

(No Model.)

H. R. PACKARD.  
HEEL NAIL.

No. 424,430.

Patented Mar. 25, 1890.

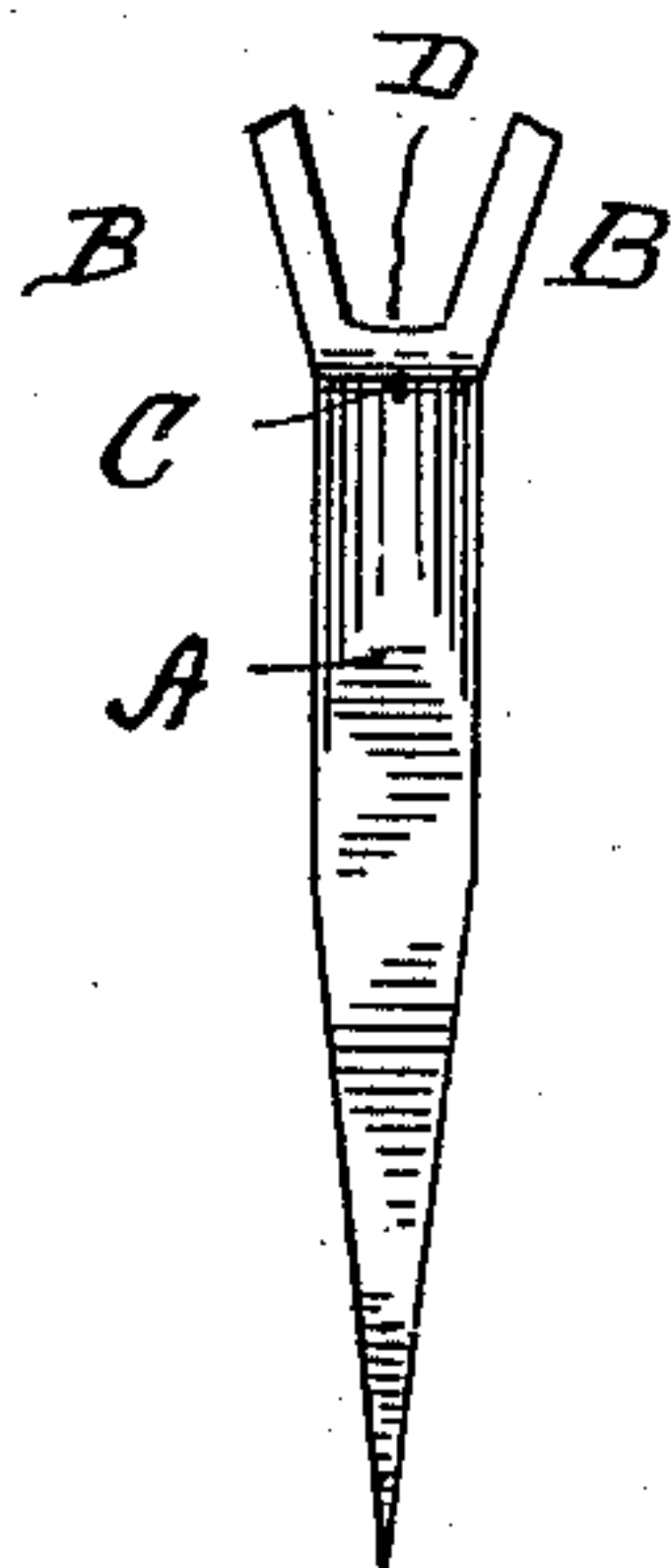


Fig. 1.

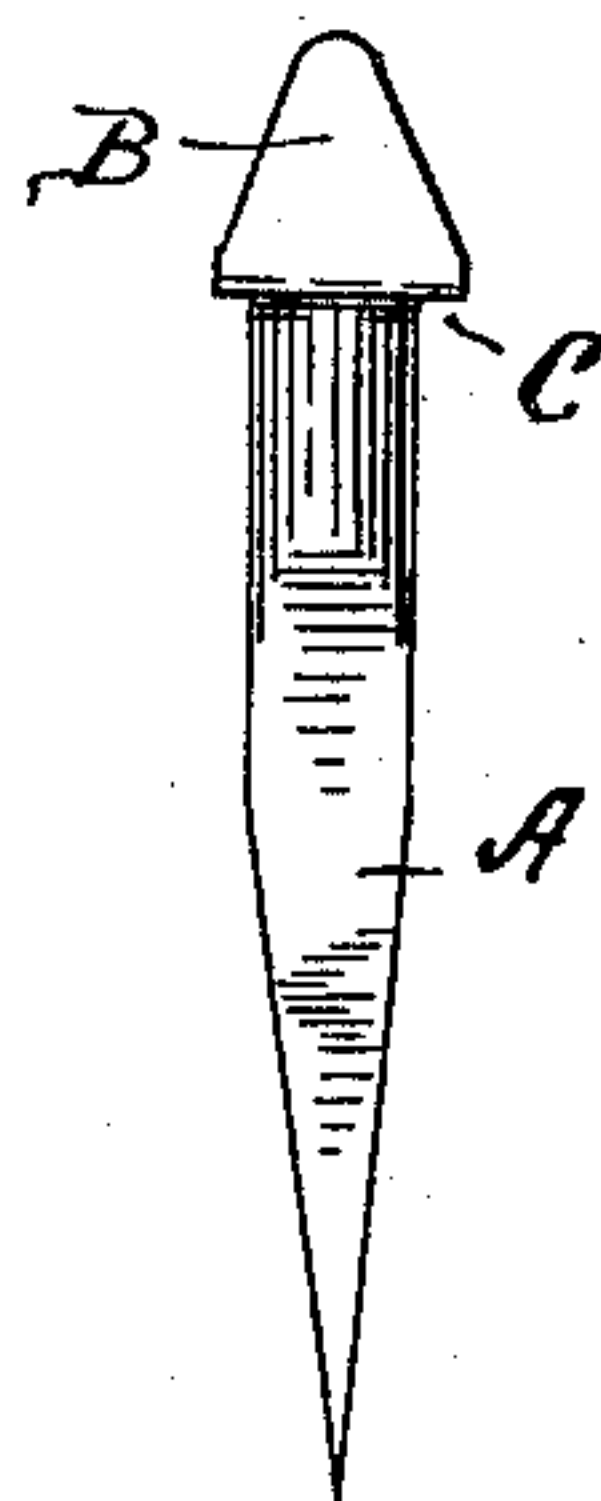


Fig. 2.

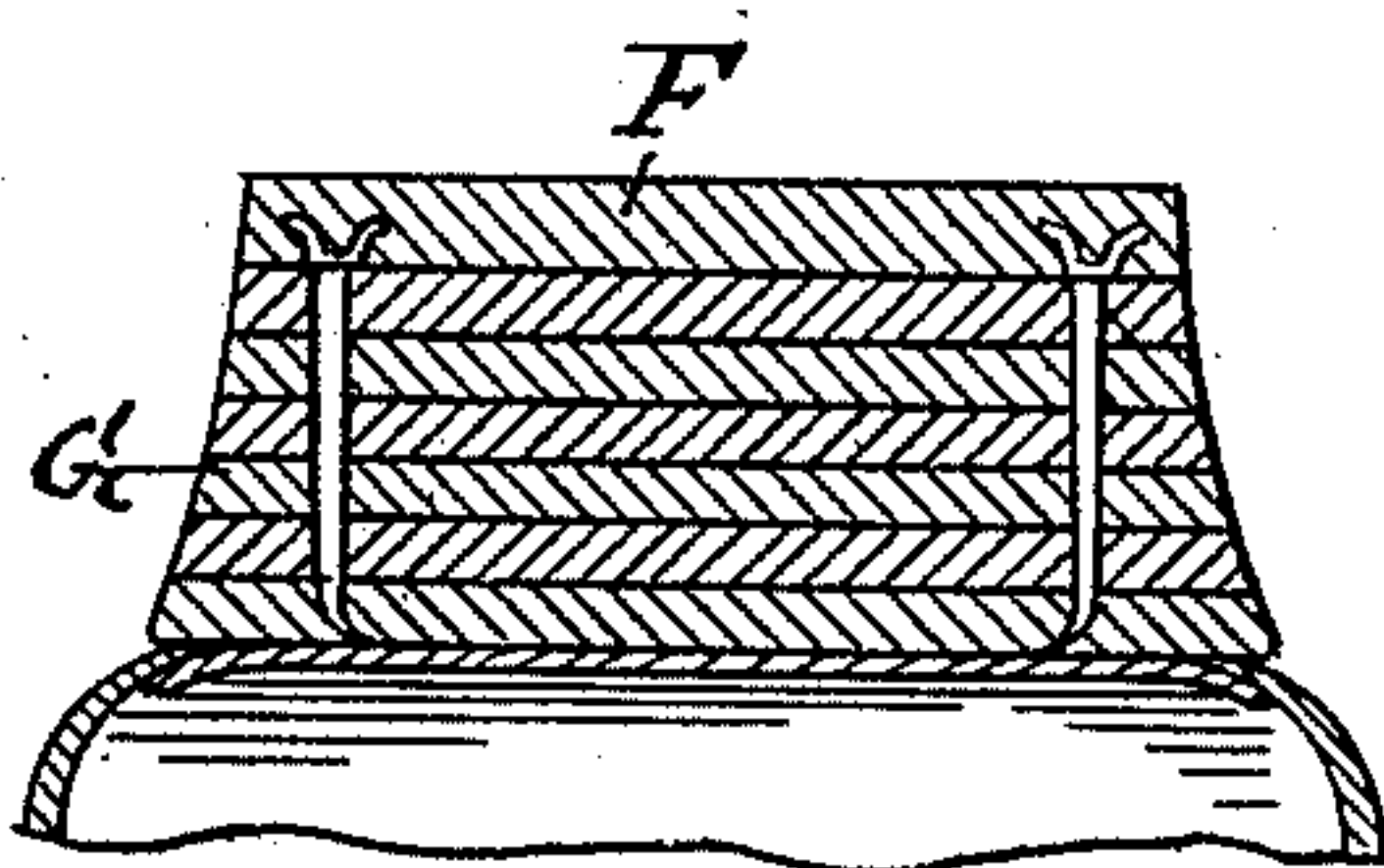


Fig. 3.

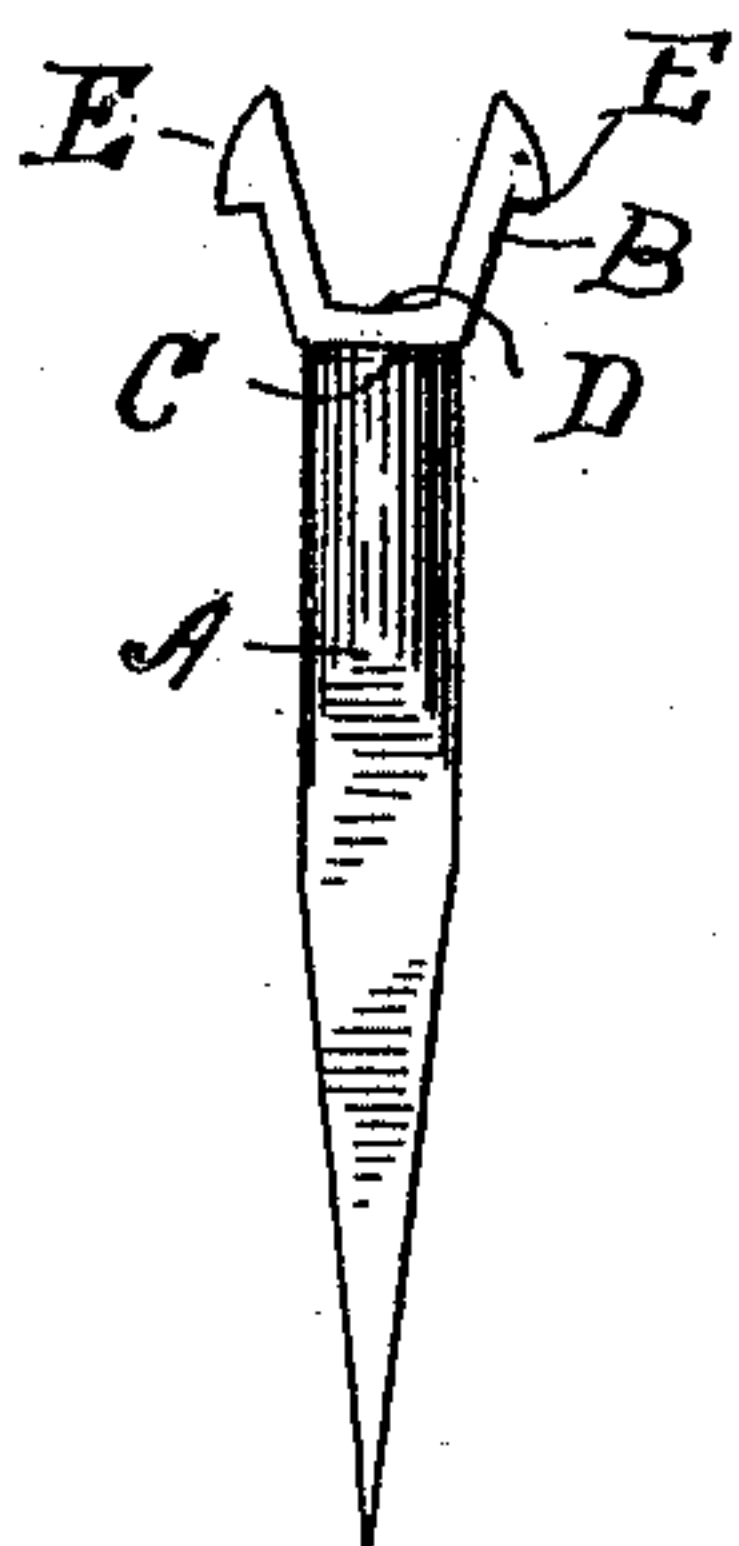


Fig. 4.

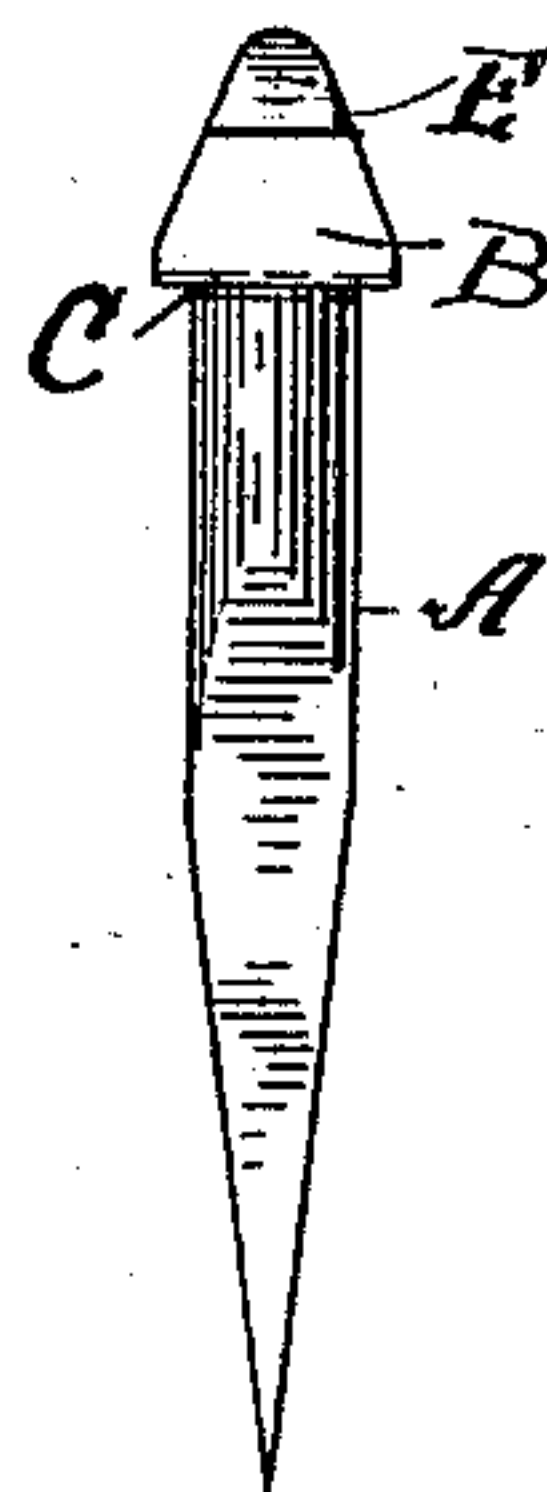


Fig. 5.

WITNESSES.

*R. Henry Marsh.*  
*E. M. Burton*

INVENTOR.

*Henry R. Packard.*  
*by H. H. Jewell.*  
*Attorney.*

# UNITED STATES PATENT OFFICE.

HENRY R. PACKARD, OF TAUNTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO THE ALBERT FIELD TACK COMPANY, OF SAME PLACE.

## HEEL-NAIL.

**SPECIFICATION** forming part of Letters Patent No. 424,430, dated March 25, 1890.

Application filed July 25, 1889. Serial No. 318,602. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY R. PACKARD, of Taunton, in the county of Bristol and State of Massachusetts, have invented a new and useful Improvement in Heel-Nails, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention relates to the class of nails especially adapted for use in shoe-heels where the outer lift is applied after the body of the heel has been nailed together, such outer lift being "spanked on" and caused to adhere to the projecting heads of the nails without being penetrated by their bodies.

The Webster patent, No. 394,802, dated December 18, 1888, represents a heel-nail having a split or V-shaped head, the two oblique wings of which meet at an acute angle and become merged in the body of the nail. Such nail lacks two features peculiar to mine—namely, a defined shoulder or stop at the under surface of the head to prevent driving in too far and a broad seat or space between the upturned wings to receive enough of the leather of the outer lift to prevent the nail from working down and out when in use.

My improved nail is preferably cut from a metal plate and made with a body tapering half its length to a clinching-point. The wings of the head taper as they recede from the body, and may have barbs or hooks at the tips.

In the drawings, Figures 1 and 2 are enlarged side and edge elevations of my improved nail, and Figs. 4 and 5 like views of the same barbed on its wings. Fig. 3 is a section through a heel, showing the nail securing the outer lift by its wings.

A is the body of the nail, and B B the upturned wings of the head.

C is a shoulder or stop at the under side of the head where it joins the body, and D is a broad seat on the upper surface of the head at the base of and between the wings. Such seat is either flat or slightly curved to separate the wings widely, and is to be distinguished from the acute angle of divergence of the wings of the V-shaped wire nail already

referred to. The head of my nail may in contrast be called "U-shaped," with the wings somewhat inclined outwardly and with a defined shoulder below them.

The barbs E (shown in Figs. 4 and 5) aid in securing the outer lift F when it is applied over the nail-heads, their tips penetrating among the fibers and the barbs resisting withdrawal. The shoulder C prevents the head from being forced into the heel-body G, while the seat D receives enough of the stock of the outer lift to keep the nail from working out.

I disclaim and distinguish from my invention the minute tack or temporary fastening for outsoles to insoles shown in the King patent, No. 392,677, dated November 13, 1888, and consisting of a conical prong too short to pass through the ordinary insole of a shoe, and two divergent curved prongs extending outwardly from the base of such conical prong to enter the inner surface layer of the outer sole and hold it in place on the inner sole until the two can be united by the usual sewing, pegging, or nailing. My nail, on the contrary, is the permanent and only fastening which secures the outer lift of the heel to the body thereof and to the sole and insole of the boot or shoe. To this end it has, in addition to the peculiar head and shoulder described, an elongated body long enough to pass through all the lifts of the heel except the outer or top lift, and through both outsole and insole and terminating in a clinching-point. The King tack, being destitute of this feature, would be utterly useless for my purpose or in any way as a heel-nail.

I claim as my invention—

1. The described heel-nail, having a body long enough to pass through the body of the heel, a clinching-point at the lower end and a shoulder or stop at the upper end thereof, and a U-shaped head having upturned wings with a broad seat or space between them in the plane of the upper surface of the head, substantially as set forth.

2. As an improved article of manufacture, the nail herein described, having a suitable



body, a shoulder or stop at the junction of  
the head and body, and a U-shaped head hav-  
ing upturned wings barbed at their extremi-  
ties and separated at the base by a seat or  
5 space, substantially as set forth.

In testimony whereof I have signed my name  
to this specification, in the presence of two

subscribing witnesses, on this 13th day of  
July, A. D. 1889.

HENRY R. PACKARD.

Witnesses:

A. H. SPENCER,  
JAMES H. FLINT.