No. 716,202.

Patented Dec. 16, 1902.

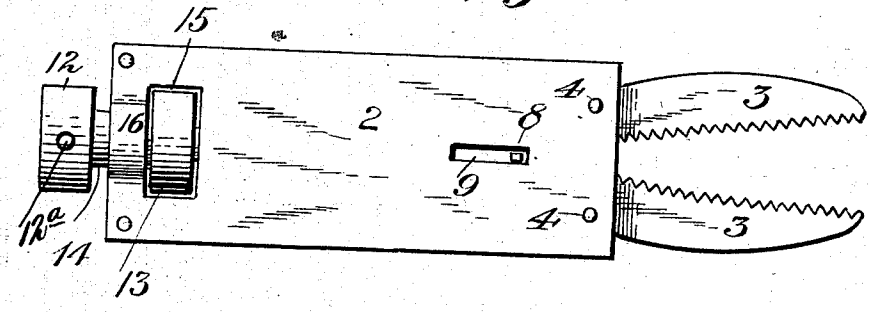
I. DE FORD.

WRENCH.

(Application filed July 5, 1902.)

(No Model.)

Fig. 1.



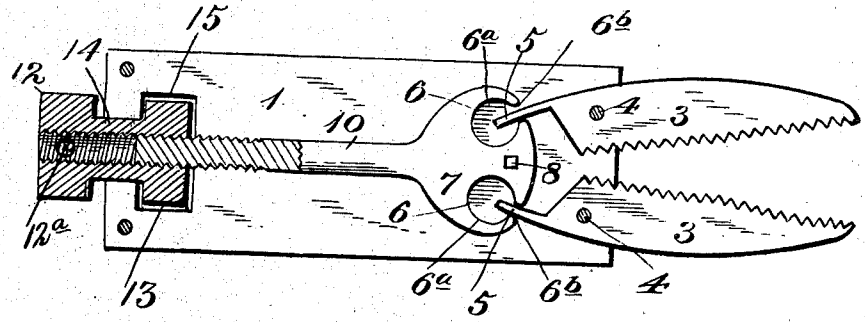


Fig. 2.

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UNITED STATES PATENT OFFICE.

ISAAC DE FORD, OF FOREST CITY, MISSOURI, ASSIGNOR TO CHARLES ANTHONEY JONES, OF FOREST CITY, MISSOURI.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 716,202, dated December 16, 1902.

Application filed July 5, 1902. Serial No. 114,519. (No model.)

To all whom it may concern:

Be it known that I, ISAAC DE FORD, a citizen of the United States, residing at Forest City, in the county of Holt and State of Missouri, have invented a new and useful Wrench, of which the following is a specification.

My invention relates to wrenches of the alligator type, and has for its object to design a simple and efficient wrench of this type having adjustable jaws.

The simple and novel construction employed by me in carrying out my invention is fully described and claimed in this specification, and illustrated in the accompanying drawings, forming a part thereof, in which—

Figure 1 is a side view of my wrench. Fig. 2 is a side view of the same with one side of the casing or handle removed.

The working parts of my wrench are supported by a casing consisting of two plates 1 and 2, which also form a handle for operating the wrench. Two toothed jaws 3 are mounted intermediate the plates 1 and 2 and are pivoted on pintles 4, the ends of which are riveted to secure the plates together. The jaws 8 have arms 5 formed integral therewith, which arms are engaged by recesses 6, formed in a head 7. The recesses 6 each consists of a circular cavity 6^a, having a contracted mouth 6^b. The arms 5 extend through the mouths 6^b and within the circular cavities 6^a, which permit the free movement thereof. A guide-lug 8, carried by the head 7, engages a guide-slot 9, formed in the plate 2. A stem 10 is integral with the head 11 and is threaded throughout a portion of its length to accommodate an adjusting-nut 12, which carries a cylindrical stop 13, connected to it by a neck 14. Apertures 15 are formed in the plates 1 and 2 to accommodate the stop 13, which limits the movement of the nut 12 to a rotation about its longitudinal axis. The plates 1 and 2 are curved at 16 to fit snugly the neck 14. An aperture 12^a pierces the nut and serves to accommodate an adjusting-pin.

In using my wrench the angle of the jaws 3 is varied by turning the nut 12, which will move the stem 13 longitudinally and swing the jaws 3. It should be observed that the jaws are positively operated in both directions.

I do not wish to be limited as to details of construction, as these may be modified in many particulars without departing from the spirit of my invention.

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 pair of pivoted toothed jaws located to coöperate to engage a nut, arms carried by said jaws, a head having recesses therein engaging said arms, guides for said head, a threaded stem connected to said head and mounted to move longitudinally, and an adjusting-nut fitted on said stem to adjust said jaws, substantially as described.

2. In a wrench, the combination of a casing constructed to serve as a handle, a pair of toothed jaws pivoted to said handle, arms carried by said jaws, a head having recesses therein and bearing a threaded stem, said recesses being located to engage said arms, and said stem being constrained to move longitudinally, and an adjusting-nut fitted on said stem to adjust the angle of said jaws, substantially as described.

3. In a wrench, the combination of two plates forming a handle, of a pair of toothed jaws located intermediate said plates and pivoted thereto, arms carried by said jaws, a head bearing a lug engaging a slot formed in one of said plates, a threaded stem connected to said head and mounted to move longitudinally, and an adjusting-nut fitted on said stem, substantially as described.

4. In a wrench, the combination of two plates forming a handle, a pair of toothed jaws pivoted to said plates, arms carried by said jaws, a head having recesses therein engaging said arms, said recesses comprising a circular cavity having a contracted mouth, a stem connected to said head, and an adjusting-nut fitted on said stem, substantially as described.

ISAAC DE FORD.

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