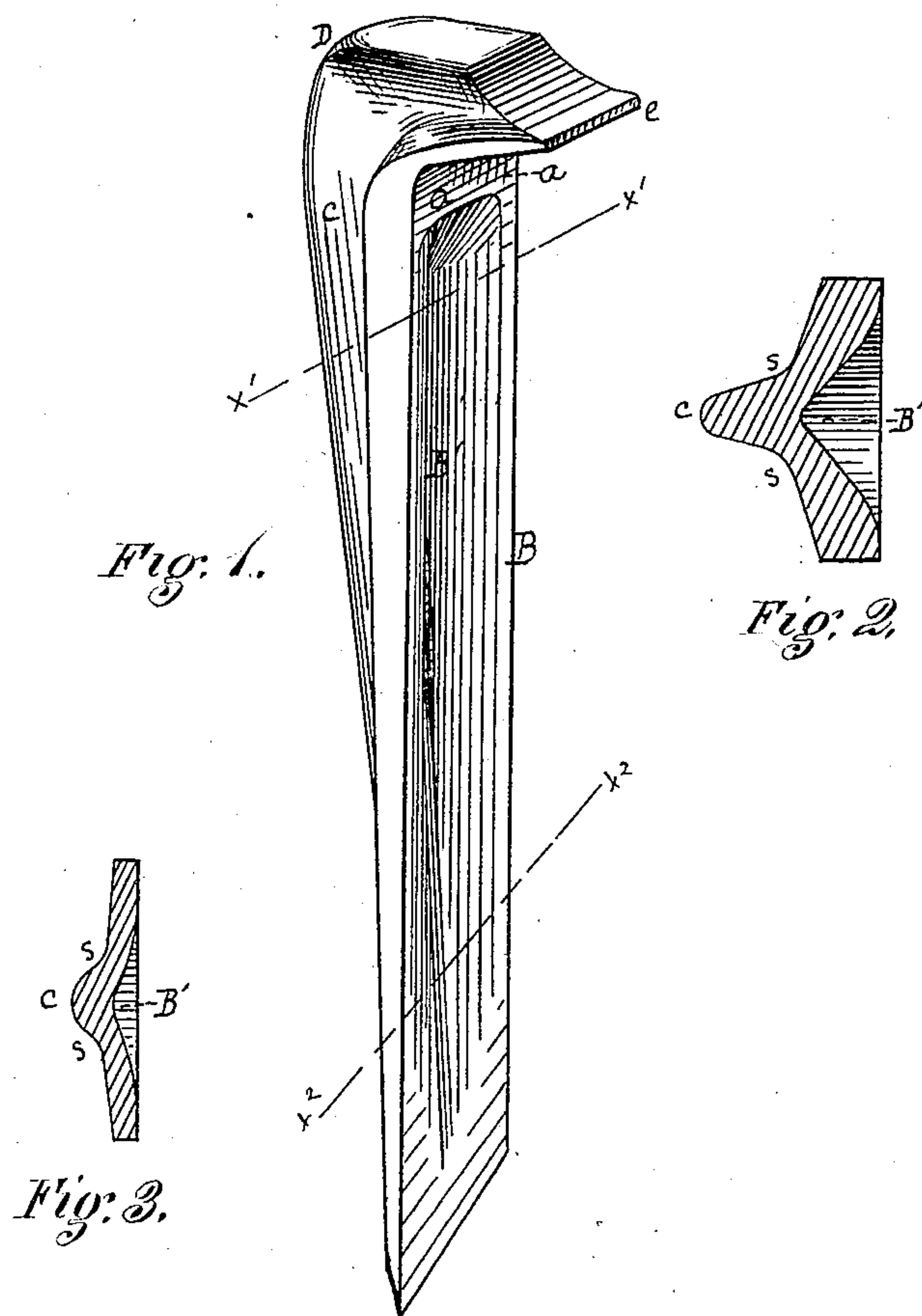


(No Model.)

H. GREER.  
RAILROAD SPIKE.

No. 266,464.

Patented Oct. 24, 1882.



*Witnessed,*  
*Wm. Greer*  
*Wm. Greer*  
*Wm. Greer*

*Inventor* Howard Greer.  
*By Attorney* George H. Christy

# UNITED STATES PATENT OFFICE.

HOWARD GREER, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO  
GEORGE H. CHRISTY, TRUSTEE, OF SEWICKLEY, PENNSYLVANIA.

## RAILROAD-SPIKE.

SPECIFICATION forming part of Letters Patent No. 266,464, dated October 24, 1882.

Application filed March 3, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, HOWARD GREER, of Chicago, county of Cook, State of Illinois, have invented or discovered a new and useful Improvement in Railroad-Spikes; and I do hereby declare the following to be a full, clear, concise, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—like letters indicating like parts—

Figure 1 is a view in perspective of my improved spike, and Figs. 2 and 3 are sectional views, respectively, in the planes of the lines  $x'$   $x'$   $x^2$   $x^2$ , Fig. 1.

This invention relates to an improved form of spike for securing railroad-rails to the ties. I have devised it more particularly for use with soft-wood ties, and also have disposed the metal forming the spike with reference to getting a large percentage or degree of strength and holding-power along with a small amount of material.

The shank or body B of the spike is so made that the bearing side, or the side which in use comes next the rail-flange, shall be comparatively broad, and also immediately opposite the edge of the rail-flange shall be solid, as at  $a$ .

The peculiar construction of the head D forms a part of the subject-matter of a separate application. From the rear base of the head a rib,  $c$ , extends down at or along about the middle of the back face of the shank B, tapering downward and sloping off both ways till its side faces merge into the back faces of the shank; or, what is substantially the same thing, a fillet,  $s$ , may be considered as made along up and down the obtuse angle formed by such

meeting faces. The opposite side or bearing-face of the spike-shank is made hollowing or concave, as at  $B'$ , such concavity by preference following approximately the contour of the back face, but leaving a sufficient thickness of metal to insure the necessary strength. This gives in effect a spike-shank which is approximately arch-shaped in cross-section, with the concavity of the arch in the rail-face of the spike, and such shape so disposed I believe to be new, and also to be superior to any shape now in use as regards the amount of metal employed, the strength of the spike, and its holding-power, all taken conjointly. It may be made by casting, rolling, or forging in any of the ways known to the art.

The lip  $e$  may be made on one side, when necessary, or may be made to extend backward over the back rib,  $c$ ; but in either such case a broad bearing-surface such as shown at  $a$  should be added beneath the base end of such lip, by which to provide a good edge-bearing to the rail-flange.

Other features of improvement illustrated in the drawings and not herein claimed are included in the subject-matter of a separate application filed herewith.

I claim herein as my invention—

A railroad-spike having on the rail side of its shank B a concavity,  $B'$ , and on its opposite side a rib,  $c$ , substantially as set forth.

In testimony whereof I have hereunto set my hand.

HOWARD GREER.

Witnesses:

FRANK J. LOESCH,  
JACOB GREMBY, Jr.