No. 832,367. PATENTED OCT. 2, 1906.

J. F. DICKASON.

WRENCH.

APPLICATION FILED NOV. 2, 1905.

Fig. 1.

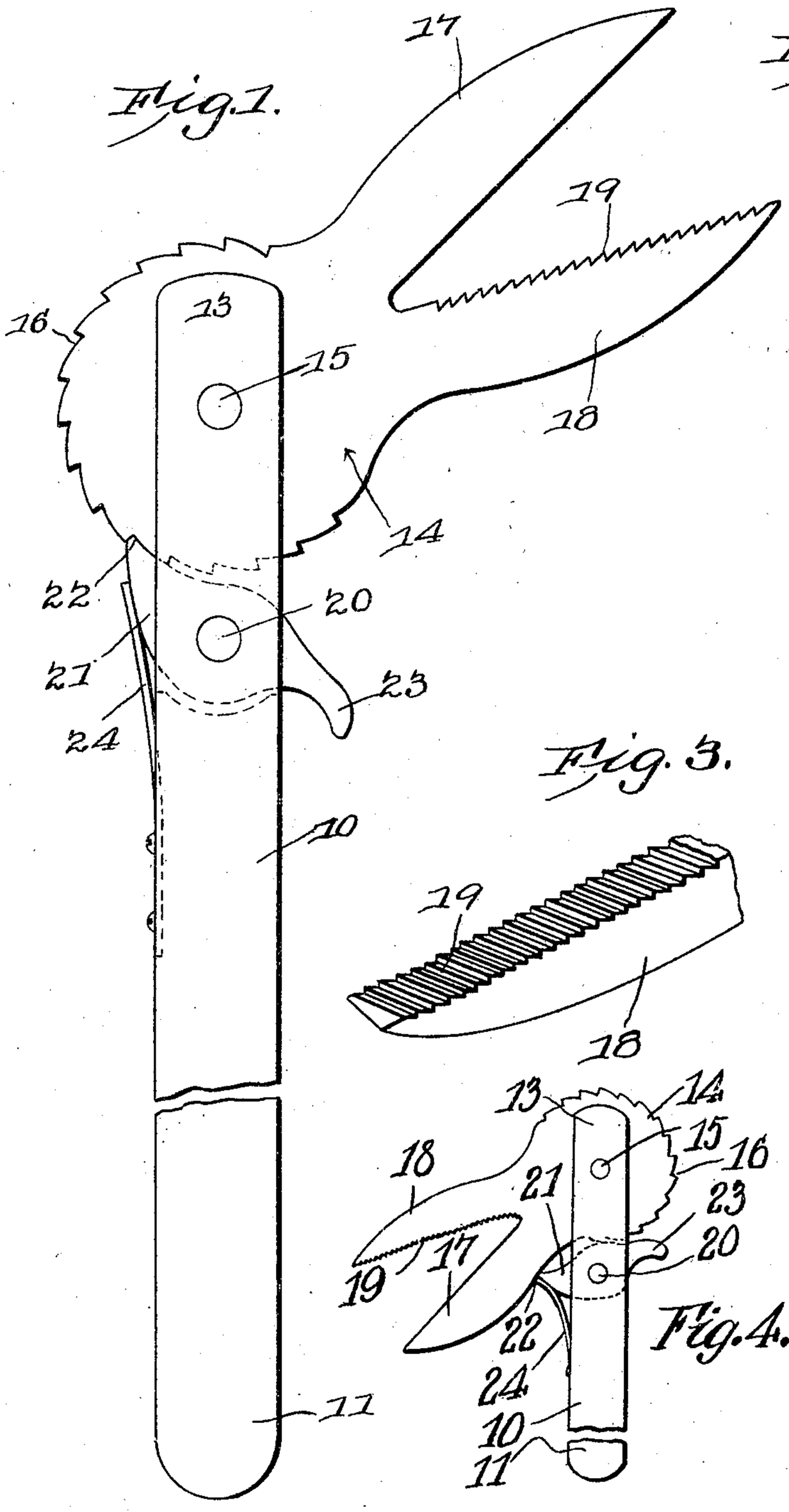

Fig. 2.

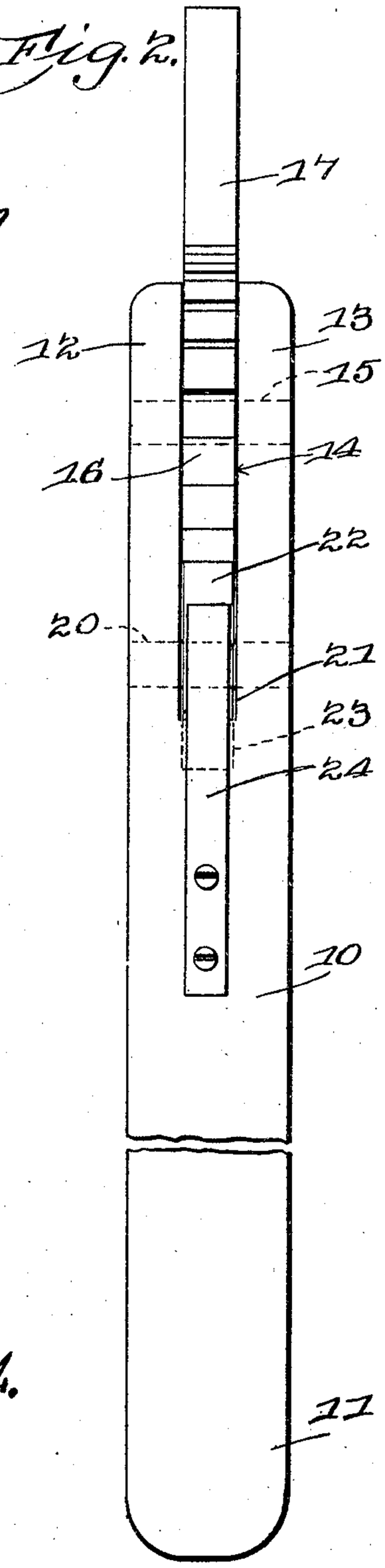

Fig. 3.

Fig. 4.

Witnesses,
E. F. Stewart
C. N. Woodward.

John F. Dickason, Inventor
by Church & Co
Attorneys.

UNITED STATES PATENT OFFICE.

JOHN F. DICKASON, OF KEYSTONE, INDIANA.

WRENCH.

No. 832,367. Specification of Letters Patent. Patented Oct. 2, 1906.

Application filed November 2, 1905. Serial No. 285,518.

To all whom it may concern:

Be it known that I, JOHN F. DICKASON, a citizen of the United States, residing at Keystone, in the county of Wells and State of Indiana, have invented a new and useful Wrench, of which the following is a specification.

This invention relates to wrenches of the class having laterally-adjustable heads, and has for its object to improve the construction and increase the efficiency and utility of devices of this character.

With these and other objects in view, which will appear as the nature of the invention is better understood, the invention consists in certain novel features of construction, as hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which corresponding parts are denoted by like designating characters, is illustrated the preferred form of embodiment of the invention capable of carrying the same into practical operation, it being understood that various changes in the form, proportion, size, and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention within the scope of the appended claims.

In the drawings, Figure 1 is a side elevation, and Fig. 2 is an edge view, of the improved implement. Fig. 3 is a perspective view of a portion of the serrated jaw, illustrating the arrangement of the teeth thereon. Fig. 4 is a side elevation of the wrench, showing a position that the jaw thereof may assume.

The improved implement comprises a stock 10, having a handle 11 at one end and with the other end bifurcated to form two spaced arms 12 13, between which the head portion 14 of the wrench is pivoted at 15 and free to swing between the arms. The head member 14 is provided with spaced ratchet-teeth 16 at one side and with outwardly-diverging jaws 17 18, extending from the other side, one of the jaws having serrated teeth 19, as shown, the teeth extending at an angle to the longitudinal plane of the jaw, as shown in Fig. 3.

Pivoted at 20, between the arms 12 13, is a pawl 21, extended at one end at 22 to engage the teeth 16, and with the other end extended into a finger-grip 23 and held yieldably in position by a spring 24. It will be noted that the tooth-engaging end 22 and the finger-grip portion 23 extend from opposite sides of the stock 10, so that the pawl may be released by the pressure from the index-finger of the hand that holds the wrench. The head 14, together with its jaws 17 18, may be quickly adjusted and manipulated with one hand, leaving the other hand free for other work. The jaws 17 18 may thus be set at any desired angle to enable the wrench to be adapted for use in cramped and otherwise inaccessible localities and the position of the jaws relative to the head very quickly changed to any required extent within the range of the radial teeth 16 with the finger of the same hand which holds the wrench. This is an important advantage in many localities where one hand only can be employed with the wrench.

All the parts are of metal, preferably steel, and may be of any required size and may be employed as a nut-wrench or as a pipe or rod wrench, as preferred.

It will be observed that the pawl 21 may be swung on its pivot, so that the under edge of the pawl will engage the end of the stock 10, lying between the bifurcations 12 and 13, and that the head 14 may be swung around upon its pivot 15, so that the side of the wrench-jaw will bear against the end 22 of the said pawl. At the same time one of the ratchets 16 will bear against the upper edge of the said pawl. It will thus be seen that an additional bearing-surface is provided between the pawl 21 and the stock and between the head 14 and the pawl 21. The parts are so moved when it is intended to start a tap that has become rusted or is otherwise obstinate in its initial movement. By providing the additional bearing-surface between the parts, as stated, the pivots 15 and 20 are relieved of unnecessary strain. After the tap has been started the parts may be moved to the positions illustrated in the drawings, which are the normal positions.

Having thus described the invention, what is claimed is—

A wrench comprising a stock having a handle at one end and bifurcations at its other end, a head pivoted between said bifurcations, said head consisting of a circular portion provided with ratchet-teeth, wrench-jaws extending laterally from said circular portion and being so disposed with relation to each other and the circular portion that radial lines drawn from the center of said circular portion to the outer pointed ends of the jaws will lie along their entire length within

the edges of the circular portion and the jaws, all portions of the opposite surfaces of the sides of said head, lying in planes parallel to each other, and a spring-operated pawl pivoted between said bifurcations and normally engaging said ratchet-teeth at one end and extending beyond the stock and terminating in a finger-grip at its opposite end, said pawl adapted to be swung on its pivot to engage at one edge the end of the stock between the bifurcations and at its end one of the laterally-extending wrench-jaws and at its opposite edge one of the ratchets of the circular portion.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN F. DICKASON.

Witnesses:
WILLIAM H. WASSON,
CHAS. E. STURGIS.