

(No Model.)

J. D. W. KING.
BOOT OR SHOE.

No. 541,814.

Patented June 25, 1895.

FIG. 1.

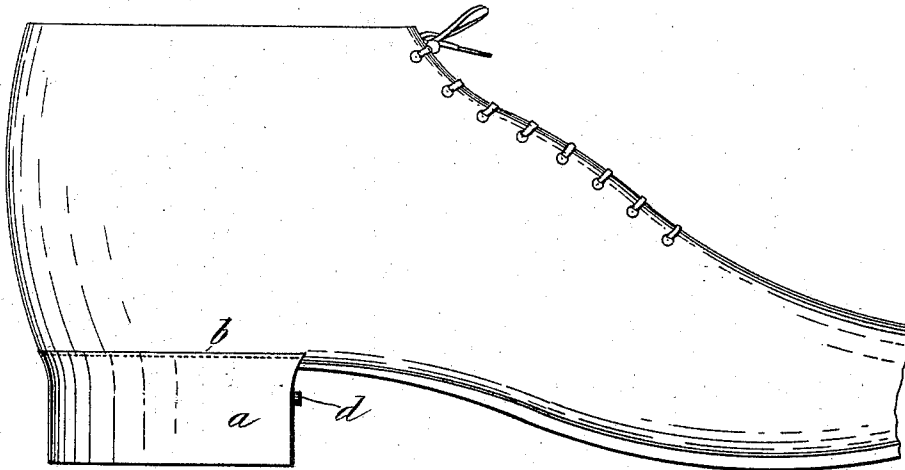
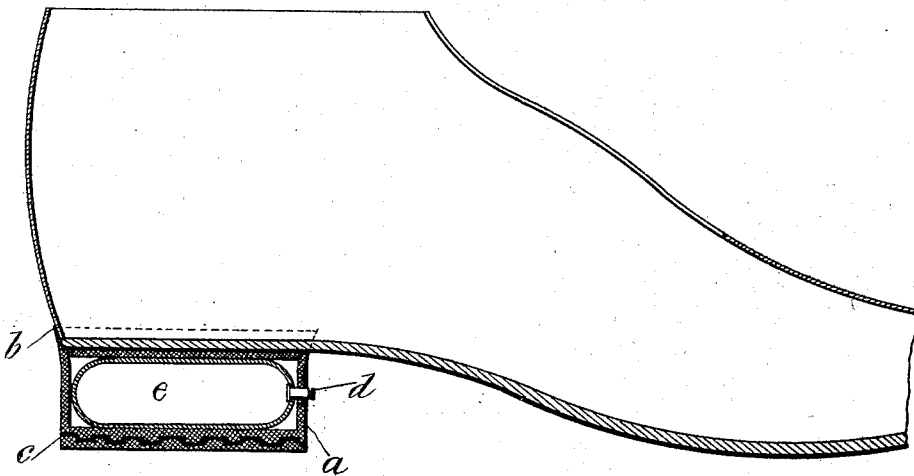


FIG. 2.



Witnesses:
John Kuebler,
Charles F. Patterson.

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UNITED STATES PATENT OFFICE.

JAMES D. W. KING, OF BROOKLYN, NEW YORK, ASSIGNOR OF ONE-HALF TO
B. L. HOUGHTON, OF SAME PLACE.

BOOT OR SHOE.

SPECIFICATION forming part of Letters Patent No. 541,814, dated June 25, 1895.

Application filed August 2, 1893. Serial No. 482,184. (No model.)

To all whom it may concern:

Be it known that I, JAMES D. W. KING, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented a certain new and useful Improvement in Boots or Shoes, of which the following is a description, reference being had to the accompanying drawings, wherein—

Figure 1 is a side view of the rear part of a shoe embodying my improvement. Fig. 2 is a view of the same in central vertical section.

A main object of the improvement is to neutralize the concussion of the foot on hard surfaces, a concussion that exercises a hurtful and painful effect upon many persons.

In the drawings the improvement is shown as applied to the heel of a shoe. It may, also, be applied under the ball or fore part of the foot.

In the drawings the letter *a* denotes a hollow vessel of strong, elastic material such as vulcanized rubber, fastened to the heel of the shoe. Preferably the vessel is furnished with a lip *b* fastened, as by cementing, to the periphery of the shoe heel.

The letter *c* denotes a plate of material such for instance, as thin sheet steel, embedded or molded in the rubber and corrugated to prevent its "creeping" from its proper place. Its purpose is to prevent the hollow vessel from being accidentally punctured when the wearer steps upon sharp stones or the like.

The letter *d* denotes a valve (of any suitable

construction) through which an elastic fluid, such, for instance as air, may be introduced into the hollow vessel under compression when by closing the valve, the fluid will be retained under compression in the vessel. The compression is carried to that degree that the hollow vessel yields but slightly under the weight of the wearer of the shoe and maintains in practical use, its integrity as a shoe-heel.

The description so far has taken no note of the interior vessel *e* and the improvement may be utilized to a degree without the presence of such inner vessel but preferably that vessel is used. It consists of a hollow vessel of strong elastic material, impervious to air, located within the outer vessel *a*, and itself containing the compressed air. To that end the valve *d* communicates therewith.

I claim as my improvement—

The improved elastic heel for boots and shoes herein described, consisting of a hollow impervious boxing shaped to the configuration of a proper heel, containing an impervious pneumatic receptacle or bag, as *e*, filling and retaining valve *d*, opening as shown in the front wall of the heel, where it is protected against derangement, and corrugated metal shield plate *c*, all substantially as specified.

JAMES D. W. KING.

Witnesses:

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