

F. WINSLOW.
Implement for Napping the Fibers of Shoe-Soles.
No. 207,636. Patented Sept. 3, 1878.

Fig. 1

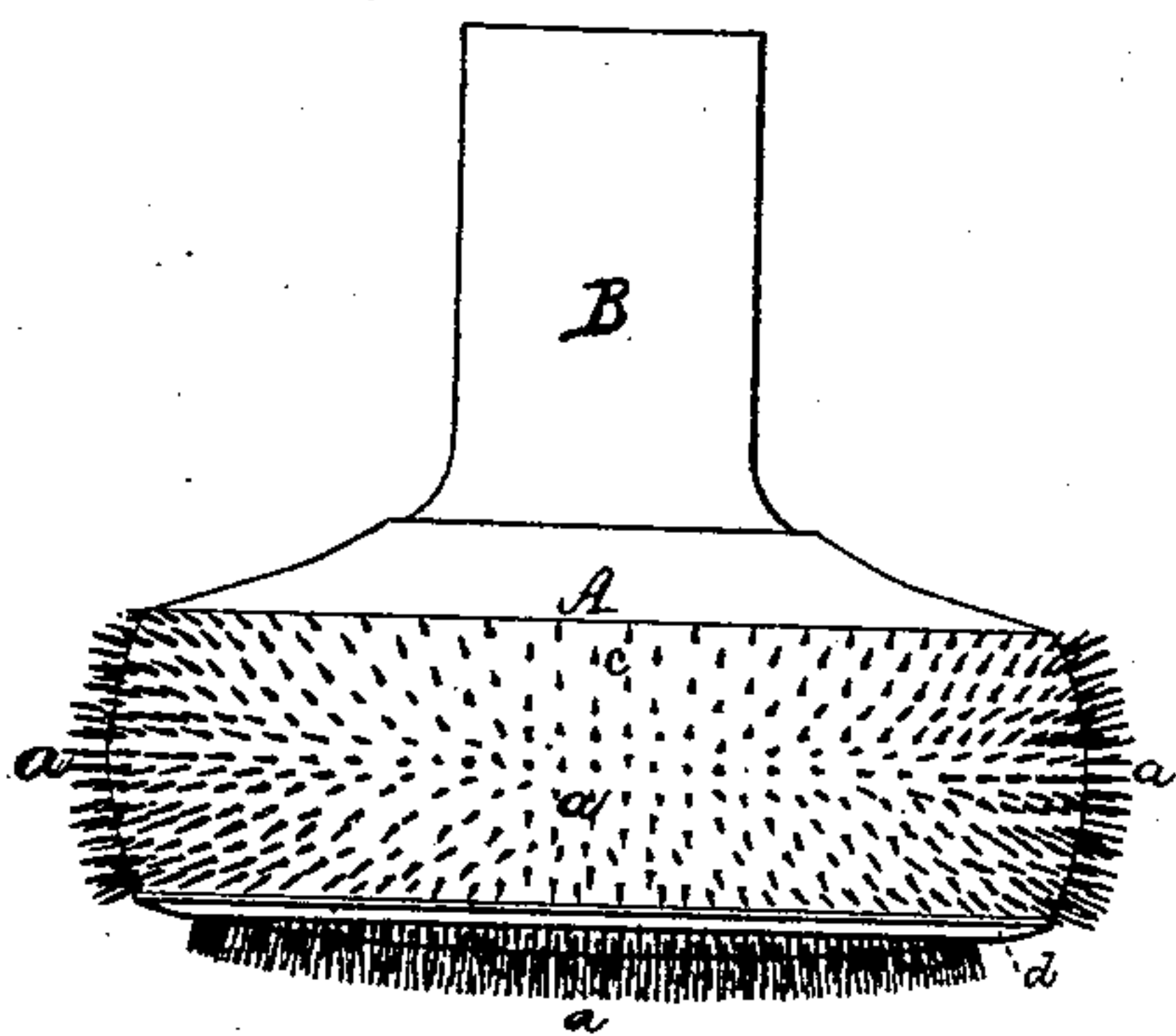


Fig. 3.

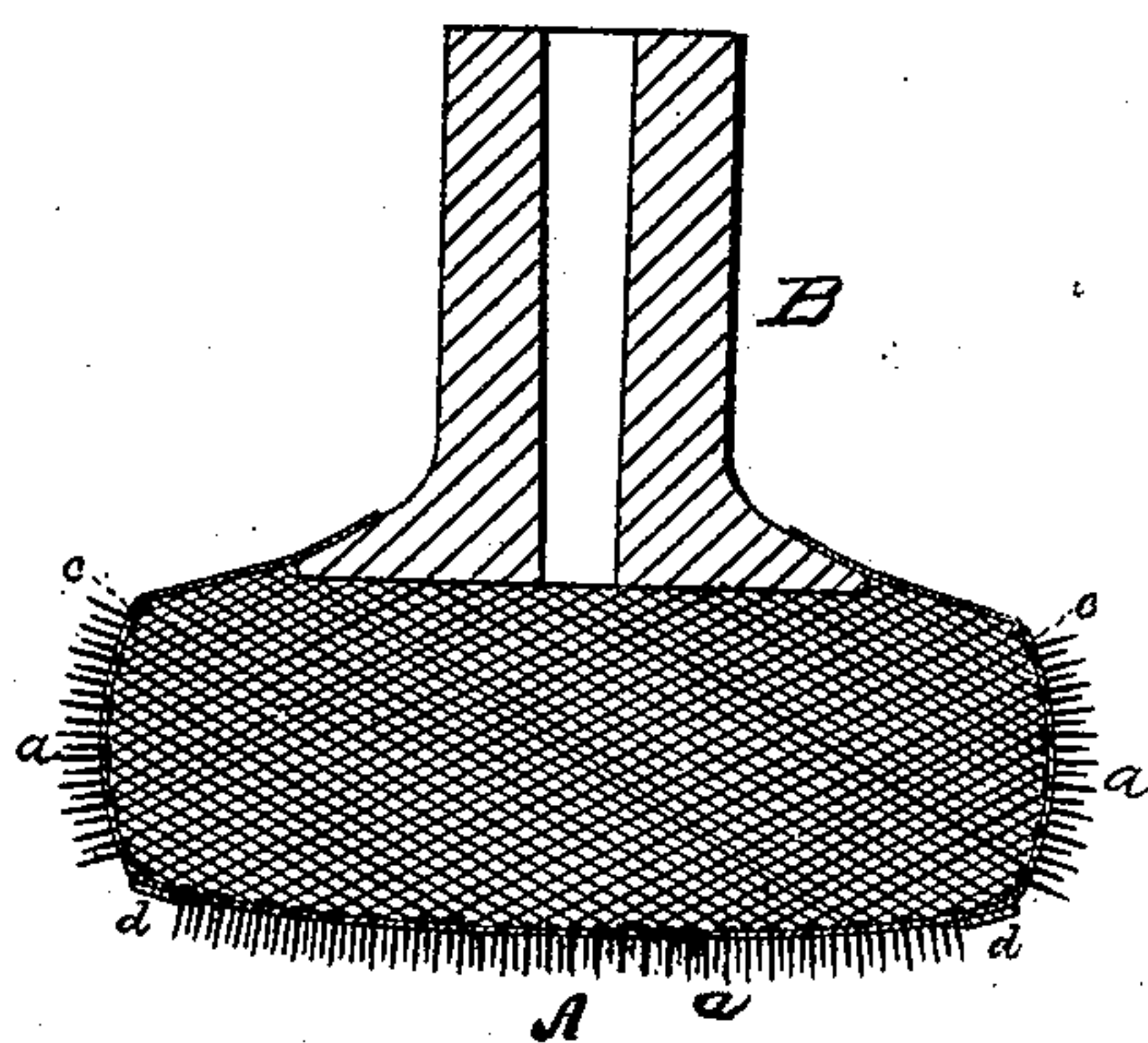
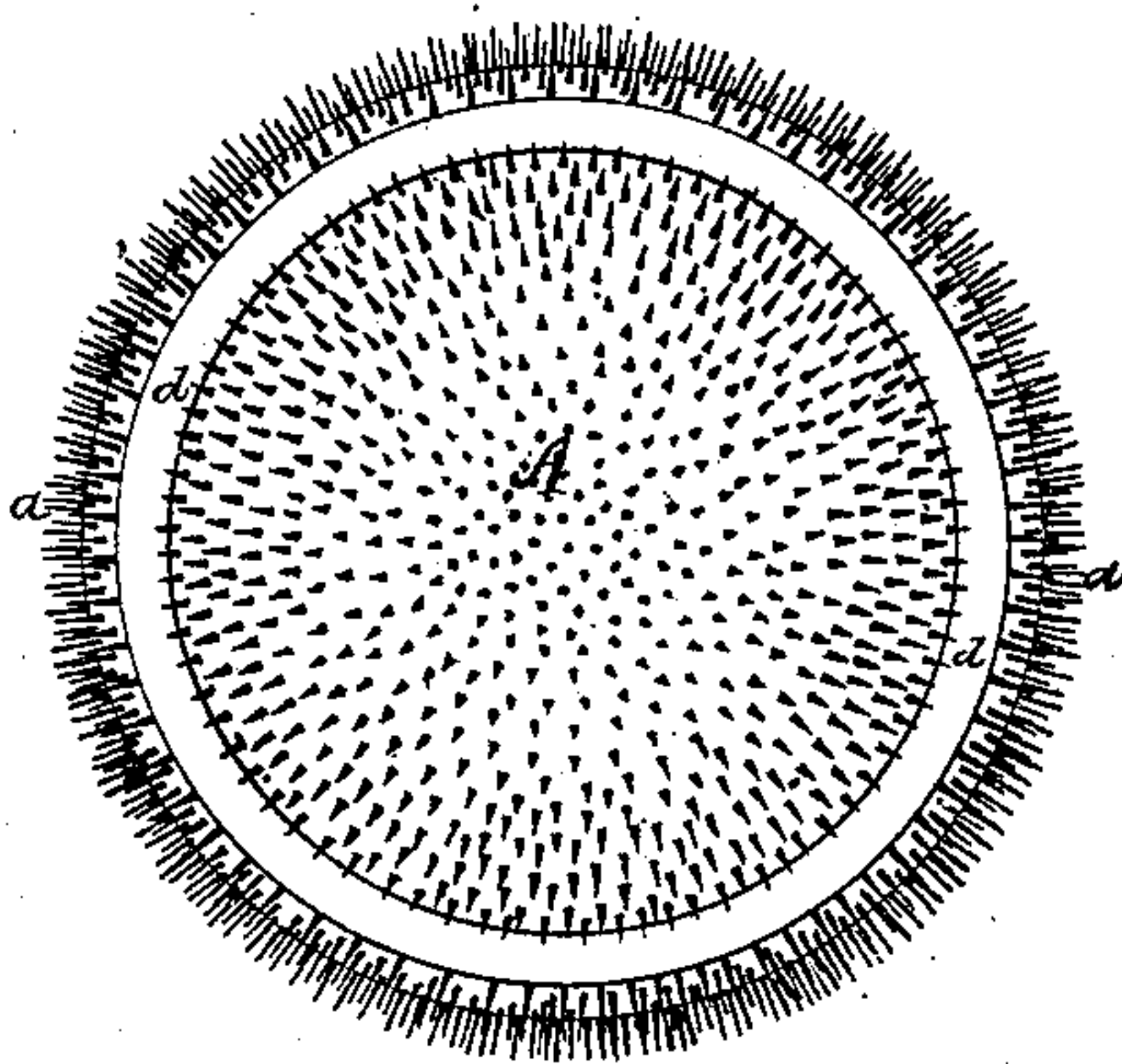


Fig. 2.



Witnesses
S. W. Piper
John Brown

Inventor.
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by his attorney
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UNITED STATES PATENT OFFICE.

FREEMAN WINSLOW, OF SALEM, MASSACHUSETTS.

IMPROVEMENT IN IMPLEMENTS FOR NAPPING THE FIBERS OF SHOE-SOLES.

Specification forming part of Letters Patent No. **207,636**, dated September 3, 1878; application filed July 1, 1878.

To all whom it may concern:

Be it known that I, FREEMAN WINSLOW, of Salem, of the county of Essex and State of Massachusetts, have invented a new and useful Implement for Napping or Loosening and Raising the Fibers of Shoe-Soles; and do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a side elevation, Fig. 2 a bottom view, and Fig. 3 a vertical section, of it.

The article in question, intended for use in making what are termed "Compo shoes," is somewhat analogous to the shoe-sole buffer for which Letters Patent No. 190,174, dated May 1, 1877, were granted to me. They, however, not only materially differ from each other, but are to produce opposite results—that is, while the buffer is to smooth and finish the bottom of an outer sole of a shoe, the napper is to roughen or tear and raise up the fibers, so as to produce a nap on the outer surfaces of an insole and the parts of the upper covering the insole, or upon the inner surface of an outer sole. The nap so produced is to enable the outer sole, when connected to the insole and upper, to adhere thereto to better advantage, and stronger than would be the case were no such nap to be raised on either or both the surfaces to be united by cement.

In the manufacture of shoes of certain kinds, especially those for infants or small children, it is customary to affix the upper-leather to the insole and both to the outer sole by means of cement. My napper is designed for use in carrying on such manufactures, in which it has been found in practice to be specially advantageous.

It consists of a circular and cushioned head, A, made in part of felt or other suitable substitute, and provided with a shank or handle, B, extending from it, as shown, and having sharp teeth or metallic tacks *a* projecting from the circumference and outer side of it (the said head) in manner as represented.

The outer covering, *c*, of the head is to be of leather or some other suitable yielding material, and it is to be thickly studded on its periphery and bottom with sharp tacks going through it from its inner side, and having their heads bearing on the outer surface of

the felt cushion *b*, enveloped by such covering, the bottom and the periphery of the head being curved or crowned in manner as represented.

Between the points of the periphery and those of the bottom of the head I prefer to have, unprovided with any of the tacks, a narrow circular space, *d*, whereby the tacks of the periphery become insulated from those of the bottom in a manner as represented, such having been found advantageous in the working of the napper. Each tack, by being inserted through the covering and having its head resting against the felt cushion, becomes properly supported in place, and can spring or give way laterally more or less and back to place while in use, whereby the points are prevented from injuriously scoring the sole, for, while the napper may be in action, it simply catches among and separates and lifts up the fibers, so as to make of them a nap on the surface acted upon. Its form admits of it being used in the concavities as well as on the convexities of the sole or surface or surfaces to be napped by it.

In using it, it is to be put in rapid revolution, its shank being fixed to the end of an arbor or shaft duly driven or revolved for the purpose, and the shoe, lasted and fixed to the insole, is to be borne against the dents or teeth of the napper, and moved, as circumstances may require, until the part or parts to be treated become suitably napped by it.

I claim—

1. As a new implement of manufacture, for use as described, the napper, substantially as set forth, consisting of the rotary shank and the elastic or circular cushioned head, studded on its outer surface or surfaces with points or tacks, as specified.

2. The sole-napper having the face and periphery of its elastic head studded with nails or metallic points, and also having those of the face and those of the periphery insulated or separated from each other by a narrow circular space, *d*, arranged and intervening with respect to them, as represented.

FREEMAN WINSLOW.

Witnesses:

JOHN S. WOODS,

GEORGE A. WARDWELL.