

A. C. CLEMENTS.

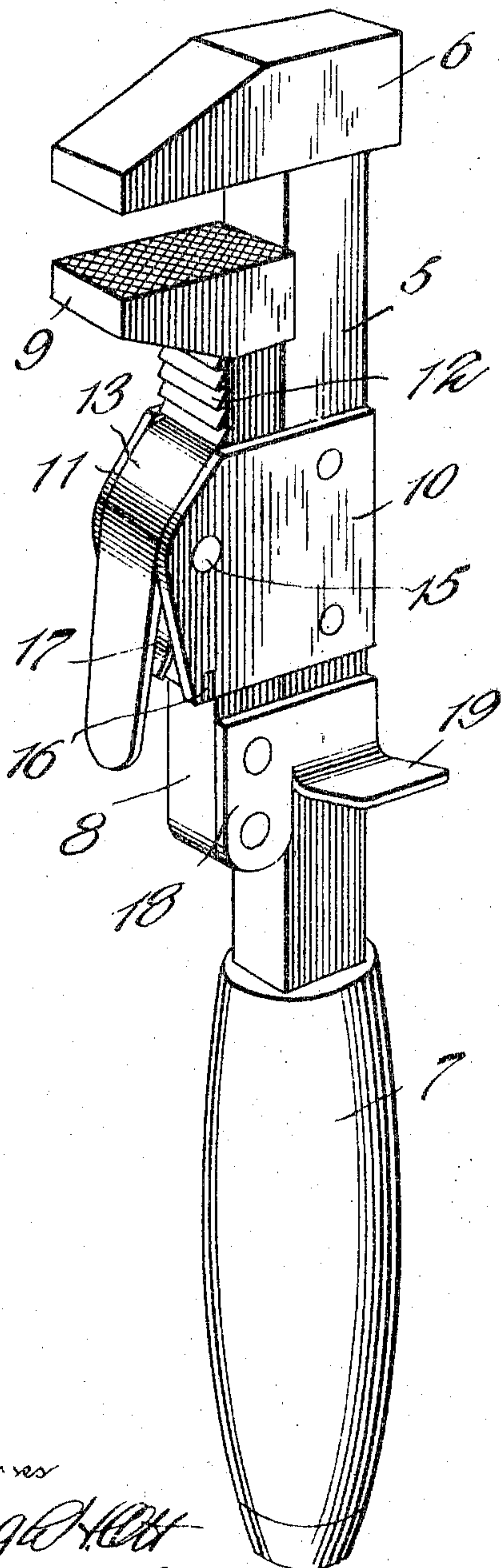
WRENCH.

APPLICATION FILED JAN. 4, 1910.

966,888.

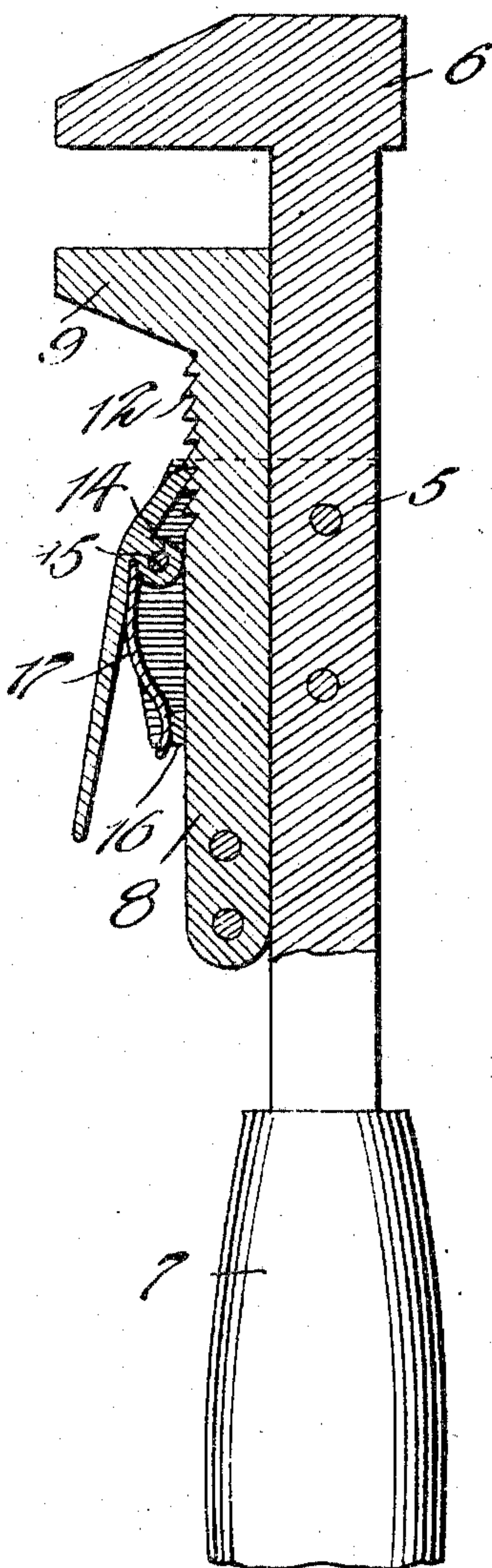
Patented Aug. 9, 1910.

Fig. 1.



Witnesses  
Hugh H. Allen  
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Fig. 2.



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# UNITED STATES PATENT OFFICE.

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## WRENCH.

966,888.

Specification of Letters Patent.

Patented Aug. 9, 1910.

Application filed January 4, 1910. Serial No. 536,264.

To all whom it may concern:

Be it known that I, ADOLPHUS C. CLEMENTS, a citizen of the United States of America, residing at Villanow, in the county of Walker and State of Georgia, have invented new and useful Improvements in Wrenches, of which the following is a specification.

This invention relates to improvements in wrenches and more particularly to that type known as sliding jaw wrenches.

One object of the invention is the provision of a wrench with a sliding jaw provided with a plurality of teeth and a spring pressed catch to engage said teeth when the sliding jaw is moved, whereby the wrench may be adjusted to the nut or other object to be turned, in an expeditious manner.

Another object is the provision of a thumb piece so arranged that the wrench may be adjusted to engage an object with the thumb of the hand that holds the wrench.

With these and other objects in view, as will more fully hereinafter appear the present invention consists in certain novel details of construction and arrangement of parts hereinafter to be more fully described, illustrated in the accompanying drawings and more particularly pointed out in the appended claim, it being understood that various changes in the form, proportion, size and minor details of the device may be made within the scope of the appended claim, without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings forming a part of the specification:—Figure 1 is a perspective view of the device. Fig. 2 is a vertical sectional view of the same.

Similar numerals of reference are employed to designate corresponding parts throughout.

The stationary shank is designated by the numeral 5 and at one end is provided with a gripping jaw 6, while the opposite end is provided with a handle 7. The shank 5 is rectangular in cross section and may be of any convenient length.

The sliding shank is designated by the numeral 8 and is somewhat less in length than the length of the shank 5 and at one end terminates in an inner gripping jaw 9. The shank 8 corresponds in width to the shank 5 but is somewhat less in thickness than the latter.

Fixedly secured to the opposite sides of

the shank 5 and projecting considerably beyond the inner face of the said shank are a pair of plates 10 and 11.

The outer or free end portions of the plates 10 and 11 bear on the opposite sides of the shank 8 of the sliding jaw and project considerably beyond the said sliding jaw and form a guide for the latter.

By reference now to Figs. 1 and 2 it will be seen that the outer face of the sliding shank 8 is provided with a plurality of beveled teeth 12 and pivoted between the plates 10 and 11 and adjacent to the outer face of the sliding shank is a latch 13. The latch is preferably formed of a single piece of metal and its inner surface is provided with a knuckle 14 which receives a pivot pin 15, the opposite ends of which extend through alining openings in the plates 10 and 11. The knuckle 14 is located at a point adjacent the engaging end of the latch, and connecting the plates 10 and 11 and located at the sides of the said plates remote from the gripping jaws 6 and 9, is a cross piece 16, which bears on the outer face of the sliding shank 8 and prevents outward movement of the latter. Fixedly secured in a slot formed at the inner side of the knuckle 14 is one end of a leaf spring 17, the opposite end of which bears on the outer side of the cross piece 16. The function of this leaf spring is to maintain the engaging end of the latch in engagement with the teeth 12.

Fixedly secured to the end portion of the shank 8 of the sliding jaw and remote from the gripping jaw 9 is a thumb piece 18. This member is preferably formed of a single piece of sheet metal oblong in contour and of a length corresponding to the combined widths of the shanks 5 and 8. The thumb piece is fixedly secured at one end to one side of the sliding shank 8, and at a point substantially in alinement with the bearing surfaces of the shanks 5 and 8 is provided with an incision extending in the direction of the lengths of the shanks 5 and 8. The metal on that side of the incision overlying the stationary shank 5 is bent outwardly and at right angles as shown at 19, whereby an abutment is provided for a thumb of the operator.

In the operation of the device and when it is desired to move the sliding jaw from engagement with the stationary jaw, one end of the latch 13 is depressed, whereby its opposite end is moved from engagement with



the teeth 12, thus permitting the sliding jaw to be moved until the gripping jaw 9 presses on one end of the latch. The jaws may now be placed astride the object to be turned and  
5 with the thumb of the hand holding the wrench, the operator may move the sliding jaw into engagement with the object to be turned by simply pressing on the thumb piece.

10 Thus it will be seen that I have provided a device which is simple in construction, embodying few parts and these so arranged that the danger of derangement is reduced to a minimum.

15 Having thus fully described the invention, what I claim as new is:—

In a sliding jaw wrench, an outer stationary member including a shank and a jaw the said shank being medially provided on its  
20 opposite sides with a pair of stationary plates extending beyond the outer face of a sliding member including a shank and a jaw said shank being arranged between said plates and bearing on the inner face of the  
25 stationary shank, said sliding shank having on its outer face a plurality of beveled teeth, a catch pivoted between said plates and ad-

jacent to the toothed surface of the sliding shank, a cross piece connecting said plates at one end and bearing on the sliding shank, 30 a leaf spring having its opposite terminals bearing on the catch and cross piece and serving to yieldingly hold one end of the catch in engagement with the said toothed surface, a flat plate having one end portion 35 fixedly secured to one side of the said sliding shank and its opposite portion bearing on the stationary shank, said plate being medially provided with an incision extending parallel with the lengths of said shanks, the 40 metal on that side of the incision overlying the stationary shank being flexed outwardly and at right angles, whereby a thumb piece is provided by means of which the engaging end of the sliding shank may, with the 45 thumb of the hand holding the wrench, be moved toward the engaging end of the stationary shank.

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

ADOLPHUS C. CLEMENTS.

Witnesses:

CLAUDE CLEMENTS,  
CHAS. CLEMENTS.