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A. T. MARTIN.

MONKEY WRENCH.

APPLICATION FILED OCT. 16, 1905.

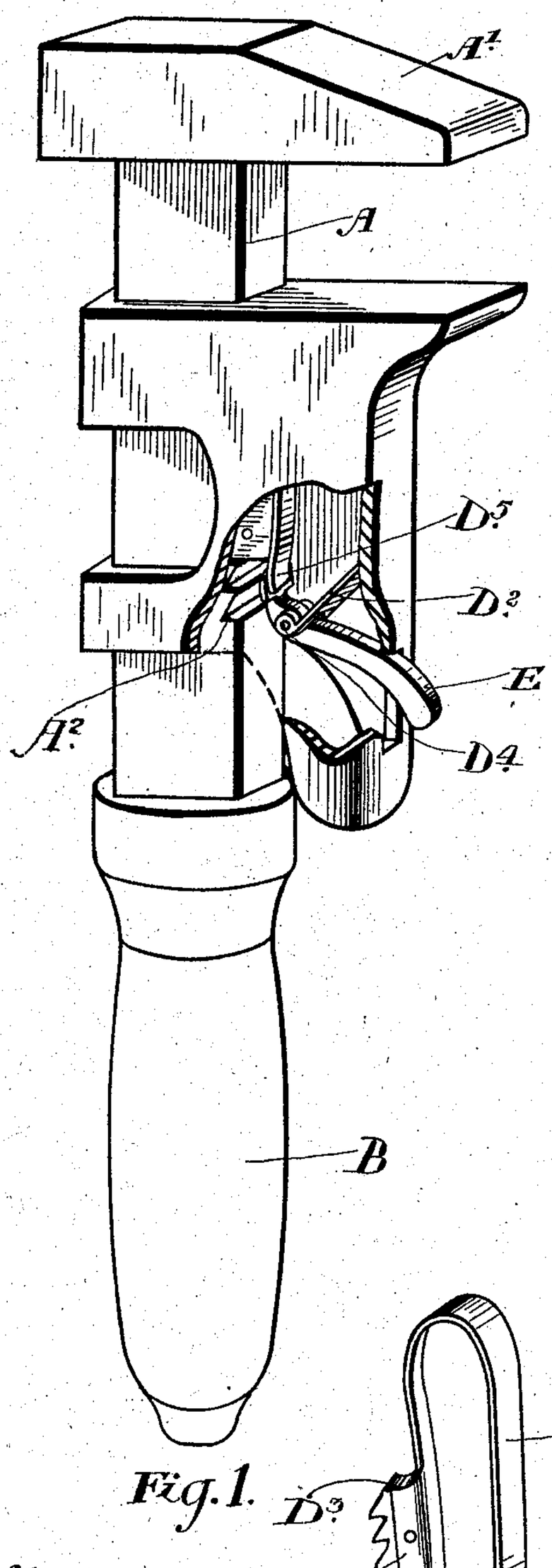

Fig. 1.

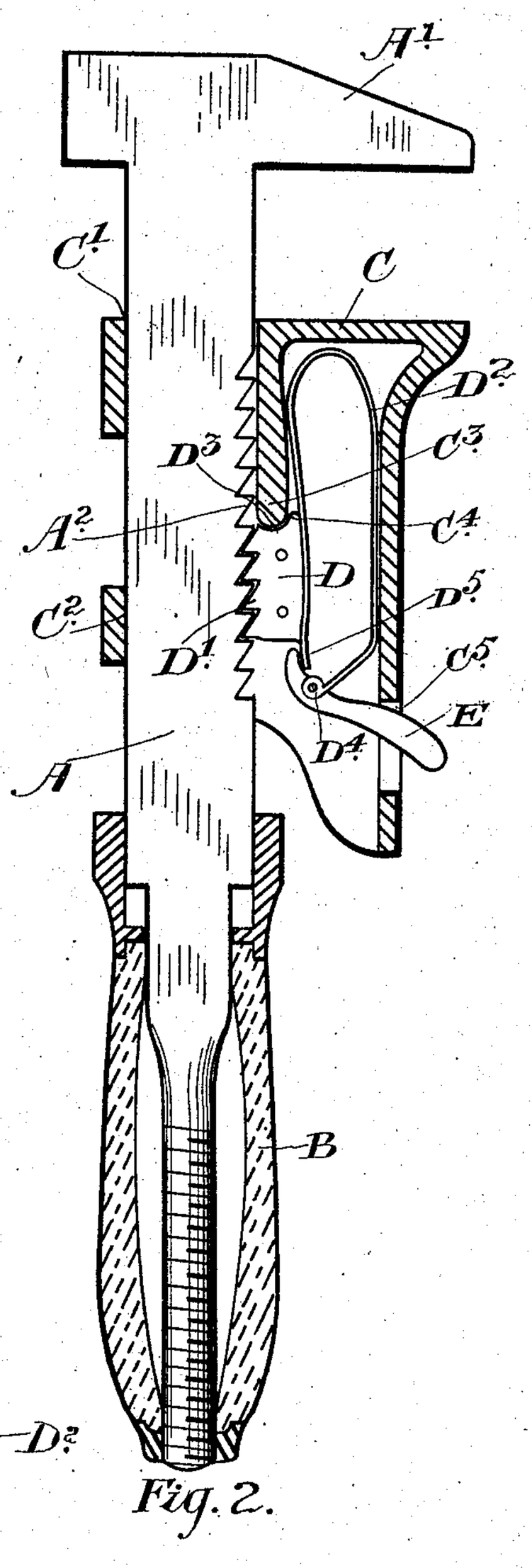

Fig. 2.

Fig. 3.

Witnesses.
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UNITED STATES PATENT OFFICE.

ALONZO THEODORE MARTIN, OF NIAGARA FALLS, CANADA.

MONKEY-WRENCH.

No. 815,449. Specification of Letters Patent. Patented March 20, 1906.

Application filed October 16, 1905. Serial No. 283,023.

To all whom it may concern:

Be it known that I, ALONZO THEODORE MARTIN, of the city of Niagara Falls, in the county of Welland, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Monkey-Wrenches, of which the following is a specification.

My invention relates to improvements in monkey-wrenches and the like; and the object of the invention is to devise a simple and cheaply-made wrench in which the movable jaw may be readily adjusted to grasp different sizes of nuts; and it consists, essentially, of a stationary jaw and shank thereof provided with ratchet-teeth and a movable jaw held on the shank and provided with a hollow front portion having located therein an engaging-block and spring means for holding the same to engage with the ratchet-teeth of the shank and a lever pivoted on the end of the spring designed to throw the ratchet-toothed block out of engagement with the ratchet-teeth in the shank, the parts being otherwise arranged and constructed in detail as hereinafter more particularly explained.

Figure 1 is a perspective view of my improved wrench, showing portion of the adjustable jaw broken away to exhibit the interior construction. Fig. 2 is a side view showing the movable jaw in longitudinal section. Fig. 3 is a detail of the combined block, spring, and lever.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is the main shank, which is provided with the usual end jaw A′. B is the usual handle, which is adjustably fastened to the reduced end of the shank A in any suitable manner or as shown. The shank A is provided with a series of ratchet-teeth A^2 on that side edge on which the jaw is located.

C is the movable jaw, which is provided with the usual openings C′ and C^2, through which the shank extends. It will be noticed that the front portion of the jaw, or more properly the jaw proper, is elongated in form and hollow, the inside web C^3 being provided with an arc-shaped end C^4 and the outside web being provided with a slot C^5.

D is a block which is provided with ratchet-teeth D′, designed to engage with the ratchet-teeth A^2. The block D has secured to it the substantially elliptical spring D^2, which fits closely the interior of the hollow movable jaw C. The upper end of the block D is provided with an arc-shaped recess D^3, so that it may swing or pivot on the arc-shaped ends of the webs C^3.

E is the thumb-lever, which is pivoted in eyes D^4 on the lower inwardly-offset end of the spring D^2. The lever E extends through the slot C^5, and the inner curved end of the lever projects within the inner end D^5 of the spring D^2 beneath the block D.

In order to manipulate the movable jaw and adjust it to and from the nut, which may be between it and the stationary jaw, all it is necessary to do is to grasp the wrench around the movable jaw and by pressing in on the lever E such lever is tilted on its pivot, and thereby by means of its inner end force out the teeth D′ of the block D from engagement with the teeth A^2, so that the movable jaw C may be slid freely backwardly and forwardly on the shank A into the proper position for adjustment and is rigid when the lever E may be released.

It is essentially important that the block D pivots or hinges on the arc-shaped end C^4 of the web C^3 in order that the block may be freed properly from the ratchet-teeth as well as allow of it being swung back readily into position, so as to insure the ratchet-teeth of the block being held in engagement with the ratchet-teeth of the shank.

Such a form of wrench as I describe is very simple, cheap to make, and easily manipulated even by one hand, which is an important desideratum.

What I claim as my invention is—

1. In a wrench, the combination with the stationary jaw and shank having the teeth on the side of the shank in which the jaw is located, of the movable jaw through openings in which the shank extends having a front hollow portion, a block located in said hollow portion and provided with corresponding teeth to engage the teeth in the shank and a spring connected to the block and designed to normally press the same against the shank, and a lever designed to engage with the end of the spring underneath the block and designed to release the teeth of the block from the teeth of the shank by the inner pressure of the outer end of the lever as and for the purpose specified.

2. In a wrench, in combination the shank provided with a stationary jaw and edge teeth, the hollow movable jaw through openings in which the shank extends provided with an inner web having an arc-shaped bottom edge, the block provided with teeth de-

signed to engage with the teeth in the shank, and having an arc-shaped recess into which the arc-shaped edge of the web extends, a substantially elliptical spring secured at one end to the block and having a projecting free end beyond the block, the said spring being bent into a compressed state within the hollow movable jaw, offset at the bottom and provided with a pivotal eye and the lever pivoted in the eye and having the inner end extending inwardly of the free edge of the spring and the outer end extending through a slot in the movable jaw as and for the purpose specified.

ALONZO THEODORE MARTIN.

Witnesses:
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