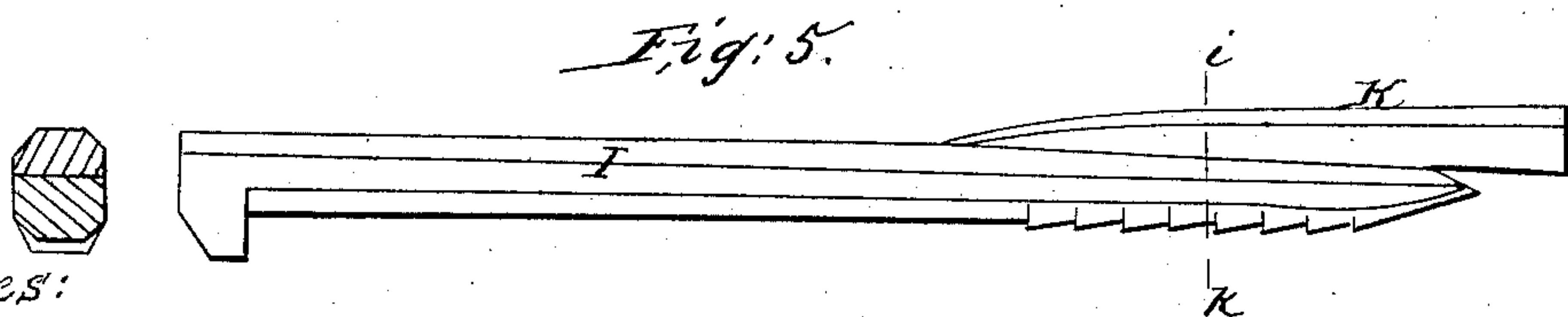
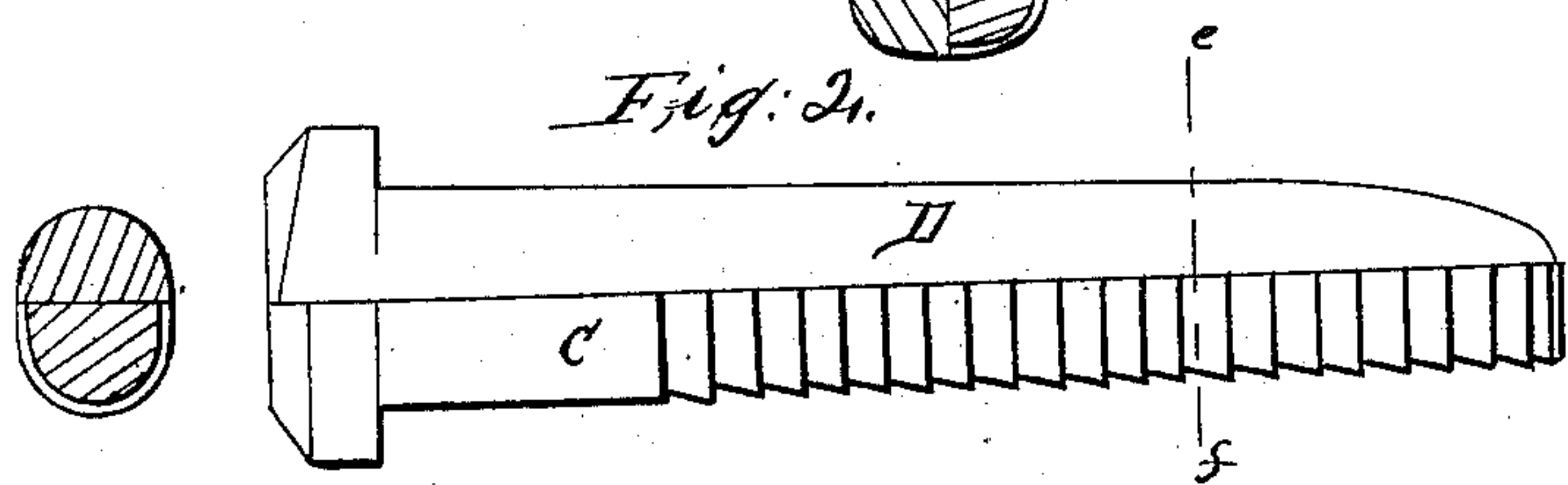
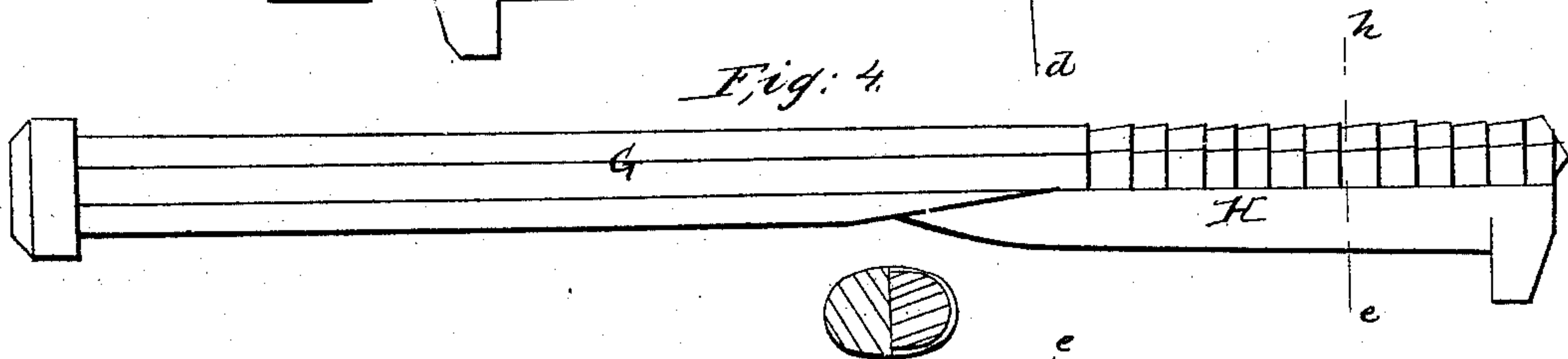
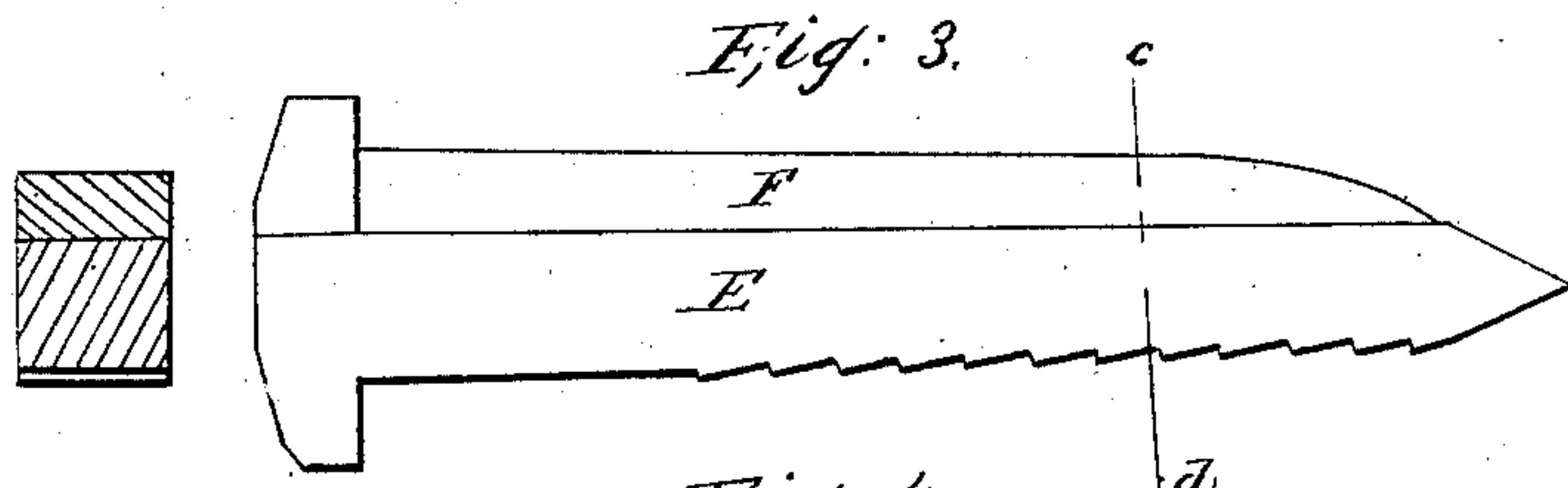
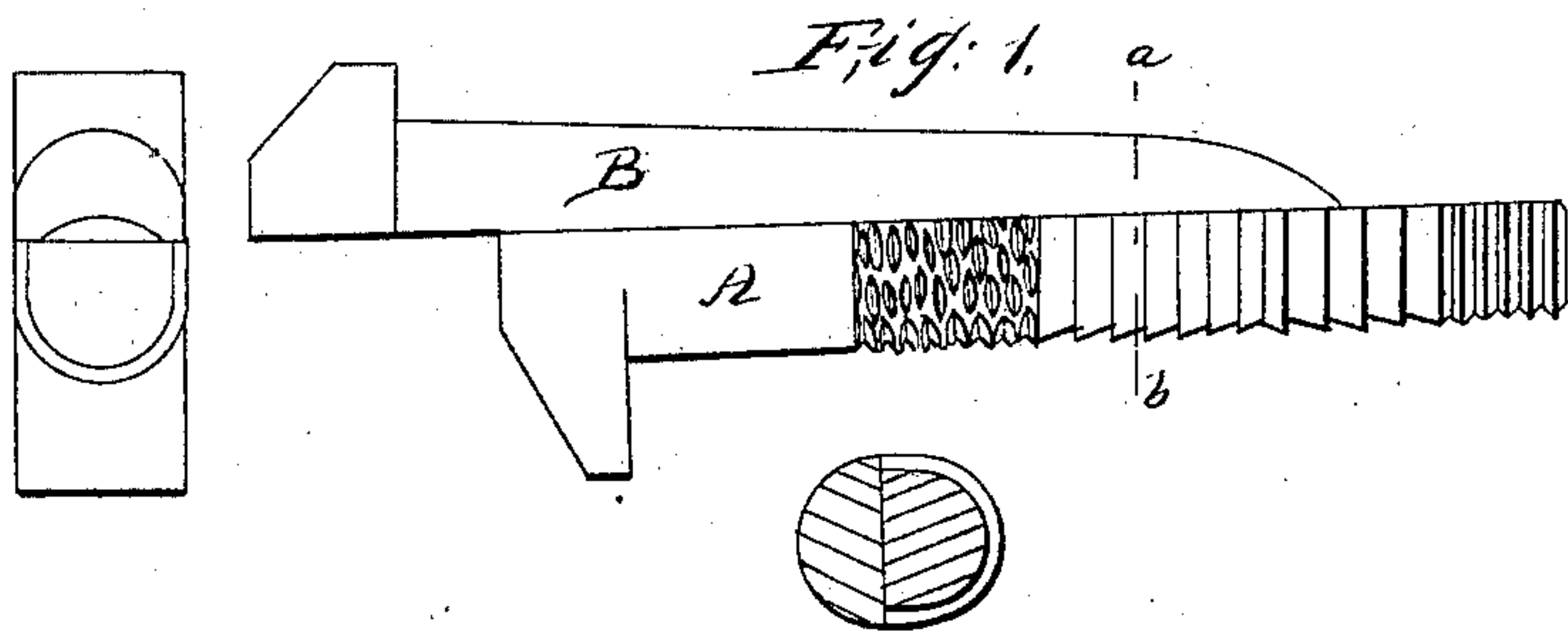


*A. Prentiss,
Spike and Nail.*

Nº 63,558.

Patented Apr. 2, 1867.



Witnesses:

*Chas. F. Wilson,
Chas. H. Poole*

Inventor:

Arthur Prentiss

United States Patent Office.

ARTHUR PRENTISS, OF PRENTISS VALE, PENNSYLVANIA.

Letters Patent No. 63,558, dated April 2, 1867.

IMPROVEMENT IN SPIKES AND NAILS.

The Schedule referred to in these Letters Patent and making part of the same.

TO WHOM IT MAY CONCERN:

Be it known that I, ARTHUR PRENTISS, of Prentiss Vale, McKean county, State of Pennsylvania, have made certain new and useful improvements in "Spikes and Bolts" for railroads and other purposes; and I do hereby declare the following to be a full and exact description of the same, reference being had to the drawings that accompany and form a part of these specifications, in which—

Figure I, view of spike with serrated surface, with key or wedge to be driven at its side to hold it in place.

Figure II, view of spike with different serrations.

Figure III, view of square spike to be driven without boring.

Figure IV, view of a bolt with serrated surface, designed to be held in place by a key or wedge.

Figure V, bolt with key or wedge of different construction.

Letter A, spike; letter B, key or wedge; letter C, spike showing a different surface; letter D, key or wedge; letter E, spike of different form; letter F, key or wedge for same; letter G, bolt with serrated surface at one end; letter H, key to hold it in place; letter I, bolt; letter K, key or wedge without any head.

The object of my invention is to provide "spikes and bolts" for railroads and other purposes that can be firmly held in their places, or readily removed when desired, and that can be replaced and made as firm as when first driven.

For the kinds shown in Figs. I and II, I bore a hole large enough to admit the spike A or C, and when placed in the desired position I drive the key B or D at its side, which will force the roughened surface of the spike against and into the wood and hold it firm and immovable. The kind shown in Fig. III, it will be noticed, has different-formed serrations, and can be driven like any ordinary spike, and the key F, driven at its side, will hold it more firmly, I believe, than any spike now in use. The bolt represented in Fig. IV may be made secure when placed in the desired position, by driving the key H in an opposite direction from which the bolt is inserted. This may be used instead of and in places where it is desirable to dispense with the nut and screw. Fig. V represents a bolt with a key having no head, which is designed to be used in places where access cannot be had to the lower end of the bolt. This is done by boring a hole the length of the bolt, then drop the key K into the hole, the largest end down, drive the bolt I by the side of the key, which will hold it as firmly as any nut or screw could do. Much difficulty has been experienced by railroad companies from having the spikes that confine the rails loosened by the continual jar and strain of the engine and cars. Spikes made in this way will hold more firmly, as it will be seen there is no strain on the key or wedge, only on the spike, and the roughened surfaces being embedded and held firmly against the wood, it is not in the least affected by the jar of engine or car. This method of applying bolts and spikes in railroads, or other places where the timber may be liable to decay, will be found of great advantage in affording a convenient opportunity to apply pitch, coal tar, or other suitable substances to the holes, for preserving both the timber and the bolts, before the bolt is driven in place.

What I claim as my invention, and desire to secure by Letters Patent, is —

Spikes and bolts for railroads and other purposes, whether round, square, octagonal, or otherwise in form, constructed in two separate pieces, the one provided with roughened side or sides, substantially as described, and to be used conjointly, either with or without the timber preservative, as and for the purposes set forth.

ARTHUR PRENTISS.

Witnesses:

CHAS. F. WILSON,

CHAS. H. POOLE.