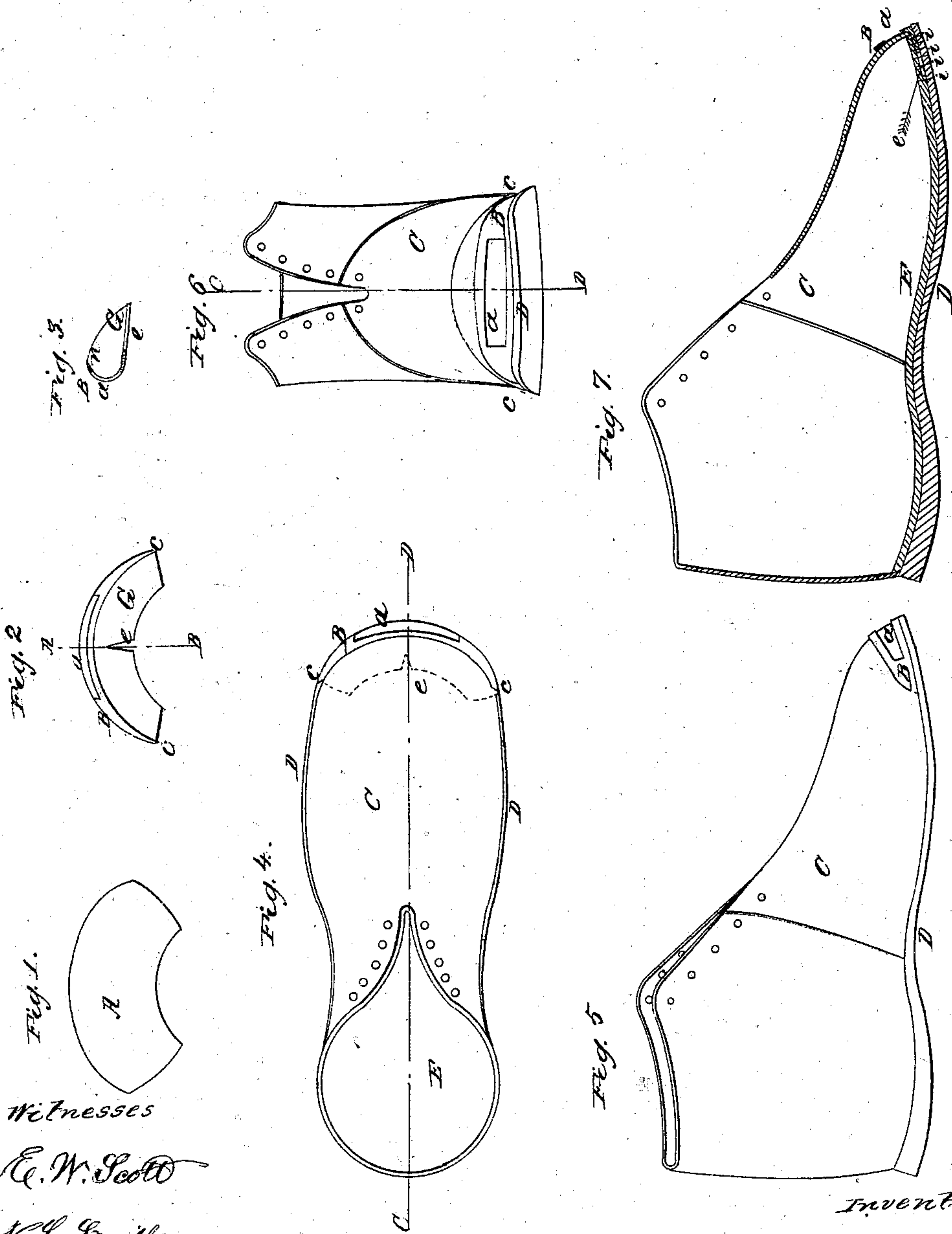


G. A. Mitchell,

Shoe Uprer,

N^o 31,673.

Patented Mar. 12, 1861.



Witnesses

E. W. Scott

N. T. Smith.

Inventor

George H. Mitchell

UNITED STATES PATENT OFFICE.

GEO. A. MITCHELL, OF TURNER, MAINE.

TIP FOR BOOTS AND SHOES.

Specification of Letters Patent No. 31,673, dated March 12, 1861.

To all whom it may concern:

Be it known that I, GEORGE A. MITCHELL, of Turner, in the county of Androscoggin and State of Maine, have invented a new and useful slotted tip for the protection of the toe and upper parts of boots and shoes and a new article of manufacture consisting of a boot or shoe with these tips applied thereto; and I hereby declare that the following specification, in connection with the accompanying drawings and references thereon, constitutes a lucid, clear, and exact description of the construction and use of the same.

In referring to the said drawings, Figure 1 denotes a metal plate for forming into the tip. Fig. 2, a plan of the same after being shaped. Fig. 3, a section on line A, B, of Fig. 2. Fig. 4, a plan or top view of a shoe with my slotted tip applied thereto. Fig. 5, a side elevation of the same. Fig. 6, an end elevation of it. Fig. 7, a longitudinal and vertical section on lines C, D, Figs. 4 and 6.

Invention.—The nature of my invention consists in the construction of tips for preventing wear and destruction of the upper and toe portion of boots and shoes; these tips being slotted in their frontal part to prevent the accumulation and retention of water, dirt, snow, ice or any foreign matter between the tip and the leather, and in slotting the portion of the tip which is placed between the soles, to allow the tip to yield laterally to conjoin with the various thicknesses of leather used in constructing the boot or shoe, and in applying these tips to boots and shoes, which constitute them a new article of manufacture all as will be hereafter seen.

Construction.—To enable persons skilled in the art to which my invention appertains to construct and carry out the same, I will describe it as follows: I construct a die of cast iron or other material (not shown) with cavity formed therein of the shape of the toe of the boot or shoe, or of the tip to be applied thereto, and a follower of cast iron or other durable material (not shown) exactly of the shape of the cavity formed in the die less the thickness of the metal for the tip. I make use of sheet metal, gutta percha, india rubber, or any desired material of a ductile nature, which may be japanned, or blacked, or otherwise prepared, but prefer brass or copper by reason of its ductility and cheapness and in not being

liable to rust, and in thickness about No. 20 of the ordinary wire gage, or more or less, as may be required, and cut it into plates or pieces seen at A, Fig. 1, or of any desired proportion, and place them one at a time upon the die over the cavity, and then bring the follower or punch down upon it, by which it is instantly formed or struck up, of the required shape, as seen at B, Fig. 2, and at Figs. 4, 5, 6, and 7, by the force and movement of punch or follower, which compresses the plate or piece A into the die and of the desired form to conjoin with the shape of the toe of the shoe as seen at Figs. 4, 5, 6, and 7.

The striking up or forming of the tip adds greatly to its temper, hardness, and strength, and where they are desired to be highly ornamental silver, or silver plated copper, or brass or German silver may be used. After the tip has received its general form, the inner and upper portion seen at *n*, Fig. 3, is rounded off by a bur cutter or otherwise to prevent the edge which would be otherwise left from cutting the upper leather as will be readily understood. When I make use of horn, green hide, gutta percha, india rubber or any other material or substance for my slotted tips I adopt suitable means for their fabrication. I form a slot or opening through the frontal part of the tip seen at *a*, to prevent any accumulation or retention of water, dirt, snow, ice or any foreign matter between the tip and the leather, this slot allowing its free exit, if any matter should by any means get between the tip and the leather.

It is well known that the leather used in making shoes varies in thickness, and consequently the toe part of some shoes or boots will certainly be wider than others, owing to this variation of the thickness of the leather, and if the tip now patented by me be large enough to fit the toe of shoes made of thick leather, the same tips would be loose if placed upon shoe toes made of thin leather, and it is desirable to have the tip in all cases fit snugly to the toe of the shoe or boot, and to effect this purpose I cut or form a slot in that portion of the tip between the soles, seen at *e*. This slot allows the tip's ends seen at *c*, Figs. 2, 4 and 6, to be readily expanded or contracted to nicely conjoin with the toe of my boot or shoe by reason of the varying thickness of their upper leather; and when nailed to the shoe on, in or be-

tween the soles, or as seen in the drawing, they are equally as strong as though the slot *e*, were not formed therein.

5 The manner of fabrication or manufacture of my metallic tipped boot or shoe, or of applying my slotted tips to boots or shoes, which constitute them a new article of manufacture, when the tip is so applied, is as follows: The boot or shoe is "lasted",
10 a term used by shoemakers to indicate a boot or shoe when the inner sole *E*, is nailed upon a last, and the upper leather *C*, also placed thereon and sewed to the inner sole *E*. Then the outer sole *D*, is placed on over
15 the inner sole, and that portion of the upper leather *C*, which remains between the soles *E*, and *D*, and then pegged, nailed, or sewed as may be desired, to that portion of the shoe previously "lasted," excepting the toe,
20 sufficient of which is left for the convenient introduction of the portion *G*, of the tip *B*, between the outer and inner soles *E* and *D*, as seen in the drawings, while the outer and upper portion of the tip is made to
25 nicely conjoin in shape or form to the upper and outer or toe part of the shoe or boot, by means of the slot *e*, which allows the tip to

be readily expanded or contracted, to fit the toe. The tip is secured firmly to the shoe or boot by nails *i*, Fig. 7, driven through the 30 outer sole *D*, the tip *B*, the upper *C*, and then into and through the inner sole *E*, the points of the nails being clenched by striking against the iron toed last within, care being taken that these nails fit snugly into 35 each of the soles, the upper, and the tip, in order to firmly unite them all together and the tip to the shoe or boot, and my slotted tip when so applied, as just described, not only protects that part of the boot or shoe 40 which it covers, from wear, but it adds great strength and consequent durability to the entire boot or shoe.

Having thus described my invention, what I claim as my invention and desire to 45 secure by Letters Patent, is—

My within described boot and shoe tip, constructed, slotted, and applied, essentially in the manner and for the purposes fully set forth and described.

GEORGE A. MITCHELL.

Witnesses:

E. W. SCOTT,
N. S. SMITH.