

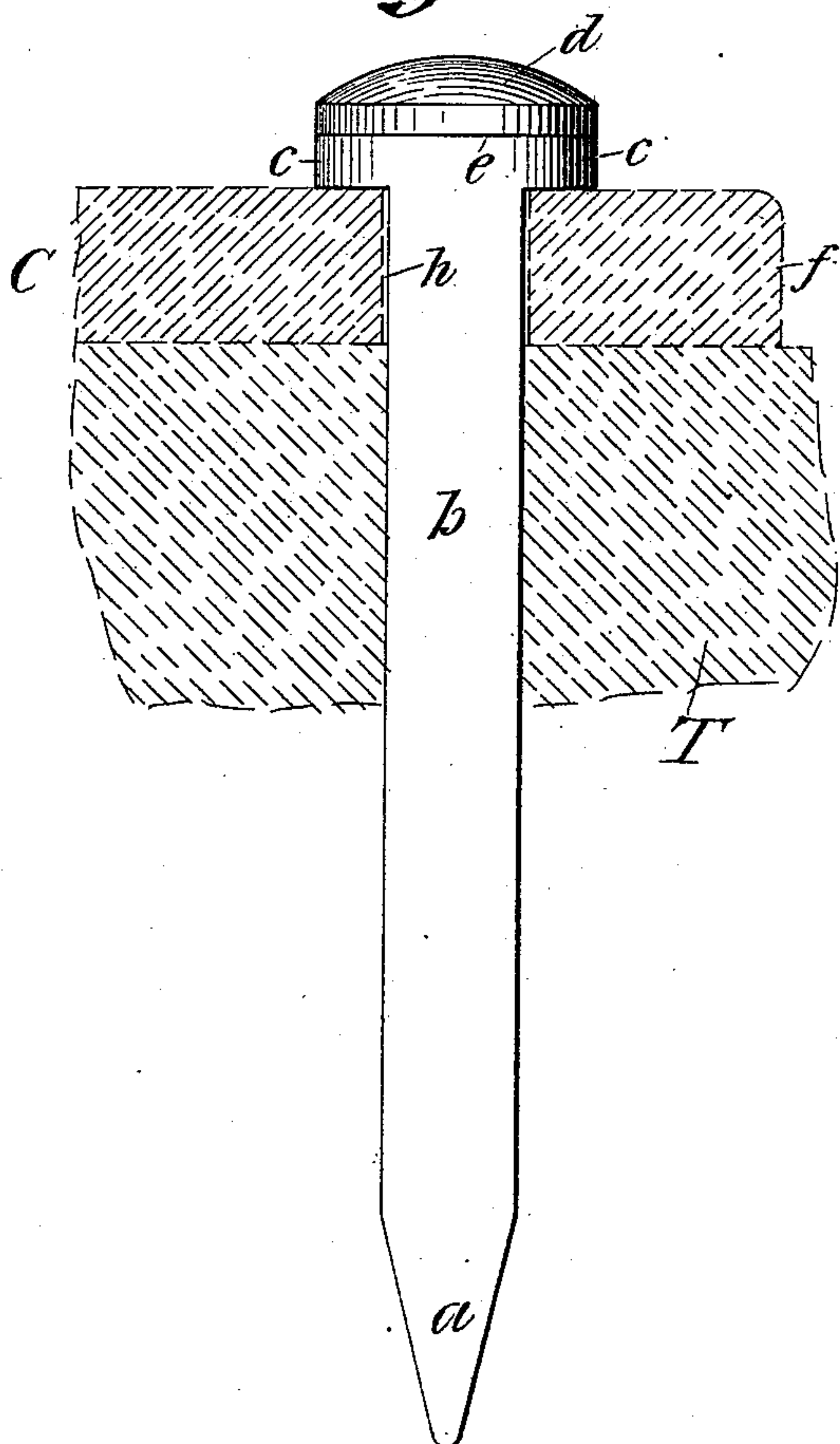
(No Model.)

W. C. WOOD.  
RAILWAY CHAIR SPIKE.

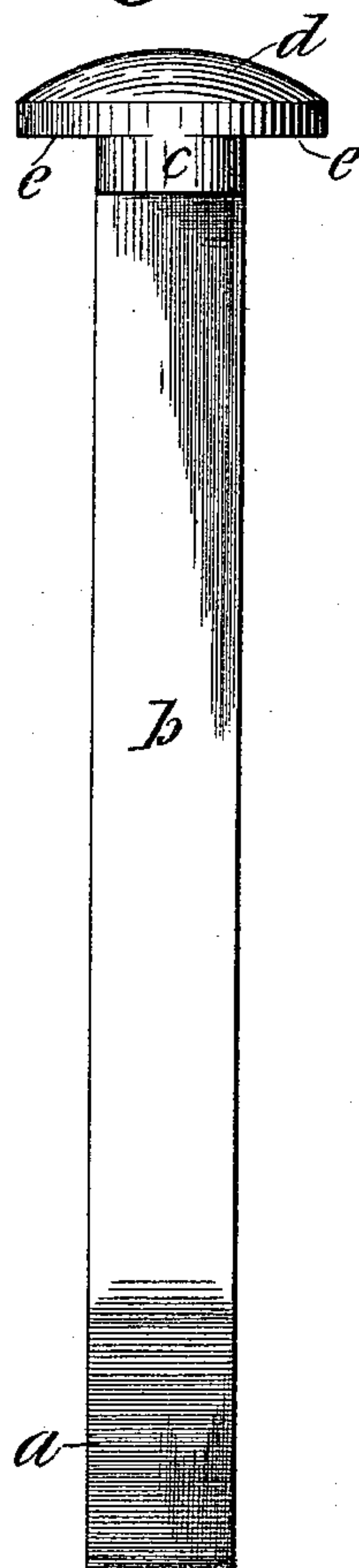
No. 447,268.

Patented Feb. 24, 1891.

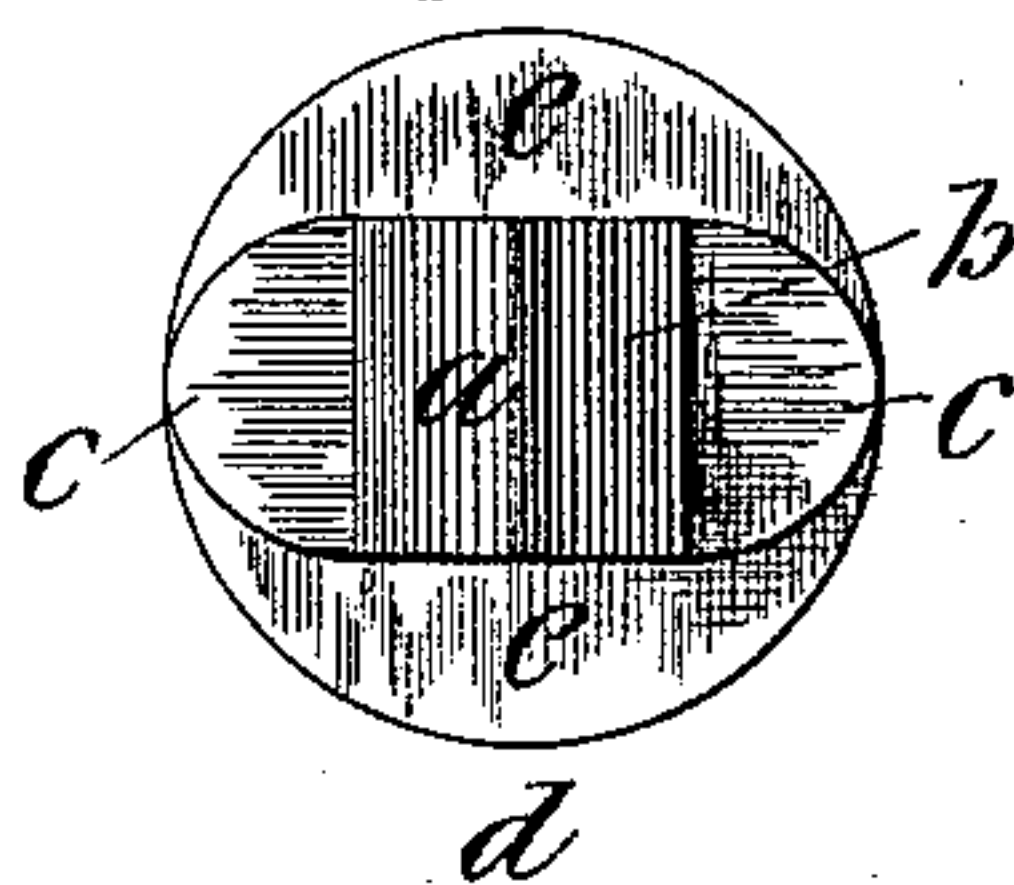
*Fig. 1*



*Fig. 2*



*Fig. 3*



Witnesses

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# UNITED STATES PATENT OFFICE.

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## RAILWAY-CHAIR SPIKE.

SPECIFICATION forming part of Letters Patent No. 447,268, dated February 24, 1891.

Application filed November 6, 1890. Serial No. 370,511. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM CLARK WOOD, a citizen of the United States, and a resident of Brooklyn, in the State of New York, have  
5 invented a new and useful Improvement in Railway-Chair Spikes, of which the following is a specification.

This invention relates to the construction of withdrawable spikes for fastening down  
10 railway-chairs, and the like, as rail-braces and track-knees; and it consists in a novel spike, as hereinafter set forth and claimed.

The objects of this invention are to facilitate driving the spike straight and so as not  
15 to weaken the head, and, at the same time, to facilitate withdrawing the spike by means of an ordinary claw-bar when the track is to be taken up or repaired, and to re-enforce the union of a "button-head" with a square shaft  
20 or body.

A sheet of drawings accompanies this specification as part thereof.

Figure 1 of the drawings is a side view of the improved spike, with an added section of  
25 adjoining portions of a chair-base and a tie or sleeper in dotted lines. Fig. 2 represents a front or rear view of the spike, and Fig. 3 is an end view thereof.

Like letters of reference indicate corresponding parts in the several figures.

The spike has a more or less sharp point *a*, adapted to be driven into a wooden tie or sleeper *T*, Fig. 1, and a square and preferably straight shaft or body *b*, adapted to hold in  
35 the wood, and fitted to a square spike-hole *h*, perpendicular to the flat top of the chair-base *C*, Fig. 1, such hole being so arranged as to have front and rear sides, so to speak, parallel with the lateral or "front" edge *f* of the  
40 base. Matching such front and rear sides of the spike-hole *h*, the spike has a pair of bolsters *c c* under its head *d*, which bolsters are conveniently of the full width of the body *b*, and project forward and rearward, respect-

ively, to the perimeter of the head *d*, their  
45 outer surfaces being rounded, as best seen in Fig. 3, so that whichever bolster is at the front is readily straddled by the claw-bar.

The elevated head *d* is a round or button-head, having a convex top, which tends to  
50 insure that the effect of driving blows shall be central or in line with the shaft or body of the spike, and consequently will not bend the head or weaken its union with said shaft or body, which union, instead, is re-enforced  
55 by said bolsters *c*. The lateral edges of the head *d*, projecting beyond the sides of the bolsters *c* and shaft or body *b*, form square and highly-efficient shoulders *e*, to engage with the claw-bar in withdrawing the spike. 60

I am aware that spike-heads have been made of an upwardly-flaring or dovetailed shape, to provide for withdrawing the spikes by claw-bars, and I hereby disclaim the same as forming no part of my invention. In my spike, 65 square elevated shoulders engage with the claw-bar, and the claws are subjected to no spreading strain, while the rounded bolsters facilitate applying the claw-bar, and render practicable providing such spikes with the  
70 popular button-head, as above.

Having thus described the said spike, I claim as my invention and desire to patent under this specification—

A spike for spiking down railway-chairs 75 and the like, having a round head, convex on top, bolsters under said head at front and rear, and a square shaft or body central with reference to the head, the lateral edges of said head forming elevated shoulders to fa- 80 cilitate withdrawing the spike, and said bolsters serving to re-enforce the union between said body and the head, substantially as hereinbefore specified.

WILLIAM CLARK WOOD.

Witnesses:

A. H. DOLLARD,  
G. W. MYERS.