

J. F. SCRIBNER.
Spike-Extractor

No. 206,902.

Patented Aug. 13, 1878.

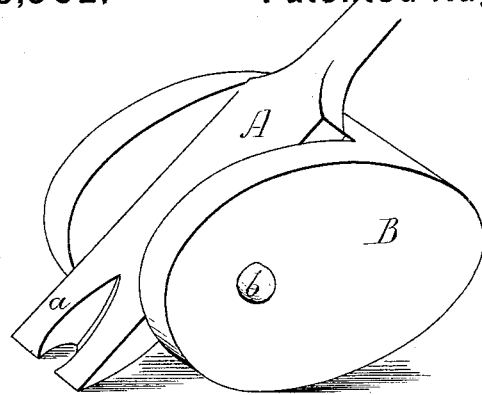


FIG. 1.

FIG. 3.

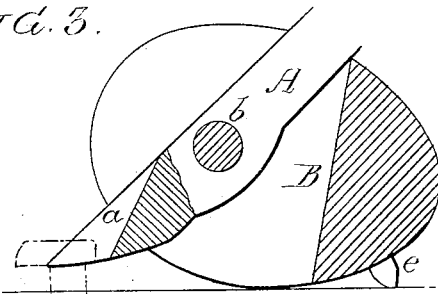


FIG. 2.

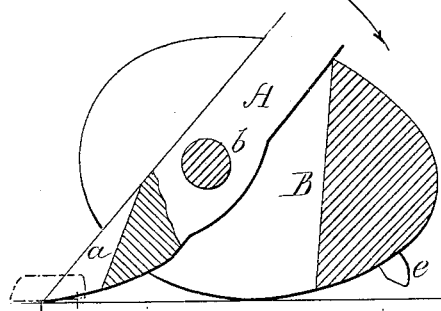


FIG. 5.

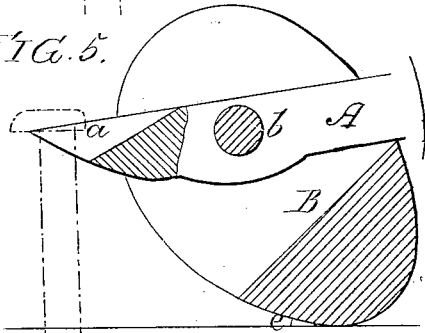


FIG. 4.

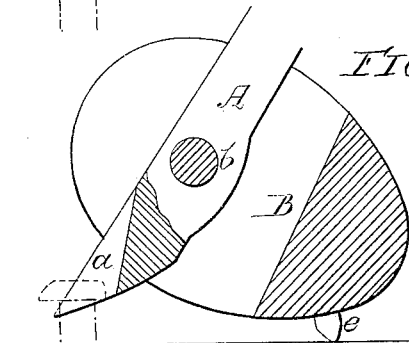


FIG. 6.

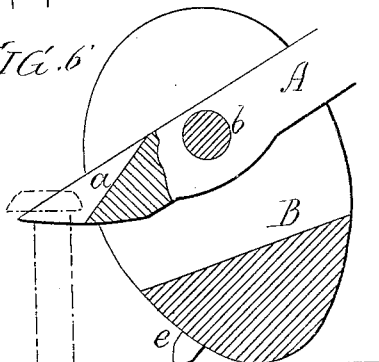
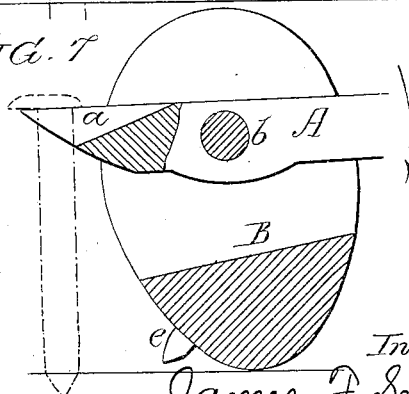


FIG. 7.



Witnesses.

Harry A. Crawford.
Harry Smith

Inventor,

James F. Scribner
by his Attorneys
Howson and Son

UNITED STATES PATENT OFFICE.

JAMES F. SCRIBNER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF
ONE-THIRD HIS RIGHT TO DANIEL R. KELLY, OF SAME PLACE.

IMPROVEMENT IN SPIKE-EXTRACTORS.

Specification forming part of Letters Patent No. 266,902, dated August 13, 1878; application filed
July 8, 1878.

To all whom it may concern:

Be it known that I, JAMES F. SCRIBNER, of Philadelphia, Pennsylvania, have invented a new and useful Improvement in Spike-Extractors, of which the following is a specification:

The object of my invention is to so construct a spike-extractor that the spike will be withdrawn in a vertical, or nearly vertical, direction; and this object I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawing, in which—

Figure 1 is a perspective view of my improved spike-extractor; and Figs. 2, 3, 4, 5, 6, and 7, diagrams illustrating the operation of the extractor.

A represents the usual claw-bar, having at the end the jaw *a*, for adaptation to a spike in the ordinary manner. This claw-bar is adapted to a recess in an egg-shaped metal block, B, which is hung to the bar A by means of a pin, *b*, passing through said bar, and through the ears formed by recessing the block B.

From the block B project, in the position shown in the drawing, one or more hardened-steel pins, *e*, the object of which will be rendered apparent hereinafter.

The method of withdrawing a spike from a tie or other object with the above implement is as follows: The claw is first adapted to the spike, as shown in Fig. 2, and the outer end of the claw-bar moved in the direction of the arrow, the block B turning on its cam-like under surface, so as to gradually raise the spike until it is in the position shown in Fig. 3. The outer end of the claw-bar is then raised, its claw still retaining a hold upon the head of the spike, however, so as to allow the block B to swing round until the pins *e* rest upon the

tie, as in Fig. 4. The claw-bar is then depressed, and the pins bite into the tie and prevent any backward movement of the block B at the base. The pins, however, serve as pivots, and permit the yielding of the upper or claw-bar bearing portion of the block caused by the vertical rise of the spike. When the parts reach the position shown in Fig. 5, the outer end of the claw-bar is again elevated, without releasing the hold of the claw on the spike, and the block B moves into the position shown in Fig. 6, the extreme end of the block now forming its resting-point, and the pins *e* being withdrawn from the tie. A depression of the outer end of the claw-bar will now effect the complete withdrawal of the spike, as shown in Fig. 7.

It will be observed that the movement of the spike during its withdrawal is almost or quite vertical, the block B yielding, so as to permit that gradual backward movement of the pivot *b* which the vertical movement of the spike demands.

As the block B can be made of cast-iron or steel, and can be applied to the ordinary form of claw-bar, the expense of manufacturing my improved spike-extractor is small. The extractor, however, is very strong and durable.

I claim as my invention—

A spike-extractor in which a claw-bar, A, is combined with a pivoted block, B, having a curved under surface armed with a projecting pin or pins, *e*, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES F. SCRIBNER.

Witnesses:

HARRY A. CRAWFORD,
HARRY SMITH.