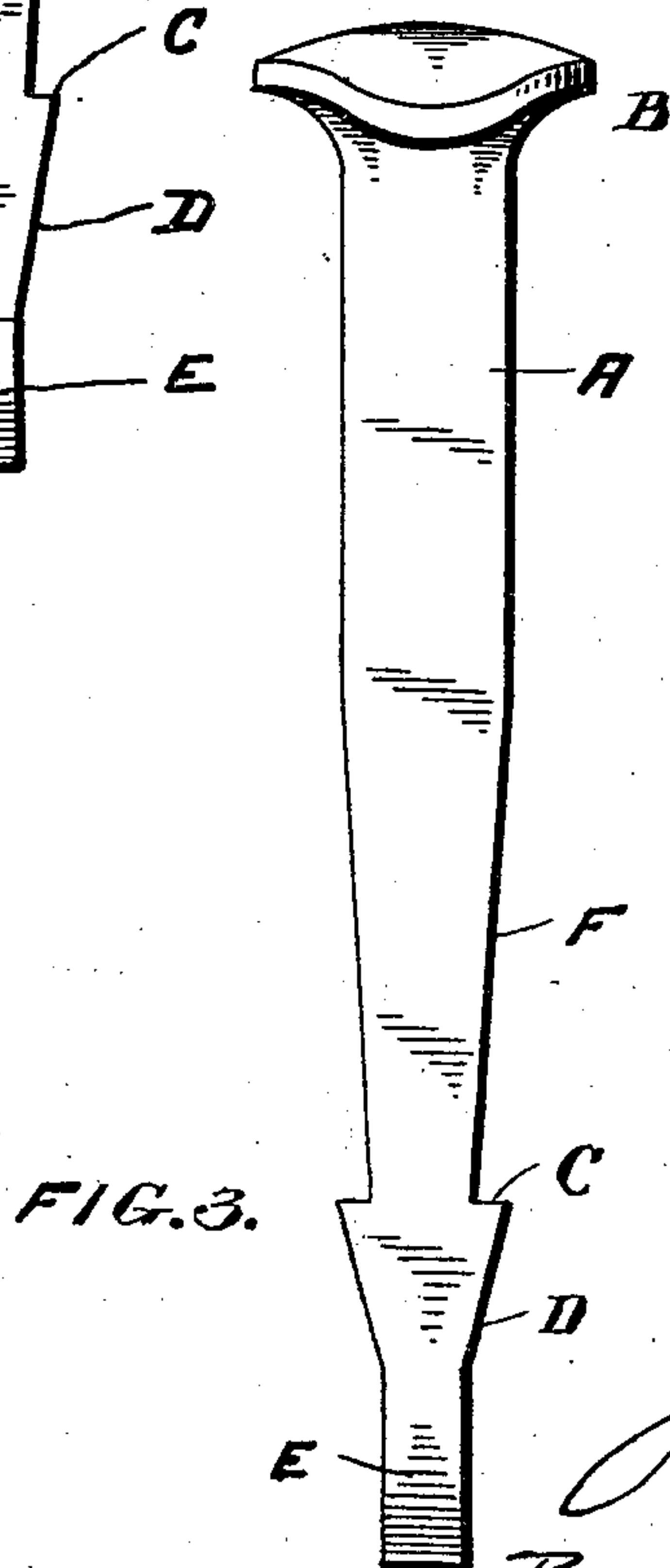
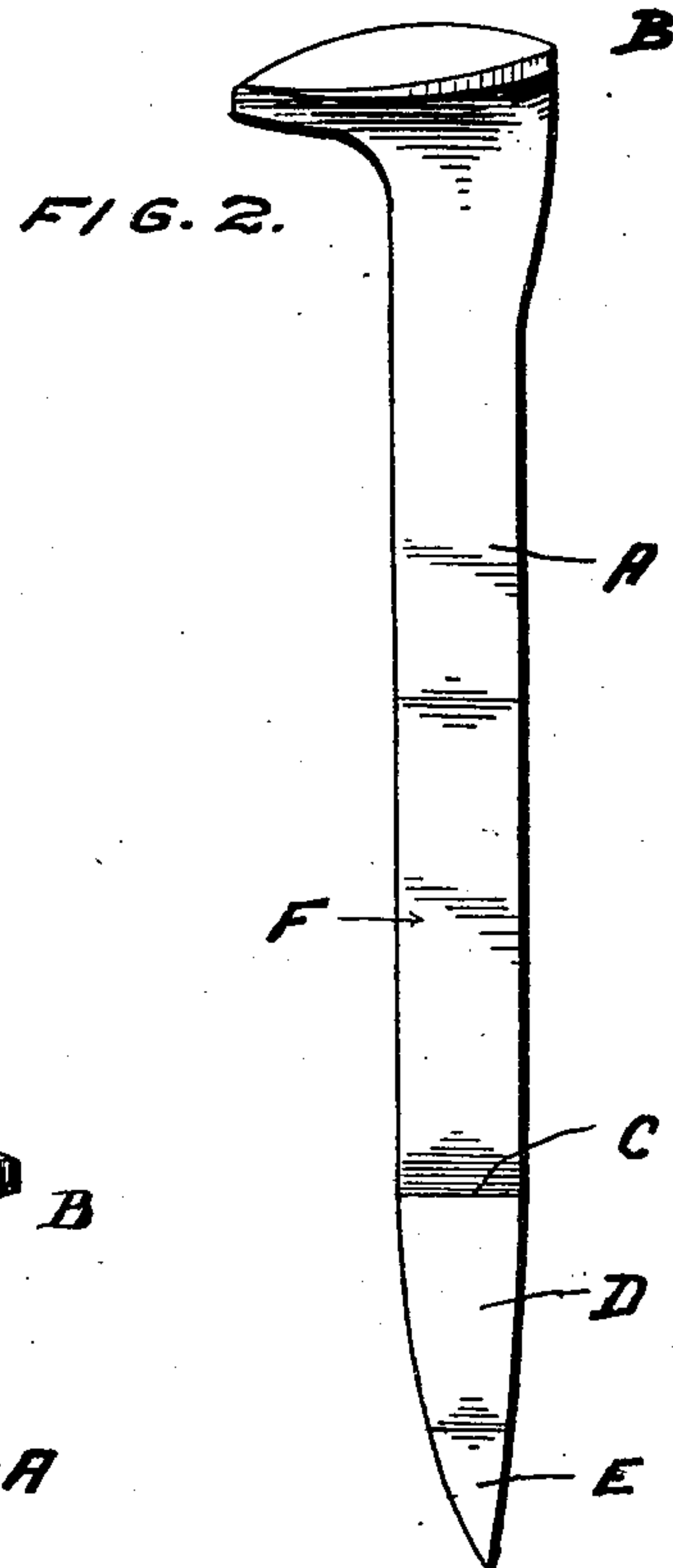
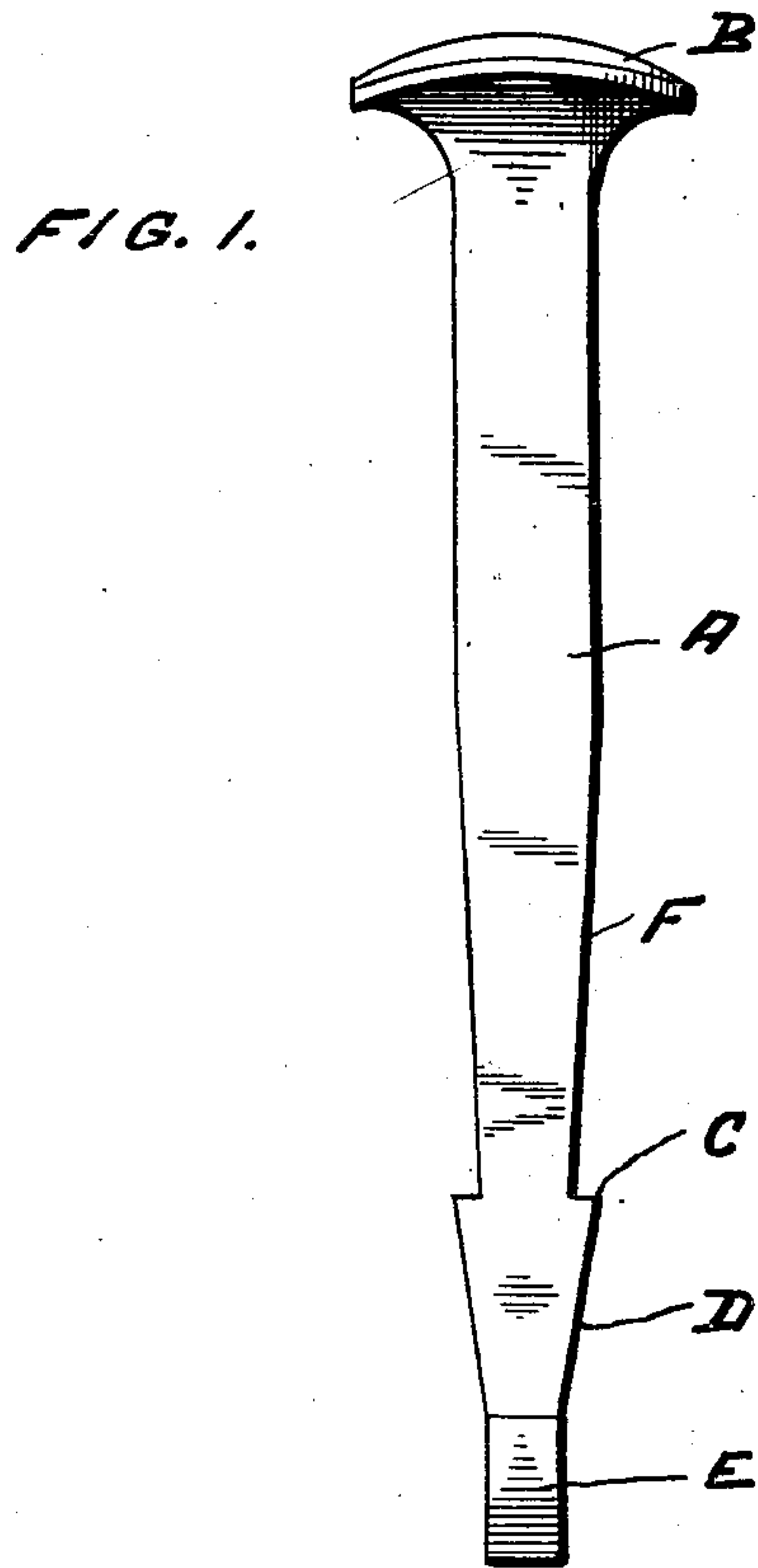


J. S. FOX.  
RAILROAD SPIKE.  
APPLICATION FILED OCT. 19, 1909.

999,773.

Patented Aug. 8, 1911.



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# UNITED STATES PATENT OFFICE.

JAMES S. FOX, OF JACKSON, MICHIGAN.

## RAILROAD-SPIKE.

999,773.

Specification of Letters Patent.

Patented Aug. 8, 1911.

Application filed October 19, 1909. Serial No. 523,461.

*To all whom it may concern:*

Be it known that I, JAMES S. FOX, a subject of the King of Great Britain, residing at Jackson, in the county of Jackson and State of Michigan, have invented certain new and useful Improvements in Railroad-Spikes, of which the following is a specification.

My invention relates to improvements in railroad spikes and the main object of the invention is the production of a spike of this character which may be readily driven into the wood and which when home will firmly engage the fibers of the wood and prevent improper or accidental withdrawal of the spike.

Another object of my invention is the provision of a railroad spike which can be manufactured at about the same cost as the spike in general and common use, but which will possess merit in point of efficiency.

With these objects in view, my invention consists of a railroad spike embodying novel features of construction and arrangement of parts for service substantially as disclosed herein.

Figure 1 is a front view of the spike. Fig. 2 is a side view. Fig. 3 is a front view of a modified form.

Fig. 1 designates the railroad spike provided with the usual head and body and at a point about one-third of its length from the lower end it is provided with a shoulder portion "C", tapering sides "D" and terminating in the driving point "E", the shoulders being on the side of the spike and running parallel with the grain of the wood. From this construction it will be seen that when the spike is driven into the timber, it upsets the fiber of the wood sufficient to allow the shoulder portion to pass, when the fiber will immediately close over said shoulder portion forming a locking engagement therewith which prevents the spike from working loose and becoming detached.

Figs. 3 and 4 is a face and end view of a modified form. It will be seen that in the modification that the body of the spike is gradually reduced in size down to the

shoulder "C" and that the formation of the shoulder is effected by decreasing the size of the body of the spike.

In the manufacture of my spike I prefer making it so that the point "E" is about one-eighth of an inch back of the center line of the spike. In providing that, it has a tendency to throw the lip of the spike toward the rail when driven home thus securing a firmer hold on the iron.

The advantage of a railroad spike constructed in accordance with my invention, will be readily understood by all conversant with this art, and it is plain that the spike can be driven in the wood with ease and when driven in, the fiber of the wood will engage the shoulder and form a locking connection therewith, and insure a firm and reliable fastening of the spike on the wood.

It is sometimes desirable to draw a spike and replace it. When that is necessary, upon starting the spike out of the wood, the shoulders "C" will cut sufficient of the fiber of the wood to fill in above the shoulders when the spike will draw out the balance of the distance the same as an ordinary spike.

I claim;

A railroad spike, comprising a body portion having a head formed on one end and having two of its opposite faces inclined to provide a broad entering point at the rear of and on the opposite side of the axis of the spike from that on which the head is, the lower portion of the spike sloping to a portion of reduced width and having vertical sides at the base, and laterally projecting wings intermediate the vertical sides of said reduced portion, said wings extending outward into the plane of the sides of the body of the spike and being adapted to engage the fibers of the tie to prevent the ready withdrawal of the spike.

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

JAMES S. FOX.

Witnesses:

EUNICE BARLOW,  
E. J. MARRINANE.