

WOODSUM & WHITMAN.

Railway Sleeper.

No. 91,893.

Patented June 29, 1869.

Fig: 1.

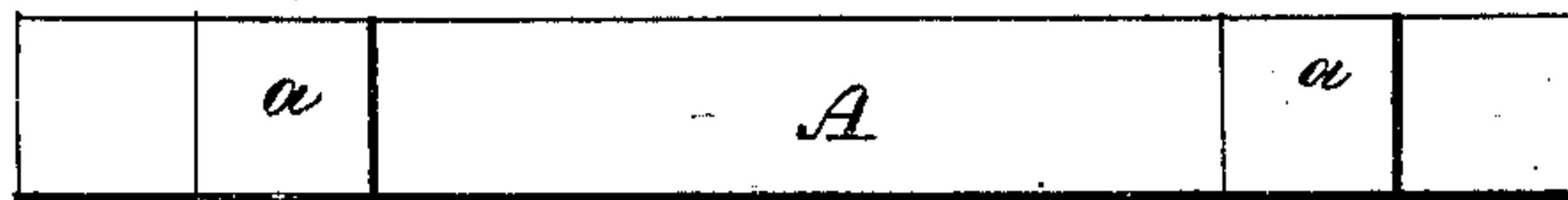
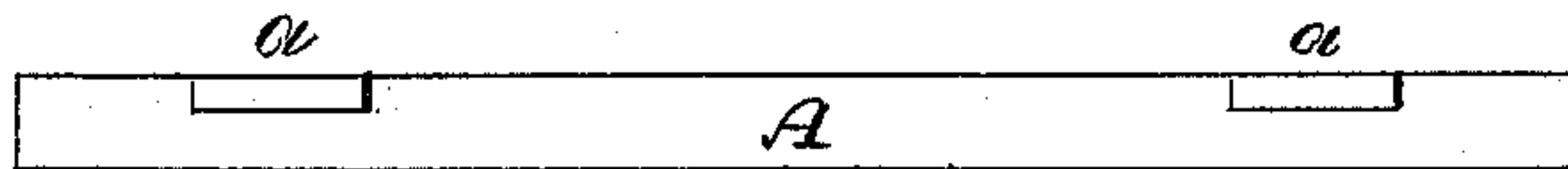


Fig: 2.



Witnesses:

Wm Frank Seavey
Henry C Houston

Inventors:

E H Woodsum
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United States Patent Office.

E. H. WOODSUM AND F. H. WHITMAN, OF HARRISON, MAINE; SAID WOODSUM ASSIGNS HIS RIGHT TO SAID WHITMAN.

Letters Patent No. 91,893, dated June 29, 1869.

IMPROVED RAILWAY-SLEEPER.

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

To all whom it may concern:

Be it known that we, E. H. WOODSUM and F. H. WHITMAN, both of Harrison, in the county of Cumberland, and State of Maine, have invented a new and useful Improved Sleeper; and we hereby declare the following to be a full, clear, and exact description thereof, which will enable others to make and use our invention, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 shows a top plan.

Figure 2, a side view.

The purpose of this invention is to make such a change in the construction of railroad-sleepers, as that their durability will be much increased, and also that lighter and softer material can be used for such sleepers, and still equal or greater durability be attained than when made in the ordinary method.

It is a familiar fact that wood, when shrinking by reason of becoming dry, does not contract in the directions of its grains, but across the same. It is also well known, that with railroad-sleepers made of wood, they soon become splintered, broken, and worn at the point where the rails of the road cross and rest upon the same. The frequent jar and pressure wear them at these points before at any other.

Our invention seeks to remedy this, as follows:

We first cut a recess at or near each end of the sleeper, where the rail will rest upon the same, when laid on a road. Into this recess, we tightly fit pieces or sections of hard, fine-grained, or durable wood. This will always remain tightly fitted, because of the peculiarity before named, that the piece will not shrink in the direction of its length or grain, and we propose to have the grains of the piece thus inserted to run in the direction of the length of the sleeper.

Then the wear of the rail and the jar of passing trains has less effect upon the sleeper, by reason of

the hardness of the wood where the rails rest upon the said sleeper, and consequently much cheaper and less durable wood or lumber can be used for the sleeper itself, without detriment to its ability to wear. It will thus wear as long or longer than harder wood.

In the accompanying drawing, the sleeper, constructed of spruce or some other like wood, is shown at A, and *a* shows the section of solid hard wood inserted therein for the rail to rest upon.

These recesses, and pieces to fit therein, can be cut with ease and rapidity by the use of proper machinery.

We do not claim merely setting blocks of wood into or on a railway-sleeper. Neither do we claim supporting the cross-ties on beams set within the railroad-embankment. Neither do we claim elevating the rails on blocks of wood, so that the cross-ties can be placed beneath the soil, to protect them from the weather. Our invention is different from this in purpose and construction. We purpose to claim merely the improvement to the sleeper herein shown, which provides a more durable part for the rail to rest on, where it crosses the sleeper. Neither do we claim the inserting of one kind of wood into another, so that the piece inserted shall not shrink in the bed or recess; but our invention refers to an improved railroad-sleeper.

What we claim as our invention, and desire to secure by Letters Patent, is—

The improved railway-sleeper, constructed as described, to wit, with the transverse cuts therein, and the blocks of hard wood inserted therein, as herein described.

E. H. WOODSUM.
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Witnesses:

JOHN MARTIN,
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