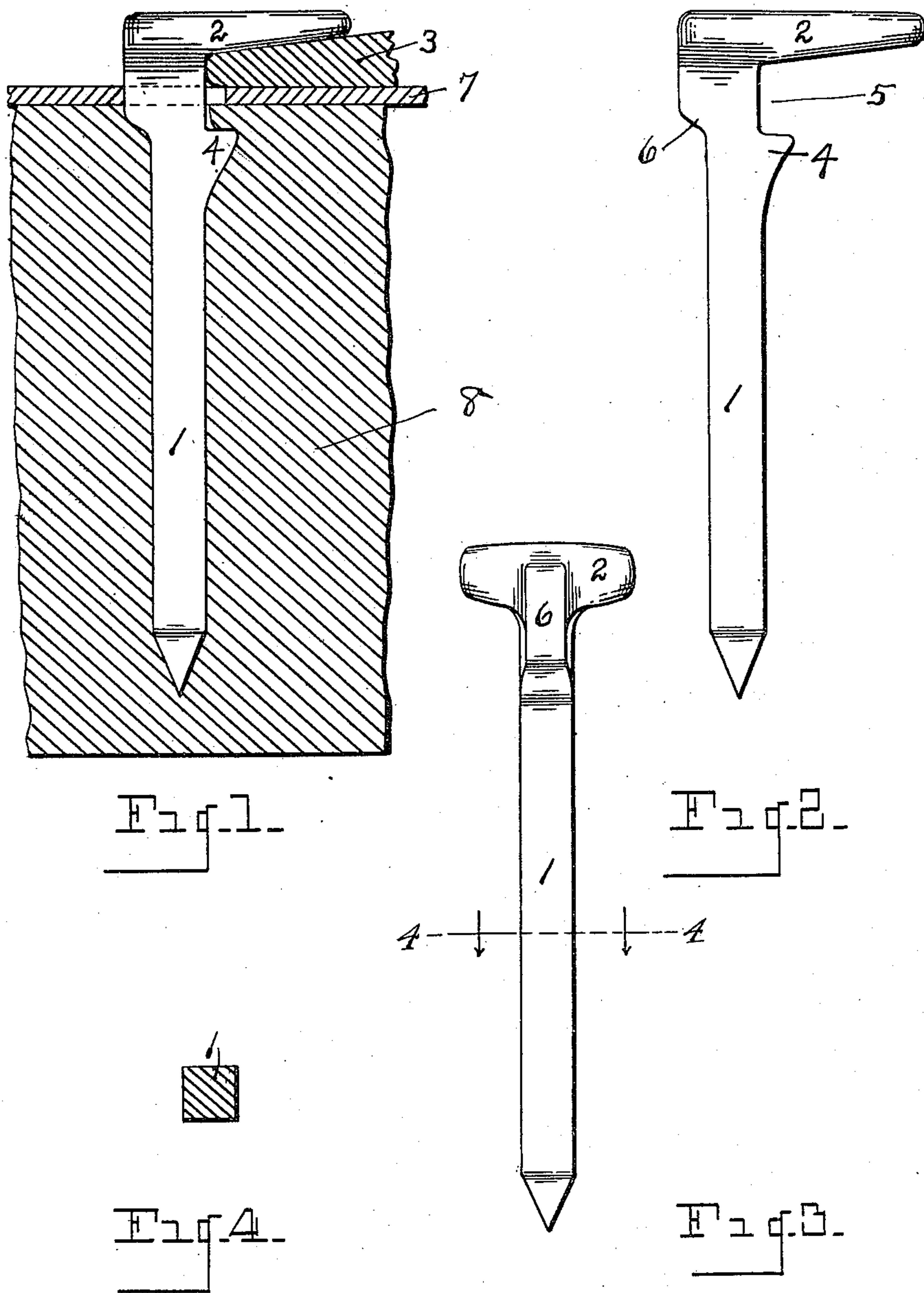


No. 896,108.

PATENTED AUG. 18, 1908.

J. E. HEALE.
RAILWAY SPIKE.

APPLICATION FILED SEPT. 16, 1907.



Witnesses

E. M. Brown.
Dec. Kane Forry the

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UNITED STATES PATENT OFFICE.

JAMES E. HEALE, OF GOLDFIELD, NEVADA, ASSIGNOR OF ONE-FOURTH TO ARTHUR C. BIGELOW AND MANUEL SYLVIA, OF GOLDFIELD, NEVADA.

RAILWAY-SPIKE.

No. 896,108.

Specification of Letters Patent.

Patented Aug. 18, 1908.

Application filed September 16, 1907. Serial No. 392,956.

To all whom it may concern:

Be it known that I, JAMES E. HEALE, a citizen of the United States, and a resident of Goldfield, in the county of Esmeralda, State of Nevada, have invented a new and useful Railway-Spike, of which the following is a specification.

My invention consists in a railroad spike provided with a shoulder to prevent the spike from working out of the cross tie, and with an inclined shoulder on the opposite side of the spike adapted to force the upper end of the spike toward the rail.

In the accompanying drawing, Figure 1 shows the spike in engagement with a rail flange. Fig. 2 is a side view of a slightly modified form of the spike. Fig. 3 is a view of the outer side of the spike. Fig. 4 is a cross section on the line 4—4 of Fig. 3.

Similar reference characters refer to like parts throughout the several views.

The size and proportions of the spike shown will depend upon the size of the rail and on the character of the wood of the cross tie.

The cross section of the body or shank 1 of the spike is preferably rectangular, and is formed with any desirable style of point. The head 2 is flat and inclined so that the lower side fits the upper side of the lower flange 3 of the rail. This prevents the head being broken off by the excessive blows after the spike is driven to place.

Projecting from the inner side of the shank or body of the spike is a shoulder 4 having an inclined lower side, and having its upper side square with the inner face of the shank. A space 5 is thus formed between the shoulder 4 and the head 2.

On the back of the head and at the upper end of the shank a second shoulder 6 is formed, also beveled on its lower face. 7 is a tie plate underneath the rail, provided with holes through which the spike may be driven.

This spike is designed to take advantage of the resilience of the wood of the tie 8. The

spike is started with its inner face a short distance, about an eighth of an inch, from the edge of the lower flange of the rail. When the shoulder 4 engages the edge of the rail flange 3, the head of the spike will spring back until the shoulder 4 passes the flange. When the inclined lower face of the shoulder 6 engages the plate 7, the upper end of the spike will be forced against the flange 3 as shown in Fig. 1. The shoulder 4 will bite into the tie and will prevent the spike from working out. Should the conditions be such that the spikes are pulled up a considerable amount, the shoulders 4 will engage under the rail flange or plates 7 and thus be held in the ties. The result will be, that while not giving perfect service in holding down the rail, the spike will at least keep the track from spreading, as the spikes cannot entirely get out of the ties.

Having now explained my improvement, what I claim as my invention and desire to secure by Letters Patent is:—

1. A railroad spike comprising a shank and a head, and shoulders on the front and back faces of the shank, said shoulders having their lower faces inclined the shoulder on the front face of the spike being nearer the point of the spike than the shoulder on the rear face.

2. A railroad spike comprising a shank and a head, a shoulder formed on the rear side of the shank at the head, and a second shoulder formed on the front of the shank below the head and having its upper face substantially at right angles to the shank and its lower face inclined thereto the lower inclined face of the former shoulder being approximately opposite the upper face of the latter.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JAMES E. HEALE.

Witnesses:

M. SYLVIA,
ARTHUR C. BIGELOW.