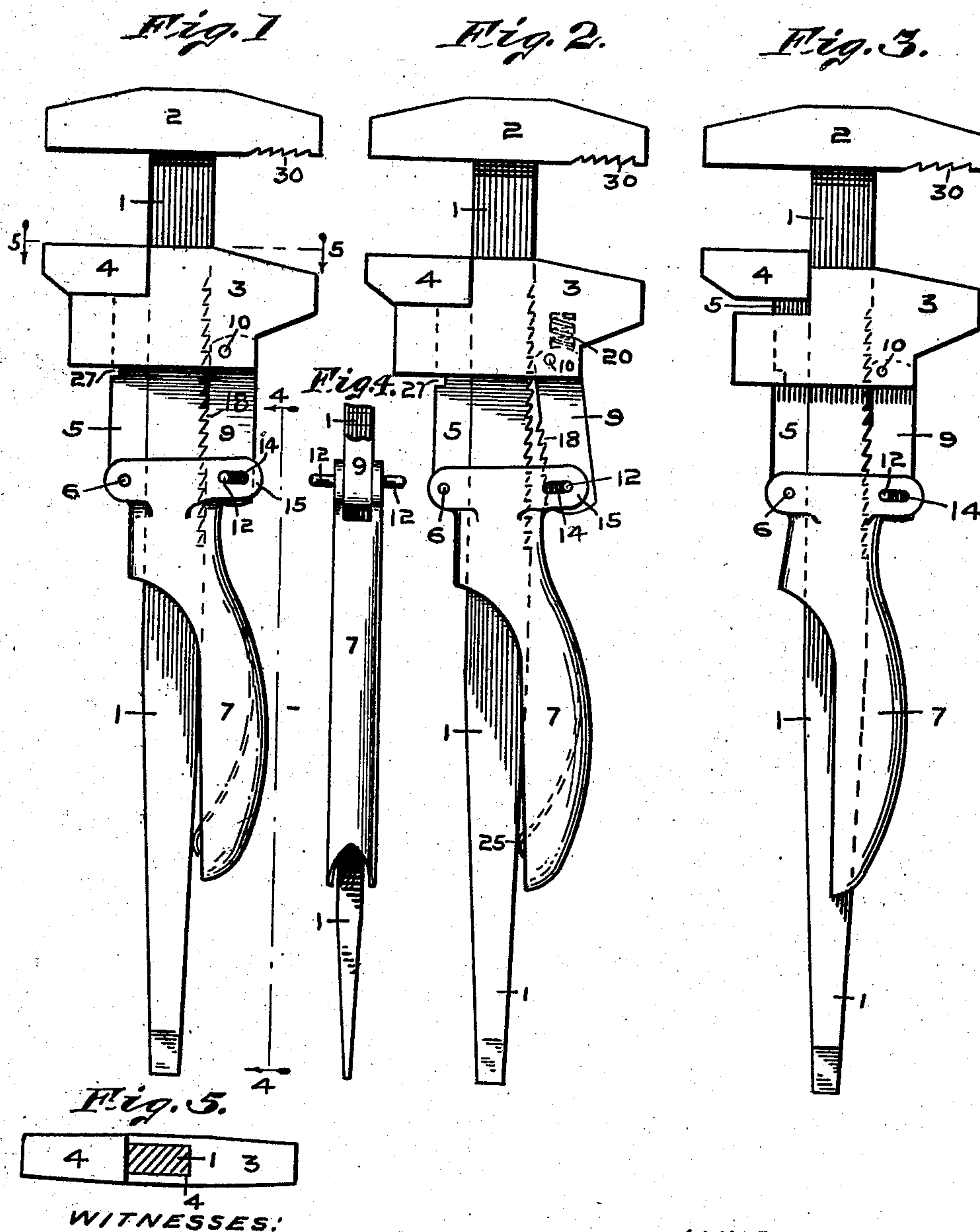


No. 855,135.

PATENTED MAY 28, 1907.

J. B. RUNNER.  
WRENCH.

APPLICATION FILED FEB. 5, 1906.



F. C. Dwyer  
Wm. Hurte.

INVENTOR  
John B. Runner,  
By Minturn & Hoerner,  
ATTORNEYS.



# UNITED STATES PATENT OFFICE.

JOHN B. RUNNER, OF INDIANAPOLIS, INDIANA.

## WRENCH.

No. 855,135.

Specification of Letters Patent.

Patented May 28, 1907.

Application filed February 5, 1906. Serial No. 299,646.

*To all whom it may concern:*

Be it known that I, JOHN B. RUNNER, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Wrenches, of which the following is a specification.

This invention relates to a wrench, and the object of the invention consists in producing a tool of general utility that embodies the several features hereinafter set forth.

I accomplish the objects of my invention by the mechanism illustrated in the accompanying drawings.

Figure 1 is a side elevation of my improved wrench and general utility tool. Fig. 2 is a view similar to Fig. 1 except that the retaining pawl is in disengaged position. Fig. 3 is a view similar to Fig. 1 except that the pawl is shown disengaged. Fig. 4 is a fragmentary detail in elevation, as seen from the dotted line 4—4 on Fig. 1. Fig. 5 is a cross section on the dotted line 5—5 Fig. 1.

In the drawing, 1 constitutes the main body of the wrench, which has the jaw 2 integrally formed therewith. A companion jaw 3 is provided with an aperture 4 which receives the wrench body 1. The jaw 3 is formed of two separable parts, consisting of the independent movable secondary member 4, which is provided with an integral shank 5 pivotally secured to a handle 7 by means of a pivot 6.

The pawl 9 is pivotally secured to the jaw 3 by means of the pivot 10. The lower end of the pawl 9 is provided with a transverse pin 12 which engages elongated slots 14 which are formed in the ears 15 on the handle 7. The pawl 9 is provided with the rack-teeth 18 which engage with corresponding teeth in the wrench body 1. It will be noted that the rack-teeth in the pawl 9 and in the body 1 are formed so that the jaw 3 may readily be moved toward the object to be grasped, at which point the parts are locked against return movement. When it is desired to open the wrench, that is, to separate the jaws, the pawl 9 may be disengaged from the rack teeth in the body 1 by means of the slot 14 in the handle 7, as shown in Fig. 3 of the drawings. The pawl 9 is held into engagement with the wrench body 1 by means of the spring 20, which bears against the upper end of said pawl. The transverse pin 12 extends sufficiently beyond the sides of the handle 7 in order to form a handle which

may be grasped with the fingers and whereby pawl 9 may be held in disengaged position so that the jaw 3 may be reciprocatorily moved along the body 1 of the wrench. This arrangement permits the jaw 3 to readily be moved against the bolt-head. In case the bolt-head is of a diameter that will prevent the jaw 3 to exactly register with it, the variation existing is compensated for by means of the movable jaw 4, which is moved against said head by means of the movable handle 7, when the latter is grasped to operate the wrench. The different positions assumed by the jaw 4 is illustrated by means of Figs. 1 and 3. This peculiar movement of the handle 7 is obtained by means of the transverse pin 12, that forms the pivotal point therefor. The handle 7 is held in its outer and normal position, away from the main body 1, by means of the spring 25 which is secured within the said handle and bears against the edge of said body.

It will be noted that the shank 5 is provided with a notch 27, which, in connection with the edge of the adjacent jaw 3 into which said notch can be moved, when the handle 10 is operated, forms a wire cutter. When the jaws 1 and 4 are moved together, a hammer-head is the result. The jaw 2 is also provided at one end with an internally serrated face 30, which, in connection with the jaw 3, provides a pipe-wrench. The end of the body 1 opposite that to which the jaw 2 is secured, provides a screw-driver, in which instance the body 1 is removed from the remaining portion of the wrench. The lower edge of the handle 10 is formed like a "claw", and when the wrench body 1 is partly withdrawn from the jaw 3, additional length and leverage is secured for pulling nails, tacks, etc.

Having thus fully described my said invention, what I desire to secure by Letters Patent, is—

1. In a wrench comprising a shank body portion including a fixed jaw, a companion jaw adjustably mounted on said shank body, a secondary jaw slidably mounted in said companion jaw, a locking means pivotally engaging the companion jaw and adapted to hold said jaw against reverse movement, and a handle pivotally secured to both the locking means and secondary jaw, for imparting additional movement to said jaw.

2. In a wrench comprising a shank body portion including a fixed jaw, a companion



jaw adjustably mounted on said shank body,  
a secondary jaw slidably mounted in said  
companion jaw, a locking means pivotally  
engaging the companion jaw and adapted to  
5 hold said jaw against reverse movement,  
means permitting the locking means to be  
moved into a disengaged position, and a  
handle pivotally secured to both the locking  
means and the movable secondary jaw, and  
10 adapted to impart additional movement to  
said jaw.

3. In a wrench comprising a shank body  
portion including a fixed jaw, a companion  
jaw adjustably mounted on said shank body,  
15 a secondary jaw slidably mounted in said  
companion jaw, a pawl pivotally engaging  
the companion jaw and adapted to hold said  
jaw against reverse movement, and a handle  
pivotally secured to both the pawl and mov-  
20 able secondary jaw, for imparting additional  
movement to said jaw.

4. In a wrench comprising a shank body

portion including a fixed jaw, a companion  
jaw adjustably mounted on said shank body,  
a secondary jaw slidably mounted in said 25  
companion jaw, a locking means pivotally  
engaging the companion jaw and adapted to  
hold said jaw against reverse movement, a  
pawl pivotally engaging the companion jaw  
and adapted to hold said jaw against reverse 30  
movement, means permitting the pawl to be  
moved into a disengaged position, and a han-  
dle pivotally secured to both the pawl and  
the movable secondary jaw, for imparting  
additional movement to said jaw. 35

In witness whereof, I, have hereunto set  
my hand and seal at Indianapolis, Indiana,  
this, 19th day of January, A. D. one thou-  
sand nine hundred and six.

JOHN B. RUNNER. [L. S.]

Witnesses:

F. W. WOERNER,  
GEO. W. WALTERS.