

W. DEVINE.
Spike-Extractors.

No. 155,429.

Patented Sept. 29, 1874.

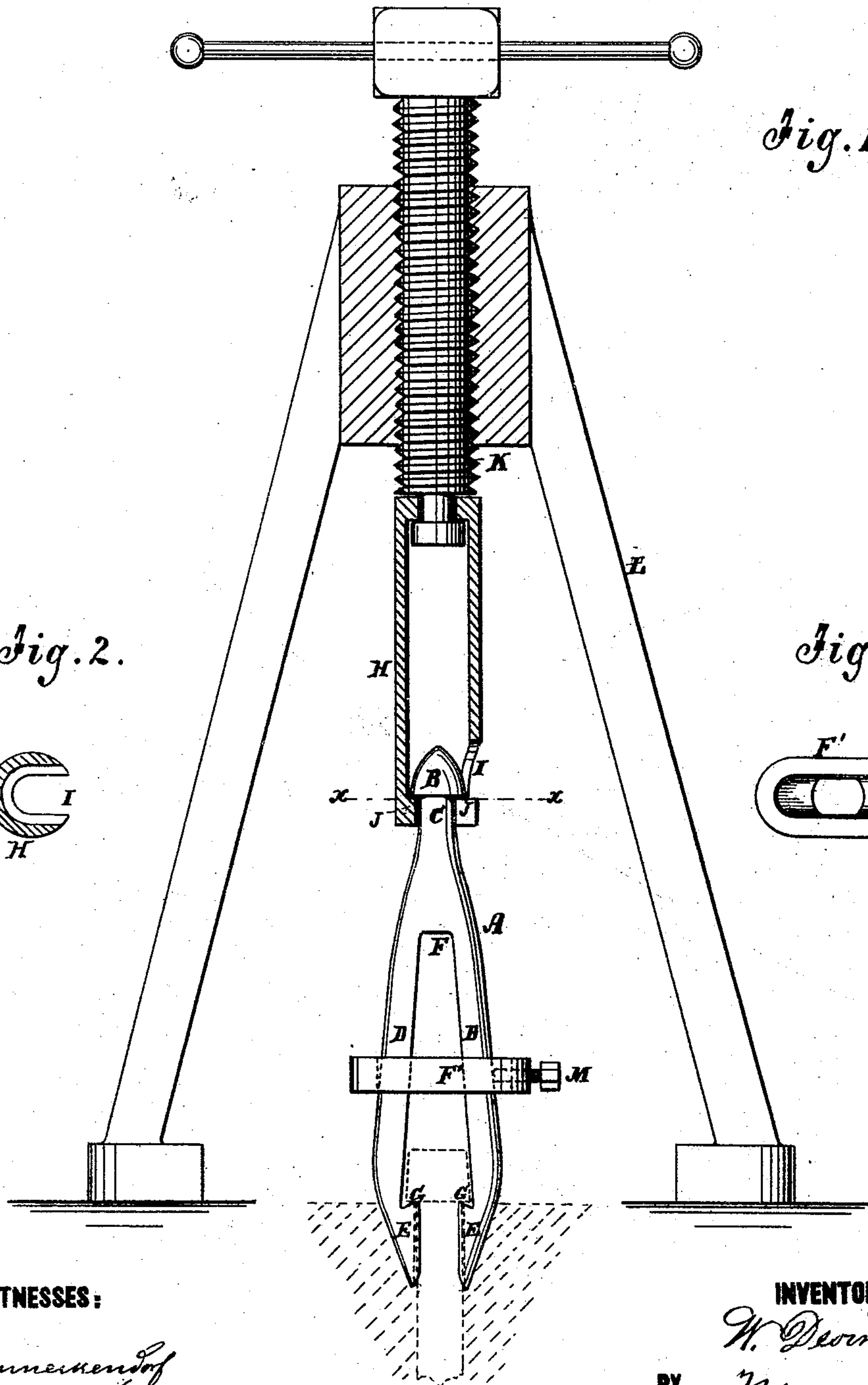


Fig. 2.

Fig. 1.

Fig. 3.

WITNESSES:

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WILLIAM DEVINE, OF BROWNSVILLE, TEXAS.

IMPROVEMENT IN SPIKE-EXTRACTORS.

Specification forming part of Letters Patent No. **155,429**, dated September 29, 1874; application filed July 25, 1874.

To all whom it may concern:

Be it known that I, WILLIAM DEVINE, of Brownsville, in the county of Cameron and State of Texas, have invented a new and useful Improvement in Spike-Extractors, of which the following is a specification:

This invention is an improvement in the class of nail-extractors in which a gripe or grapple formed of pendent springs or hinged jaws is employed.

The improvement relates to the connection between the spring-jaws and a tube, which is swiveled to the hoisting or jack-screw.

In the accompanying drawing, Figure 1 is an elevation of a lifting-jack, showing the grapple attached to the screw thereof by means of a swiveled tube, the latter being shown in longitudinal section. Fig. 2 is a horizontal section of Fig. 1, taken on the line *x*, showing the opening in the tube for the head of the grapple. Fig. 3 is a view of the "becket" or set-screw link for compressing the jaws of the grapple.

Similar letters of reference indicate corresponding parts.

A is the grapple. B is the head. C is the neck. D D are the arms, and E E the jaws. These arms D D may be hinged together above the crotch F, or made so as to spring toward each other. When the arms are made to spring, the grapple may be used for extracting nails and the lighter kinds of spikes without the use of the becket F'. The jaws E E are driven into the wood, and compressed

by the becket, as seen in Fig. 1, and the grapple, being attached to the screw by the swiveled tube, will extract the spike as the screw is turned. The jaws E E have each a sharp cutting-edge, G, which, when the jaws are compressed on the spike or nail, either by the springing of the arms, or by means of the becket, will penetrate the sides of the spike or nail, and obtain sufficient hold to extract the spike when the grapple is raised, whether the spike or nail has a head or not. H is the tube, which is swiveled to the lower end of the screw, so that the screw will readily revolve. I is an opening in the side of the tube, which admits the head and incloses the neck of the grapple by the shoulders J J, as seen in the drawing. By turning the jack-screw K, it will be seen that the tube and grapple will be raised vertically, thereby drawing the spike. L is the jack-screw frame. M is the becket-screw. By means of the becket, a spike or nail may be drawn straight, so that it can be used again without straightening.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The jaws D D having enlarged head B, in combination with the swiveled tube H, having slot or opening I, and shoulders or flanges J, as and for the purpose specified.

WILLIAM DEVINE.

Witnesses:

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