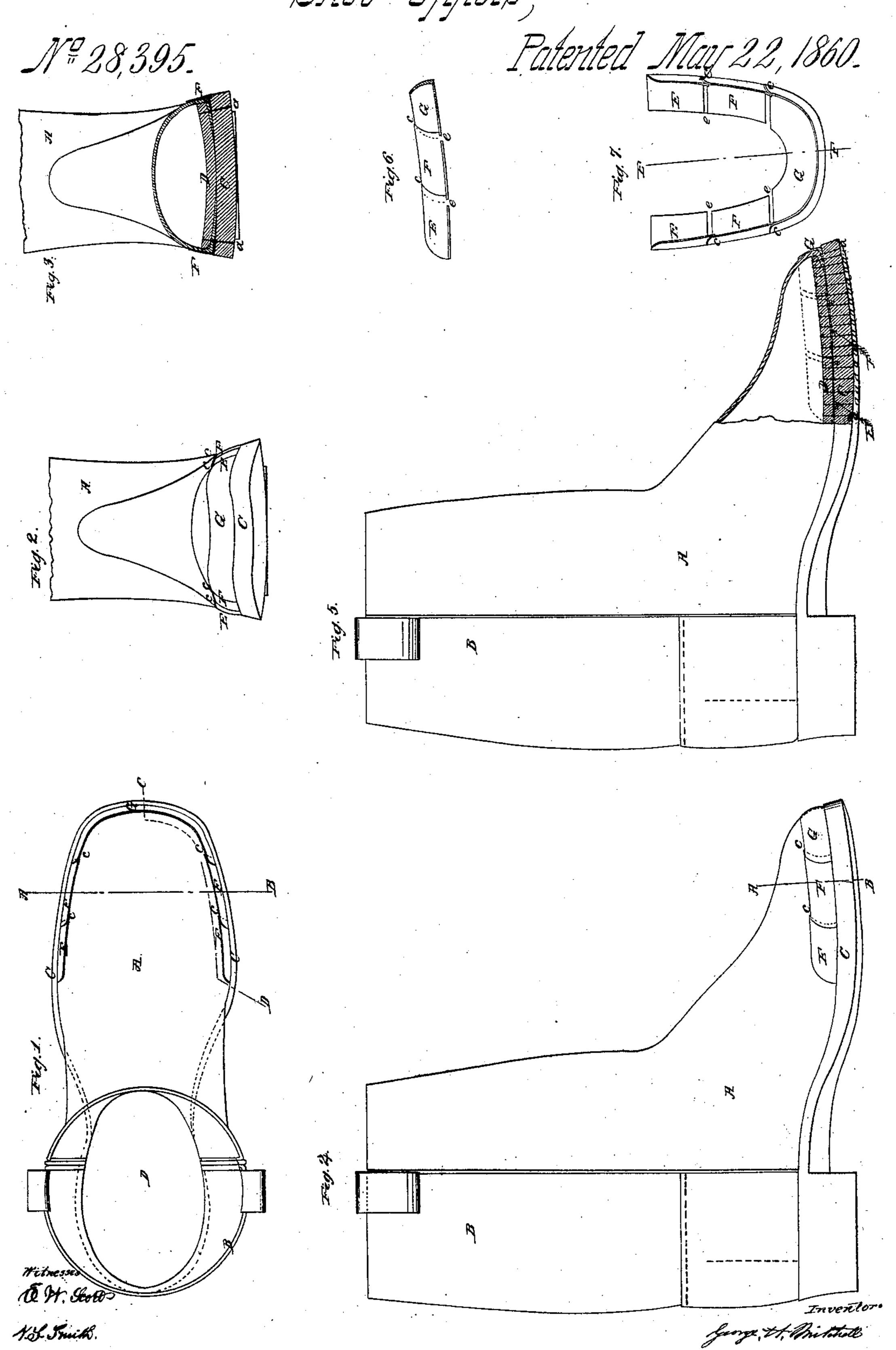
## G. A. Mitchell,

Stoe Muers,



## UNITED STATES PATENT OFFICE.

GEORGE A. MITCHELL, OF TURNER, MAINE.

JOINTED TIP FOR BOOTS AND SHOES.

Specification of Letters Patent No. 28,395, dated May 22, 1860.

To all whom it may concern:

Be it known that I, Geo. A. MITCHELL, of Turner, in the county of Androscoggin and State of Maine, have invented a new and useful Jointed Tip for Protecting the Toes and Uppers of Boots and Shoes; and I hereby declare that the following specification, in connection with the accompanying drawings and references thereon, constitute a lucid, clear, and exact description of the same.

In referring to the said drawings, Figure 1 denotes a plan or top view of a boot with my jointed tip attached thereto; Fig. 2, a front end view; Fig. 3, a section on line A, B, Figs. 1 and 4; Fig. 4, a side elevation; Fig. 5, a part side elevation and section on line C, D, of Fig. 1. Fig. 6 is a section of my jointed tip taken on line E, F, Fig. 7, and showing one half beyond. Fig. 7 is a plan of my jointed tip in position as applied to the boot or shoe, but disconnected therefrom.

25 consists in providing the upper and toe portion of boots and shoes with a tip, which is extended back the desired distance toward the heel, and made in sections, the ends or edges overlapping each other where it protects the upper, and not coming in contact where it is confined between the soles, in order to effectually protect the upper, and at the same time not render the soles rigid, or prevent their elasticity.

Construction.—To enable others 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 <sup>40</sup> cavity formed therein of the shape of the toe of the boot or shoe, or of the tip to be applied thereto seen at G, and a follower of cast iron, steel, or other desirable material (not shown) exactly of the shape of the cav-45 ity formed in the die less the thickness of the metal or material for the tip and so moved into the die as to form or strike up the tip. Dies and followers are constructed and operated in a similar manner to the above, but of the requisite shape to form or strike up the tips E, and F, as desired, the front ends of sides of tips F, projecting forward so as to be overlapped by side ends of tip G, but not fastened together, as seen at c, while the base of each, or that part of them which is secured between the soles are cut or formed

sufficiently short that they can not touch each other; but on the contrary leave the space e, Figs. 5, 6, and 7, between them. And the sides of rear tips E, in turn project 60 forward and are overlapped as seen at c, by the sides of F, and a similar space e, left between their bases, or parts between the soles. The protecting sides of the tips are made to overlap as just described and seen at c, for 65 the purpose of rendering a complete protection to the upper leather, or such part of the boot as is most liable to come in contact with the various obstructions including prairie grass. The base portions are cut short as 70 seen at e, Fig. 5, and at Figs. 6 and 7, so as not to impair the elasticity of the soles or any part of the boot, in the least. The projections sliding freely past each other, when the wearer of the boot or shoe is walking, 75 and allowing the soles to bend or give, in all positions as freely as though no tips were applied.

The several parts E, F, and G, when placed upon and secured to the boot or shoe 80 as seen in the drawing constitute my jointed tip, and may be secured on, into, or between the soles.

Various material or substance may be made use of for the tip, which may be 85 japanned or colored black or otherwise prepared such as copper, brass, German silver, iron or any other metal or alloy of metal, or material or composition of matter, ductile and susceptible of being set with a die, or 90 otherwise shaped or formed, so as to conform to the toe, and other desired part of the boat or shoe, the plate or material when cut, or set, or shaped, being either hot or cold, or any desired consistency. If metal be used 95 copper is preferable by reason of its ductility and cheapness and in not being liable to rust.

The several parts of my jointed tip being formed, the boot or shoe is then lasted, the upper being seen at A, and the boot leg at B, and before the outer sole C, is put on, they (the tips) are placed together thereon as seen in the drawings. Then the outer sole C, is placed thereon and nails seen at a. 105 Figs. 3 and 5 are driven through the outer sole C, tips E, F, and G, the upper A, and the inner sole D, the nail points being clenched by striking the iron toed last, and thus holding the soles C, and D, the upper A, and thus holding the soles C, and D, the upper A, and the tip E, F, and G firmly together: and my jointed tip when constructed and ap-

plied as just described, not only protects that part of the boot or shoe which it covers, from wear, but it adds material strength, and consequent durability to the entire boot 5 or shoe.

It is well known that the upper leather at the toes and sides of boots and shoes is the first to be worn out especially when worn in prairie grass. This natural and unavoid-10 able result arises from the greater contact which this portion of the upper part of the shoe or boot is liable to come when in use, and from this unavoidable and well known predominance of wear, the shoe or boot is 15 worn through or so as to require mending when they are otherwise less than half worn out. This is the case particularly with children's and youths' boots and shoes, and to those worn in the rude occupations, and 20 have to be consequently thrown aside when nearly all parts of them are good, and the object of my invention is to cheaply and ef-

fectually avoid the aforesaid serious defects by never allowing them to occur, as well as to impart an increased durability to the entire boot or shoe by giving the greatest strength to that part heretofore the weakest and soonest destroyed, and without impairing the elasticity of the soles, and to cause the boot or shoe to longer retain their elegance of form and new appearance, all as will be readily seen.

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

The construction and application of the within described tip, made jointed, or in sections, substantially in the manner and for the purposes fully set forth.

## GEORGE A. MITCHELL.

Witnesses:

E. W. Scott, N. S. Smith.