

G. McKay & L. R. Blake.

Turned Shoe.

N<sup>o</sup> 47770.

Patented May 16. 1865

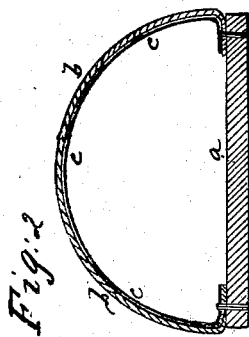
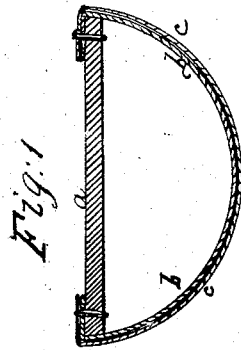
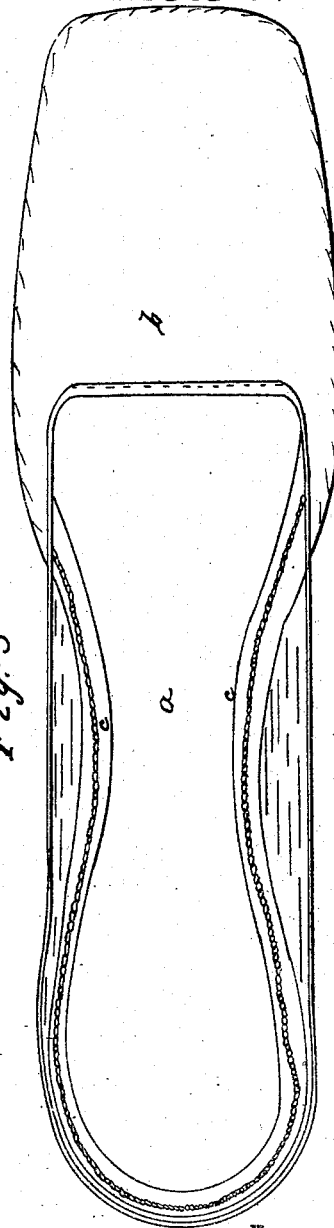


Fig. 3



Witnesses

F. Gould  
S. W. Huddell

Inventor

Gordon M. Kay  
Lyman R. Blake

# UNITED STATES PATENT OFFICE.

GORDON McKAY, OF BOSTON, AND LYMAN R. BLAKE, OF QUINCY, ASSIGN-  
ORS TO GORDON McKAY, OF BOSTON, MASSACHUSETTS.

## IMPROVED TURN-SHOE.

Specification forming part of Letters Patent No. 47,770, dated May 16, 1865.

### *To all whom it may concern:*

Be it known that we, GORDON McKAY, of Boston, Suffolk county, State of Massachusetts, and LYMAN R. BLAKE, of Quincy, Norfolk county, and State aforesaid, have invented an Improved "Turn;" and we do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of our invention sufficient to enable those skilled in the art to practice it.

In the Patent No. 29,562, granted August 14, 1860, to Lyman R. Blake herein named, a new article of manufacture is described, the same being a boot or shoe in which the vamp is united to the bottom by means of chain-stitches which pass through the parts united, leaving the chain on the outside of the sole or in a groove formed from or in the outer surface of the sole, the parts being sewed together in the position which they maintain when the boot or shoe is put into the market for sale and use—that is to say, the boot or shoe is not made a turn—*i. e.*, is not made up inside out and then turned after sewing. Such patented articles are generally made up with an inner sole, to which the vamp is confined in the process of lasting, which sole contributes to the substance of the whole sole, and to the durability of the manufactured article. It may be possible as a feat to dispense with the inner sole and yet sew the boot or shoe, as described in said Patent No. 29,562; but the skill and labor involved in this would cost more than the stock of the inner sole, which can be made of pasteboard, cheap leather, or other material of small worth. It is, however, a desideratum to produce a cheap and light article of boots and shoes, made as turns, without an inner sole and sewed by mechanism, so that in the finished article the chain of the stitches uniting the sole and vamp comes upon the inside of the shoe.

Our invention consists in a boot or shoe, as a new article of manufacture, which embodies the construction described in a general way in the preceding paragraph. It is subordinate to the invention patented to Lyman R. Blake, as aforesaid, and is useful in that by dispensing with an inner sole a second quality of goods adapted for light use as slippers and for women's wear can be produced by mechan-

ism more cheaply than goods of a similar grade have heretofore been produced by hand-sewing.

We are aware that machine-sewed shoes have been made as turns with chain-stitches, but these did not pass through the sole from one side to the other, but were arranged with respect to the vamp and sole, as are the stitches made by hand in the ordinary production of turns.

Of the drawings, Figure 1 shows a cross-section taken through the toe portion of a shoe, the material of the shoe being arranged inside out, that surface of the sole which will be outermost on the shoe when turned being innermost in this figure. The sole is represented by *a*, the vamp by *b*, and the lining *c*, which may or may not be used, by a red line.

Fig. 2 represents in cross-section, taken in the same place with Fig. 1, the shoe, when turned, subsequent to being sewed. It will be seen that the red line, representing the lining *c*, is innermost instead of outermost, as in Fig. 1.

Fig. 3 shows in plan a shoe as finished, exhibiting the chain of the stitches on the inside of the shoe.

The sewing of the vamp and sole together is accomplished on the machine patented to Lyman R. Blake aforesaid, July 6, 1858, as improved by Gordon McKay aforesaid, and Robert H. Mathies, as described in the Patent No. 36,163, granted August 12, 1862.

To prepare the materials for being united by sewing so as to form a boot or shoe of the kind described, the sole is temporarily secured to the bottom of a suitable last, the face or grain side of the leather being placed against the last. Then the last is placed in the vamp, which is turned wrong side out, so that the finished surface of the vamp comes against the surface of the last, and the vamp and lining, if any, is drawn closely over the last over the edge of the sole, and is secured to the surface thereof by pegs, nails, or stitches at intervals, or by cement. The fastenings, which temporarily secured the sole to the last, are then withdrawn, and the last is drawn out of the vamp, leaving this and the sole slightly secured together, when they are sewed all around the entire sole on the Blake or the McKay and Mathies machine, the chain of the

seam appearing on the lining of the vamp, or on the rough or unfinished surface of the vamp, if no lining is used. When the sewing is completed, the shoe is turned and finished in the way common with hand-sewed turns.

In many cases it is desirable to keep the stitches from appearing on the finished outer surface of the sole, and they are hidden in a groove or under a flap, so that, exactly speaking, perhaps the stitches do not pass entirely through the sole, still they do so pass substantially, and with this explanation the meaning herein of the expression "entirely through the sole" will be evident.

We claim—

As a new article of manufacture, a boot or shoe made as a turn, with the vamp and sole united with chain-stitches passing entirely through the material, both of the vamp and sole, and with the chain of the stitches upon the inside of the article when in its finished state.

Executed by us this 26th day of January, A. D. 1864.

GORDON MCKAY.  
LYMAN R. BLAKE.

Witnesses:

F. GOULD,  
S. B. KIDDER.