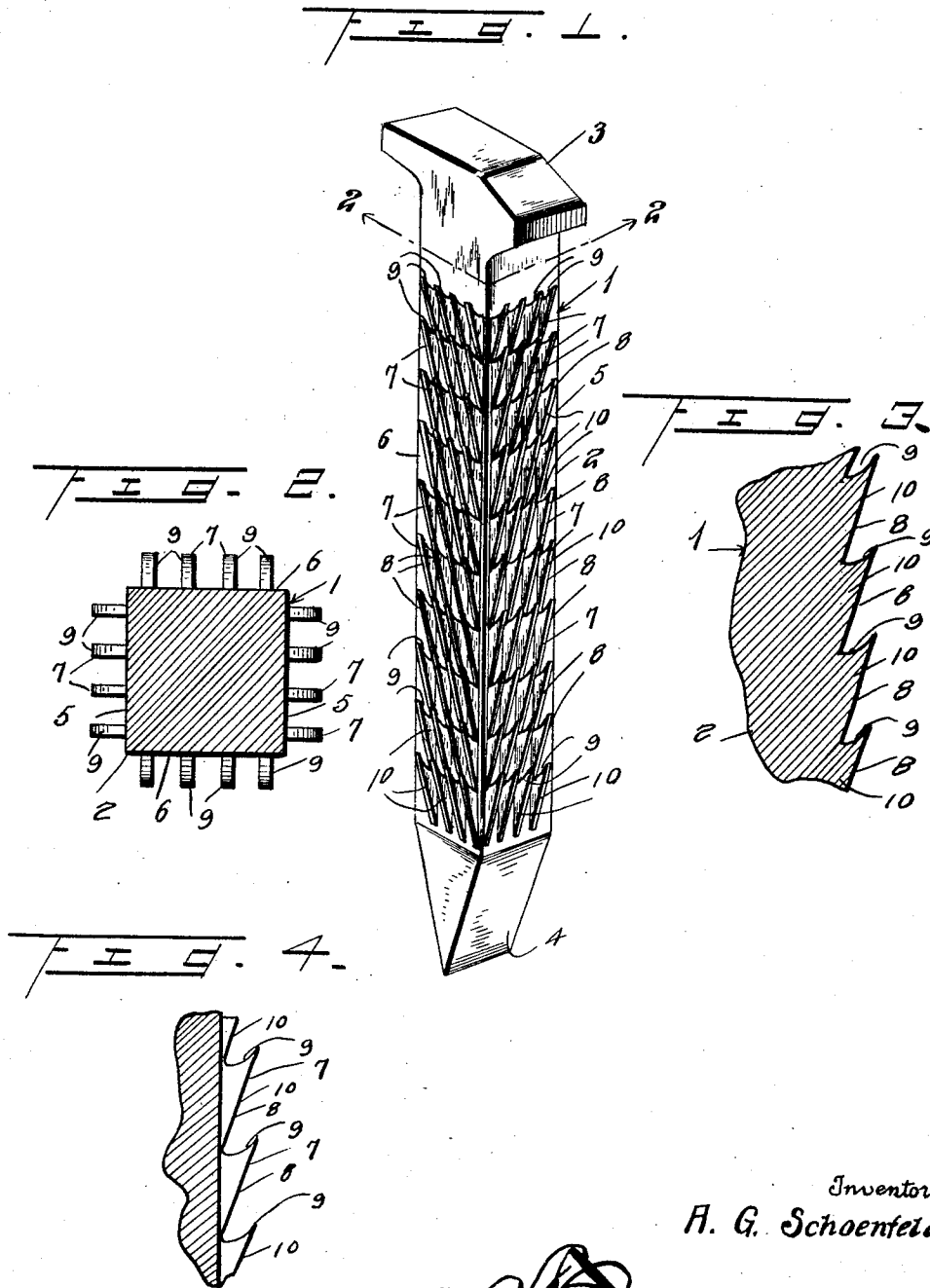


A. G. SCHOENFELD.
RAILROAD SPIKE.
APPLICATION FILED JAN. 18, 1919.

1,330,906.

Patented Feb. 17, 1920.



Inventor
A. G. Schoenfeld.

By *A. G. Schoenfeld*, Attorney

UNITED STATES PATENT OFFICE.

ALBERT G. SCHOENFELD, OF DENVER, COLORADO.

RAILROAD-SPIKE.

1,330,906.

Specification of Letters Patent.

Patented Feb. 17, 1920.

Application filed January 18, 1919. Serial No. 271,823.

To all whom it may concern:

Be it known that I, ALBERT G. SCHOENFELD, a citizen of the United States, residing at Denver, in the county of Denver, 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.

This invention relates to railroad spikes and the primary object of the invention is to provide an improved spike especially designed for securing railroad rails to ties in which the likelihood of the spike sliding out of the tie and out of engagement with the railroad rails is obviated.

Another object of the invention is to provide an improved spike having a plurality of saw-like teeth formed on each side thereof which are adapted to fit into a tie or other work and thereby effectively anchor the spike in position and prevent displacement or removal thereof.

A further object of the invention is the provision of a spike having a plurality of teeth formed on all four sides thereof for engaging the wood to prevent removal of the spike, said teeth being formed similar in construction to saw teeth, so that when the spike is being driven into a tie or other work, the teeth will readily slide over the fibers of the wood but, upon upward movement of the spike, the teeth will immediately engage the fibers of the wood and prevent displacement thereof.

A still further object of the invention is to provide an improved spike of the above character, which is durable and efficient in use, one that is simple and easy to manufacture, and one that can be placed upon the market at a reasonable cost.

With these and other objects in view, the invention consists in the novel construction, arrangement and formation of parts, as will be hereinafter more specifically described, claimed and illustrated in the accompanying drawings, in which:

Figure 1 is a perspective view of the improved device.

Fig. 2 is a horizontal section through the same taken on the line 2—2 of Fig. 1,

Fig. 3 is an enlarged fragmentary vertical section through the shank of the de-

vice illustrating the formation of the teeth in detail, and

Fig. 4 is an enlarged fragmentary vertical section through the shank of the device showing the teeth in elevation.

Referring to the drawings in detail, wherein similar reference characters designate corresponding parts throughout the several views, the numeral 1 generally indicates the improved spike, which includes the shank 2 having the head 3 at one end thereof. The opposite end of the shank is preferably pointed as at 4 so as to facilitate driving of the shank into a tie or other work. The spike 1 is preferably constructed in the ordinary or any preferred manner. The front and rear faces 5 and the side faces 6 are disposed in substantially parallel relation throughout the major portion of their length, as clearly shown in Fig. 1 of the drawings. The front and rear faces 5 and side faces 6 are provided with a plurality of rows of teeth 7, which extend substantially the entire length of the walls.

The teeth 7 include the upwardly curved front wall 8 and the downwardly inclined upper wall 9, which is at an acute angle to the front wall 8 and forms a means for biting into the grain of the wood upon upward movement of the spike. The teeth are provided with plain side walls 10. Each tooth 7 owing to the formation of the upper wall 9 forms substantially hook shaped members which catch into the fibers of the wood and thus prevent upward movement of the spike.

From the foregoing description, it can be seen that when the spike is driven into a tie or other work, the grain or fiber of the wood will slide over the upwardly inclined face 8 of the spaced rows of teeth 7, but immediately upon upward movement of the spike, the fiber of the wood will catch into the upper ends of the teeth owing to the downwardly inclined upper edge 9 thereof and prevent further outward movement of the spike.

In practice, I have found that the form of my invention illustrated in the accompanying drawings and referred to in the above description, as the preferred embodiment, is the most efficient and practical; yet realizing the conditions concurrent with the adoption of my device will necessarily vary, I desire to emphasize that various

minor changes in details of construction, proportion and arrangement of parts may be resorted to, when required without sacrificing any of the advantages of my invention
5 as set forth.

What I claim as new is:

A railroad spike comprising a shank, a head at one end of the shank, the opposite end of the shank being pointed, a plurality
10 of spaced teeth arranged in spaced rows on all four sides of the shank, each tooth including an upwardly inclined front wall, a

downwardly curved upper wall arranged at an acute angle to the front wall, and plain side walls, the outer faces of the shank between the teeth being arranged substantially in a vertical plane, as and for the purpose specified. 15

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

ALBERT G. SCHOENFELD.

Witnesses:

JOHN SAWDO, Jr.,

PETER SULLIVAN.