A. C. & I. L. DUNN.

SCREW SPIKE FOR RAILROADS.

No. 108,986. Patented Nov. 8, 1870.

Fig 1.

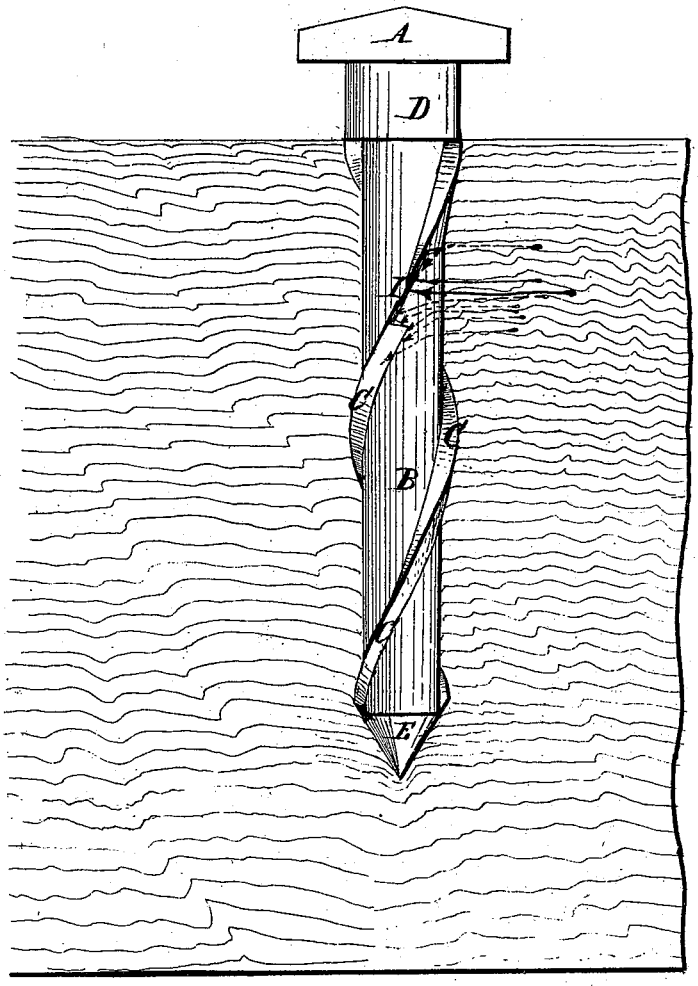
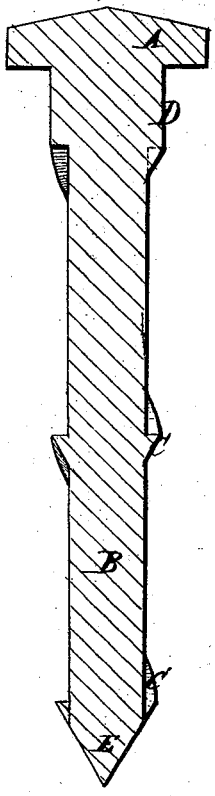


Fig 2.



Witnesses

John T. Bouton

E. H. Bouton

Wm. H. Smith

Inventors

Alpheus L. Dunn

Isaac L. Dunn

United States Patent Office.

ALPHEUS C. DUNN AND ISAAC L. DUNN, OF NEW YORK, N. Y.

Letters Patent No. 108,986 dated November 8, 1870; antedated October 28, 1870

IMPROVEMENT IN SCREW-SPIKES FOR RAILROADS.

The Schedule referred to in these Letters Patent and making part of the same.

We, ALPHEUS C. DUNN, and ISAAC L. DUNN, both of the city, county, and State of New York, have invented a certain new article of manufacture in Screw-Spikes for Railroads, of which the following is a specification.

Our invention consists in having a new article of manufacture in spikes which has a slightly-tapered round shank, with one or more spiral ribs slightly tapered or smaller toward its point, and has, at the same time, square-shouldered notches in said ribs extending partially through them, so that the spike can be driven home with blows of a hammer, and in driving turns around according to its spiral ribs and becomes very firmly held in the timber, and has considerable friction in the same to withstand great side pressure, and that at the same time the fibers of the timber are allowed to swell into said notches and thereby obstruct, to a large extent, the self-withdrawing of the spike from the timber.

In the drawing—

Figure 1 represents a side view of our spike shown driven in a railroad-tie, which latter is shown bisected to exhibit the position of its fibers relative to the spike after being placed therein.

Figure 2 represents a vertical section of the spike, to show the form of its ribs.

A represents the head of the spike;

B, the body of its shank;

C C, its spiral ribs;

D, the shoulder of the shank; and

E, the point of the spike.

The body B is made slightly tapering toward the point, sufficiently to fit, cause, and keep nearly the same pressure and friction all over it in the timber.

The ribs C C are also made of a gradually-reduced dimension toward the point of the spike, for the same purpose as that of tapering the body B.

Toward the upper portion of the body B we have formed on these ribs one or more cavities, F, on each, on the downward side of the ribs, for the purpose of causing and permitting the fibers of the timber having been bent downward, as indicated by the arrows in dotted lines, as is the case in driving the spike home, to spring back and straighten and wedge themselves, and obstruct the turning and withdrawing of the spike to a large extent.

By means of the taper form of the ribs and shank, the spike is made stronger, is supported and held more firmly in the timber against the side pressure of the rail, and the rain and water more certainly prevented from settling around the shank in the timber, to cause decay of the spike and timber, than with the ordinary spike.

Claim.

What we claim as our invention is—

A new article of manufacture in spikes, when the same is of the tapered form on its shank and spiral-rib or ribs, and provided with notches partially extending through said ribs, and with square shoulders, substantially as and for the purpose herein described.

ALPHEUS C. DUNN.
ISAAC L. DUNN.

Witnesses:
JOHN BOUTON,
WM. H. MERRITT,
E. H. BOUTON.