C. Gaylord,

Spike.

No. 113,510. Patented Apr. 11. 1871.

Fig. 2.

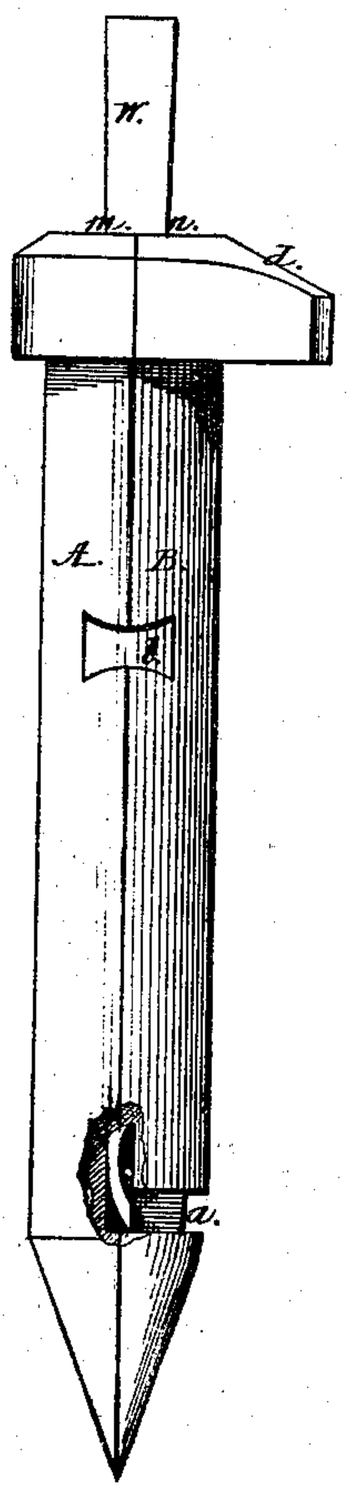
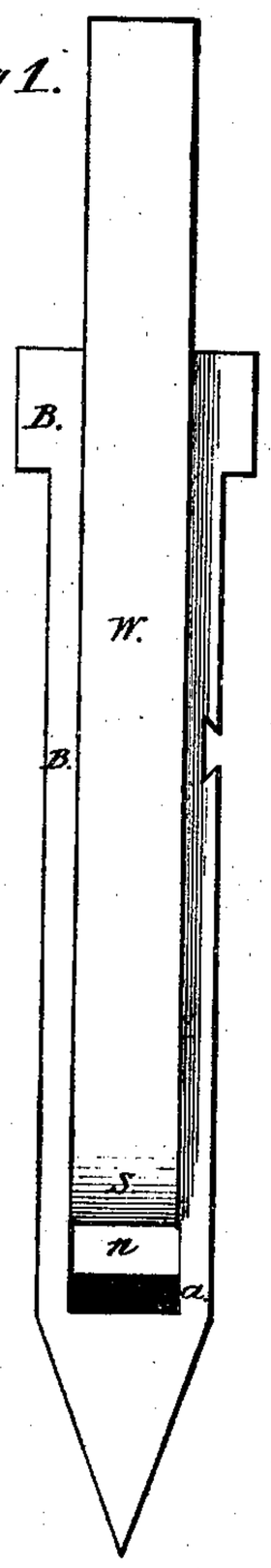


Fig. 3.

Fig 1.



Witnesses;

W Read

Edw. F. Brown

Inventor;

Charles Gaylord

United States Patent Office.

CHARLES GAYLORD, OF WASHINGTON, DISTRICT OF COLUMBIA.

Letters Patent No. 113,510, dated April 11, 1871; antedated March 29, 1871.

IMPROVEMENT IN RAILROAD-SPIKES.

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

To all whom it may concern:

Be it known that I, CHARLES GAYLORD, of Washington, in the county of Washington and District of Columbia, have made certain new and useful Improvements in Railroad-Spikes; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and letters of reference marked thereon, in which—

Figure 1 is a view of one of the half-spikes, showing the groove on its inner face and the wedge partially inserted, and also a perforation near the point of the half-spike.

Figure 2 is a view of the half-spikes joined together, and showing the perforation near the point of one of them; and

Figure 3 is a side view of the wedge.

Similar letters indicate like parts in all the figures.

My invention relates to improvements in railroad-spikes; and

It consists in the employment of two half-spikes, grooved on their inner sides, and one of said halves having a perforation near its point, and below the groove, in combination with a wedge driven into the grooves after the insertion of the spike into the tie, for the purpose of spreading the halves of the spike laterally, the point of the wedge being forced through the perforation in one of the half-spikes and into the tie, thereby bending said wedge at its point or lower end and thereby securely fastening the rail.

My invention further consists in an improvement in the wedge, in combination with one of the half-spikes, having a perforation in its sides, hereinafter more fully described.

In the accompanying drawing—

A and B are the two half-spikes, having wedge-shaped grooves *m n* formed on the inner face of each, and the half-spike B being provided with a perforation, *a*, below the groove *n*, the object of which is hereinafter more fully set forth.

The half-spikes A B are so constructed that, when united together by any convenient fastening, as the mortise and tenon *b*, seen in fig. 2, the halves will accurately fit and form a spike.

The half-spike B has a half-head, *d*, which fits over the lower flange of the rail after the spike has been driven into the tie. The other half-spike A has no half-head.

The perforation *a* is made through the half-spike B at the lower end of the groove *n*.

W is a wedge driven into the grooves *m n* after the insertion of the spike.

When the wedge is driven in the two half-heads will be spread out laterally in the tie, thus more securely fastening the spike to the tie than when an ordinary spike is employed

The wedge W has an inclined or bent end *o*, the wedge being inserted in such a manner that its bent end, lettered *o*, shall be opposite the perforation *a* in the half-spike B.

s is a groove cut in the face of the wedge near its lower end, and above the bend in the wedge, so that it will be weakened at the groove *s*, and when the wedge is driven down and comes in contact with the solid metal below the grooves in the half-spikes it, in consequence of the inclination of its point or end, and the groove made across its lower end or face, will be caused to bend and pass through the perforation *a*, and thence into the tie, thus materially increasing the security of the fastening.

By constructing the half-head *d* broader, my improved spike may be employed in lieu of a railway-chair at the intersection of the rails, thus dispensing with the employment of the ordinary railroad-chairs.

Having thus fully described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. The two half-spikes A B, grooved on their inner surfaces, and connected together to form a spike by any convenient fastening, the half-spike B being provided with a half-head *d* and perforation *a*, in combination with a wedge, substantially as described.

2. In combination with the semi-cylindrical half-spike B with a rectangular opening, the wedge W with a bent lower end, *o*, and groove *s*, substantially as described.

CHARLES GAYLORD.

Witnesses:
W. READ,
EDM. F. BROWN.