(No Model.)

T. A. BRESNAHAN.

GAGE FOR SHOE SOLES.

No. 451,363. Patented Apr. 28, 1891.

Fig. 1.

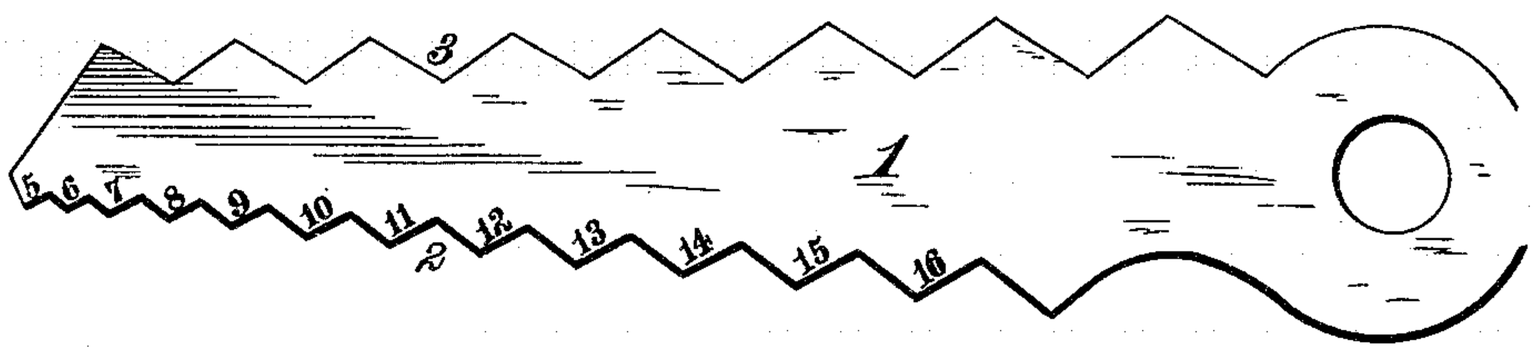
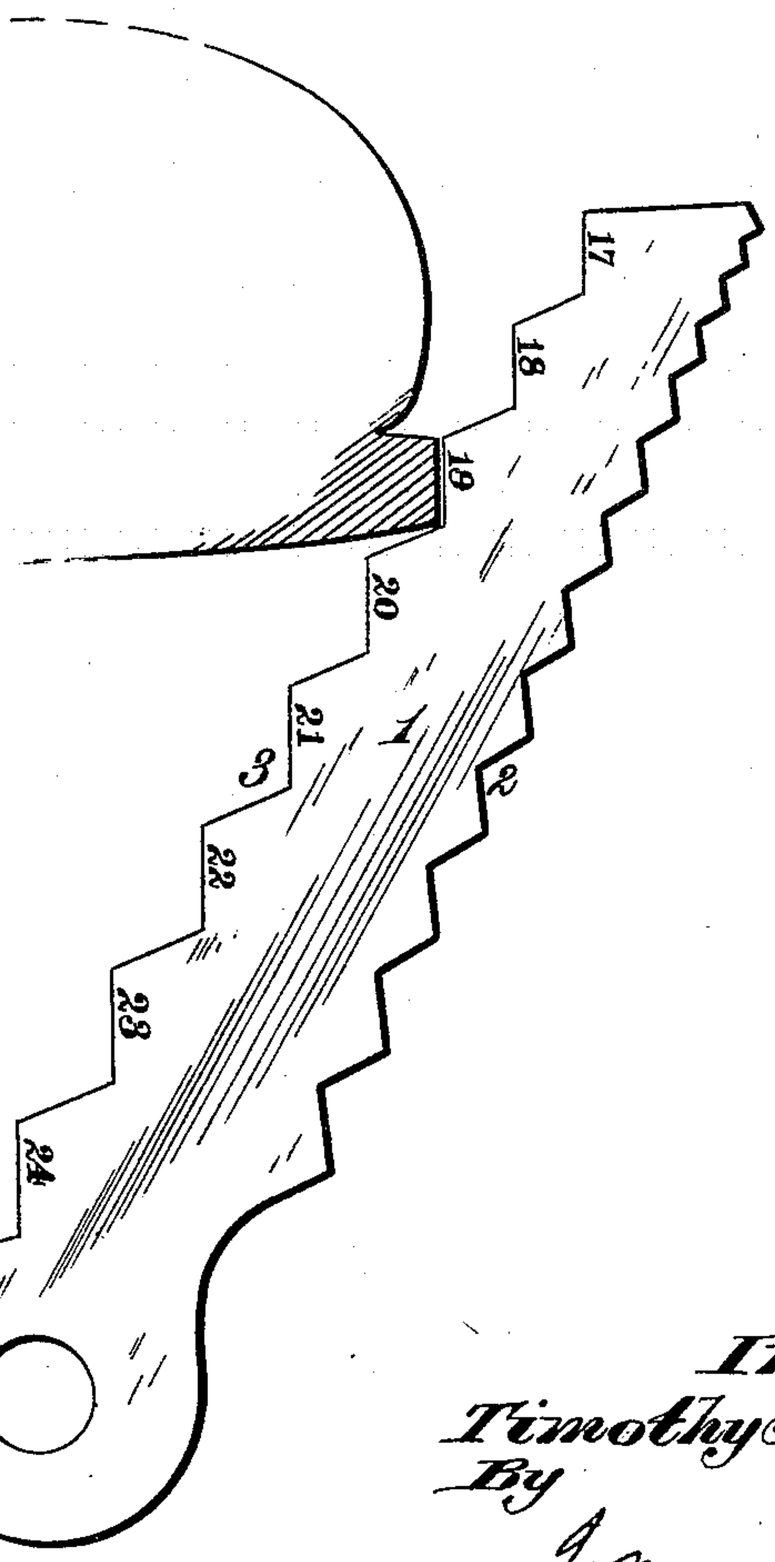


Fig. II



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UNITED STATES PATENT OFFICE.

TIMOTHY A. BRESNAHAN, OF BOSTON, MASSACHUSETTS.

GAGE FOR SHOE-SOLES.

SPECIFICATION forming part of Letters Patent No. 451,363, dated April 28, 1891.

Application filed October 21, 1890. Serial No. 368,840. (No model.)

To all whom it may concern:

Be it known that I, TIMOTHY A. BRESNAHAN, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Gages for Designating the Thickness of Soles of Manufactured Boots or Shoes, of which the following is a specification.

My invention relates to devices for ascertaining or determining the thickness of soles upon boots or shoes, and the purpose thereof is to provide what may be termed an "edge-gage," which shall correspond with substantial accuracy with the cutters or planes used in shoe-factories in finishing the edges of the soles.

It is the especial purpose of this invention to provide a simple and inexpensive device whereby retail dealers may be enabled to pick out or select stock of the thickness or size of the sole when finished which is particularly adapted to their trade, whereby in ordering stock from the wholesale dealer they need only specify the different grades by the numbers upon said device, which numbers correspond to the several degrees of thickness of the sole of the boot or shoe, as indicated by the standard measurement or gages of soles used in the factories.

My invention consists, to this end, in the novel article having the several features of construction hereinafter fully set forth, and then definitely pointed out in the claims following this specification.

To enable others to understand and use my said invention, I will proceed to describe the same in detail, reference being had to the accompanying drawings, in which—

Figure 1 is a face view of the gage-plate embodying my invention. Fig. 2 is a view showing the opposite side of the gage-plate and illustrating the method of using said gage-plate in determining the thickness of the sole.

Heretofore and prior to my invention gages have been made by which the soles could be measured when separated from the unfinished boot or shoe and before they have been applied thereto; but I am not aware of any instrument by which the gaging of the sole can be practically effected both before and after the shoe is finished, whereby the retail dealer may order the exact quality of stock from the wholesalers best adapted to his trade. Heretofore, also, gages have been made consisting of a flat plate or rule having a series of open rectangular notches of various width, but the sizes measured thereby did not correspond with those produced by the cutters or planes, and the application of this gage to the edge of the sole after the latter was applied to the shoe would be impracticable, for the reason that the upper would interfere with the necessary adjustment, and for the further reason that a beveled sole cannot under any circumstances be properly, conveniently, or accurately measured. To avoid these objections and to place in the hands of all retail dealers a simple, inexpensive, and accurate gage whereby the purposes desired may be accomplished, I provide a gage composed of a flat plate 1, formed of metal, papier-maché, hard rubber, zylonite, or other pyroxiline compound, or even heavy card-board, said plate being of any desired width and of such length as to receive upon its edges the gaging serrations hereinafter described. Upon the opposite edges of said plate, which may be parallel or converging, are formed two series of serrations, (designated by the numerals 2 and 3,) the former beginning at one end of the plate and proceeding toward the other end, the serrations increasing in depth by a regular gradation toward the opposite end of the gage-plate, and being each numbered or designated by a character corresponding with or denoting the size or thickness of the sole produced by the corresponding size of edge-trimmer used in the factory. Upon the opposite side of said plate is formed a further series of similarly-shaped serrations having a regulated increase in depth and cut at the same angle with those already described, each being distinguished by a separate number or character, like those already described, the designating-numbers running from 5 to 24, inclusive. The serrations described are all formed upon the same angle, but of successively-increasing depth. This angle of for-

mation is somewhat greater than ninety degrees, and the method of ascertaining the measurement of the sole is clearly shown in Fig. 2, wherein the possibility of measuring the thickness of soles of all kinds is readily apparent.

In those cases where a dealer finds that his customers prefer shoes having a heavier or lighter sole, he will order such stock as he requires, designating the same by the numerals upon the serrations of the gage. As all shoe-factories use the standard measurement of thickness or gage of the soles indicated by the numerals upon the gage-plate, the order cannot be mistaken by the wholesaler. The serrations of the gage-plate increase from the smallest to the largest by a ratio of one forty-eighth of an inch, and are each formed in the manner shown—to wit, by cuts of increasing depth, as described, formed at an angle with the longitudinal line of the plate, whereby the opposite edges of each serration meet at a point. By this construction, as shown in Fig. 2, the edge of one serration may be laid against the bottom of the sole and the adjacent edge of the next serration applied to the edge thereof, the gage being shifted until the exact measurement is obtained.

By this invention I provide a sole-edge gage by which the size or thickness of the sole may be readily and accurately ascertained either before or after said sole is applied to the shoe or boot.

What I claim is—

1. A gage-plate for retail boot and shoe dealers, consisting of a flat plate having upon its edges one or more series of serrations having an increasing depth, each being designated by a numeral corresponding with that denoting the edge-trimmer forming said sole, substantially as described.

2. A gage-plate for retail boot and shoe dealers, consisting of a flat metallic plate or strip having upon the edges serrations which increase in depth and width throughout the entire series, said serrations being each designated by a numeral or character corresponding with the standard gage of soles used in the factories, the said serrations having edges formed at an angle with the longitudinal line of the plate and meeting in points, substantially as described.

In testimony whereof I have affixed my signature in presence of two witnesses.

TIMOTHY A. BRESNAHAN.

Witnesses:

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