J. Mongomery,

Spike.

No. 100,055. Patented Feb. 22. 1870.

FIG. 1.

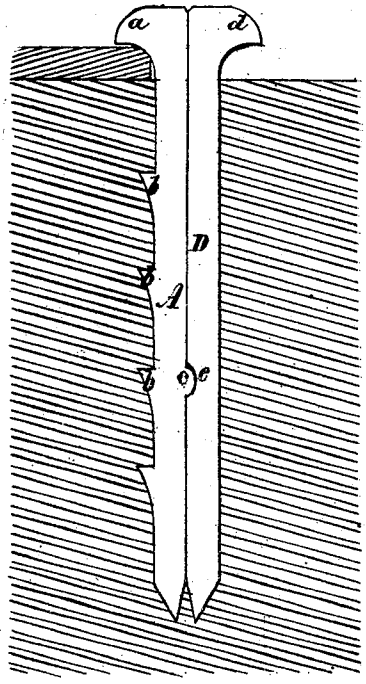

FIG. 2.

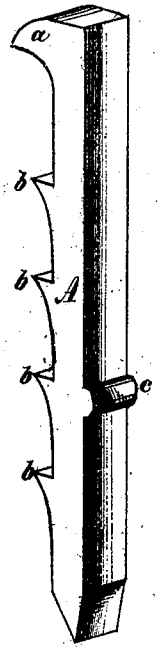

FIG. 4.

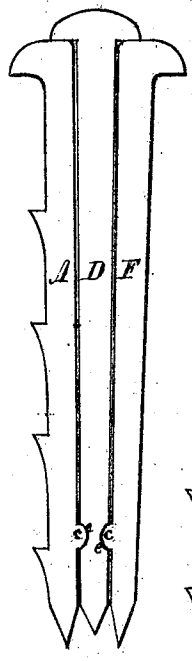

FIG. 3.

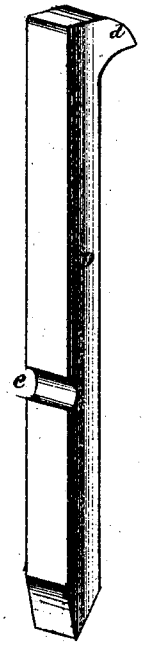

FIG. 5.

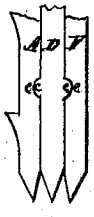

FIG. 6.

Witnesses
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United States Patent Office.

JAMES MONTGOMERY, OF NEW YORK, N. Y.

Letters Patent No. 100,055, *dated February* 22, 1870.

IMPROVEMENT IN SPIKES FOR RAILWAYS.

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

I, JAMES MONTGOMERY, of the city, county, and State of New York, have invented a new and useful Improvement in Railway-Spikes, which is described as follows:

Nature and Object of the Invention.

My improved spikes are made to be used in pairs, one of them, which is to hold the rail, having transverse barbs in its face, which barbs are made to enter the wood by driving the second spike down at the back of the first, and the second spike is formed on its face with a depression, which, as the said spike is wedged down at the back of the first, springs or slips over a corresponding projection thereon, which holds the second spike from working loose by accident, and the barbs of the first spike prevent this from being drawn out by any force applied to its head.

When the spike is to be taken out, the supplementary spike must be first drawn out with a claw-bar, and the barbed spike being then pressed back into the cavity left by the supplementary spike, the barbed spike will come out without difficulty.

General Description with Reference to the Drawing.

In the accompanying drawing—

Figure 1 is an elevation of a pair of my improved spikes, parts of the tie and of the base of the rail being shown in section.

Figure 2 is a perspective view of the barbed spike, and

Figure 3 is a perspective view of the supplementary spike.

For greater clearness of description, I shall in this specification denominate the primary spike shown in fig. 2, "the holding spike," and the secondary spike shown in fig. 3, "the key spike."

The holding spike A is formed with the customary head *a* projecting from one side, for the purpose of engaging with the base of the rail, and on the surface of the spike are formed barbs *b b b*, which hold firmly in the wooden cross-tie when the spike is driven.

On the opposite face of the spike is a protube ance, *c*.

The key spike D is formed with a head, *d*, for the purpose of drawing it when necessary, a flat face to fit against the flat face of the spike, and a recess, *e*, to engage and fit over the protuberance *c* of the spike A.

In use, the spike A is first driven into the cross-tie, its head engaging and holding the base of the rail in customary manner.

The key spike D is then driven in close contact with A, and, by its wedging action, it forces the barbs *b* more firmly into the wood.

The driving is continued until the recess *e* springs over the protuberance *c*, so as to lock the spike A, and in this condition the combined or duplex spike is firmly secured against drawing by any strain which the rail may exert upon the head *a* of the spike A.

If, however, it becomes necessary to remove the holding spike A, the key spike D is first drawn, by means of a claw-bar. The holding spike A is released and may readily be withdrawn.

Figure 4 illustrates the application of the same invention to triple spikes.

In this case the key spike D is driven centrally between the outer spikes A and F after the latter have been inserted.

The projections *c* may be on the two outer spikes, A and F, as shown in fig. 4, both on the central or key spike, as shown in Figure 5, or one on the central key spike, and one on either of the outer ones, as illustrated in Figure 6.

Claim.

I claim as my invention—

The spikes A D, provided respectively with one or more projections *c* and recesses *e*, and adapted for combined use, substantially as described.

JAMES MONTGOMERY.

Witnesses:

THOS. B. KINGSLAND,

OCTAVIUS KNIGHT.