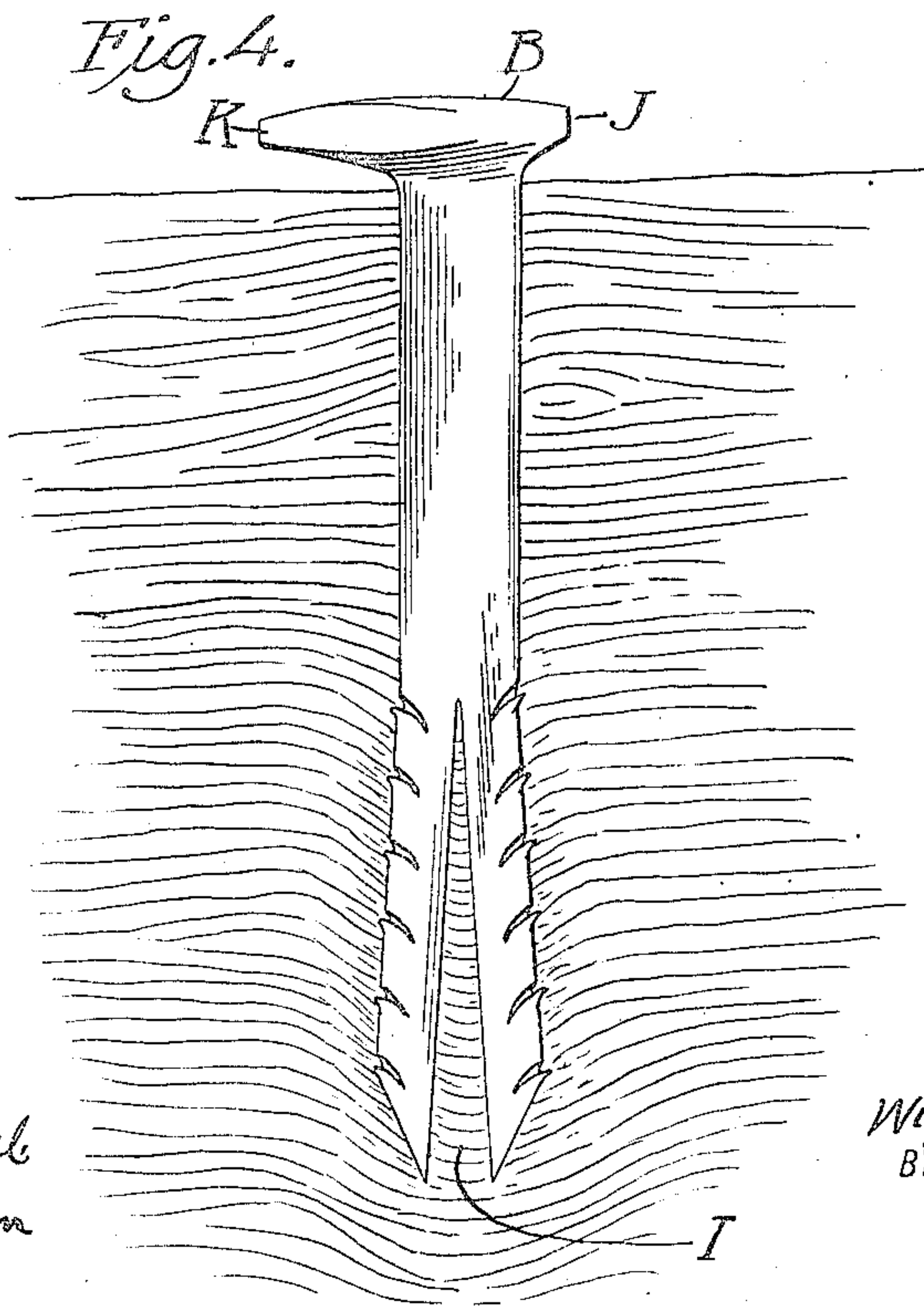
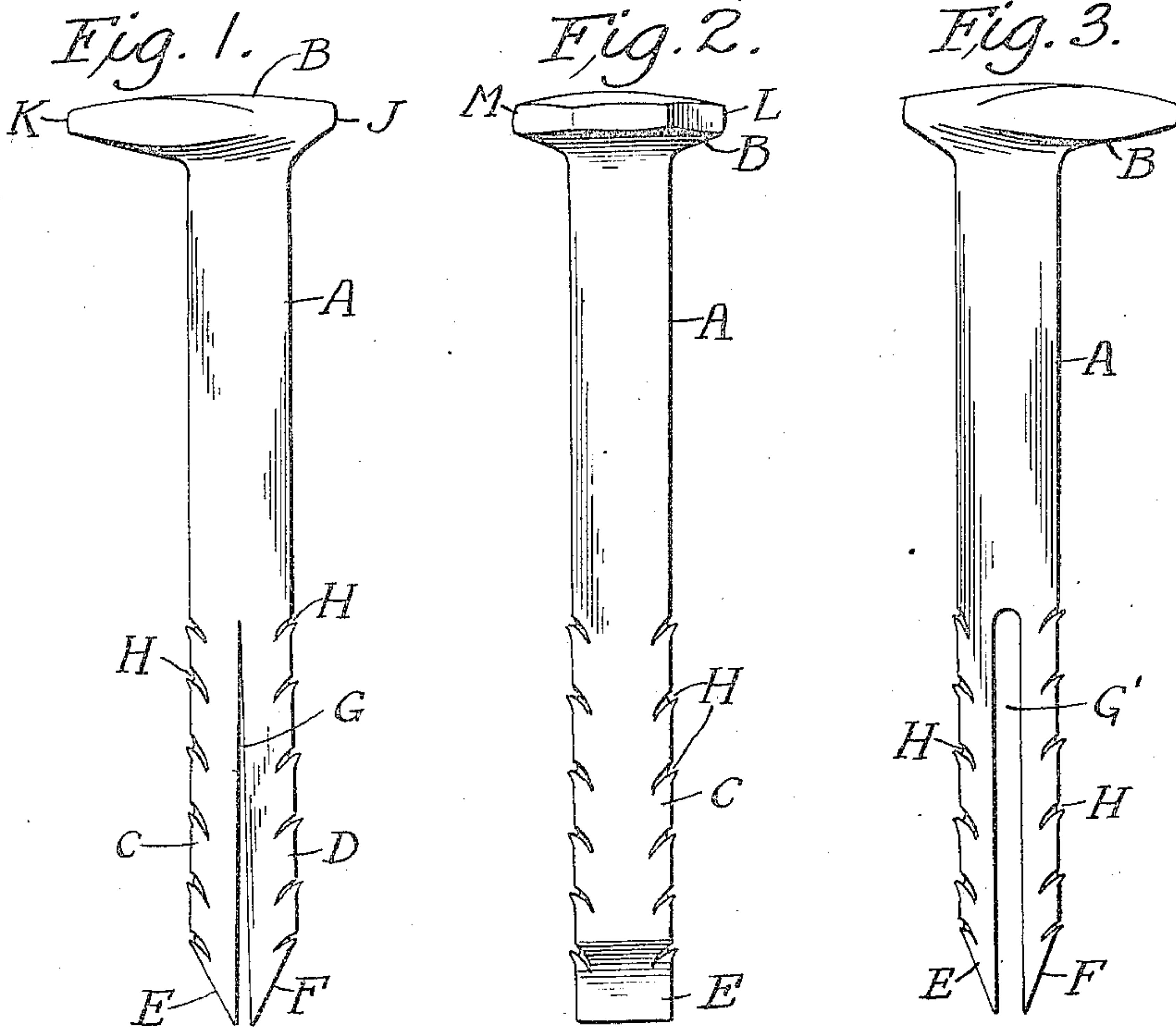


W. T. M. BRADY.
PRONGED SPIKE.
APPLICATION FILED OCT. 16, 1909.

975,322.

Patented Nov. 8, 1910.



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WILFRED T. M. BRADY, OF BROOKLYN, NEW YORK.

PRONGED SPIKE.

975,322.

Specification of Letters Patent.

Patented Nov. 8, 1910.

Application filed October 16, 1909. Serial No. 523,076.

To all whom it may concern:

Be it known that I, WILFRED T. M. BRADY, a citizen of Great Britain, and resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Pronged Spikes, of which the following is a specification.

This invention relates to pronged spikes and has in view the production of a spike which will penetrate comparatively deeply before the prongs are expanded, all as is now fully explained in the following specification, pointed out in the claims and illustrated in the drawings, in which:

Figure 1 is a side view of a spike involving my invention. Fig. 2 is a rear view of the spike. Fig. 3 is a side view of a modification and Fig. 4 is a section showing a spike driven into a tie or other wooden object.

Before my invention, attempts have been made to introduce pronged or split spikes into railroad construction, but these attempts have failed owing to the defective construction of such spikes which I have discovered and remedied.

My spike is supplied with prongs which are straight on their inner sides and beveled on the outer sides of their ends to form points, and the prongs are at no point of their length separated a greater distance than that between their lower ends. In this form the tendency of the bevel is to bring the points together, but the fibers, which are simultaneously compressed between the prongs, prevent this and when a sufficient accumulation of fibers between the prongs has been made the pressure of the compressed fibers forces the prongs outward, so that the spike is held very firmly and reliably. Referring to the drawing there is shown the upper integral portion A of the shank of a railroad spike, with the usual head B serving to hold a rail in place and to pull the spike when it is desired to remove it. The lower portion of the spike is split at G so as to form the prongs C and D having the terminals E and F beveled on the outside. The prongs preferably carry serrations, notches or dents H to produce greater frictional hold.

In Fig. 3 the prongs are shown as being some distance apart, separated by the slot G'.

In Fig. 4 the spike is shown driven into a tie, the prongs being separated by the fibers I, forced between them usually in a broken and disintegrated form. The head B of the spike has a heel J and sides L and M, by which the spike may be pulled and a projecting portion K, serving to hold a rail in place, a line drawn centrally through the head of the spike constituting the longer diameter of the head of the spike. It will be noted that when the spike is applied, the longer diameter is substantially parallel with the tie and the grain of the wood. The distance between the prongs before the spike is driven may be varied, the spreading or flaring of the prongs caused by driving the spike amounting roughly to about twice the initial distance between the prongs.

Spikes of this construction hold rails very firmly and reliably and are of great use on curved railroad sections where the friction and strain is great.

Although the spikes hold the rails very firmly yet they are capable of being pulled and used over again, the effort required to pull the spikes being considerably greater than when ordinary spikes are used.

In general it is preferable to cause the prongs to spread only slightly from one quarter to one half an inch with a spike three and one-half inches long. This is of advantage as it makes the spike capable of removal and reuse. If, again, the spreading or flaring is carried too far the spike may be seriously weakened at the point of junction between the integral and pronged portion.

What I claim as new is:

A spike consisting of a head and body and prongs extending from said body, said prongs being straight on their inner sides and being beveled on the outer sides of their ends to form points, the prongs being separated at no point of their length a distance greater than that between their lower ends, whereby the fibers between the prongs are compacted when the spike is driven into a tie.

Signed at New York in the county of N. Y. and State of N. Y. this 11th day of October A. D. 1909.

WILFRED T. M. BRADY.

Witnesses:

C. A. O. ROSELL,
E. C. DUFF.