Torstrick & Boekken,

Railway Spike.

No. 111,096. Patented Jan. 17. 1871.

Fig 1.

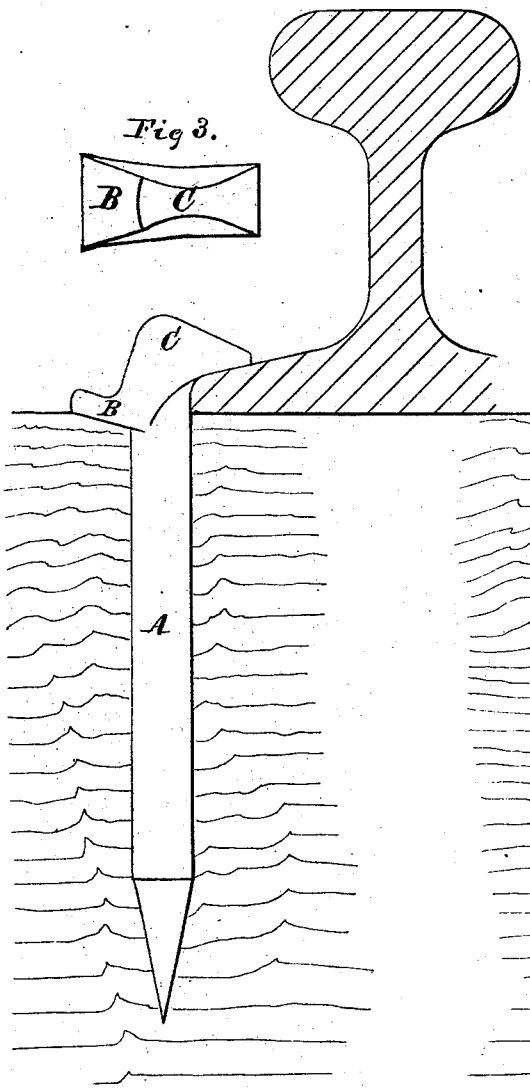

Fig 2.

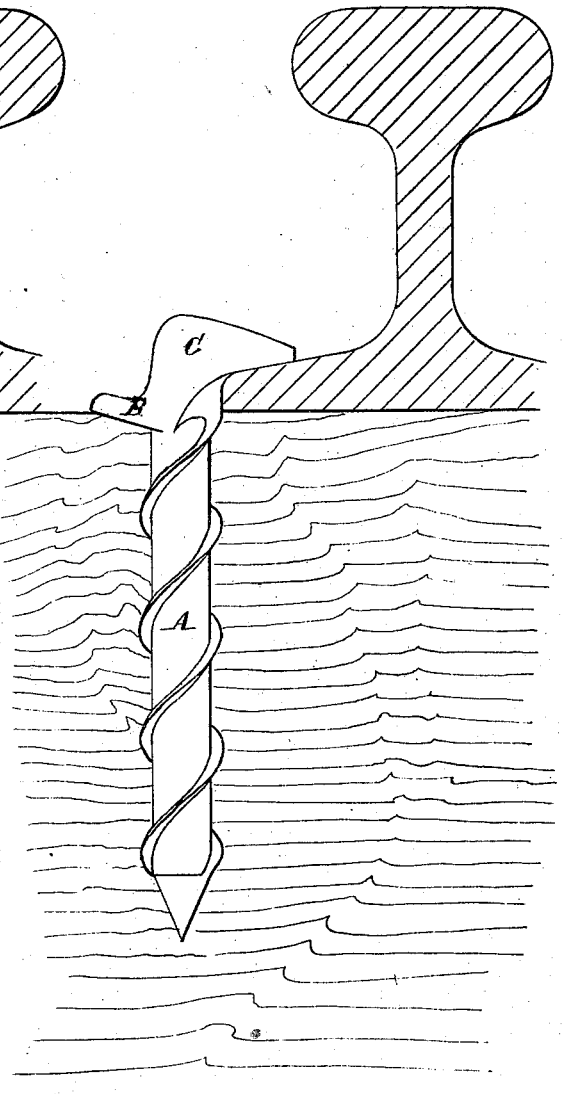

Fig 3.

Witnesses
Wm B. Jackson
Wm G. Barnard

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Reinhold Boekken
Inventors

UNITED STATES PATENT OFFICE.

HENRY TORSTRICK, OF NEW YORK, AND REINHOLD BOEKLEN, OF BROOKLYN, N. Y.

IMPROVEMENT IN RAILROAD-SPIKES.

Specification forming part of Letters Patent No. **111,096,** dated January 17, 1871; antedated January 6, 1871.

We, HENRY TORSTRICK, of the city, county, and State of New York, and REINHOLD BOEKLEN, of the city of Brooklyn, State of New York, have invented certain new and useful Improvements in Railroad-Spikes; and we hereby declare that the following is a clear and exact description of the same, reference being had to the accompanying drawing, which forms a part of this specification, and to the letters of reference marked thereon.

Our invention consists in providing the spike at the upper part of its shank with a flange or nose, protruding in an inclination from said shank rearward and over the cross-tie, said protruding nose being placed considerably below the clamping-head, and at a proper distance between the upper side of the resting-flange of the rail and the upper surface of the tie, so as to permit said nose to rest firmly on the tie when the spike is driven home, whereby said nose serves to counteract most effectually the side pressure of the rail without adding to its weight.

Figure 1 represents a sectional side view of the tie and rail and our improvement applied to a square spike; Fig. 2, the same and our improvement shown with a screw-spike. Fig. 3 represents a top view of the head of the spike, showing the expansion outward of the flange.

A represents the shank of the spike, which is provided with the usual point, and having on its upper end the head C, to overlap the rail. On said shank, and on about a level with or a little below the upper surface of the tie, we form a nose, B, which protrudes nearly rearward in opposite direction of the rail. The lower surface of said nose, which rests upon the cross-tie, we make at an inclination nearly at right angles with the side pressure of the rail, and to oppose the same, by which means we most effectually guard against the bending of or moving the shank by such side pressure, and this flange is made wider on its outer end than on the shank, to have a larger bearing-surface.

The head C of the spike, it will be observed, is made of an extra height, and does not spread sidewise, and does only extend to the shank, and has no connection with the nose B above mentioned.

Our object in increasing the height of the clamping-head is to distribute the metal in the direction of the upward pressure or strain against said head, and in narrowing the same to save metal used now on its sides, and which is not in a positive direction of the strain against the head, so that by the above means we produce a spike that is stronger than those made heretofore, and of less weight than the ones now in use.

We do not claim, broadly, in railroad-spikes, the shoulder opposite the clamping-head of the spike resting on the tie when driven home.

What we do claim as our invention is—

The head C of a spike, as shown, when its shank is provided with the inclined nose, wider at its outer edge, as described, and for the purpose set forth.

HENRY TORSTRICK.
REINHOLD BOEKLEN.

Witnesses:
WM. E. BARNARD,
EDWARD MCCALLEN.