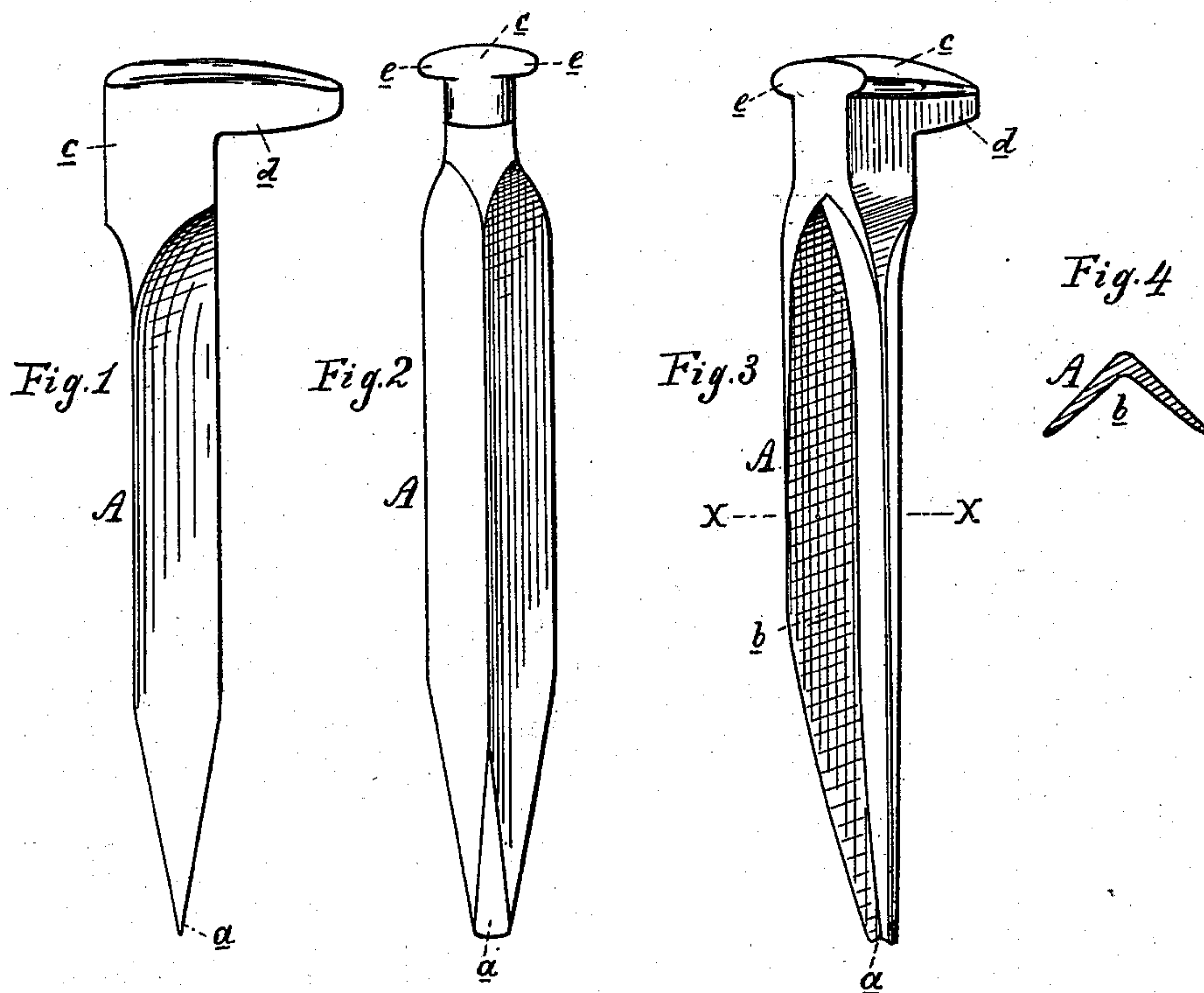


(No Model.)

C. BAINES.
RAILWAY SPIKE.

No. 384,229.

Patented June 12, 1888.



Attest:
John Schuman.
P. M. Hulbert.

Inventor:
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By
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Atty.

UNITED STATES PATENT OFFICE.

CHARLES BAINES, OF WINDSOR, ONTARIO, CANADA, ASSIGNOR TO
WILLIAM GRAY, OF DETROIT, MICHIGAN.

RAILWAY-SPIKE.

SPECIFICATION forming part of Letters Patent No. 384,229, dated June 12, 1888.

Application filed March 20, 1888. Serial No. 267,859. (No model.)

To all whom it may concern:

Be it known that I, CHARLES BAINES, a citizen of the United States, residing at Windsor, in the county of Essex and Province of Ontario, Canada, have invented certain new and useful Improvements in Railway-Spikes, of which the following is a specification, reference being had therein to the accompanying drawings.

15 This invention relates to certain new and useful improvements in railway spikes.

The object of the invention is to construct a spike for the purpose of securing rails to cross-ties that, when driven to place, cannot be readily removed by the jar caused by a passing train, that will obviate the objections to the so-called "tapering spike," and that is provided with means for holding the spike firmly in place without the use of barbs.

20 The invention consists in the peculiar construction of the spike, all as more fully hereinafter set forth.

Figure 1 is a side elevation of my improved spike. Fig. 2 is an elevation of the angular face of the spike. Fig. 3 is an elevation of the grooved face; and Fig. 4 is a cross-section on the line *x x*, Fig. 3.

In the accompanying drawings, which form a part of this specification, A represents the body of my improved spike, which is triangular in cross-section, as shown, and has parallel edges to the beveled point *a*.

35 In the flat face of the spike I form an angular groove, *b*, which extends from near the head to the extreme end of the point. Above this angular groove the spike is solid in cross-section, the edges being slightly curved in-

wardly to the head *c*, the latter being provided with the usual flange, *d*, for overlapping the foot of a rail, and the flanges *e*, under which a proper tool may be inserted when it is desired to withdraw the spike from the tie.

It will readily be seen that a spike constructed as above described will, when driven into the tie, cut the fiber so as to form a tongue that will be received into the groove *b* in the flat face of the spike, and that such tongue so formed will be slightly depressed, and in the tendency of the fiber to assume its original position will be firmly in contact with the walls of the groove.

What I claim as my invention is—

1. As a new article of manufacture, a railway-spike, A, triangular in cross-section, with parallel edges to the bevel of the point, and provided with an angular groove, *b*, in its flat face, said groove extending from the solid head to the extreme point of the spike, substantially as described.

2. A railway-spike, A, triangular in cross-section and having parallel edges to the bevel of the point A, an angular groove, *b*, formed in the flat face of said spike and extending from the head *c* to the extreme end of the point *a*, and flanges *d e*, formed upon the said head *c*, substantially as and for the purposes described.

In testimony whereof I affix my signature, in presence of two witnesses, this 10th day of November, 1887.

CHARLES BAINES.

Witnesses:

H. S. SPRAGUE,
P. M. HULBERT.