J. W. ALKIRE.
WIRE WORKING TOOL.
APPLICATION FILED FEB. 6, 1903.

NO MODEL.

## NITED STATES PATENT

## JOHN W. ALKIRE, OF MADISON, WISCONSIN.

## WIRE-WORKING TOOL.

RECIFICATION forming part of Letters Patent No. 745,984, dated December 8, 1903. Application filed February 6, 1903. Serial No. 142,179. (No model.)

To all whom it may concern:

Beit known that I, John W. Alkire, a citizen of the United States, residing at Madison, in the county of Dane and State of Wiscon-5 sin, have invented a new and useful Wire-Working Tool, of which the following is a

specification.

This invention relates to an improved wireworking tool for twisting and coiling wire and to which may likewise be employed without change of structure as a wrench, its object being to produce a simple implement of this class in which all the parts coact to produce the desired results.

The invention consists in certain novel features of construction, as hereinafter shown and described, and specified in the claim.

In the drawings illustrative of the invention, in which corresponding parts are de-20 noted by like designating characters, Figure 1 is a side elevation. Fig. 2 is a perspective illustrating the operation of the device.

The implement consists of the shank or stock portion 10, formed of a flat bar of steel 25 or other suitable material, having parallel sides and formed with outwardly-opening reversely-inclined jaws 11 12 at one end, one of which is internally serrated, and with a backwardly-inclined jaw 13 at the other end 30 with one of the operating-faces serrated, as shown. Formed through the shank portion in the rear of the jaw members 1112 is an enlongated aperture 14, having longitudinallyinclined side walls, and between the aper-35 ture 14 and the jaw member 13 is another perforation 15, preferably square. Extending inwardly from the juncture of the jaw members 11 12 is an open-ended slot 16, having parallel side walls comparatively close to-40 gether, as shown. Upon one edge adjacent to the aperture 14 the shank 10 is graduated into inches and fractions of inches, as shown. The parts thus described, it will be noted, are all formed in one single piece and may be of 45 steel, malleable iron, or other metal, as required.

An implement thus constructed may be employed as an ordinary "alligator - wrench," while at the same time the open slot 16 pro-

vides for the support of the end or ends of a 50 wire while being twisted or coiled about an object held between the jaws 11 12 or within

the slot 14 or aperture 15.

In Fig. 2 of the drawings I have illustrated the application of the tool for winding or coil- 55 ing wire, the rod or mandrel upon which the wire is to be wound being held within the slot 14 and the wire supported in the slot 16. By this simple means one or more wires may be quickly twisted or wound around any object 60 desired in uniform and regular layers or coils and without abrading or unduly straining the wire, the inclined jaws 11 and 12 guiding the wire in the slot 16 and the graduations on the shank enabling the length of the wire 65 necessary to form a predetermined number of coils to be readily determined.

By reason of the inclined form of the jaw members 11 12 and the slot 14 the implement is capable of application to various sizes of 70 articles and is therefore capable of a wide range of uses. It will be found especially useful in connection with agricultural machinery, where an implement which can be readily and quickly adapted for a variety of 75 purposes is very desirable.

The implement can be manufactured in various sizes and may thus be employed in connection with the largest or smallest struc-

Having thus described my invention, what I claim is-

As a new article of manufacture a wireworking tool comprising a shank portion having reversely-inclined jaws and provided with 85 a contracted open slot extending from the juncture of said jaws longitudinally of said shank, there being an aperture formed in the shank portion spaced from the slot and provided with inclined side walls diverging in 90 the direction of the jaws.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in

the presence of two witnesses.

JOHN W. ALKIRE.

Witnesses:

LYNN A. CLARK, E. E. PARKINSON.