(No Model.)

G. W. THOMPSON.

RAILROAD SPIKE.

No. 519,511. Patented May 8, 1894.

Fig. 1

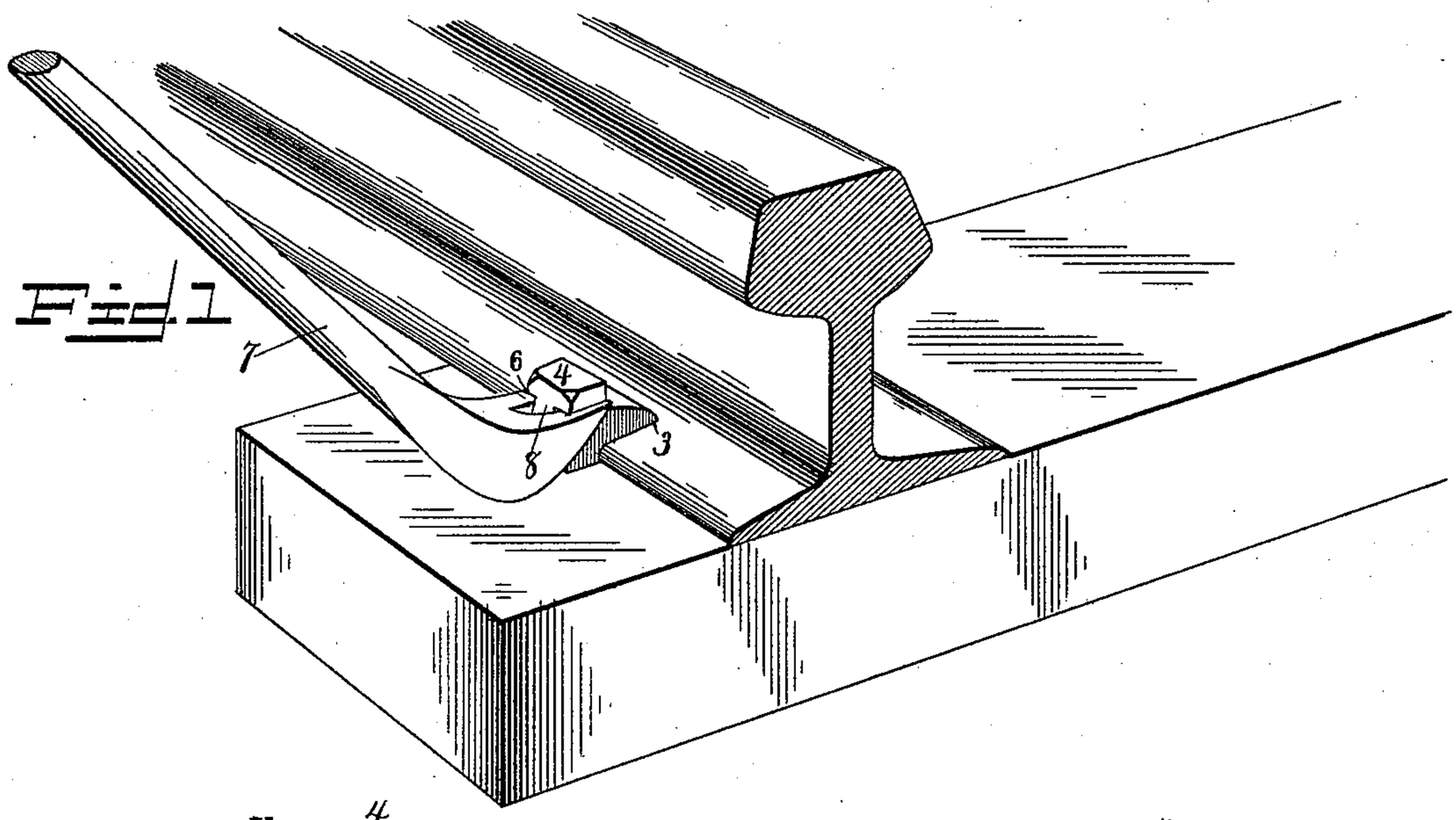


Fig. 2

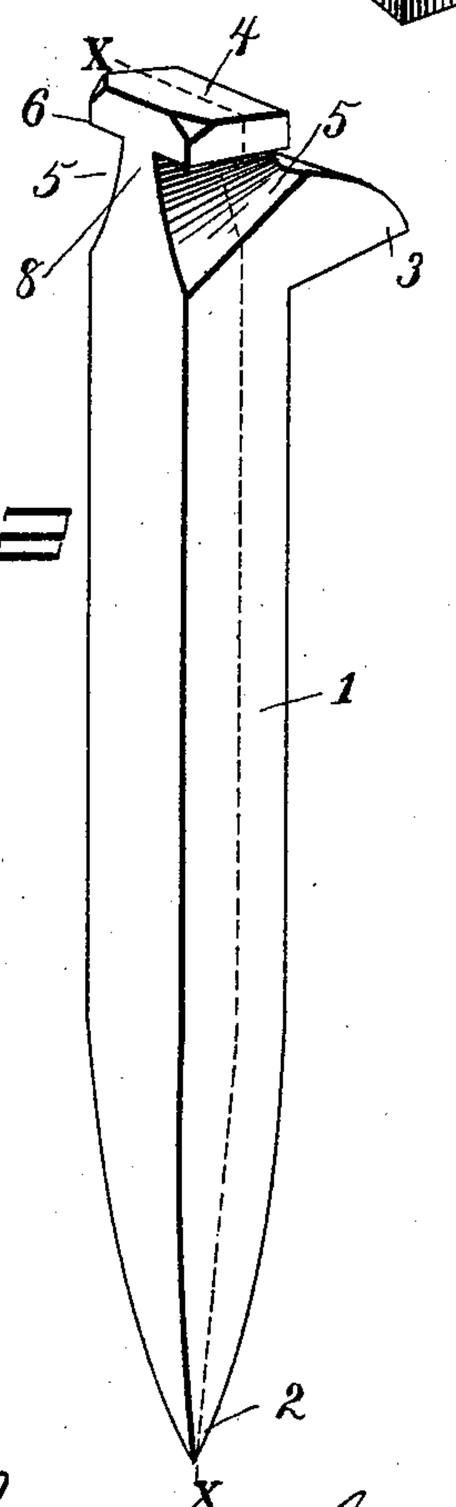
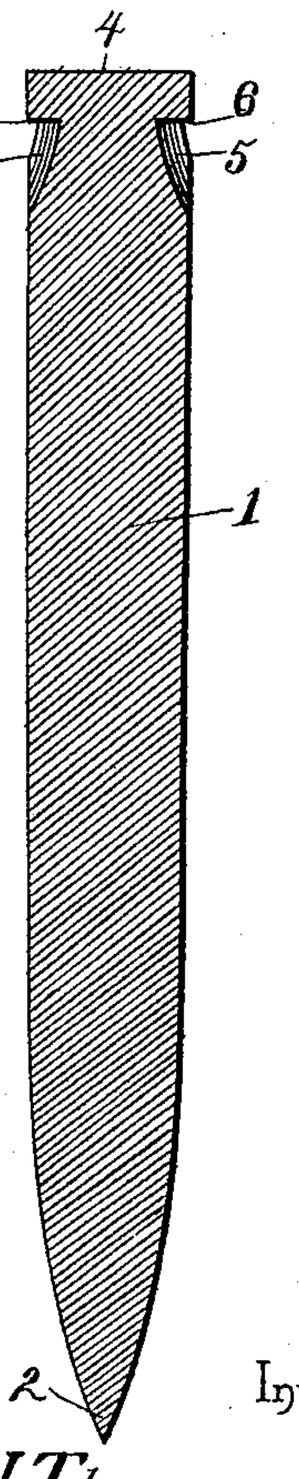


Fig. 3



Witnesses

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GEORGE WASHINGTON THOMPSON, OF LEADVILLE, COLORADO.

RAILROAD-SPIKE.

SPECIFICATION forming part of Letters Patent No. 519,511, dated May 8, 1894.

Application filed January 12, 1893. Serial No. 458,144. (No model.)

To all whom it may concern:

Be it known that I, GEORGE WASHINGTON THOMPSON, a citizen of the United States, residing at Leadville, in the county of Lake and State of Colorado, have invented a new and useful Railroad-Spike, of which the following is a specification.

This invention relates to railroad spikes, and has for its object to provide means in connection with the head thereof whereby it may be more readily withdrawn from its driven position, and at the same time form means by which the same may be readily driven and that are located above the engaging flange or lip thereof; and with this object in view, the invention consists of the construction and arrangement of parts as will be more fully hereinafter described and claimed.

In the drawings: Figure 1 is a perspective view of a portion of a rail and tie, showing the improved spike in connection therewith and the manner of using a claw-bar in withdrawing the spike from its driven position. Fig. 2 is a perspective view of the spike on an enlarged scale. Fig. 3 is a transverse sectional view on the line *x*—*x*, Fig. 2.

Similar numerals of reference indicate corresponding parts in the several figures.

1 designates the sectionally rectangular shank of the improved spike, which is provided with a tapering point 2, and 3 represents a laterally-projecting main head or lip which extends at right angles from the shank 1 and is adapted to take over the rail flange. Above the main head with its rear end flush with the back of the shank 1, is a supplemental head 4, having a flattened upper side to receive the impact of a sledge or other tool which may be employed in driving the spike. The neck 8 by which the supplemental head is connected to the upper end of the shank is wedge-shaped in horizontal section, the sides of the neck converging toward the back of the same. The neck terminates at the under surface of the supplemental head in abrupt shoulders 6, which are broadest at the back of the shank and diminish or taper in width toward the front of the same. The opposite sides of the neck are beveled or concaved, as shown at 5, whereby the neck is substantially wedge-shaped in vertical section, as clearly shown in Fig. 3, and the intersection of the surfaces 5 of the sides of the neck with the surfaces of the sides of the shank and head 3, incline upwardly from the rear angles of the shank to the upper surface of the main head. It will be observed, furthermore, that the channels or cavities forming the neck extend through and penetrate the front side of the supplemental head between the plane of the lower surface thereof and the upper surface of the main head.

7 represents a claw-bar of the ordinary or any preferred construction, the oppositely-arranged toes of which are adapted to be engaged with the shoulders 6, formed by the under surface of the supplemental head to enable the spike to be withdrawn.

The advantage of the peculiar shape of the neck lies in the fact that the necessary strength is provided to enable the spike to be driven without risk of fracture, and at the same time provides shoulders 6, of sufficient projection and of suitable shape to insure a firm engagement of the claw-bar therewith.

A further advantage of the peculiar construction described resides in the fact that an ordinary form of spike can be altered by cutting the tapered cavities in the opposite sides thereof, as described.

I am aware that spikes have been constructed, heretofore, with laterally projecting shoulders for the engagement of a claw-bar, the body portions of said spikes being specially constructed to give the necessary strength at the points of greatest strain, but in the construction which I have illustrated an ordinary form of spike may be provided with the advantages of these shoulders, and the manner of forming the same leaves the spike with the necessary strength at the base or inner end of the main head, which is the point of greatest strain. The tapering of the side cavities, to produce the V-shaped neck, leaves the entire sectional strength of the metal at the inner end of the main head.

Having thus described the invention, what is claimed as new is—

As an improved article of manufacture, a spike having a shank 1 rectangular in cross-

section, provided with a lateral main head 3, a superjacent supplemental head 4 flush at its rear edge with the back of the shank, and a neck 8 connecting the supplemental head with the upper end of the shank, such neck being V-shaped or tapered in cross-section with its sides converging toward the rear of the shank, concaved or beveled outwardly toward the lower end of the neck to intersect the sides of the spike in lines extending from the rear angles of the shank to the top of the main head and terminating abruptly at the upper end of the neck to form shoulders 6 which taper in width toward the front of the supplemental head, an interval being formed between the edge of the supplemental head and the upper surface of the main head at the front of the former substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

GEORGE WASHINGTON THOMPSON.

Witnesses:
F. LAMOREAUX,
ELIAS PARRY.