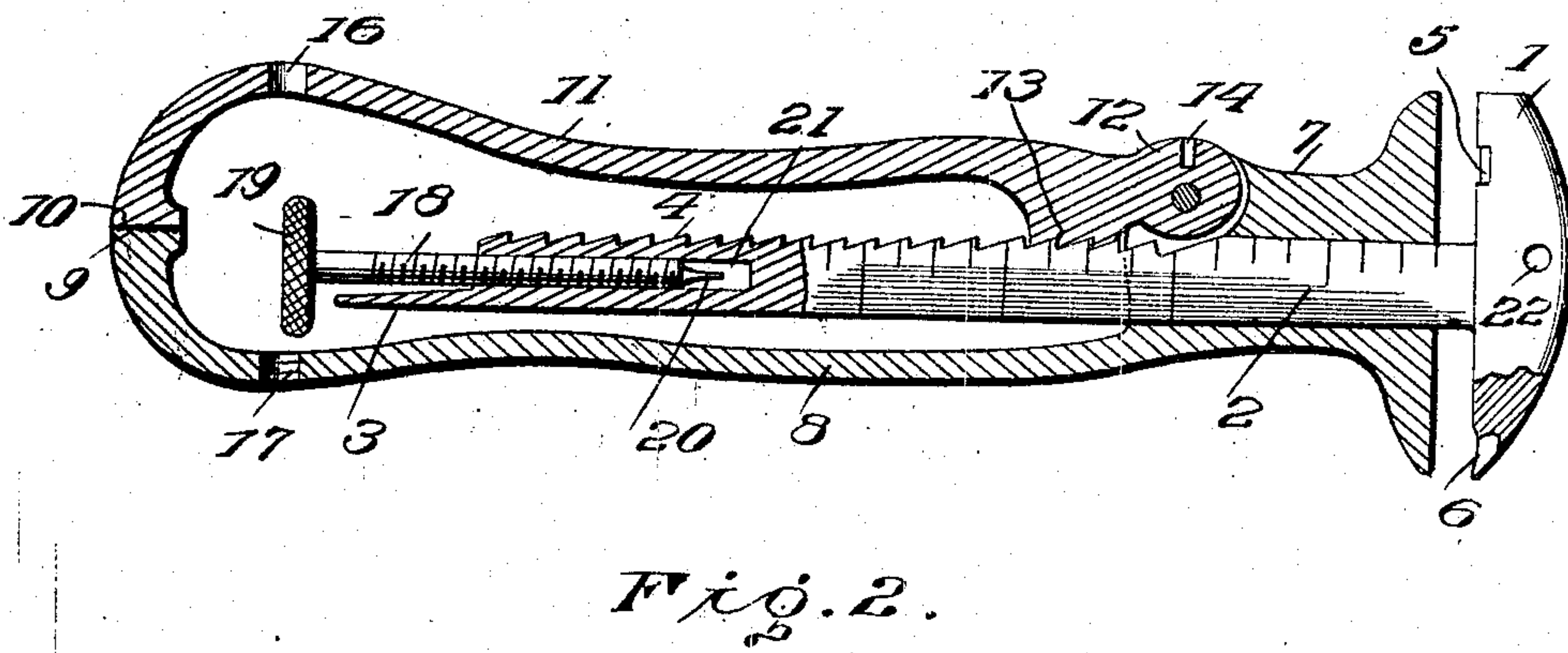
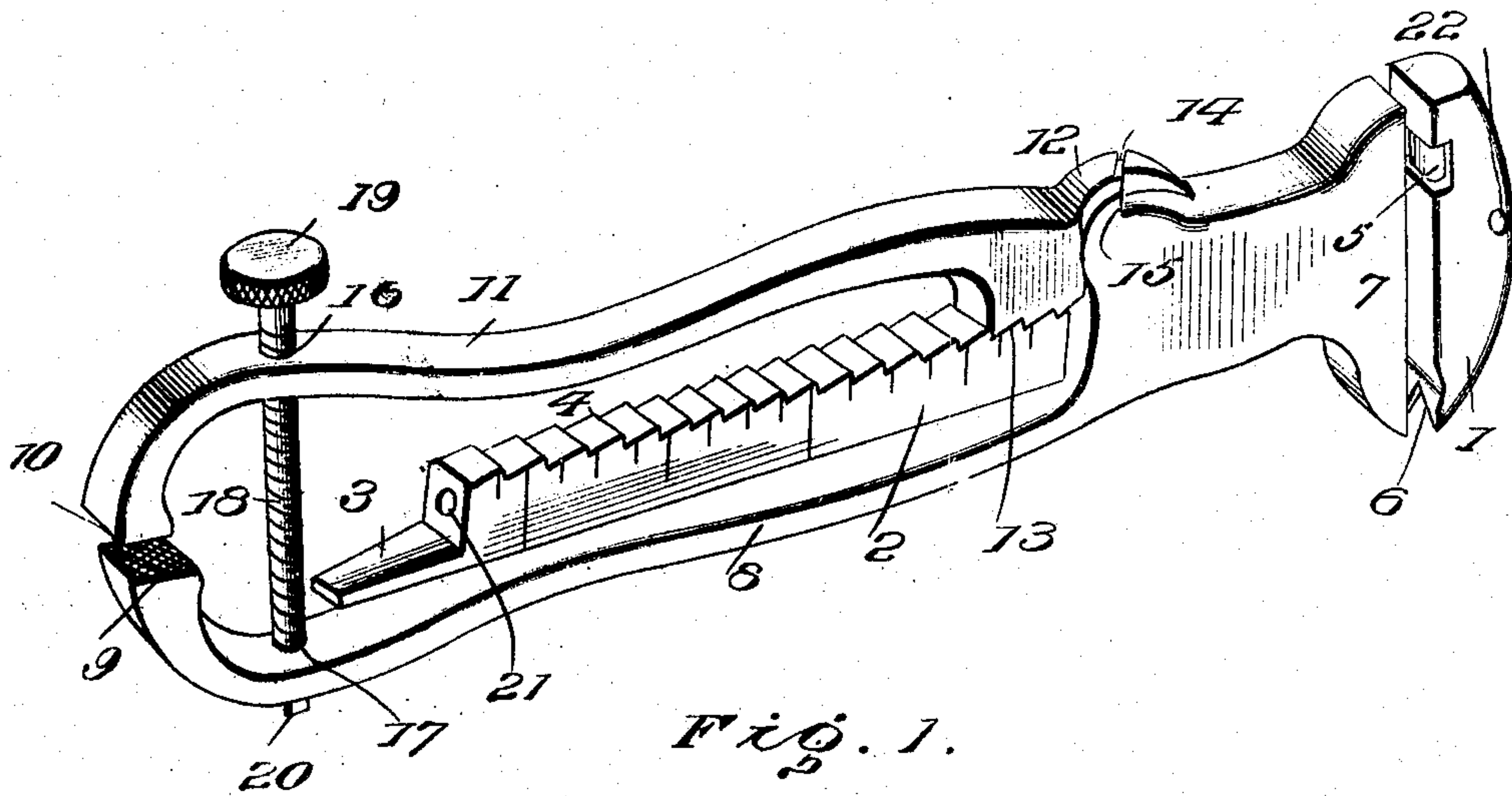


No. 867,118.

PATENTED SEPT. 24, 1907.

J. H. FLORA.
COMBINATION TOOL.
APPLICATION FILED JAN. 16, 1907.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN HENRY FLORA, OF TUNNEL HILL, ILLINOIS.

COMBINATION-TOOL.

No. 867,118.

Specification of Letters Patent.

Patented Sept. 24, 1907.

Application filed January 15, 1907. Serial No. 352,411.

To all whom it may concern:

Be it known that I, JOHN HENRY FLORA, a citizen of the United States, residing at Tunnel Hill, in the county of Johnson and State of Illinois, have invented certain new and useful Improvements in a Combination-Tool, of which the following is a specification.

This invention has for its object an improved construction of combination tool which will embody in the one appliance a large number of novel and useful adjuncts, and which will be simple and durable in construction and efficient in operation for the various uses to which the tool may be put.

With this and other objects in view as will more fully appear as the description proceeds, the invention consists in certain constructions and arrangements of the parts hereinafter described and particularly pointed out in the appended claims.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a perspective view of my improved combination tool. Fig. 2 is a longitudinal sectional view thereof.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The movable jaw 1 of the improved combination tool of this invention is provided with a shank 2 which is formed with linear graduations as shown, and is provided at its extremity with a tapered projection 3 adapted to serve as a screw driver. It is also formed on one edge with outwardly beveled teeth 4. The head of the movable jaw 1 which is formed substantially in the shape of a hammer head, coacts with the shank 2 as the handle of the device when used as a hammer, and for this purpose one end of the movable jaw 1 is comparatively flat and blunt to provide a striking portion, while the opposite end is formed into a claw as indicated at 6 so as to provide a convenient device for extracting nails and tacks. The said head is also formed on its inner surface with a wire and spring binder 5 which is produced by a curved recess as clearly illustrated in the drawing.

The stationary jaw 7 is hollow so as to prevent the shank of the movable jaw from sliding therethrough, and said stationary jaw is formed with an integral rearward extension 8 which constitutes one member of a handle, said handle extending inwardly at its extremity and serrated as shown to form one jaw 9 of a vise. The coacting jaw 10 of the vise is formed on the inwardly extending end of the opposite handle member 11 which is provided at its other extremity with a rounded or disk like head 12 pivotally mounted upon the stationary jaw 7 as shown. The said handle mem-

ber 11 is also formed with a toothed portion 13 adapted to coact with the notched or toothed surface 4 of the shank 2 so as to hold said shank at the required adjustments to effect the requisite spacing of the two jaws and secure grip of the work to be operated upon. In addition to the function of a lever grip for the shank 2, the handle member 11 constitutes a wire cutter in that it is provided in its head 12 with a preferably oblique transverse slot 14 adapted to coact with a sharpened lug 15 on the stationary jaw 7.

The pivoted handle member 1 is formed near its outer or free end with an aperture 16, which is preferably smooth, while the handle member 8 is formed with a threaded aperture 17 adapted to register with the aperture 16.

18 designates a screw threaded rod provided with a milled head 19. This rod is adapted to extend through the aperture 16 and work through the aperture 17 so as to constitute an operating rod to draw the said vise jaws 9 and 10 together. The extremity of the actuating rod 18 for the vise jaws is tapered as indicated at 20 whereby it may be used as a screw driver, and when this rod is not in use either as a screw driver or as an actuating rod for the vise it may be securely held to the tool where it may not be in the way of the other operating parts by being placed in a longitudinally extending socket 21 in the outer end of the shank 2.

If desired the head or movable jaw 1 may be provided with a transversely extending aperture 22 into which a nail or rod may be inserted, and another nail or rod hold the ordinary vise jaws 9 and 10 so that the tool may be used as a sighting device.

Having thus described the invention, what is claimed as new is:

1. A tool of the character described, consisting of a movable jaw provided with a toothed shank, a hollow stationary jaw through which said shank is mounted to slide, said stationary jaw being provided with a relatively stationary handle member the outer end of which projects inwardly and is adapted to provide a vise jaw, a pivoted handle member mounted on the stationary jaw and provided with a toothed portion adapted to engage said shank, the outer end of said pivoted handle member extending inwardly towards the opposing end of the said handle member and adapted to coact therewith to form a vise, and an actuating rod adapted to extend through the outer ends of said handle members whereby to draw said ends together.

2. A tool of the character described, consisting of a movable jaw provided with a toothed shank, a hollow stationary jaw through which the said shank is mounted to slide, said stationary jaw being provided with a relatively stationary handle member, a pivoted handle member mounted on the stationary jaw and provided with a toothed head portion adapted to engage said shank, the two handle members being provided at their outer ends with registering apertures, and a screw threaded actuating rod adapted to extend through the said apertures whereby to draw the outer ends of the handle members together and grip the teeth of the pivoted handle member against said shank.

3. A tool of the character described, consisting of a movable jaw provided with a toothed shank, a stationary jaw

- through which said shank is mounted to move, said stationary jaw being provided with a relatively stationary handle member, a pivoted handle member mounted on the stationary jaw and provided with a toothed portion adapted to engage said shank, a detachable actuating rod adapted to extend through the outer ends of the said handle members whereby to draw the same together, one end of said actuating rod being tapered, as and for the purpose set forth.
- 10 4. A tool of the character described, consisting of a movable jaw provided with a toothed shank, a stationary jaw through which said shank is mounted to move, said stationary jaw being provided with a relatively stationary

handle member, a pivoted handle member mounted on the stationary jaw and provided with a toothed portion adapted to engage said shank, and an actuating rod adapted to extend through the outer ends of said handle members whereby to draw the same together, the shank of the movable jaw being provided in its end with a socket adapted to receive said actuating rod. 15

In testimony whereof I affix my signature in presence of two witnesses. 20

JOHN HENRY FLORA. [L. S.]

Witnesses:

W. N. SIMMONS,
C. F. FLORA.