No. 21,334. PATENTED AUG. 31, 1858.

G. W. GRISWOLD.

METHOD OF STRETCHING BOOTS OR SHOES.

Fig. 2.

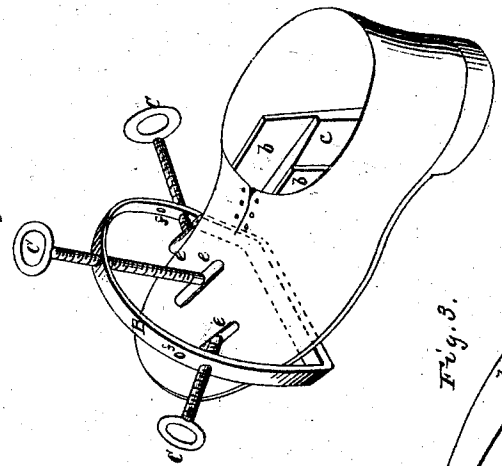


Fig. 3.

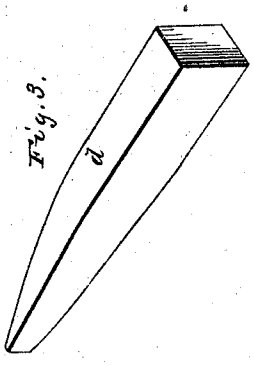
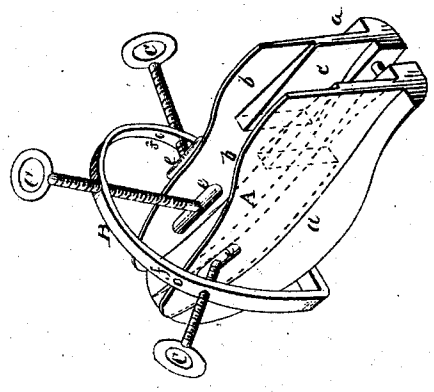


Fig. 1



UNITED STATES PATENT OFFICE.

GEORGE W. GRISWOLD, OF CARBONDALE, PENNSYLVANIA.

METHOD OF STRETCHING BOOTS AND SHOES.

Specification of Letters Patent No. 21,334, dated August 31, 1858.

To all whom it may concern:

Be it known that I, GEORGE W. GRISWOLD, of Carbondale, in the county of Luzerne and State of Pennsylvania, have invented a new and useful Improvement in the Manner of Stretching Boots and Shoes; and I do hereby declare the following to be a full, clear, and exact description of the construction of the apparatus and of its mode of operation, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1, represents a perspective view of the skeleton last, and stirrup iron removed from the shoe. Fig. 2, represents a perspective view of the shoe with the last, and stirrup iron in place for stretching, and Fig. 3, represents the wedge for spreading the last.

My invention consists in an apparatus by which boots or shoes, may be stretched from the outside, instead of the inside thereof, and by which also the boot or shoe, may be stretched in one part or place where it is needed, without stretching them in other parts or places where it is not needed or desired.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

A, represents a skeleton last, made in two sections *a*, *a*—said two sections being held together by dowels in the usual manner.

b, *b*, are ribs rising vertically from the respective sections *a*, *a*—their upper edges being made to represent the outline of the instep or top of the foot. The space *c* between these ribs *b*, *b*, is sufficient for the introduction of a wedge *d*, for spreading said sections after they are placed on the inside of the boot or shoe. A skeleton last so made may serve for several sizes of boots or shoes, and a less number of them will consequently be required.

After the last made as above described is inserted in the boot or shoe, the stirrup shaper iron B, is slipped over the shoe, to the place or part where it is desired to stretch it. The thumb screws C, C, C, are then run down so that their buttons *c*, *c*, *c*, shall press upon the leather. If it be desirable to stretch the boot or shoe clear across the instep, then the thumb screws are all run down with an equal force. If, however, it is to be stretched at one point or place without stretching at another, then the thumb screws are first uniformly run down which holds the leather over the ribs *b*, *b*, and prevents it from slipping to any extent thereon—the thumb-screw then that is over the part or place to be stretched is run down harder than the others—its button pressing down and thus stretching said part. The buttons are loose on the end of the thumb screws, so that they may be turned to better lie upon the place to be stretched. Pieces of leather may be placed under the buttons, or between the stirrup iron and the sole, for changing the points of pressure, or holes *f*, may be made in said iron for shifting the thumb screws in. Of course any other pressure applied between the ribs and outside of them will answer a similar purpose as that described, and I should claim such application as involved in my invention.

The object of the ribs *b*, *b*, is to cause elevations, with depressions between them, into which the leather may be forced by the screws C; and this may be effected by making elevations and depressions in a wooden last as well as in the iron one here represented, so that the leather may be pressed into the cavities so formed, from the outside of the shoe.

Having thus fully described the nature and object of my invention, what I claim is,

Stretching boots or shoes from the outside, and at any part or point without stretching other parts or points, by means of a skeleton last on the inside, and a pressing apparatus substantially such as that herein described on the outside of said shoe or boot.

G. W. GRISWOLD.

Witnesses:

LEWIS PUGHE,

BERNARD MCTIGHE.