

(No Model.)

W. GORDON.
TURNED SHOE.

No. 523,634.

Patented July 24, 1894.

FIG. 1.

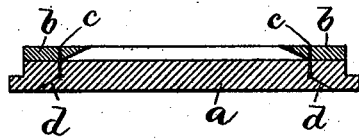


FIG. 2.

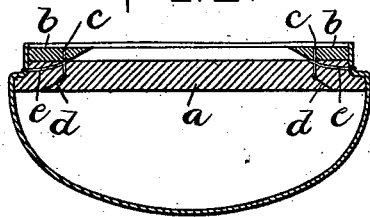


FIG. 3.

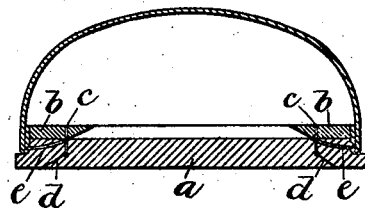


FIG. 4.

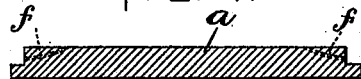


FIG. 5.

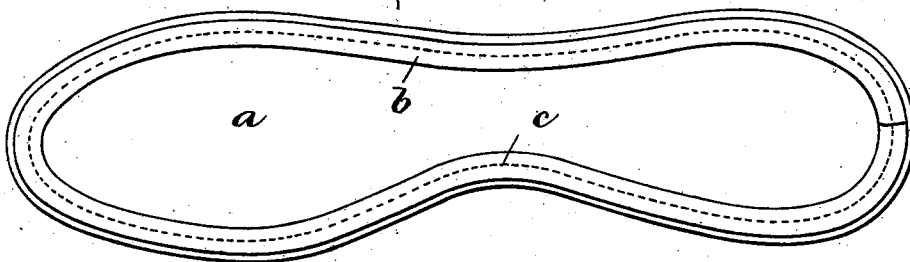


FIG. 6.



WITNESSES:

A. D. Harrison

H. A. Hall.

INVENTOR:

W. Gordon

by Wright & Brown
Attys.

UNITED STATES PATENT OFFICE.

WILLIAM GORDON, OF BOSTON, MASSACHUSETTS.

TURNED SHOE.

SPECIFICATION forming part of Letters Patent No. 523,634, dated July 24, 1894.

Application filed September 19, 1893. Serial No. 485,799. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM GORDON, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Turned Shoes, of which the following is a specification.

This invention relates to shoes in which the upper and sole are sewed together inside-out and are afterward turned.

Heretofore, the stitches that connect the upper and sole of a turned shoe have been formed in a deep channel cut in the inner surface of the sole, the stitches extending from the bottom of said channel through the material of the sole to the edge thereof, said material being known as the "between-substance." The formation of the channel in the inner-sole greatly weakens the latter, and shortens the term of usefulness of the shoe, because, when the sole is worn partially through, the channel comes to the wearing surface of the sole, thus practically destroying the shoe.

My invention has for its object to do away with the channel in the inner surface of the sole, and to utilize the inner surface of the sole as a part of the between-substance, the stitches starting from the surface of the sole instead of from the bottom of a channel formed in said surface.

My invention consists in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings, forming part of this specification: Figure 1 represents a transverse section of a turned shoe sole constructed in accordance with my invention. Fig. 2 represents a transverse section, showing the upper and sole of a turned shoe as first secured together, before the turning operation. Fig. 3 represents a similar view, after the turning operation. Fig. 4 represents a sectional view, showing the sole without the hereinafter-described strip, which forms an essential part of my invention. Fig. 5 represents a plan view of the sole. Fig. 6 represents a sectional view, showing the sole of a turned shoe, as ordinarily made.

The same letters of reference indicate the same parts in all the figures.

In carrying out my invention, I take a sole *a*, and attach to the inner surface thereof a

strip *b*, of leather or other suitably strong material, said strip extending around the edge of the shank and fore-part of the sole, and being attached thereto in any suitable way, preferably by stitches *c* extending through the strip and into a channel *d* formed in the outer surface of the sole, said stitches being made at such distance from the inner edge of the strip that said inner edge is free, and the inner portion of the strip constitutes a channel-flap, or one side of a channel, the other side of which is the inner surface of the sole.

In attaching the upper to the sole, the edge of the upper is laid against the edge of the sole, as shown in Fig. 2, and secured by stitches *e*, made by any of the well-known forms of sewing machine or otherwise, the stitches passing from the channel formed by the inner surface of the sole and the strip *b*, through the between-substance, to the edge of the sole, and through the upper, the inner portions of the stitches lying upon the inner surface of the sole, and being engaged with the stitches *c* that secure the strip *b* to the sole.

It will be seen that the formation of a channel in the body of the sole for the reception of the stitches *e* is entirely avoided, and that the entire substance of the sole between the edge and the inner surface of the sole, at the point where the strip *b* is attached thereto, is utilized as the between-substance. The shoe is therefore much more durable than an ordinary turned shoe, the inner surface of sole of which is channeled for the reception of the stitches.

Fig. 4 shows by dotted lines *f* the course of the stitches *e* through the sole, and indicates the extent to which the material of the sole next the inner surface thereof is utilized as the between-substance.

Fig. 6 shows a sole of ordinary construction, having a channel, said figure indicating by the dotted lines *g* the course of the stitches from the channel to the edge of the sole.

By comparison of Figs. 4 and 6, it will be seen that the stitches are necessarily much nearer the tread or wearing surface of the sole in the old construction than in my improved construction.

The most important function of the strip *b* is that of a guide to the needle that forms the stitches *e*. Without said strip, it would not

be feasible to locate the stitches as shown in Figs. 2, 3 and 4, because there would be no guide to cause the needle to penetrate the inner surface of the sole at the proper point; hence, while the stitches *c* that attach the strip *b* to the sole are useful in partially sustaining the pull of the upper on the stitches *e*, they are not depended on for this purpose, since the stitches *e* pass through a sufficient extent of between-substance next the inner surface of the sole to insure the secure connection of the upper to the sole, even though the stitches *c* were broken or severed, as by the wearing away of the face of the sole into the channel *d*. I do not, therefore, limit myself to the attachment of the strip *b* to the sole by stitches, and may secure the same by any other suitable means, such as by cement or nails, care being taken in either case to leave the inner portion of the strip free to serve as a channel-flap.

I claim—

1. A turned shoe, comprising a sole having a strip attached to its inner surface, a portion of said strip forming one side of a channel the

other side of which is the inner surface of the sole, and an upper attached to the sole by stitches extending from said channel to the edge of the sole through the intermediate substance of the sole, as set forth. 30

2. A turned shoe, comprising a sole having a strip lying on its inner surface and attached to the sole by stitches passing through said strip into a channel in the outer surface of the sole, the inner portion of said strip serving as one side of a channel, and an upper secured to the sole by stitches passing from the inner surface of the sole through the between-substance and the upper, the last-mentioned stitches being engaged with the stitches that secure the strip to the sole, as set forth. 35 40

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 16th day of September, A. D. 1893.

WILLIAM GORDON.

Witnesses:

C. F. BROWN,

A. D. HARRISON.