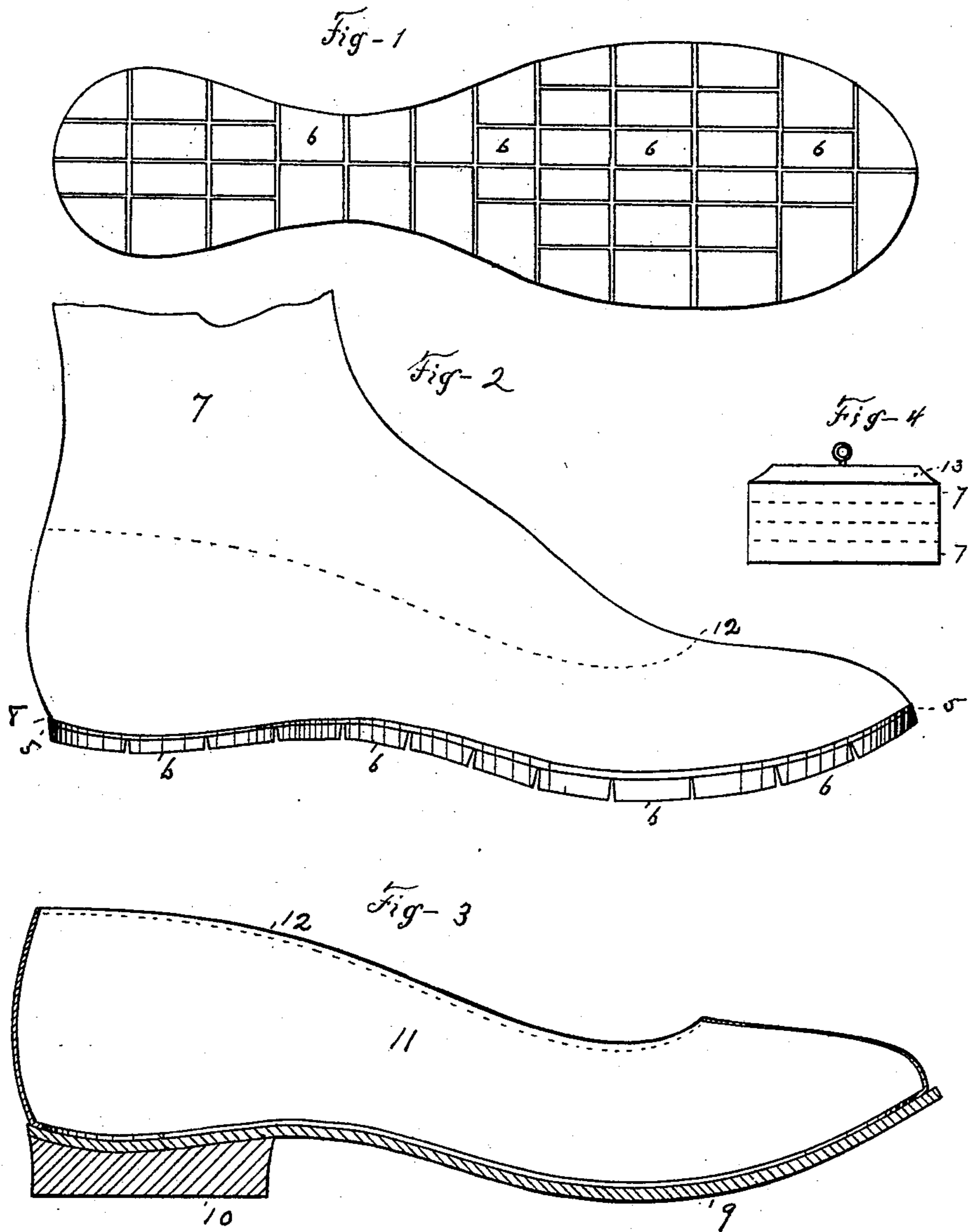


(No Model.)

W. HALL.
SHOE.

No. 500,385.

Patented June 27, 1893..



WITNESSES:

Albert Baker
George H. Tommee

William Hall INVENTOR

BY
H. C. Hartman ATTORNEY

UNITED STATES PATENT OFFICE.

WILLIAM HALL, OF FORT WAYNE, INDIANA.

SHOE.

SPECIFICATION forming part of Letters Patent No. 500,385, dated June 27, 1893.

Application filed January 23, 1893. Serial No. 459,377. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HALL, a citizen of the United States, residing at the city of Fort Wayne, in the county of Allen, in the State of Indiana, have invented certain new and useful Improvements in Boots or Shoes; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in boots or shoes. Its objects are to provide, first an improved spring sole to relieve the jar on the feet, and second an improved boot or shoe which will still better provide for the movement or elasticity of a spring sole; other objects and advantages will hereinafter appear. And the invention consists in the construction and novel combination of parts pointed out in the appended claims and illustrated in the accompanying drawings, in which—

Figure 1 is a bottom view of the spring sole. Fig. 2 is a side view of the spring sole and the main upper. Fig. 3 is a side view of the slipper upper, and Fig. 4 is an elevation of a block of cork with weight above it with lines showing method of cutting.

Referring to the drawings by numerals, the spring sole consists of a thin intermediate sole 5 of leather or other suitable material, to which numerous pieces of elastic material, preferably blocks of cork 6 are attached in any suitable manner, either by glue, or adhesive mixture, or by sewing. These blocks 6 are spring or elastic blocks of any suitable elastic material placed in contiguity with each other, but with such spaces between them that room is provided for their separate compression and expansion, so that such compression and expansion shall be uniform over all the surface of the sole, and each separate block shall have room for individual compression and expansion. These spring blocks may be made of rubber, cork or any suitably elastic material. I prefer to use cork, especially prepared for the purpose and made more durably elastic by a process which will be the subject-matter of another application. When cork is used

it is sub-divided as in the case of large blocks (Fig. 4) and is cut into horizontal slabs 7, which are further divided into the smaller blocks 6.

My improved boot or shoe consists in combining a main upper 7, provided with an inner sole 8, with a slipper upper 11 provided with a wearing sole 9, and preferably with a heel 10, as shown in Fig. 3, the slipper upper 11 being adapted in size and shape to inclose and fit over the main upper 7. Between the inner sole 8 and the wearing sole 9 is placed a spring sole 5, preferably constructed with spring blocks as above described. The slipper upper is then secured to the main upper 7 in any suitable manner, preferably by sewing along the upper edge 12 of the slipper 11, so as to hold the intermediate sole 5 closely against the inner sole 8. This construction permits the two soles 8 and 9 to move to and from each other with the movements of the elastic blocks 6, without rubbing the stockings or chafing the feet, and this provision is essential to secure the full advantages of my invention.

Heretofore cork soles have been placed removably in boots and shoes inclosed in felt, for the purpose of protecting the feet from moisture, but they have never been so constructed as to give sufficient elasticity to relieve the jar upon the feet. An additional objection has been, that they were more or less loose inside of the shoe and easily became deranged in place, and stiff and hard by absorption of the perspiration of the foot. My invention obviates all these difficulties, and in addition provides for an elasticity, not possible in the ordinary cork sole. Cork soles have also been placed between the parts forming the sole of the shoe for the purpose of preventing dampness, sewed in so as to make a part of the sole. Such construction while preventing dampness has no function whatever in making the sole elastic. Rubber has been used in like manner and for the same purpose, but its elasticity has been confined and restricted by such construction, so that practically it did not relieve the jar upon the foot; in fact was not intended to do so.

I therefore do not broadly claim the use of cork or elastic material in the construction of the sole of a shoe.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a boot or shoe the combination of a complete upper attached to an in-sole, and a
5 slipper upper provided with a wearing sole and adapted to fit over and inclose the upper, the two being attached to each other so as to hold a spring sole between them; and a spring
10 sole consisting of blocks of elastic material placed between said two uppers, the blocks being arranged with spaces between them, so that they may expand and contract separately in all directions.

2. As an article of manufacture, a boot or
15 shoe consisting of two uppers, the one a main

upper attached to an insole, and the other a slipper upper adapted to fit over the main upper, and provided with a wearing sole, the two being suitably joined to each other and provided with an elastic or spring sole adapted to relieve the jar on the feet placed between them.

In testimony whereof I hereunto subscribe my name, in the presence of two witnesses, this 19th day of January, 1893.

WILLIAM HALL.

Witnesses:

ALBERT BAKER,
H. C. HARTMAN.