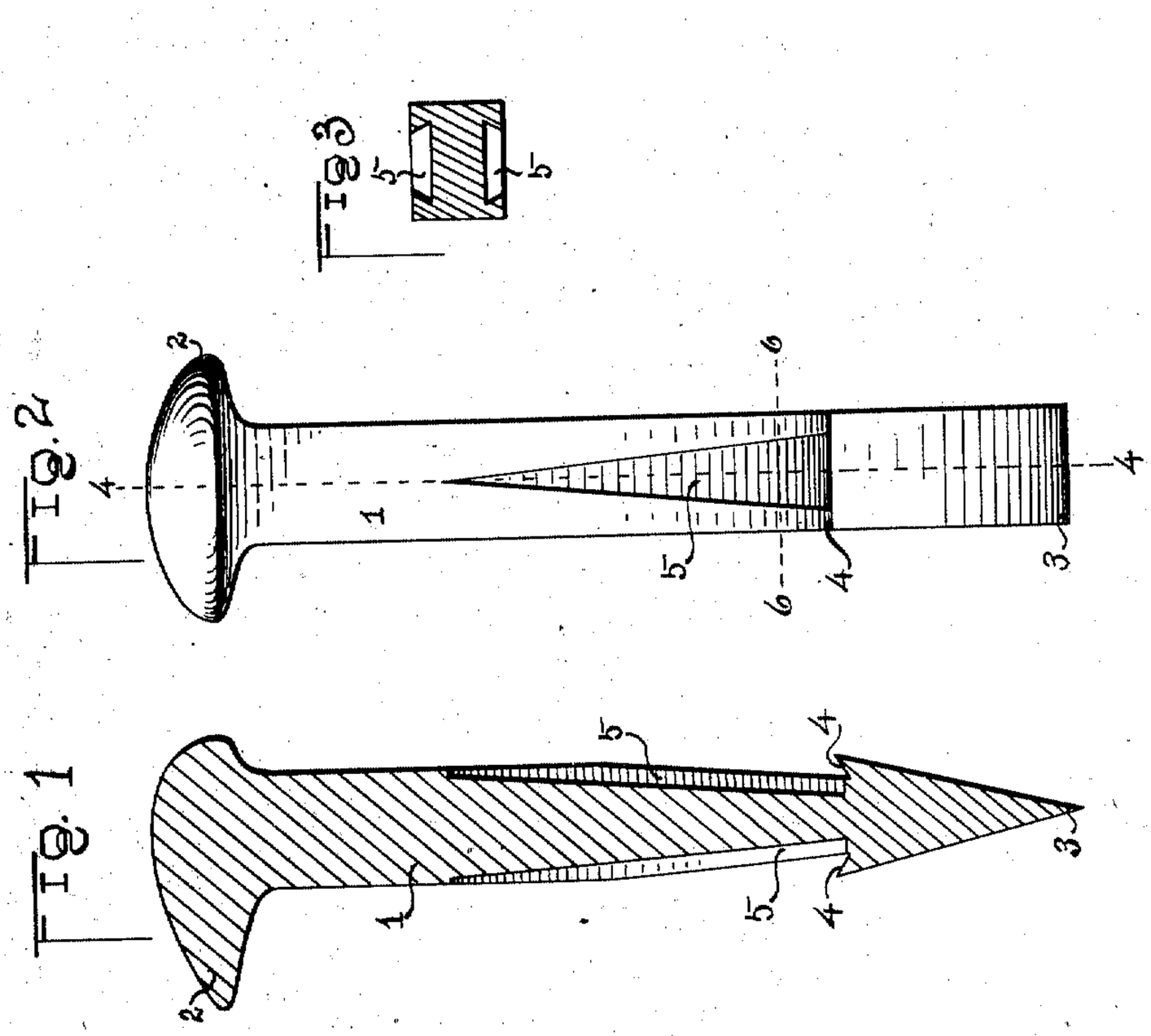
C. A. FLANAGAN.

RAILROAD SPIKE.

APPLICATION FILED FEB. 18, 1910.

985,519. Patented Feb. 28, 1911.

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# UNITED STATES PATENT OFFICE.

CHARLES A. FLANAGAN, OF COLORADO SPRINGS, COLORADO.

## RAILROAD-SPIKE.

985,519. Specification of Letters Patent. Patented Feb. 28, 1911.

Application filed February 18, 1910. Serial No. 544,699.

*To all whom it may concern:*

Be it known that I, CHARLES A. FLANAGAN, a citizen of the United States, residing at Colorado Springs, in the county of El Paso and State of Colorado, have invented certain new and useful Improvements in Railroad-Spikes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to new and useful improvements in spikes and more particularly to that class adapted to be used for securing track rails to ties and my object is to provide means on the spike for preventing the same from being casually removed when once entered into the tie, and, a further object is to provide means for preventing the spike from being moved laterally when properly engaged with the tie.

Other objects and advantages will be hereinafter referred to and more particularly pointed out in the specification and claims.

In the accompanying drawings which are made a part of this application, Figure 1 is a vertical central sectional view through the spike as seen on line 4—4 Fig. 2. Fig. 2 is a side elevation of that form of the spike shown in Fig. 1. Fig. 3 is a sectional view thereof as seen on line 6—6 Fig. 2.

Referring to the drawings in which similar reference numerals designate corresponding parts throughout the several views, 1 indicates the body of the spike which is preferably oblong and substantially rectangular in cross section, the upper end of the body being provided with a head 2, while the lower portion thereof, or substantially one half the length of the body, is tapered to provide a point 3 which is adapted to be entered into the usual form of tie. The lower portion of the inclined section of the body is at a greater angle than the upper portion, whereby shoulders 4 are formed and by extending the surfaces of said shoulders at a downward inclination from their outer to their inner edges, the fiber of the tie will be positively engaged by said shoulders and the spike held against casual removal from the tie.

Above the inclined shoulders 4 are recesses 5 which are formed in the tapered faces of the body and the edge walls of the recesses are likewise tapered and converge at their upper ends. The end walls of the recesses, as shown in Fig. 3 may also be at an angle, whereby a dove tail connection will be formed between the spike and the fiber of the tie. The prime object of the recesses is to prevent lateral twisting movement of the spikes after the same have been properly seated in the tie and the engagement of the fiber of the tie with said recesses will also serve to hold the spike against removal from the tie.

In applying the spike to use, the point end 3 thereof is properly positioned upon the tie and blows delivered to the head end of the spike, which will result in driving the same into the tie. As the tapered edges of the spike are transversely of the grain of the time, the fiber of the tie will immediately expand and engage the shoulders of the spike and enter the recesses therein and in view of the overhanging portions of the fiber, it will be practically impossible to disengage the spike from the tie and it will likewise be seen that by providing the recesses to receive portions of the fiber of the tie, said spike will be additionally braced against lateral movement.

What I claim is:—

1. An article of manufacture, comprising a body portion having a head at one end and tapered faces at the opposite end, a section of the taper being greater than the remaining portion of the taper, whereby shoulders are formed and recesses in the tapered faces above said shoulders the side walls of said recesses converging at their upper ends.

2. The herein described spike, comprising a body portion having portions of two of its edges tapered and converging to form a point, the lower section of the tapered edges

being at a greater angle than the upper portions of the tapered sections, whereby shoulders are formed, said shoulders being inclined, said tapered faces above the shoulders having recesses therein, the edge walls of which converge at their upper end and are disposed at an angle.

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

CHARLES A. FLANAGAN.

Witnesses:

WENDELL B. PRICE,

F. O. HARRIS.

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