

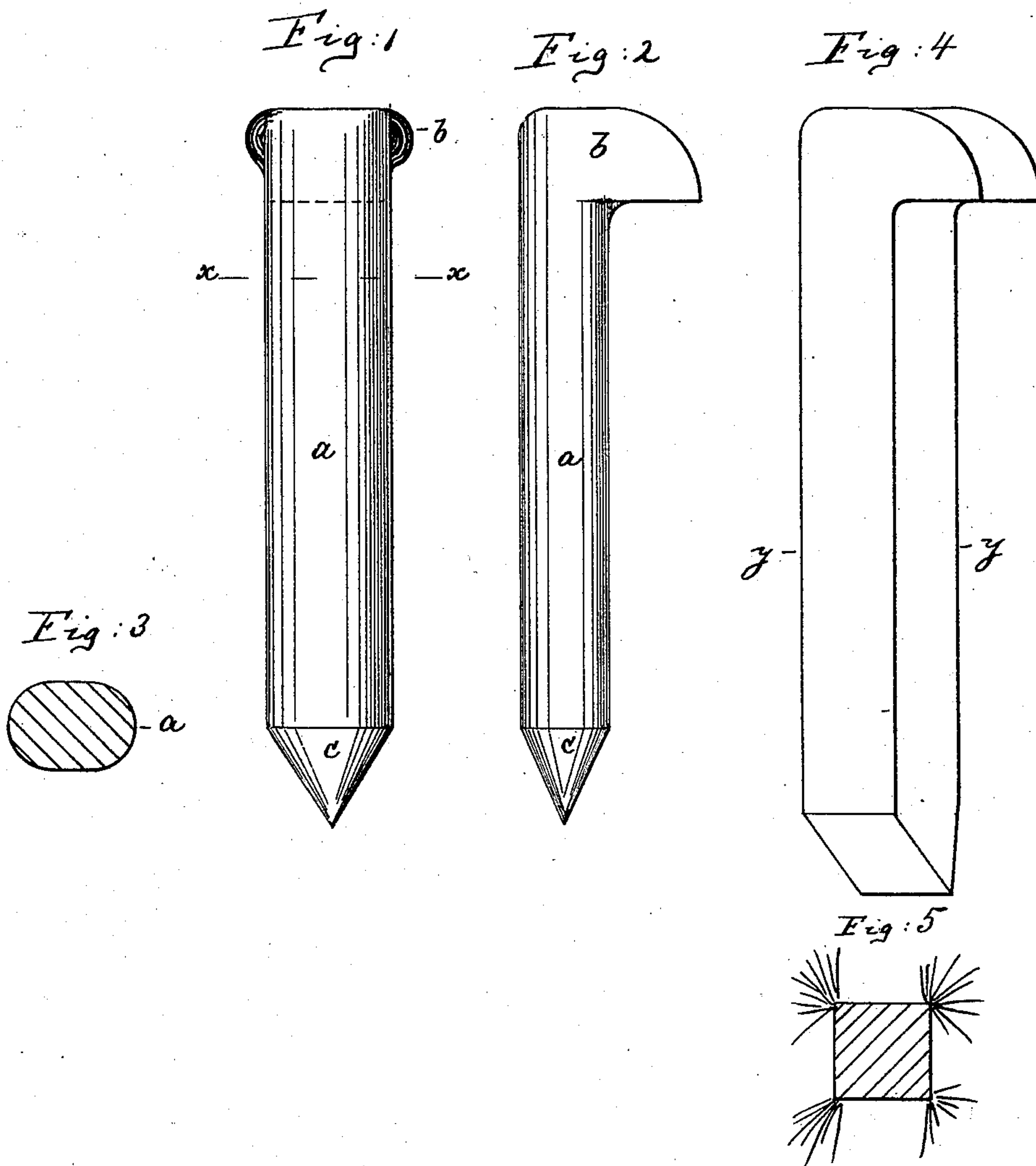
(No Model.)

J. S. PESSENGER.

SPIKE.

No. 370,650.

Patented Sept. 27, 1887.



Witnesses:  
Alfred Joughmans  
William Partington.

Inventor:  
J. S. Pessenger  
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attorneys.

# UNITED STATES PATENT OFFICE.

JOHN S. PESSENGER, OF BROOKLYN, NEW YORK.

## SPIKE.

SPECIFICATION forming part of Letters Patent No. 370,650, dated September 27, 1887.

Application filed May 13, 1887. Serial No. 238,061. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN S. PESSENGER, a citizen of the United States, residing in Brooklyn, county of Kings, State of New York, have  
5 invented a new and Improved Spike, of which the following is a specification.

This invention relates to a spike the shank of which is made of elliptical form in cross-section, so that the spike will not crack or  
10 split the wood when driven home. The shank is made without a taper from head to point, so as to prevent any wedge-like action.

The invention consists of the various features of improvement, more fully pointed out  
15 in the claim.

In the accompanying drawings, Figure 1 is a front view of my improved spike. Fig. 2 is a side view thereof. Fig. 3 is a cross-section on line *x x*, Fig. 1. Fig. 4 is a perspective side view of a spike as heretofore generally constructed. Fig. 5 is a cross-section on  
20 line *y y*, Fig. 4.

Spikes as heretofore generally made had sharp upright edges from head to point, which  
25 were apt to act similar to wedges in splitting the wood as the spikes were driven home; or they were circular in cross-section, when they were apt to turn in their seats. Figs. 4 and 5 are intended to illustrate this old form of spike,  
30 Fig. 5 showing the effect it produces upon the wood.

In order to overcome this objection, the shank *a* of my spike is made of elliptical shape in cross-section, as more clearly shown in Fig. 3.  
35 This elliptical shape is without grooves or indentations, so that an uninterrupted elliptically-curved outline without any edges what-

soever is obtained. In this way the spike will not force the fibers of the wood asunder, but will pass through them without any tearing  
40 action. The spike is thicker from front to rear than from side to side, or vice versa, and thus the spike is prevented from turning in its seat. The shank *a* should be made of uniform cross-section from the head *b* to the point *c*—  
45 that is to say, it should be made without any taper—and thus any wedge-like action is prevented. The point *c* is made of conical shape, while the head *b* is of the customary form.

As shown in Fig. 3, the cross-section of the  
50 spike is a figure having two straight parallel sides joined to two convex sides, or an approximately or entirely elliptical figure.

An additional advantage of this improved spike is, that it requires less metal in its pro-  
55 duction than an angular spike having the same strength.

It also obtains a tighter hold in the wood, compressing the fibers equally around it, with-  
60 out cutting or destroying them.

I am aware of Patent No. 333,889, granted to W. H. Perry January 5, 1886, and do not claim the construction therein described; but

I do claim—

As a new article of manufacture, a spike  
65 the shank of which is of uninterrupted elliptical form in cross-section, so as to have no upright edges, and which is made of uniform thickness from head to point, substantially as specified.

JOHN S. PESSENGER.

Witnesses:

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