

(No Model.)

H. W. LIBBEY.  
RAILWAY SPIKE RETAINER.

No. 421,007.

Patented Feb. 11, 1890.

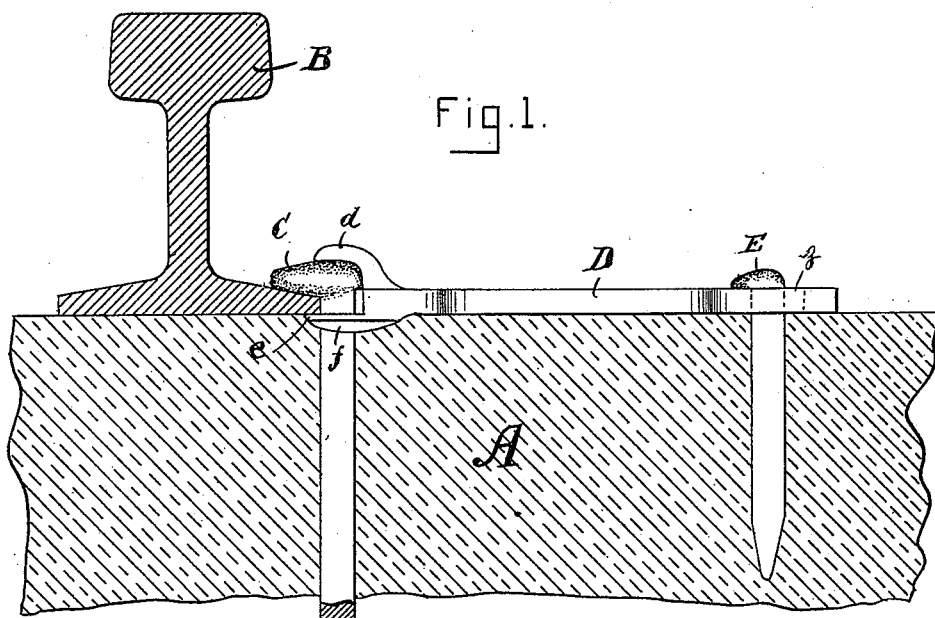


Fig. 2.

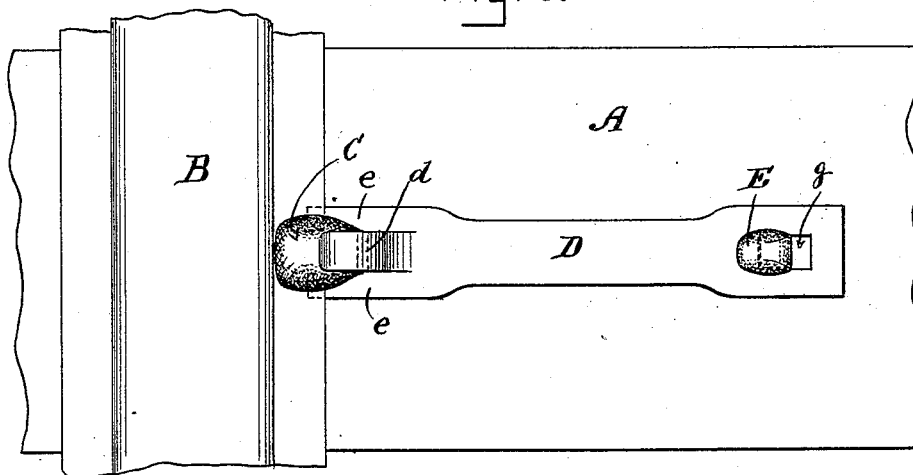


Fig. 5.

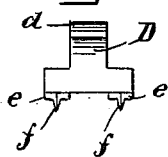


Fig. 3.

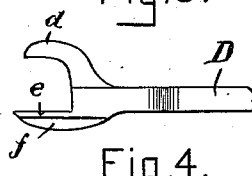
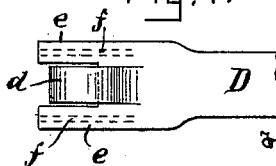


Fig. 4.



Witnesses.

George Ditzgen  
H. Cook

Inventor.

H. W. Libbey  
by Edwin Blanta,  
Attorney.

# UNITED STATES PATENT OFFICE.

HOSEA W. LIBBEY, OF BOSTON, MASSACHUSETTS.

## RAILWAY-SPIKE RETAINER.

SPECIFICATION forming part of Letters Patent No. 421,007, dated February 11, 1890.

Application filed May 22, 1889. Serial No. 311,765. (No model.)

*To all whom it may concern:*

Be it known that I, HOSEA W. LIBBEY, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Railway-Spike Retainers, of which the following, taken in connection with the accompanying drawings, is a specification.

In railways the spikes holding the rails to the sleepers work loose by the constant jar occasioned by the trains passing over them.

The object of my invention is to produce a retainer whereby when the spikes are once driven they will be held in place; and the invention consists in its peculiar construction, all as hereinafter fully described, and pointed out in the claims.

Referring to the accompanying drawings, Figure 1 represents a transverse vertical section of a rail and sleeper with a spike-retainer embodying my invention in position over the spike. Fig. 2 is a plan or top view of the same. Fig. 3 is a side view of the inner end of the spike-retainer. Fig. 4 is a plan or top view, and Fig. 5 is an end view, of the same.

A represents the sleeper, B the rail, and C the spike holding the rail to the sleeper, all of ordinary construction.

D is the spike-retainer, which consists of a flat piece of metal provided at its inner end with a lip *d*, that passes over the head of the spike C, and also two prongs *e*, which pass by the side of the spike and extend a short distance under the flange of the rail. These

prongs are strengthened by a V-shaped web *f*. The object of having the webs V-shaped is that they will readily cut into and be embedded in the sleeper A. The outer end of the spike-retainer D is provided with an oblong hole *g*, through which a spike E is driven into the sleeper A, thus holding the spike-retainer in its proper position.

It will be seen that by means of the spike-retainer it is impossible for the spike to work loose, as its head is confined by the lip *d*, and the prongs *e* under the flange of the rail on each side of the spike and the retainer being held in place by the spike E. It will also be seen that the spike-retainer acts as a reinforcement to prevent the rails from spreading.

What I claim is—

1. A spike-retainer having at its inner end a lip to embrace the head of the spike and prongs to pass under the flange of the rail, and at its outer end a hole through which a spike is driven to hold the retainer in place, substantially as shown and described.

2. A spike-retainer D, having at its inner end a lip *d* and two prongs *e*, and V-shaped webs *f*, and at its outer end a hole *g*, substantially as and for the purposes set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 20th day of March, A. D. 1889.

HOSEA W. LIBBEY.

Witnesses:

CHAS. STEERE,  
EDWIN PLANTA.