

A. C. WYMAN.

Improvement in Detachable Heels for Boots and Shoes.

No. 129,447.

Patented July 16, 1872.

Fig. 1.

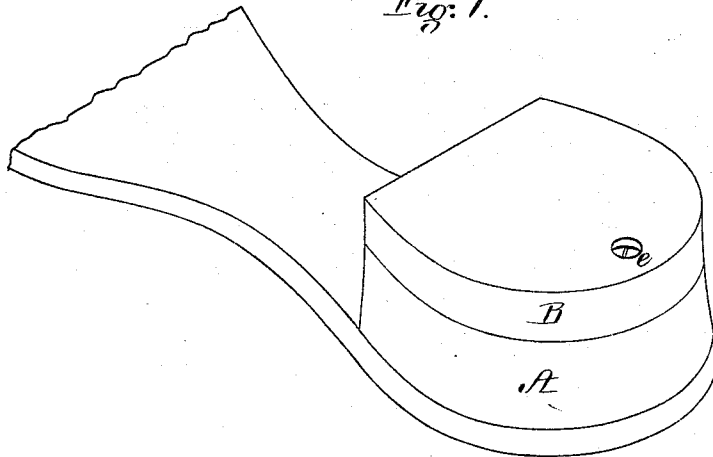


Fig. 2.

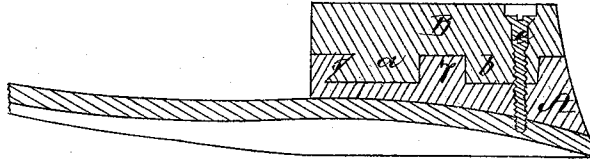


Fig. 3.

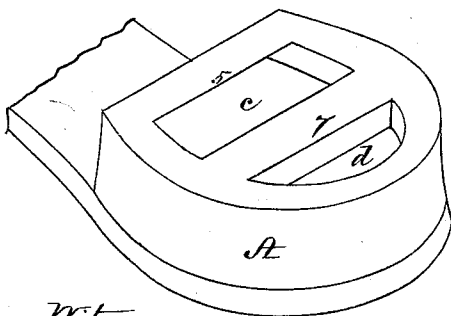
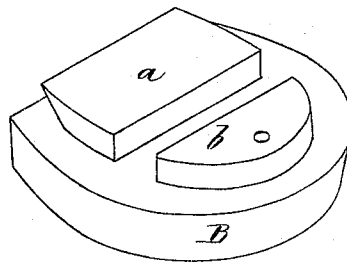


Fig. 4.



Witnesses,
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UNITED STATES PATENT OFFICE.

ARCHELAUS C. WYMAN, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN DETACHABLE HEELS FOR BOOTS AND SHOES.

Specification forming part of Letters Patent No. 129,447, dated July 16, 1872.

To all whom it may concern:

Be it known that I, ARCHELAUS C. WYMAN, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Detachable Heels for Boots and Shoes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a perspective view of my improved heel, inverted. Fig. 2 is a vertical section through the center of the same. Fig. 3 is a perspective view of that portion of the heel which is intended to be permanently secured to the boot or shoe. Fig. 4 is a perspective view of the detachable portion of the heel.

This invention relates to an improvement in that class of heels for boots and shoes for which Letters Patent of the United States were granted to George W. Martin on the 4th August, 1868, and in which the wearing part of the heel or portion nearest the ground was made detachable, so that when worn away it could be readily removed and a new portion substituted therefor, which construction allowed of the interchange of the detachable parts of the two heels of a pair of boots or shoes where the irregular wear of their surfaces rendered it desirable, and, furthermore, allowed the height of the heel to be varied to suit the requirements of the purchaser, detachable pieces of various thicknesses being provided which could be readily applied as wanted.

In the aforesaid patent of George W. Martin, the two portions of the heel were united together by a longitudinal tongue or groove, the detachable portion being held in place by springs or other suitable device. This method is, however, objectionable for the reason that in walking the concussion upon the heel causes the detachable portion to be thrown forward, which mars the appearance of the heel, and renders it useless after very slight wear.

My invention has for its object to overcome this difficulty; and consists in a heel composed of a permanent portion and a detachable portion, one of these portions being provided with a dovetailed projection, and a corresponding dovetailed recess, and held together by a sin-

gle screw, arranged with reference to the projection and recess, or the projections and recesses, in manner as hereinafter described, whereby the movable part becomes fixed to the stationary part by the single dovetailed projection and recess and one screw, and the detachable portion is effectually prevented from being thrown forward out of place by the action of walking, and consequently the heel retains its proper shape, while the removable portion can be readily detached when required.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawing, A represents the base of the heel, which is intended to be permanently secured to the boot or shoe, and B is the detachable portion of the heel, which comes in contact with the ground in walking. The parts A B may be of any suitable material, either firm or elastic, or the base A may be of firm material and the part B of elastic material, thus securing an elastic heel. My invention is, however, particularly designed for elastic heels for ordinary boots and shoes. On the under side of the detachable portion B are two projections, *a b*, of the form seen in Fig. 4, which fit into recesses *c d* of corresponding size and shape in the base or portion A. The front side of the projection *a* is beveled or inclined forward, and fits the correspondingly beveled side *e* of the recess *c* by which means the front of the detachable portion B of the heel is securely locked to the portion A, the rear of the portion B being held down by a screw, *e*, which can be readily removed when it is desired to detach the portion B from the portion A. The head of the screw *e* is countersunk to prevent it from coming into contact with the ground.

From the foregoing it will be seen that all liability of the detachable portion B being thrown forward on the portion A by the striking of the heel on the ground in walking is avoided, as the projections *a* and *b* each take a firm bearing against the front ends of their respective recesses *c d*, and the heel consequently retains its proper shape at all times, as required.

Instead of the two projections *a b* the single dovetailed one only may be employed, fitting into a corresponding recess. In such case, however, the additional security against the movement of the portion B on the portion A afforded by the bearing of the rear projection *b* against the portion 7 would be lost, and consequently I prefer to use two projections and two recesses, as shown and described.

The above-described method of uniting and holding the two portions A B together is simple and convenient, and admits of the portion B being readily removed when it is desired to replace it with another; and a heel so constructed is exceedingly durable and not liable to be injured by hard usage.

I make no claim to anything shown or described in the aforementioned patent; nor do I claim anything shown or described in the United States Patent No. 111,986, to Horace S. Smythe. My improvement affords advantages not incident to anything as represented in either of such patents; and, besides, enables the heel to be made very cheaply and the mov-

able part to be fastened in place by a single screw, all as set forth, operating with the dovetailed projection and its socket.

Claims.

1. I claim the detachable-heel part B and the stationary or fixed part A, as provided with the dovetailed projection and corresponding dovetailed recess and connected by the single screw, arranged with respect to such dovetailed projection and recess, as set forth.

2. I also claim the detachable-heel part B and the fixed part A, as provided with the dovetailed projection *a*, the tenon or plain projection *b*, and the corresponding sockets or recesses, and as connected by the single screw, arranged with the projections and recesses, as shown and described.

Witness my hand this 30th day of January, A. D. 1872.

ARCHELAUS C. WYMAN.

In presence of—

P. E. TESCHEMACHER,
N. W. STEARNS.