D. M. LIPSCOMB.

RAILROAD SPIKE.

APPLICATION FILED SEPT. 11, 1908.

956,378. **Patented Apr. 26, 1910.**

Fig. 1.

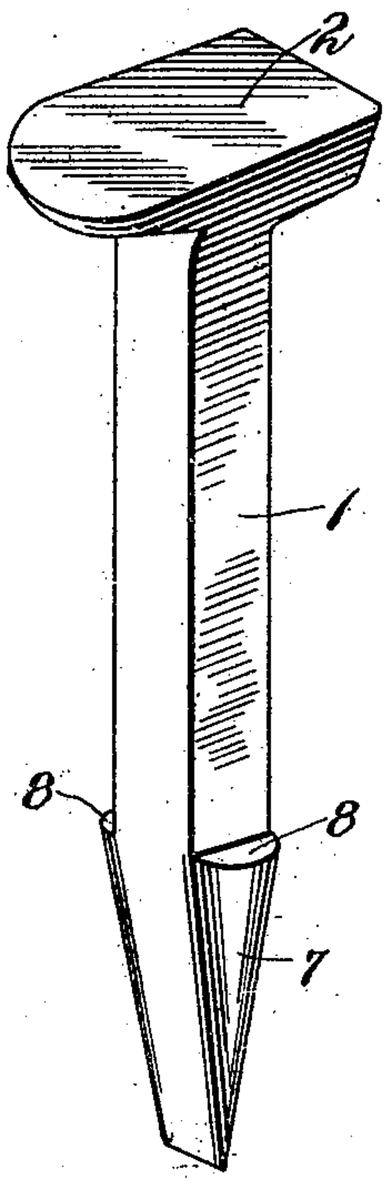


Fig. 2.

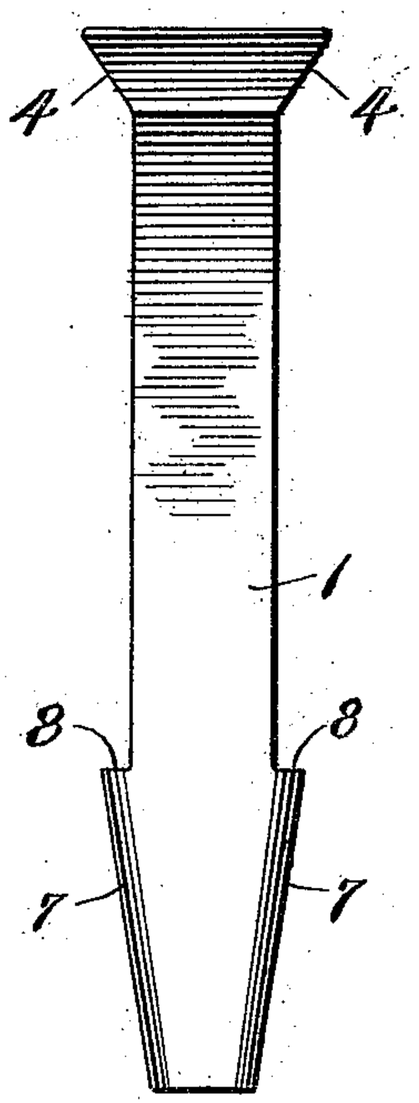
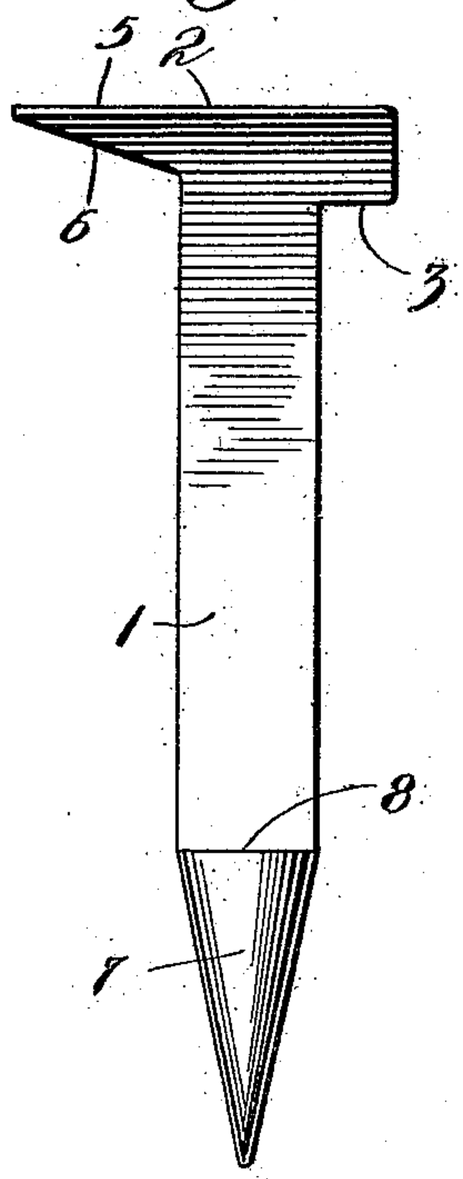


Fig. 3



Witnesses

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RAILROAD-SPIKE.

956,378. Specification of Letters Patent. **Patented Apr. 26, 1910.**

Application filed September 11, 1908. Serial No. 452,681.

To all whom it may concern:

Be it known that I, DANIEL MACK LIPSCOMB, a citizen of the United States, residing at Albert, in the county of Tucker and State of West Virginia, have invented new and useful Improvements in Railroad-Spikes, of which the following is a specification.

This invention relates to railroad spikes and has for its object the production of a spike adapted for fastening rails to wooden ties, the spike embodying a construction adapting it to be readily driven into the tie and to spread apart the fiber of the wood without mutilating or cutting the same and subsequently permitting the fiber to close in over shoulders which prevent the accidental displacement of the spike and serve to maintain the spike in its holding position.

With the above and other objects in view, the nature of which will more fully appear as the description proceeds, the invention consists in the novel construction, combination and arrangement of parts as herein fully described, illustrated and claimed.

In the accompanying drawings:—Figure 1 is a perspective view of a railroad spike embodying the present invention. Fig. 2 is an elevation of the spike looking toward that side of the spike from which the shoulder head projects. Fig. 3 is a view taken at right angles to Fig. 1.

The spike contemplated in this invention comprises a substantially square and flat-sided shank 1 the same being provided at one side with a head 2, one side of which projects to one side of the shank to form a tie-engaging shoulder 3 adapted to bear snugly against a wooden tie and to be driven partially into the same, the opposite sides of the head being reversely beveled or chamfered as shown at 4 to admit of such partial penetration of the head of the spike into the tie. At the opposite side the head is extended to form a projecting lip 5 adapted to engage the base flange of the contiguous rail over and against which each rests, the lower face of said rail-engaging lip being beveled or inclined as shown at 6 to form a tight and effective fit against the upper surface of the base flange of the rail. The projecting lip 5 is also reversely beveled or chamfered in its opposite sides as indicated in the drawings. At the opposite end the shank 1 is reversely beveled on opposite sides and brought to a point which is substantially chisel-shaped as shown in Figs. 1 and 2 to adapt the spike to be driven into the material in the tie. The same end of the spike is also provided with oppositely projecting flukes 7. These flukes gradually increase in width from the pointed end of the spike upward and terminate in abrupt transverse shoulders 8, while the outer surface of said flukes are rounded as best shown in Fig. 1 or in other words, said flukes are of semi-conical shape in cross section.

By reason of the construction above described, the spike is adapted to be driven into the tie, the chisel-shaped point extending at right angles to the grain of the fiber of the tie and cutting said fiber as the spike is driven down. The rounded semi-conical flukes serve to compress the fiber of the wood and spread the same apart during the driving of the spike and after the spike has been driven into the tie to the full extent, the fiber or grain of the wood which remains unbroken crowds itself inward over the abrupt anchoring shoulders 8 and thereby retains the spike securely in place, preventing the accidental displacement of such spike.

I claim:—

A railroad spike comprising a shank square in cross section, a head having straight reversely inclined upwardly diverging opposite side faces which merge into corresponding faces of the shank and also embodying a beveled rail engaging lip and a horizontal tie-engaging shoulder with straight reversely beveled and under-cut side faces, the opposite end of the spike being reversely beveled on two opposite sides to produce a chisel-shaped edge, and inverted semi-conical flukes projecting from the remaining two sides of the shank, said flukes terminating at their upper ends in abrupt transverse anchoring shoulders and being tapered therefrom to their lower extremities where they terminate in points which merge into the chisel-shaped edge of the spike.

In testimony whereof I affix my signature in presence of two witnesses.

DANIEL MACK LIPSCOMB.

Witnesses:
D. E. CUPPETT,
JOHN MIELKINS.