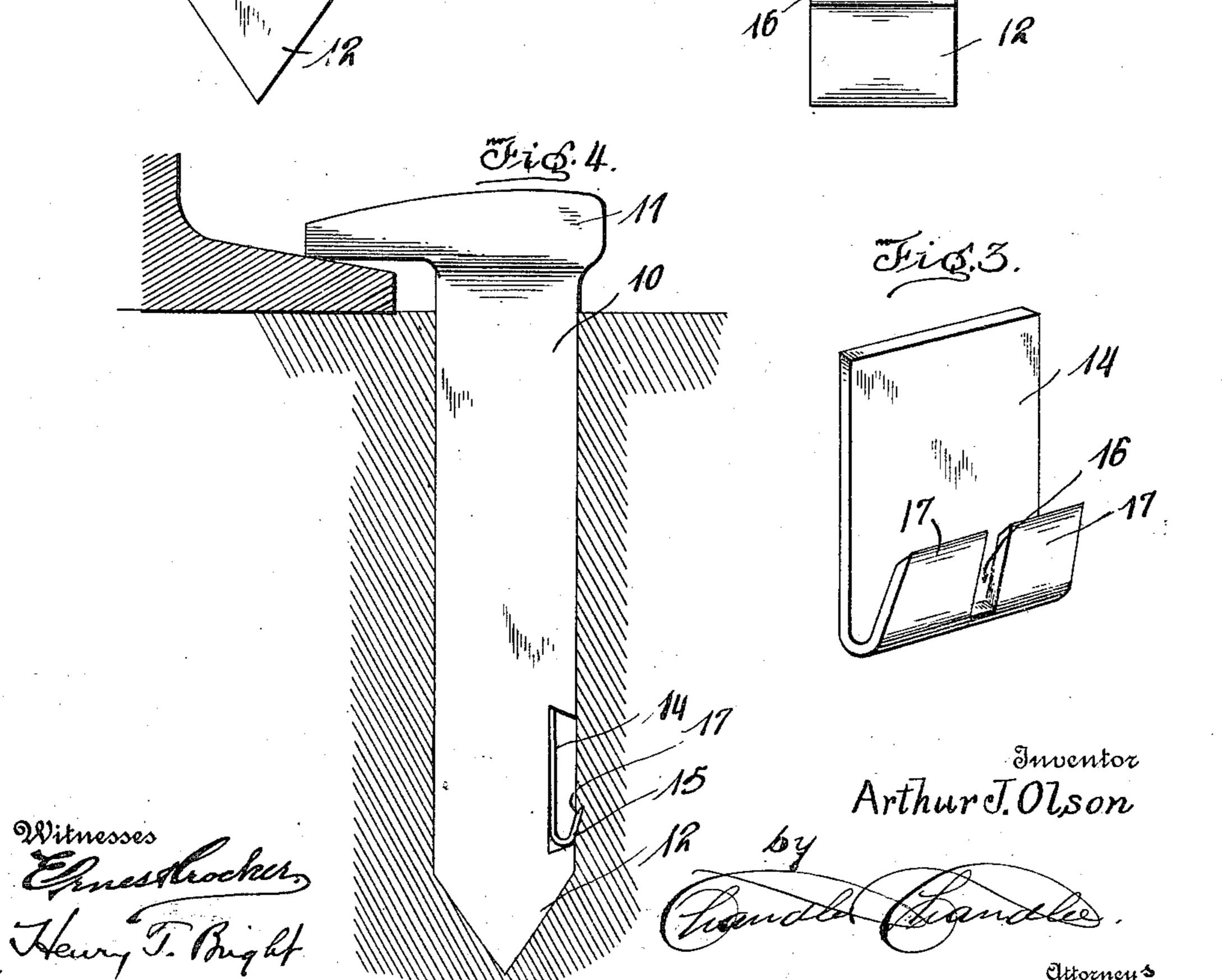
A. J. OLSON. SPIKE.

APPLICATION FILED MAY 31, 1910. 985,625. Patented Feb. 28, 1911.



ED STATES PATENT OFFICE.

ARTHUR J. OLSON, OF OSCEOLA, MICHIGAN.

SPIKE.

985,625.

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

Application filed May 31, 1910. Serial No. 564,142.

To all whom it may concern:

citizen of the United States, residing at plurality of teeth 17 are produced. From Osceola, in the county of Houghton, State 5 of Michigan, have invented certain new and useful Improvements in 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 10 to which it appertains to make and use the same.

This invention relates to spikes and particularly to that class which are employed to secure rails to the ties of a road bed.

The object of the invention resides in the production of a spike of the character named which when driven into a tie will not work loose as the result of jarring or other causes.

With the above and other objects in view 20 the invention consists in the details of construction and in the arrangement and combination of parts as will be hereinafter more fully described and particularly pointed out in the appended claims.

In describing the invention in detail reference will be had to the accompanying drawings wherein like characters of reference denote corresponding parts in the sev-

eral views; and in which,

Figure 1 is a side elevation of a spike constructed in accordance with the invention; Fig. 2, an end view of same; Fig. 3, a detail perspective view of the holding device detachably associated with the spike; 35 and, Fig. 4, a side elevation of the spike, showing same driven into a tie and engaging the base of a rail.

Referring to the drawings, 10 indicates the stem or main body portion of the spike 40 provided at its upper end with an engaging lip 11 and having its lower end pointed as at 12. Extending across the body portion 10 near its lower end is a dove-tailed groove 13 in which is seated a resilient metallic 45 plate 14, one end of which engages the upper wall of the groove and the other end the lower wall of the groove. The end of the plate 14 which engages the lower wall of the groove 13 is bent outwardly and up-50 wardly to form a hook terminal 15, the free end of which terminal projects beyond the

be it known that I, Arthur J. Olson, a formed in the hook terminal 15 whereby a this construction it will be apparent that 55 when the spike is driven into a tie any effort to withdraw said spike will cause the teeth 17 to bite with increasing strength into the tie and resist such effort. It will also be apparent that the plate 14 can be readily 60 attached to and detached from the spike by a bodily movement longitudinally of the groove 13 which will permit the assembling of the spike and plate 14 to be deferred until it is desired to drive said spike into a tie. It 65 will also be noted that by reason of the dovetailed formation of the groove 13 the possibility of disengagement of the plate 14 from said groove during the driving of the spike is obviated.

What is claimed is:

1. A spike having a groove extending completely across one of its sides, the side walls of said groove converging outwardly, a plate seated in said groove and having its 75 upper end disposed at the intersection of the top side walls and the rear wall of the groove, and its lower end bent to form a hooked terminal, the curved portion of which is disposed against the lower side wall of 80 the groove and its free end positioned exteriorly of the grooved side face of the spike, whereby the converging side walls of said groove serve to secure said plate against movement transversely of the groove, but 85 permit movement of the plate longitudinally of the groove to effect the disengagement of same from the spike.

2. A spike having a recess in one of its sides, and a plate removably seated in said 90 recess, said plate being bent adjacent its lower end to form an outwardly and upwardly extending portion, the free end of which is notched longitudinally to form a plurality of engaging teeth.

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

ARTHUR J. OLSON.

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Witnesses: James F. Jones, Peter Strandgaard.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."