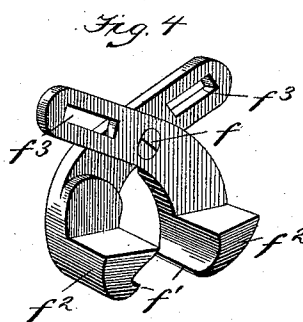
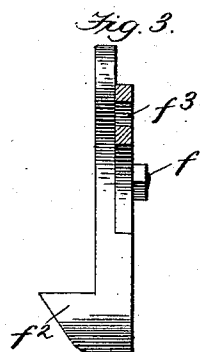
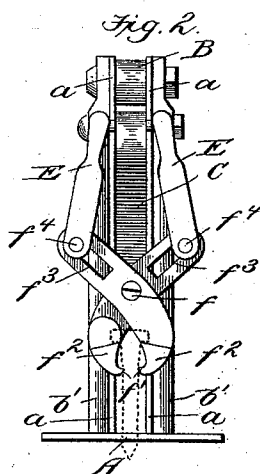
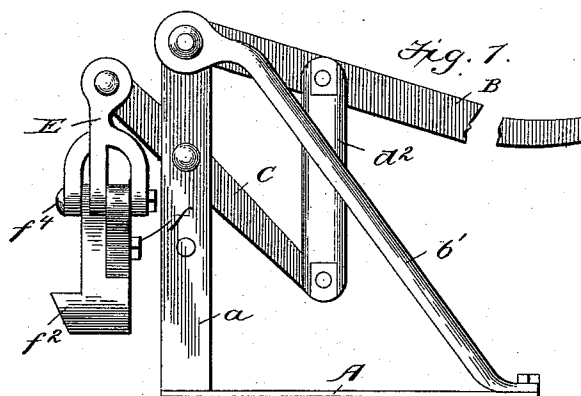


(No Model.).

P. FOWLER.
SPIKE PULLER.

No. 532,149.

Patented Jan. 8, 1895.



Witnesses

Edwin L Bradford
Joseph B. Schmitz

Inventor
Philip Fowler
By
Patrick C. Baugh
Attorney

UNITED STATES PATENT OFFICE.

PHILIP FOWLER, OF WAYNE, NEBRASKA.

SPIKE-PULLER.

SPECIFICATION forming part of Letters Patent No. 532,149, dated January 8, 1895.

Application filed April 9, 1894. Serial No. 506,859. (No model.)

To all whom it may concern:

Be it known that I, PHILIP FOWLER, a citizen of the United States of America, residing at Wayne, in the county of Wayne and State of Nebraska, have invented certain new and useful Improvements in Spike Pullers or Extractors, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to spike pullers of that class which employ pivoted jaws or dogs having pivoted connection with the power transmitting devices.

This invention is designed chiefly as an improvement on the device for which I obtained Letters Patent of the United States, November 17, 1891, No. 463,145. The jaws shown in my former patent sustain the strain during the entire operation of extracting the spike, thereby causing the same to give out after a limited use.

The object of the present invention is to prolong the life and usefulness of the jaws and increase the efficiency of the puller and the ease with which the same can be manipulated.

With these ends in view the improvement consists essentially; of lateral ribs or projections near the active or biting ends of the jaws to engage with the underside of the head of the spike after the latter has been started and pulled part way from its socket or seat, as hereinafter will more fully appear, reference being had to the accompanying drawings, in which—

Figure 1. is a side view of a puller embodying the invention. Fig. 2. is an end view of the device. Fig. 3. is a detail perspective view of the jaws detached and shown on a larger scale. Fig. 4. is an edge view of the parts shown in Fig. 3. the upper part of one of the jaws being broken away.

The base A, standards *a*, levers B and C connected by links *d*², brace *b*¹, and the slotted links E pivotally connected to the lever C are precisely the same as the corresponding parts shown in my former patent herein referred to and are shown to illustrate the application of my invention.

The jaws F are pivotally connected together between their ends by the rivet or bolt *f* and have slots *f*³ in their upper ends by means of

which they are connected with the slotted links E by the bolts *f*⁴. The lower ends *f*¹ of the jaws are curved and sharpened to readily catch under the head of the spike. The lateral ribs or projections *f*² are beveled or slope in opposite directions on the upper side from the biting edge outward and curve outwardly on the inner or opposing faces, as is most clearly shown in Figs. 2. and 3. The outer face or side of the nibs or projections tapers from the top side to the lower or biting ends of the jaws.

In practice, the lower ends of the jaws are first brought into active operation by engaging with the head of the spike and the latter started or partially extracted. The lower ends of the jaws are now disengaged from the partially extracted spike and the nibs or lateral projections *f*² are fitted under the head of the spike and the latter wholly and entirely extracted in the usual manner, as will be readily understood.

The invention is specially designed for extracting long bolts and spikes which are used in the construction of bridges. In this class of structures the bolts are usually from sixteen to twenty-four inches long and by removing the same by the present invention, the jaws slide down on the bolt after the same has been partially withdrawn and when returning the lever to a position for a new stroke and bite into the sides of the said bolt when the lever is again actuated to draw out the bolt. This operation is repeated as often as necessary until the bolt is wholly withdrawn.

To prevent the improvement from tipping forward when in use the base is projected a short distance in front of the vertical frame or posts thereby providing a brace.

I claim—

1. In a spike puller a pair of pivoted jaws having lateral nibs or projections, having the top faces brought to an angle on the inner sides so as to form additional jaw faces, substantially as and for the purpose described.

2. In a spike puller, a pair of pivotal jaws having lateral nibs or projections contiguous to the biting edges of the jaws, and having the top faces brought to an angle on the inner side so as to form additional jaw faces, and having the outer or side faces sloping from the

top faces to the ends of the jaws, substantially as set forth.

3. In a spike puller, a pair of pivotal jaws having lateral nibs or projections, and having
5 the top faces brought to an angle on the inner sides so as to form additional jaw faces, and having the said inner sides curved outwardly, and having the outer or side faces sloping

from the top faces toward the ends of the jaws, substantially as shown and described. 10

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

PHILIP FOWLER.

Witnesses:

W. H. YOUNG,
A. A. WELCH.