end of the next shell being closed, and when used for sewing carrying the indentations, &c. So, also, any desired number of 100 shells or layers of metal may be employed; and the kind of metal or material employed in the shells may be varied, always observing, however, that adjacent layers or shells of metal

or other material are of different kinds, and capable, in conjunction with one another, of generating an electric current. I prefer to make that shell which comes in contact with the needle of some material other than steel or iron, in order that the conjoint action of the steel or iron needle commonly used in sewing may co-operate with the thimble to generate an electric current.

Copper is preferably employed for the interior shell, zinc for another, and I prefer lining the zinc with a copper or brass shell to increase the electric action and prevent the fingers from coming directly into general contact with the zinc. When desired, the zinc shell may have suitable perforations similar to those shown in the shell C.

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

- 20 1. A thimble composed of two or more layers of material adapted to generate an electric current.
- 2. A thimble composed of two or more layers of material adapted to generate an electric current, the exterior of said thimble being provided with indentations or corrugations.
- 3. In a thimble, the combination of shells A and B, substantially as and for the purposes 30 specified.
 - 4. In a thimble having indentations or corrugations b, the combination of shell A and

shell B, substantially as and for the purposes specified.

5. In a thimble, the combination of copper 35 shell A, and zinc shell B, and copper shell C, substantially as and for the purposes specified.

6. In a thimble, the combination of copper shell A, and zinc shell B, and copper shell C, having perforations e, substantially as and for 40 the purposes specified.

7. In a thimble provided with indentations, the combination of shell A, shell B, and shell C, provided with perforations e, substantially as and for the purposes specified.

8. In a thimble, the combination of shell A, carrying indentations or corrugations, shell B, and perforated shell C, substantially as and for the purposes specified.

9. In a thimble, the shell A, shell B, and 50 shell C, the latter provided with flange d, overlapping the bottom of shell B, and extended toward or to shell A, substantially as and for the purposes specified.

10. In a thimble having indentations, the 55 shell A, shell B, and shell C, carrying perforations e, and having a flange, d, extended outward and under the lower end of shell B, substantially as and for the purposes specified.

MARSHAL BEATY.

Witnesses:

J. WM. STREHLI,

E. R. HILL.