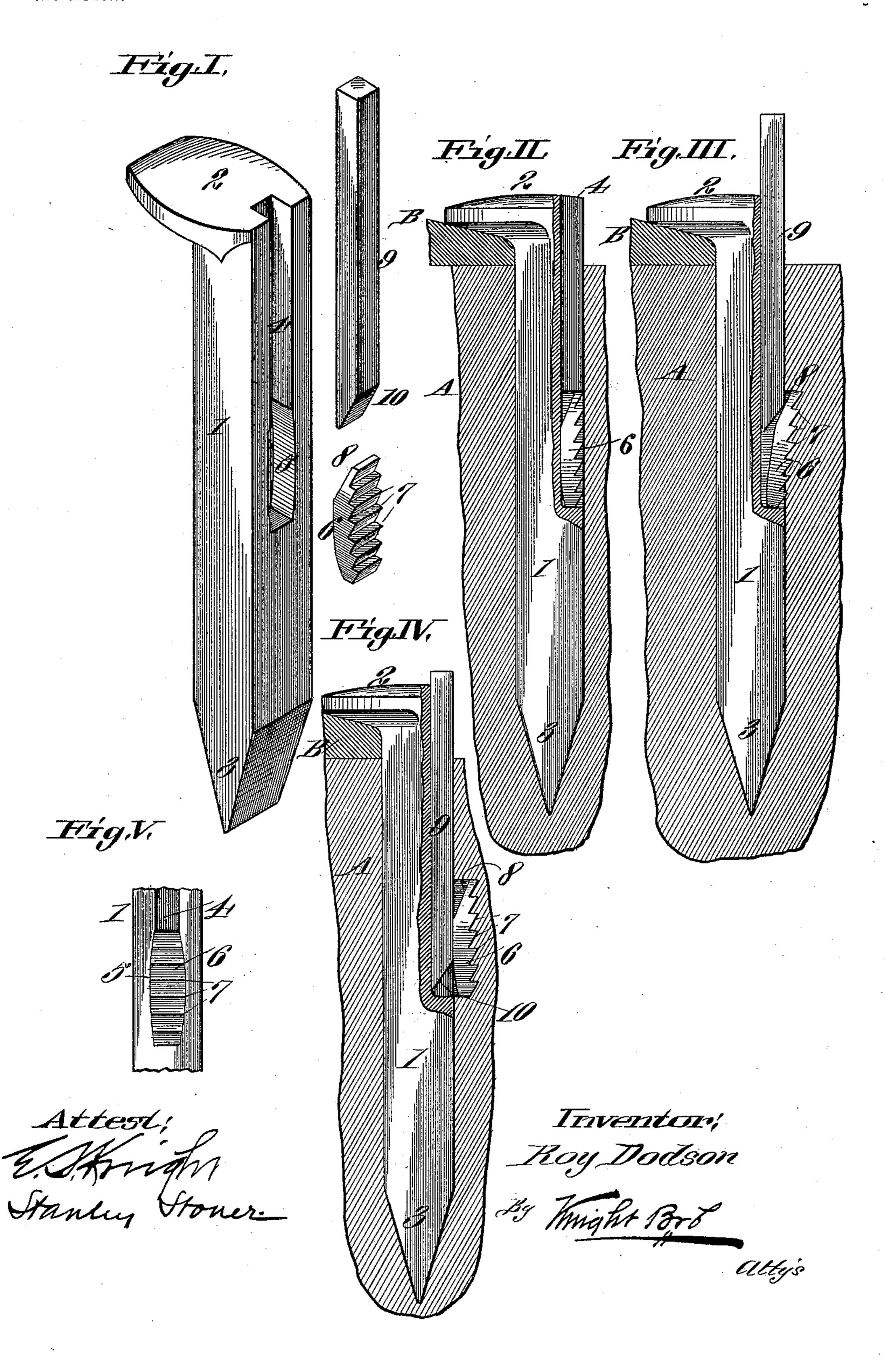
R. DODSON. RAILROAD SPIKE.

(Application filed Nov. 6, 1897.)

(No Model.)



United States Patent Office.

ROY DODSON, OF DALLAS, TEXAS.

RAILROAD-SPIKE.

SPECIFICATION forming part of Letters Patent No. 613,797, dated November 8, 1898.

Application filed November 6, 1897. Serial No. 657,658. (No model.)

To all whom it may concern:

Be it known that I, Roy Dodson, a citizen of the United States, residing at Dallas, in the county of Dallas and State of Texas, have 5 invented certain new and useful Improvements in Railroad-Spikes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to a railroad-spike embodying means for preventing the spike from working loose in use.

My invention consists in features of novelty hereinafter fully described, and pointed

15 out in the claims.

Figure I is a perspective view of a railroadspike and a locking-piece and key embodied in my invention, the parts being shown separate. Fig. II shows a side view of my spike, 20 partially broken away and shown in section, embodied in a fragment of a railroad-tie, the locking-piece being shown in position assumed when the spike is first driven. Fig. III is a similar view to Fig. II, showing the 25 locking-piece and key inserted in the spike and the locking-piece projected into retaining position. Fig. IV is a similar view to Fig. III, showing the key inserted to a greater degree and the locking-piece forced from its 30 seat in the spike to enable the withdrawal of the spike when required to remove it from any cause. Fig. V is a detail edge view of a fragment of the spike, showing the lockingpiece in elevation in the groove thereof.

1 designates the spike, having a head 2 and a point 3. In the outer face of the spike is a longitudinal groove 4, having a lower enlarged portion providing longitudinal recesses 5 in the sides of the groove formed

40 with outwardly-curved sides.

6 designates a locking-piece provided with curved outwardly to fit in the recesses 5 of the groove 4 and be held therein from verti-45 cal displacement as the spike is driven into the tie. The upper rear portion of the locking-piece 6 is formed with an incline 8, and the lower end of the locking-piece is at the rear curved slightly in a forward direction.

A designates the railroad-tie, and B the 50 flange of a railroad-rail.

9 designates a key adapted to fit in the groove 4 and provided at its lower end with an inclined surface 10.

In practical use the spike is affixed to the 55 railroad-tie in the following manner: The spike is first driven into the tie, as shown in Fig. II, with the locking-piece 6 resting in the recesses 5 of the groove 4, from which the locking-piece is incapable of escaping by rea- 60 son of its outwardly-projecting sides fitting to the contour of said recesses. When the spike has been driven into the tie, as mentioned, the key 9 is inserted in the groove 4, with its inclined face 10 outermost, and on 65 its insertion the inclined face comes in contact with the inclined upper rear face 8 of the locking-piece, when by driving the key downward the upper end of the locking-piece is thrown outward from its seat in the re- 70 cesses of the groove and is embedded into the tie A. As the displacement of the upper end of the locking-piece does not cause the lower end to be moved from its seat at the bottom of the groove 4, the locking-piece has a bear-75 ing in the groove against the spike at its lower end, and its upper end being embedded in the tie and the teeth or serrations biting thereinto the spike is held firmly from working loose, as might otherwise result.

In the use of my improved spike the key 9 is not necessarily required to remain in the groove 4 after it has accomplished the desired purpose by being driven against the locking-piece to force its upper end outward 85 and embedding it into the tie. Such key may therefore, if desired, be removed and the groove may be filled with cement or other

suitable substance.

In Fig. IV, I have illustrated the manner 90 in which the locking-piece 6 may be forced entirely from the groove 4 in order that the teeth or serrations 7, said key having its sides | spike may be withdrawn. To accomplish this result, it is only necessary that the key 9 be driven farther into the groove 4 and down 95 into the enlargement in the rear of the locking-piece, and the locking-piece will thereby be forced entirely from its seat in the groove, preventing any opposition of the lockingpiece to the withdrawal of the spike. I claim as my invention—

1. The combination of a spike formed with

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a longitudinal groove having an enlargement providing recesses in the sides of the groove, and a locking-piece fitting in the enlargement and having sides extending into the recesses; substantially as described.

2. The combination of a spike formed with a longitudinal groove having an enlargement providing recesses in the sides of the groove curved outwardly at their sides, and a lock-

ing-piece formed with outwardly-curved sides to fitting in the recesses, with a rear incline at its upper end, slightly curved forward at its lower end, and with front teeth or serrations; substantially as described.

ROY DODSON.

In presence of— E. S. KNIGHT, STANLEY STONER.