

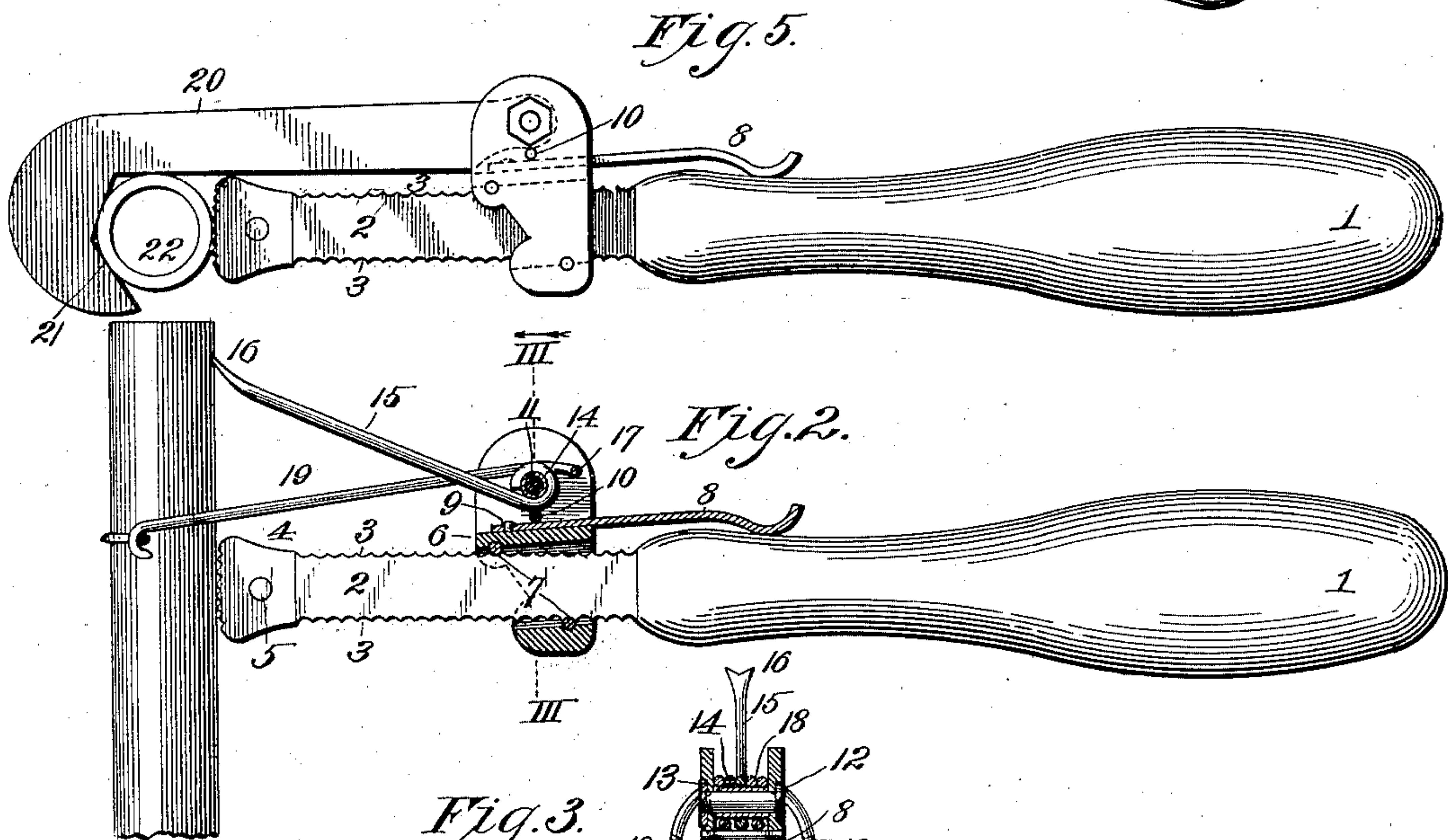
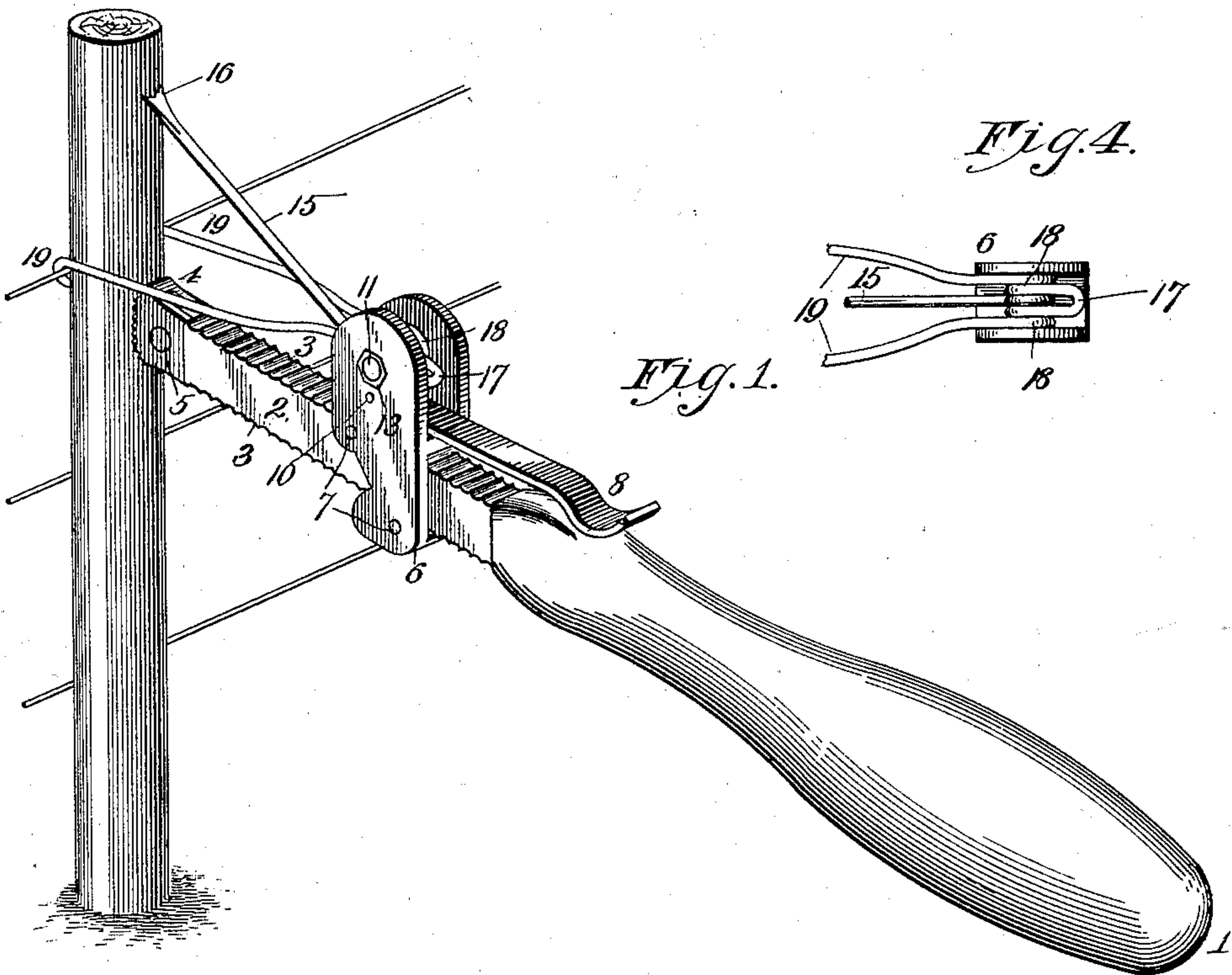
No. 656,622.

Patented Aug. 28, 1900.

W. J. BARNES.
COMBINATION TOOL.

(Application filed Mar. 30, 1900.)

(No Model.)



Witnesses,

H. C. Rodgers.

J. M. Goring

Inventor.
Willis J. Barnes.

By, Fischer & Choate
Attys

UNITED STATES PATENT OFFICE.

WILLIS J. BARNES, OF MILAN, KANSAS, ASSIGNOR TO E. A. PHILLIPPI, L. B. PHILLIPPI, B. E. PHILLIPPI, AND F. BROWN, OF SAME PLACE.

COMBINATION-TOOL.

SPECIFICATION forming part of Letters Patent No. 656,622, dated August 28, 1900.

Application filed March 30, 1900. Serial No. 10,773. (No model.)

To all whom it may concern:

Be it known that I, WILLIS J. BARNES, a citizen of the United States, residing at Milan, Sumner county, Kansas, have invented a new and useful Combination-Tool, of which the following is a specification.

My invention relates to an implement for use as a wire-tightener or pipe-wrench, and has for its object the provision of an efficient tool of this character possessing the desirable features of simplicity, strength, and cheapness.

The invention consists in certain novel and peculiar features of construction and combinations of parts, as will be hereinafter described and claimed; and in order that it may be fully understood I will proceed to describe it with reference to the accompanying drawings, in which—

Figure 1 is a perspective view of the implement adapted for use as a wire tightener or stretcher. Fig. 2 is a vertical longitudinal section of the same. Fig. 3 is a cross-section taken on the line III III of Fig. 2. Fig. 4 is a top view of part of the device. Fig. 5 is a side view of the device as arranged for use as a pipe-wrench.

Referring to the drawings in detail, where like reference-numerals designate corresponding parts, 1 designates a handle of any suitable type and provided with a shank 2, serrated in its upper and lower edges, as at 3, and terminating at its front end in a toothed foot 4, the latter being riveted, as at 5, or otherwise secured to the end of the shank.

6 designates a sleeve fitting loosely upon the shank and provided at diagonally-opposite points with cross-pins 7, extending transversely of the sleeve-opening in order that when the sleeve is canted slightly said pins shall engage certain serrations 3, and thus prevent the sleeve slipping on the shank. The normal position of the sleeve, as shown most clearly in Fig. 2, is with the pins engaging serrations of the shank, a spring 8 being riveted to the sleeve, as shown at 9, and below the cross-pin 10, and pressing at its rear end against the handle or the shank, according to the position of the sleeve upon the latter, so as to hold the sleeve canted, or, in other words, with said pins engaging the ser-

rations in the upper and lower sides of the shank, as hereinbefore explained. To adjust the sleeve upon the shank, it is necessary to press forward and rearward against its upper and lower edges sufficiently to disengage said pins from said serrations, the spring yielding under such pressure and permitting the sleeve to be manipulated. As soon as such pressure is removed the spring throws the sleeve back to its original and operative position, as shown clearly in Fig. 2, and automatically locks it against sliding movement on the shank. This shank and spring-locked sleeve may be used in conjunction with a device for stretching or tightening the strands of wire fences or for screwing or unscrewing pipes, as shown, respectively, in Figs. 1 to 4, inclusive, and Fig. 5. In both cases the sleeve carries a screw-bolt 11, with its head 12 countersunk, preferably in one side of the sleeve, and a securing-nut 13 countersunk in the other side of the sleeve, and to relieve the bolt of wear and eliminate chance of it becoming unscrewed in operation of the implement said bolt is preferably provided with a sleeve or collar 14. Mounted pivotally on said sleeve or collar in Figs. 1, 2, 3, and 4 is a brace-rod 15, terminating in a sharpened forked end 16, adapted to bite into the fence-post and prevent slippage of the implement. Mounted also on said collar or sleeve is a double hook, the same being formed, preferably, of a single piece of stiff spring-wire bent at its middle, as at 17, and formed adjacent to and at each side of said bend 17 with similar coils 18, and terminating in diverging hook-arms 19, adapted to fit over the wire to be stretched or tightened.

In securing the brace 15 and the double hook in position the screw-bolt is first removed by means of a screw-driver or equivalent device. The collar or sleeve 14 is then fitted in the registering eyes or coils of brace 15 and the double hook is caused to register with the bolt-holes. The bolt is then slipped back to its original position and the nut 13 held in the proper countersink until (see Figs. 1 and 3) the bolt is screwed home. Should there be any tendency in the sleeve 6 to spring inward, it is obvious the collar or sleeve 14 will resist and prevent the brace 15 and double

hook from being cramped, and thereby insure their free pivotal operation when necessary.

To stretch or tighten a fence-wire, the serrated or toothed foot 4 is brought to bear
5 against the post, with the brace engaging the latter above, the double hook fitting at opposite sides of the post and engaging the wire. With the shank as a fulcrum the handle is now depressed, and the effect is to pull the
10 wire strand forward, as indicated in Fig. 2. When properly stretched or tightened, it is secured in its new position by staples or in any other suitable or preferred manner.

When it is desired to utilize this implement
15 as a pipe-wrench, the foot 4 forms the stationary or inner jaw, the brace 15 and double hook are removed, and the arm or movable jaw 20 is pivoted upon the screw-bolt or its collar 14, said jaw being provided with an
20 obtuse-angle inner face 21, against which and the inner jaw or foot 4 the pipe 22 is clamped by the proper adjustment of the sleeve 6 upon shank 2, the spring 8 locking it reliably at the desired point. By having the serrations
25 3 sufficiently fine and close together and the cross-pins 7 sufficiently small at their inner sides it is obvious that an exceedingly-fine adjustment of the sleeve upon the shank may be obtained.

30 The device can be manipulated with ease and quickness, the operator with one hand grasping the handle and with the other adjusting the sleeve and the contiguous parts.

From the above description it will be apparent that I have produced an implement
35 of the type described possessing the advantageous features enumerated as desirable in the statement of invention, and it is to be understood that while I have illustrated the
40 preferred embodiment of the invention I re-

serve the right to make such changes as properly fall within the spirit and scope of the appended claims.

Having thus described the invention, what I claim as new, and desire to secure by Letters
45 Patent, is—

1. In an implement of the character described, a shank serrated at its upper and lower sides, a sleeve 6, mounted slidably thereon, and provided with cross-pins 7, at
50 diagonally-opposite points, a spring 8 having one end fitting in the sleeve and riveted thereto as at 9, a pivot-bolt mounted in the sleeve above the spring, a nut engaging said bolt and countersunk in the sleeve, a collar
55 or sleeve 14, upon the bolt and bearing endwise against sleeve 6, and an arm pivotally mounted on said collar or sleeve within sleeve 6, all arranged substantially as described.

2. In a tool of the character described, a
60 shank serrated at its upper and lower sides, a sleeve mounted slidably thereon, and provided with diagonally-opposite cross-pins, a spring secured to the sleeve and adapted to cant the same and hold said cross-pins in en-
65 gagement with certain of said serrations, a bolt bridging the sleeve above said spring, a brace pivoted on the bolt and adapted to bite against a fence-post, and a double hook piv-
70 oted on the bolt and formed of a single wire, by bending the latter at its middle, as at 17, and near said bend forming double loops or coils 18, and hook-arms 19, substantially as described.

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

WILLIS J. BARNES.

Witnesses:

F. M. ROBSON,
D. L. PIERCE.