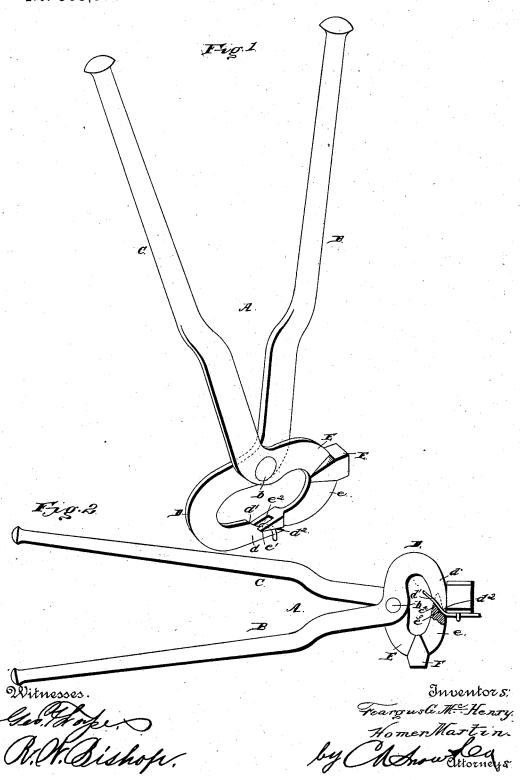
F. G. McHENRY & H. MARTIN.

COMBINED WIRE TIGHTENER AND STAPLE DRIVER AND EXTRACTOR.

No. 383,970.

Patented June 5, 1888.



## UNITED STATES PATENT OFFICE.

FEARGUS GEO. MCHENRY AND HOMER MARTIN, OF BLOOMINGTON, KANSAS.

COMBINED WIRE-TIGHTENER AND STAPLE DRIVER AND EXTRACTOR.

SPECIFICATION forming part of Letters Patent No. 383,970, dated June 5, 1888.

Application filed December 5, 1887. Serial No. 257,057. (No model.)

To all whom it may concern:

Be it known that we, FEARGUS GEO. Mc-HENRY and HOMER MARTIN, citizens of the United States, residing at Bloomington, in the county of Osborne and State of Kansas, have invented a new and useful Improvement in a Combined Wire-Tightener, Staple Driver and Extractor, of which the following is a specification.

The invention relates to combined wiretightening nippers, staple-extractors, and hammers, especially adapted for use in building and taking down wire fences; and it consists in the construction and novel combination of 15 parts, hereinafter described, illustrated in the drawings, and pointed out in the claim hereto

In the accompanying drawings, Figure 1 is a perspective view of the device, with the jaws 2) slightly open and in the position assumed for drawing staples. Fig. 2 is a side view showing the device in the position assumed for tightening wires.

Referring to the drawings by letter, A des-25 ignates the nippers, having the shanks or handles BC, pivoted together at b immediately inward from the jaws, said handles being about parallel when the jaws are closed.

D E are the jaws, extending, respectively, 30 from and integral with the handles B C and outward from the pivotal point b. The said iaws extend outward at right angles from the handles in opposite directions, then curve outward and upward and then inward, their meet-35 ing end portions being inclined slightly inward when closed on each other. The jaw D, integral with the handle B, has a point, d, which is made concave on its inner edge, d', the end or extremity  $d^2$  of the point turning 40 inward. The point e of the jaw E, integral with the handle C, is widened laterally, made slightly concave on its lower edge near its extremity e', and provided with the longitudinal recess or notch  $e^2$ , into which the point d en-45 ters, the floor  $e^3$  of the recess corresponding in

inclination to that of the inner edge of the point

when the jaws are closed, upon the outer edge of the point e, and the ends of the latter point are then considerably inward from the outer 50 edge of the point d, so that when the jaws are slightly open the end of the point d will be outward from the ends of the point e a distance exceeding the diameter of the wire forming a staple.

F is a hammer-head projection formed upon and standing outward from the central part of

the bend of the jaw E.

The method of using the device is as follows: To drive staples, the hammer head F is used 60 in the same manner as a hammer head of ordinary construction. To draw the staple of a fence-wire, the points of the jaw E are placed against one side of the bend or transverse portion of the staple and the jaws closed, the 65 point of the jaw D passing into the wood of the post, so as to hook under the staple and engage it between the inner edge of the jaw D and the outer edge of the jaw E. When a staple is driven clear down on the wire, the 70 notched jaw grips the staple, the wire entering the notch so that the claw goes right down on the post. The closing of the nippers then pushes the pointed jaw under the wire. The staple can then be readily drawn from the post. 75 To tighten or take up the slack of the wire, the latter is caught between the jaws and a purchase obtained on the post to which the wire is attached, the slack drawn up, and the wire secured with staples to the post. The 80 slack is taken up behind the stretcher, the operator standing behind the post next behind the stretcher, gripping the wire between the jaws and taking a purchase on said post. To get the purchase, he pushes the device back- 85 ward. Time and trouble are thus saved, as by the use of the device the erection of additional posts is avoided.

Having described the invention, we claim-The combined wire-tightener and staple 90 puller and driver, having the jaws D E, the end of the jaw D forming a point, d, having a concave inner edge, d', and an inwardly-turned d. The end or extremity of the point d lies, point,  $d^2$ , and the end of the jaw E being

pointed and widened laterally, made slightly concave on its lower edge, and provided with a longitudinal notch or recess,  $e^2$ , the floor  $e^3$  of said recess being convex and corresponding to the concave edge of the point d, substantially as specified.

In testimony that we claim the foregoing as