(No Model.)

W. B. KINSLEY.

GORE MARKER.

No. 481,305. Patented Aug. 23, 1892.

Fig: 1.

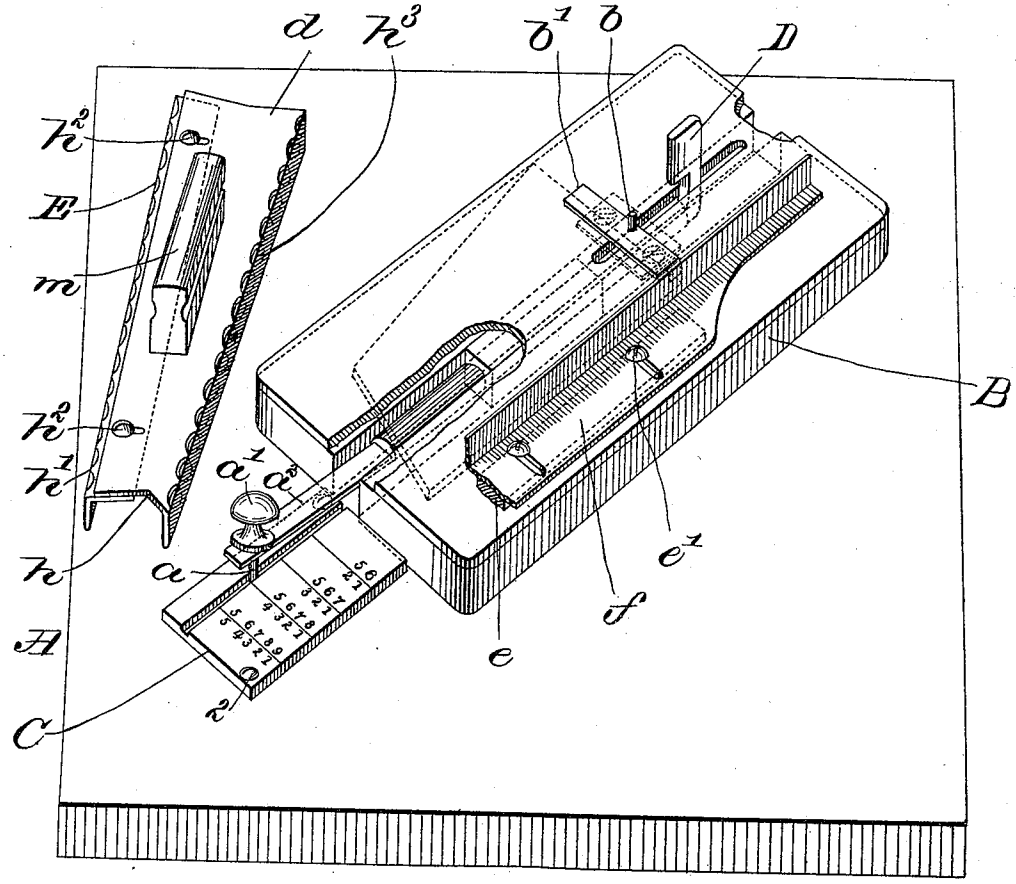

Fig: 3.

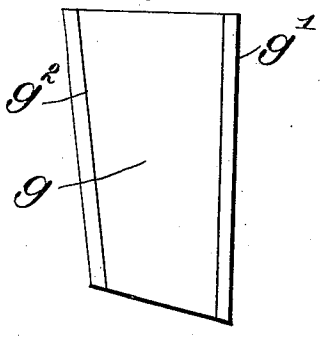

Fig: 2.

Witnesses.
Fred N. Ashworth.
Edward F. Allen.

Inventor:
William B. Kinsley,
by Crosby & Gregory Attys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM B. KINSLEY, OF MELROSE, MASSACHUSETTS.

GORE-MARKER.

SPECIFICATION forming part of Letters Patent No. 481,305, dated August 23, 1892.

Application filed February 15, 1892. Serial No. 421,568. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM B. KINSLEY, of Melrose, county of Middlesex, State of Massachusetts, have invented an Improvement in Gore-Markers, of which the following description, in connection with the accompanying drawings, is a specification, like letters and figures on the drawings representing like parts.

In the manufacture of boots and shoes wherein goring is employed it is customary to stitch the cut edges of the goring to what is called the "edges" of the top of the shoe, the goring projecting about three-eighths of an inch beyond the edge of the material (leather or other material) of which the top of the shoe is composed, and usually for the best grades of work the material of the top is laid with its face against the goring, when the material and goring are stitched together, and thereafter the material is turned over to conceal not only the line of stitches, but also the cut edge of the goring and also the edge of the material used in the top.

Manufacturers have ascertained by experience that three-eighths of an inch is amply sufficient for the goring to extend beyond the line of stitching, or that the line of stitching uniting the top to the goring should be about three-eighths of an inch from the cut edges of the goring.

In most factories the stitchers are told to preserve this three-eighths-inch margin; but owing to carelessness it generally happens that the margin is left wider, and the margin varies materially in successive shoes, and hardly ever is the line of stitching perfectly parallel to the cut edge, so that shoes of the same size and width present different widths about the top, in which the goring is inserted.

Manufacturers especially desire, and it is a great desiratum, to have the tops of shoes of the same length and width exactly uniform and of like size for any number of pairs, and they also aim to use a uniform margin. The stitchers when judgment and the eye alone are depended upon fail to do the stitching at the same distance from the cut edge of the goring in successive shoes, and this is especially apt to be the case because the goring containing india-rubber "crawls" under pressure and during the stitching operation. To overcome this trouble and enable uniformity of fit in gored shoes, especially in their gored parts, and at the same time economize the time of the stitcher, I have devised an apparatus, which I shall herein describe, by which it is possible to mark the gore-pieces quickly and unerringly at any desired distance from the cut edges thereof, and this no matter what the length of the goring, for my apparatus has been provided with a size-gage by which to adapt the apparatus to gores of different lengths, adapted for use in shoes of different length and width; and, further, inasmuch as the cutter who cuts the gore from the web frequently cuts several layers of web while superimposed and frequently by carelessness fails to cut the gores just alike, I have provided means whereby notwithstanding the cut edge is not perfectly straight, yet the gore will be marked properly, so as to afford the proper width of space between the rows of stitching up and down the sides of the gore. To do this, I have provided an end stop for the upper edge of the gore and have swiveled the edge-top, so that it may tip or turn and adapt itself to the top edge of the gore and let the cut edge come properly under the gage, against which the marking device rests when performing its work.

Figure 1, in perspective, shows an apparatus embodying my invention. Fig. 2 is a section in the line *x*, Fig. 1, of the marking device; and Fig. 3 shows a gore as it will be marked in accordance with my invention.

Referring to the drawings, A represents a bottom or base board, on which in this present instance of my invention I have secured a bed-plate B and a size-gage C. The size-gage, which preferably will be composed of a metallic plate held in place by a suitable set-screw 2, is provided with a suitable scale having suitable figures arranged in suitable manner to indicate sizes and widths.

In the drawings the numbers above the transverse lines marked on the size-gage represent the size of the shoe and the numbers below the width of the shoe.

The scale or index or some suitable part of the apparatus has a suitable hole or notch to be entered or engaged by a suitable locking device, herein shown as a pin *a*, having a head *a'*, the said pin being extended through one end of a rod a^2, provided at or near its oppo-

site end with a sliding gage, as D, against which may contact the end *d* of the marking-gage E, to be described, the said marking-gage being represented in Fig. 1 as set off from the supporting-bed and upon the base-plate. The gage D will, it will be obvious, occupy different positions, according to the length of the shoe to be made.

Near the gage D, which is extended upwardly above the bed-plate B, I have mounted upon a pin *b* a top-edge gage *b'*, the said top-edge gage being free to swivel or tip upon the said pin to thereby adapt itself to the top edge of the gore and yet let the cut edge of the gore come against the edge-gage *e*, which is fastened upon the bed-plate B in suitable manner, as herein shown, by screws *e'*, said screws passing through slots in a size-gage *f*, against which is placed one side of the marking-gage E when the latter is pressed down upon the gore *g*. (Shown separately in Fig. 1.)

In practice the gage *f* will project over the edge of the gage *e* for substantially three-eighths of an inch or for the distance it is desired that the marks *g'* shall be distant from the gage-edge of the gore.

The marking-gage is composed of two pieces *h h'*, suitably connected by screws h^2, passing through slots in one part and being screwed into the other part or into a nut below it. The two parts *h h'* are flanged, and the flanges are notched or cut away, as at h^3, (see Figs. 1 and 2,) and about these flanges, which form feet for the marker, are laid pieces of cloth or other suitable material, as h^4, the inner faces of the folded cloth being glued together through the said notches or spaces; but it is not intended to limit this invention to the particular plan shown for securing the fibrous material h^4 upon the marker.

The person using the apparatus will have a suitable bed of chalk or other equivalent material, upon which the marker will be set or rubbed, so as to take chalk or other material and apply it in lines upon the goring. When a piece of goring is to be marked, the said goring will be laid upon the bed-plate with its right-hand edge against the face of the gage *e*, with its top edge against the top-edge gage *b'*, the latter by its swiveling action adapting itself to a gore for a right or left hand shoe, and this done the operator will engage the marker by its handle *m* and place the right-hand edge of the marker against the gage *f* and press the marker down upon the gore, making two marks, as *g' g²*, upon the gore at exactly the proper distance therefrom. By reason of the screws h^2 the marker may be made to taper more or less in the direction of its length, according to the taper of the goring to be marked.

It is obvious that instead of the middle plate C the numbers indicating sizes and widths may be made directly upon the board A or be suitably connected with the bed-plate B.

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

1. In apparatus for marking gores, a bed-plate having a fixed gage thereon for one edge of the gore and a swiveled gage for one end of the gore, combined with a superimposed adjustable gage parallel to said fixed gage for one side of a removable marker and a sliding gage movable longitudinally with relation to the fixed gage to position the marker longitudinally with relation to the length of the gore, substantially as described.

2. In an apparatus for marking gores, a bed-plate having a sliding gage to position one end of a removable marker with relation to the length of the gore, a scale indicating sizes to co-operate with said sliding gage, and a gage for one end of the gore, combined with a removable marker, a gage on the bed-plate for one side of the gore, and a superimposed adjustable gage for one side of the marker, to operate substantially as described.

3. In an apparatus for marking gores, a swiveling gage for one end of the gore-piece, a movable rod to which it is pivoted, a scale indicating sizes to co-operate therewith, and a locking device to hold said rod in fixed position, combined with a fixed side gage for one edge of the gore-piece, substantially as described.

4. In an apparatus for marking gores, a marker having two downturned marking or impression flanges arranged at an inclination one to the other, said flanges being made adjustable one from the other, substantially as described.

5. In an apparatus for marking gores, a marker composed of flanged plates having their flanges covered each with an independent fibrous body adapted to retain chalk or equivalent and adjustable connections for said plates, substantially as described.

6. In an apparatus for marking gores, a marker composed of a flanged body cut away at intervals or provided with holes, combined with a fibrous covering applied to the flanged and perforated portion of the marker and connected through the said perforations, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM B. KINSLEY.

Witnesses:
GEO. W. GREGORY,
EMMA J. BENNETT.