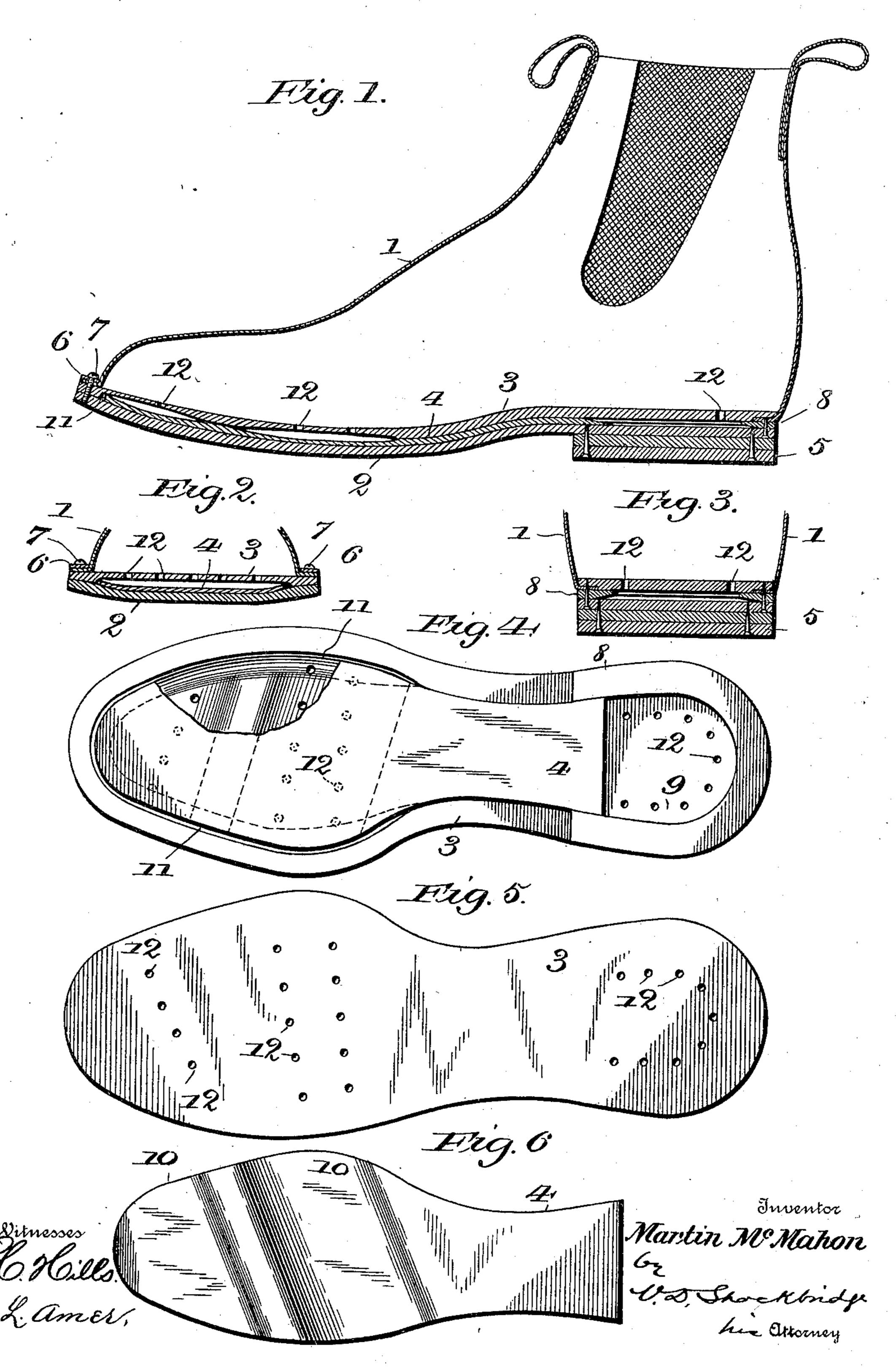
## M. McMAHON. BOOT OR SHOE.

(Application filed Nov. 4, 1897.)

(No Model.)



## United States Patent Office.

## MARTIN MCMAHON, OF MILFORD, MASSACHUSETTS.

## BOOT OR SHOE.

SPECIFICATION forming part of Letters Patent No. 628,836, dated July 11, 1899.

Application filed November 4, 1897., Serial No. 657,398. (No model.)

To all whom it may concern:

Be it known that I, MARTIN MCMAHON, a citizen of the United States, residing at Milford, in the county of Worcester and State of 5 Massachusetts, have invented certain new and useful Improvements in Boots or Shoes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in 10 the art to which it appertains to make and use the same.

This invention relates to boots and shoes, the object in view being to provide a durable construction of shoe which is especially adapt-15 ed for use by soldiers, miners, quarrymen, and others who subject boots and shoes to

hard usage.

In addition to increasing the life of the boot or shoe it is also the object of the invention 20 to provide the shoe with an elastic or cushioned sole and heel, thereby to a material extent relieving the pressure and jar upon the sole of the foot and making the boot or shoe more agreeable in use. The detailed objects 25 and advantages of the invention will appear more fully in the course of the subjoined description.

The invention consists in certain novel features and details of construction, as herein-30 after fully described, illustrated in the draw-

ings, and incorporated in the claim.

In the accompanying drawings, Figure 1 is a longitudinal section through a shoe constructed in accordance with this invention. 35 Fig. 2 is a transverse section through the ball portion of the sole. Fig. 3 is a similar section taken through the heel. Fig. 4 is a bottom plan view with the sole removed. Fig. 5 is a plan view of the insole. Fig. 6 is a top 40 plan view of the center piece or shank.

Similar numerals of reference represent cor-

responding parts in all the views.

Referring to the drawings, 1 designates the upper of the improved shoe; 2, the sole there-45 of; 3, the insole; 4, the center piece or shank, and 5 the heel.

In carrying out the present invention the sole and insole are made of greater width than the lower portion of the upper or vamp, 50 so as to form what is known as an "extension-sole." The upper or vamp is laid upon the insole, and the edge of the upper is then

turned outward until it meets with the edge of the insole. A welt 6, of leather, is then laid over the edge of the upper, said welt ex- 55 tending entirely around the foot portion proper of the shoe and being secured by means of round-headed screws 7, the shanks of which pass first through the welt 6 and then through the insole and finally through the lower or 60 main sole, the ends of the screws being filed off flush with the lower surface of the sole. By this means all projecting nails and threads are dispensed with and the shoe rendered more agreeable and comfortable in use. At 65 the same time the durability of the shoe is

greatly increased.

In order to provide for the proper cushioning of the heel, a piece of leather (indicated at 8) is employed, the same approximating in 70 its outline the shape of the heel and being cut away at its center to leave an open space 9. The strip 8 is also skived to give it a bevel, as shown in the sectional views, and is secured outside of or beneath the inwardly- 75 projecting edges of the upper when the latter is tucked beneath the heel portion of the insole. The strip 8 may be temporarily secured in place by one or more brads preparatory to the application of the main sole and heel 85 thereto. When the heel is secured in place, the fasteners which secure it are made sufficiently long to pass through the strip 8 to the interior of the shoe, where they are clenched in the usual manner.

Located beneath the insole is the center piece or shank above referred to, and for the purpose of cushioning the ball portion of the shoe the said center piece or shank is skived or cut away on its upper surface, as indicated 9° at 10, and the lower surface of the insole is correspondingly skived, so as to leave a surrounding bead 11 and form an air-space between the insole and shank. The insole is provided with a series of perforations 12, so 95 that in walking or running the air contained between the insole and shank may escape into the interior of the shoe, thus adding to the proper ventilation of the shoe and increasing its hygienic properties. The sole of course 100 extends beneath the center piece or shank, and its edge is coincident with the edge of the insole or projects slightly beyond the same, and said sole is secured by means of the screws

7 above referred to, which pass through the

strip 8 and the insole.

The end of the center piece or shank under the heel is beveled to permit the insole to yield 5 to the pressure of the heel. The said center piece thus serves to assist in cushioning the heel and acts as a shank and filling and together with the insole, as set forth, cushions the ball.

From the foregoing description it will be seen that an extremely durable and at the same time comfortable shoe is provided. The improvements are not limited in their scope to shoes of any particular kind, but may be 15 employed in connection with boots and shoes in general. It will also be understood that the shoe or boothereinbefore described is susceptible of changes in the form, proportion, and minor details of construction, which may 20 be accordingly resorted to without departing

advantages of the invention. The object of skiving or cutting away both

from the principles or sacrificing any of the

the shank-piece and the insole is to provide the greatest possible space or chamber be- 25 tween said parts, while at the same time preserving the continuity of said parts.

Having thus described the invention, what

is claimed as new is—

In a boot or shoe, the combination with the 30 sole and insole thereof, the latter having a portion of its under surface skived and provided with perforations extending through the skived portion, of a continuous and imperforate shank between the sole and insole con- 35 forming in size and shape thereto and having a portion of its upper surface skived, the spaces formed by skiving the shank and insole coming opposite each other and providing a cushioning and ventilating space.

In testimony whereof I affix my signature

in presence of two witnesses.

MARTIN MCMAHON.

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Witnesses:

JOHN MCENARY, WILLIAM C. NEWMAN.