

I. D. BOARD.
WRENCH.

APPLICATION FILED JAN. 11, 1909.

938,956.

Patented Nov. 2, 1909.

FIG. 1.

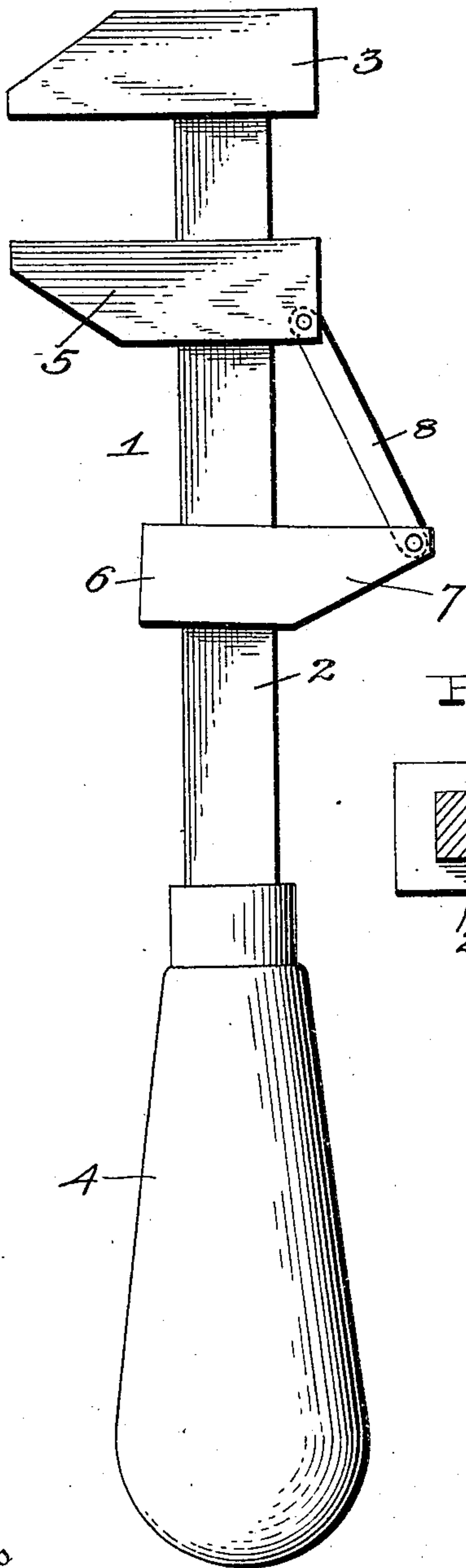


FIG. 2.

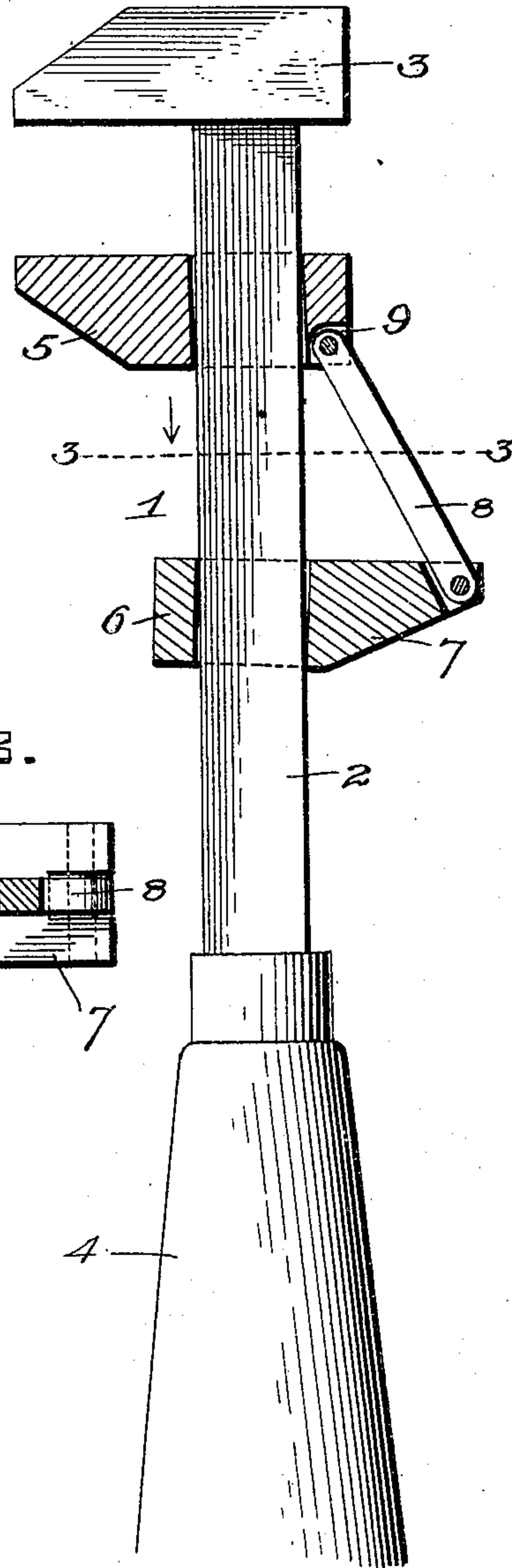
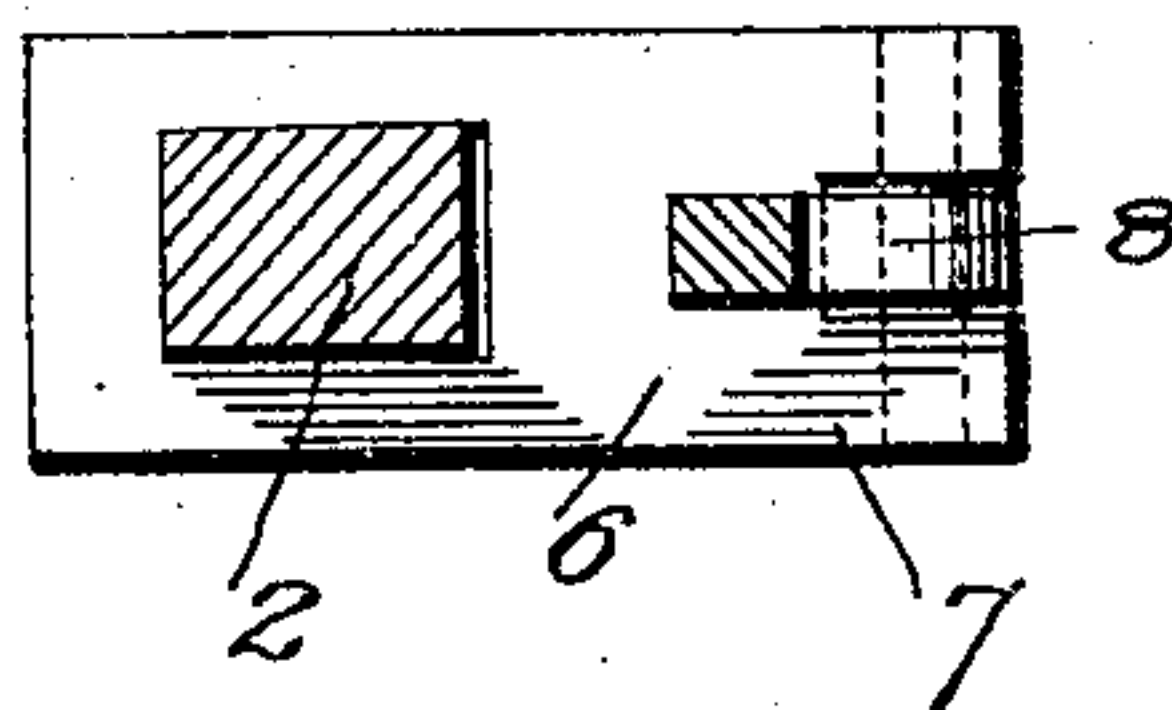


FIG. 3.



Witnesses
C. Allen
L. O. Hilton.

Inventor
I. D. Board
By *H. B. Wilson & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

ICHAM DENVER BOARD, OF CECILIAN, KENTUCKY, ASSIGNOR OF ONE-HALF TO
D. E. SHIPLEY, OF CECILIAN, KENTUCKY.

WRENCH.

938,956.

Specification of Letters Patent.

Patented Nov. 2, 1909.

Application filed January 11, 1909. Serial No. 471,718.

To all whom it may concern:

Be it known that I, ICHAM DENVER BOARD, a citizen of the United States, residing at Cecilian, in the county of Hardin and State of Kentucky, have invented certain new and useful Improvements in Wrenches; and I do declare the following to be a full clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in wrenches.

The object of the invention is to provide a wrench having means whereby the movable jaw may be quickly adjusted and held in its adjusted position.

A further object is to provide a jaw holding device for wrenches which will be simple, strong and durable in construction, efficient and reliable in operation, and well adapted to the purpose for which it is designed.

With these and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts as will be described and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a side view of a wrench constructed in accordance with the invention; Fig. 2 is a longitudinal sectional view; and Fig. 3 is a cross sectional view on the line 3—3 of Fig. 2.

Referring more particularly to the drawings, 1 denotes the wrench which consists of a shank, 2, an outer stationary jaw, 3, which is preferably formed integral with the shank, 2, and a handle, 4. The shank, 2, is preferably rectangular in form, and slidably mounted thereon is an inner jaw, 5. The inner jaw, 5, is provided with a transversely disposed passage through which the shank extends and by means of which the jaw is slidably engaged with the shank.

Slidably mounted on the shank between the inner jaw and the handle is a gripping or clutch jaw, 6, which comprises a body portion having a transversely disposed passage which conforms to the shape of the shank and is slightly larger than the latter.

The clutch or gripping jaw is provided with a rearwardly projecting extension, 7, having a notched or slotted outer end in which is pivotally connected the lower end of a clutch operating bar, 8, the upper end of which is pivotally connected with the rear end of the

movable jaw in a notch, 9, formed in the rear inner corner of the jaw.

In using the wrench, the jaws are adjusted to fit the object with which the wrench is to be engaged by sliding the inner jaw, 5, and the clutch jaw, 6, together on the shank, until the inner and outer jaws, 5 and 3, are in engagement with the object. The inner jaw when thus adjusted is securely locked or held against movement on the shank by means of the clutch jaw, 6, and its connecting and operating bar, 8. The formation of the passage through the clutch jaw is such that when the inner jaw has been adjusted to the proper position and pressure is applied upon the nut or other object, the tendency of the inner jaw will be to push inwardly or away from the outer jaw, which movement will be imparted through the operating rod, 8, to the outer end of the extension, 7, on the clutch jaw, thereby causing said jaw to cant or tip, which will cause the opposite inner rear and outer front corner of the passage through the clutch jaw to engage and firmly grip the opposite edges of the shank and to form a clutch engagement therewith which will prevent any further movement of the same or of the inner jaw, 5, on the shank. In order to release the jaws to permit the wrench being disengaged from the object, the clutch jaw, 6, is straightened out or brought to a position at right-angles to the shank, at which time said jaw and the inner movable jaw of the wrench may be readily adjusted.

From the foregoing description, taken in connection with the accompanying drawing, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention as defined in the appended claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. In a wrench the combination of a shank having on its outer end a fixed jaw, a movable jaw slidable on said shank to coact with said fixed jaw, a clutch jaw also slidably mounted on said shank and an operating bar pivotally connected at its opposite ends to

said inner jaw, and said clutch jaw respectively.

2. In a wrench, a shank having on its outer end a fixed jaw, a movable inner jaw
5 slidable on said shank, a clutch jaw having a passage slightly larger in size than said shank, a lateral extension on said clutch jaw, and an operating bar pivotally connected at its opposite ends to the outer end

of said clutch jaw extension and to said 10 inner jaw respectively.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ICHAM DENVER BOARD.

Witnesses:

J. K. BOARD,
L. D. SHIPLEY.