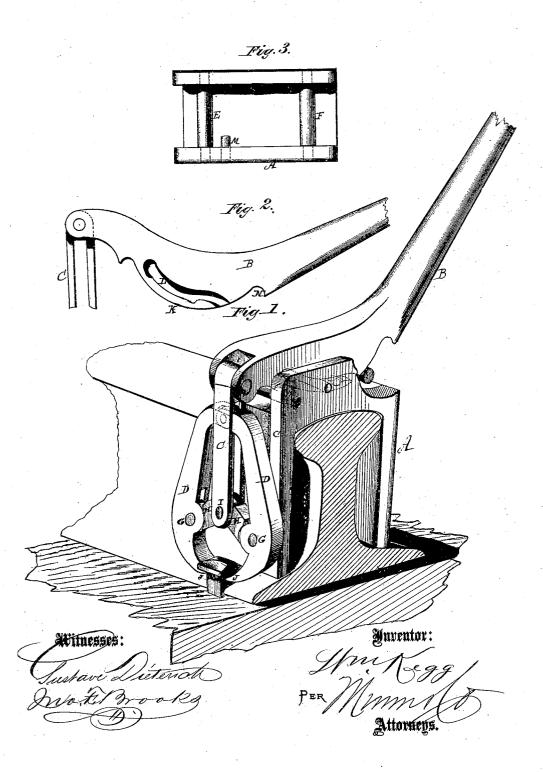
N. Kegg , Nail Extractor .

No. 98,977.

Patented Jan. 18.1870.



United States Patent Office.

WILLIAM KEGG, OF LASSELLSVILLE, NEW YORK.

Letters Patent No. 98,977, dated January 18, 1870.

IMPROVEMENT IN SPIKE-EXTRACTOR.

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

To all whom it may concern:

Be it known that I, WILLIAM KEGG, of Lassellsville, in the county of Fulton, and State of New York, have invented a new and useful Improvement in Spike-Pullers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and useful improvement in a machine for pulling spikes, more especially designed for pulling railroad-spikes, but applicable to

other purposes; and The invention consists in the construction and arrangement of parts, as hereinafter more fully described.

In the accompanying sheet of drawing-

Figure 1 represents a perspective view of the machine, showing it as when applied over a rail, for drawing a railroad-spike.

Figure 2 is a longitudinal section of the lever, showing, also, a section of the link by which the lever is connected with the pincers.

Figure 3 is a top or plan view of the fulcrum-stand, showing the fulcrum-rollers of the lever.

Similar letters of reference indicate corresponding

A is the stand on which the lever is supported.

B is the lever.

C is the connecting-link.

D D represent the jaws of the pincers.

E F represent the fulcrum-rollers, on which the lever bears in operating the machine; consequently, the lever operates on a variable fulcrum.

The upper ends of the pincer-jaws are tongued and grooved, and pivoted together. They are also connected together from the points G G, by short bars H H, which form a point at each end.

By the central joint-pin I they are connected with

the lower end of the connecting-link C.

The link slides on grooves on each side of the upper end of the pincers, so that the jaws preserve, at all times, their true and relative positions.

J J represent the lower points of the jaws of the

pincers, which grapple with the head of the spike when the machine is in use, as seen in the drawing.

When the machine is placed, and applied to the spike, as seen, the lever bears at first on the forward roller E, which gives the shortest purchase, and allows the greatest force to be applied for starting the

As the long end of the lever is brought down, it strikes the back roller F, and the rounded surface K rolls forward, so that the spike is maintained in a vertical position while being drawn, and without crooking or bending.

It will be seen, that as the power is applied, the pincers (by virtue of the connecting-bars H H) will not only be raised, but the jaws will be drawn together, the force applied being duly proportioned for the accomplishment of each purpose. The spike is raised by a single effort. As the lever strikes the back rollerfulcrum F, the revolving motion of the roller commences, changing the position of the lever, and increasing the distance of the fulcrum from the point of resistance, and thereby retaining the spike in a perpendicular position.

L is a groove in the side of the lever, and

M is a pin in the stand, which engages with the groove when the lever is in place. By this means the lever is attached to the standard. There may be a groove and pin on each side, if desired. The lever is removed from the stand by raising the back shoulder N over the back roller F.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent-

1. The combination of lever B, constructed as set forth, with the fulcrum-rollers E F, so as to give the greatest leverage in starting the spike.

2. Attaching the removable lever to the frame on which it is fulcrumed, by means of the groove in its side and a pin on the frame, as set forth.

WM. KEGG.

Witnesses:

DANIEL LASSELL, S. S. STEWART.