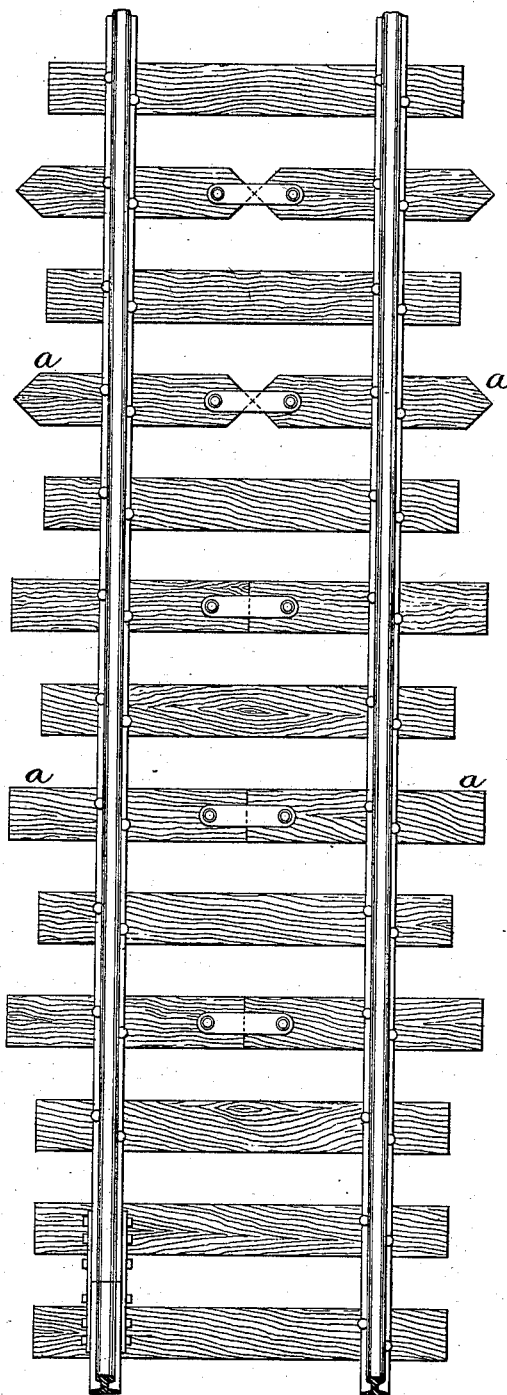


(No Model.)

S. W. HUDSON.  
RAILROAD TRACK.

No. 264,162.

Patented Sept. 12, 1882.



WITNESSES

*Wm A. Smith*  
*Jos. S. Latimer*

INVENTOR

By his Attorneys *Samuel W. Hudson.*  
*Baldwin, Napkin, & Peyton*

# UNITED STATES PATENT OFFICE.

SAMUEL W. HUDSON, OF HUDSONDALE, PENNSYLVANIA.

## RAILROAD-TRACK.

SPECIFICATION forming part of Letters Patent No. 264,162, dated September 12, 1882.

Application filed June 22, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL W. HUDSON, of Hudsondale, in the county of Carbon and State of Pennsylvania, have invented certain new and useful Improvements in Railroad-Tracks, of which the following is a specification.

My invention consists in certain improvements whereby old railroad-ties which have become worn out or partly rotted away and waste ends or short pieces of new ties and other railroad timber may be utilized in the laying of a track.

The accompanying drawing is a plan view of a section of a railroad-track, showing my improvements.

Heretofore old ties, the parts of which have rotted away and become unstable, have not been utilized in relaying a track. They were either thrown aside or burned as fuel, and in either case a considerable waste and inconvenience was involved.

In my improvement I use the old ties in connection with new ones in the following manner: Railroad-ties usually rot at the ends and where the rails cross them, though sometimes they will be found rotted in the middle and in good condition toward the ends. I cut off the rotted imperfect parts of each tie so as to leave about four feet eight inches (more or less) of the solid preserved portion of the tie. I then take two such sections of old ties and place them together, to form a single tie about nine feet four inches in length, in the manner illustrated in the drawing. Such compound ties are preferably made of the length mentioned and are longer than the ordinary length of new ties, which are about eight feet long.

*a a* are the sections, which are united by suitable metal straps and bolts or spikes, as shown. It will be observed that the rails rest on these sections at or about their middle, so that the

sections will settle evenly and the rails be firmly and securely seated.

I have shown in the drawing such combined railroad-ties laid alternately with solid new ties. Under such a construction the track is perfectly solid, and is as durable as if laid according to the old plan with entirely new ties.

In order to give the proper strength at the fish-plates where the rails are jointed, I prefer to use a solid tie or ties, as shown in the drawing.

It will be observed that some of the sections forming the combined ties are cut away or pointed at the ends, instead of being cut off square. This is done in order to prevent the frost from forcing the ends of the sections apart and spreading the track.

By laying the track according to the above plan waste ends and short pieces left over in making ordinary ties can be utilized, and this fact, coupled with the utilization of old worn-out ties, marks a very material economy.

What I claim as my invention is—

1. The improvement in the method of laying railroad-tracks, which consists in utilizing old worn-out ties by cutting off their rotted portions and using two of the sections thus left to form single ties in connection with solid railroad-ties, in the manner described.

2. The combination, substantially as set forth, of the rails, the solid ties, and the sectional ties secured together at their inner ends.

3. The combination, substantially as set forth, of the rails, the solid ties, the sectional ties, each section of which is pointed at one or both ends, and the securing-bolts.

In testimony whereof I have hereunto subscribed my name.

SAMUEL W. HUDSON.

Witnesses:

L. H. BARBER,  
JAMES S. LOOSE.