(No Model.)

## F. J. RABBETH.

NUT CRACKER.

No. 397,023.

Patented Jan. 29, 1889.

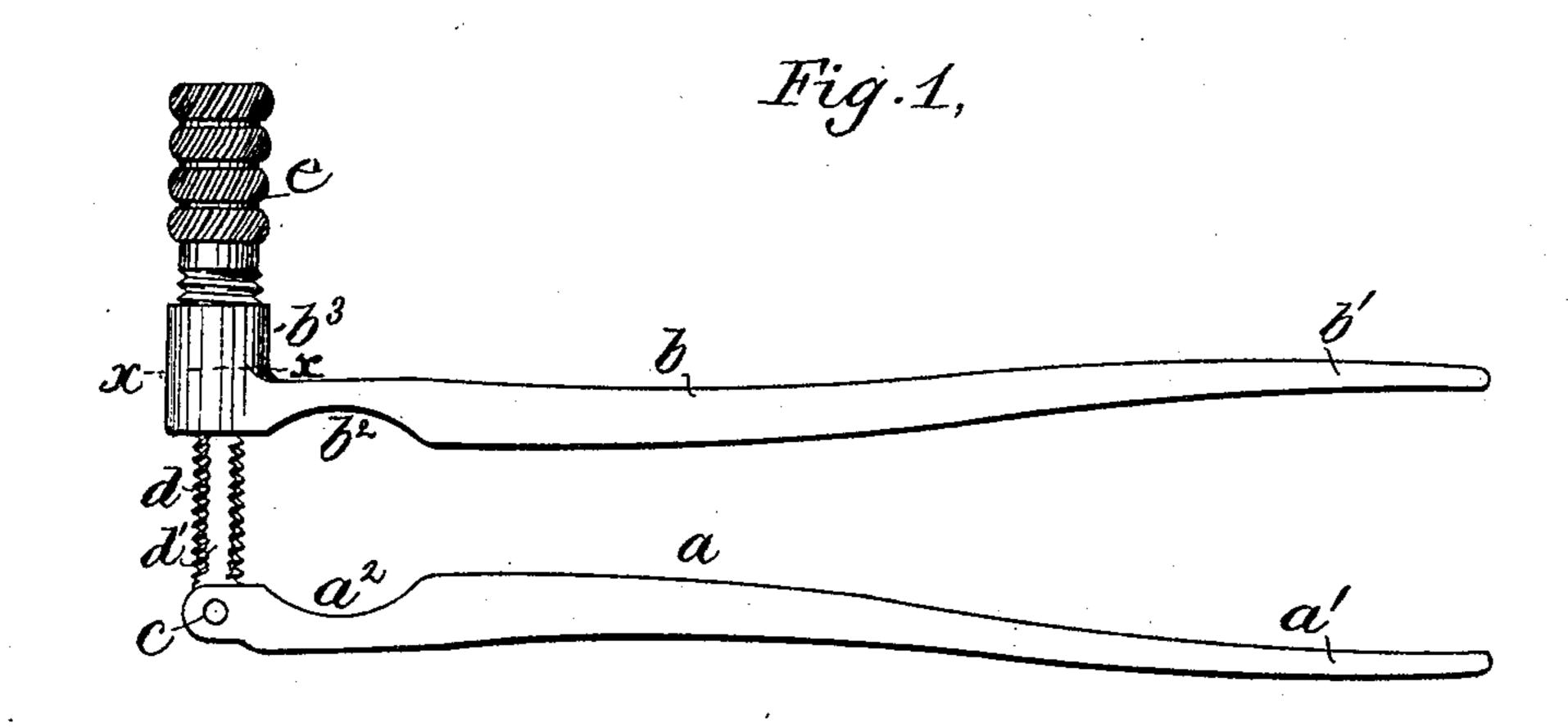


Fig. 2

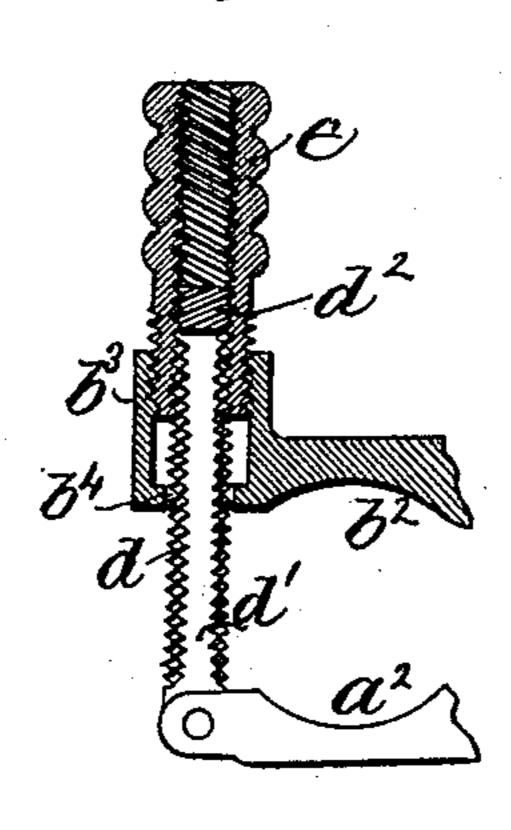


Fig. 3.

34 d' d' d'

Witnesses Jas Je Maloncy! Mo. B. Hill

Inventor,
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## United States Patent Office.

FRANCIS J. RABBETH, OF BOSTON, MASSACHUSETTS.

## NUT-CRACKER.

SPECIFICATION forming part of Letters Patent No. 397,023, dated January 29, 1889.

Application filed February 24, 1888. Serial No. 265,168. (No model.)

To all whom it may concern:

Be it known that I, Francis J. Rabbeth, of Boston, county of Suffolk, and State of Massachusetts, have invented an Improvement in 5 Nut-Crackers, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

My invention relates to a nut-cracker of that ro class in which two pivoted members are provided with jaws or recesses to engage the nut to be cracked, and with handles by which the

said jaws are pressed together.

In one class of nut-crackers of this kind the 15 members are connected by a link, and the pivotal connection between the link and the jawhandles is offset to one side of the latter, the said jaw-handles being provided on both sides with devices to engage the nut, and the dis-20 tance between the jaw-faces being varied according as one or the other side of the jaws is used, and thus affording a certain degree of adjustability between the jaws, to enable the nut-crackers to be used easily with nuts 25 of different size. In other constructions the jaw-faces are extended a considerable distance from the pivot, so that a larger nut can be properly engaged at a point more remote from the pivot than the proper point for en-30 gaging a smaller nut. This latter construction, however, varies the leverage derived from the handles, giving less power to crack a larger than to crack a smaller nut.

The object of the present invention is to 35 produce a nut-cracker that can be readily adjusted to operate upon nuts of all sizes with the handles in the most convenient position for the user and with the maximum amount

of leverage for all-sized nuts.

The nut-cracker embodying this invention comprises two members, each having a handle portion and a jaw or face to engage the nut, and an adjustable link or connection between said members, by which the ends of the mem-45 bers that are pivotally connected together may be placed at any required distance apart, the adjustment being quickly and easily accomplished.

Figure 1 is a side elevation of a nut-cracker 50 embodying this invention; Fig. 2, a longitudinal section of the end portion thereof, show-

ing the link or connector in side elevation; and Fig. 3, a sectional detail on line x x, Fig. 1.

The nut-cracker comprises two members, a b, the ends a' b' of which constitute the han- 55 dles by which the implement is held and operated, and the said members are provided near their other ends with suitable jaw-faces,  $a^2b^2$ , to engage the nut to be cracked. The said members are connected by an intermediate bar or 60 link, the construction of which will be hereinafter described, and one is pivoted or fulcrumed with relation to the other by a hingejoint (shown at c) between the member a and the connecting-link, so that their handles a' 65 b' may be moved toward or from one another to close or open the jaws  $a^2 b^2$  in the usual manner.

In order to provide for varying the distance between the jaws  $a^2 b^2$ , so that they may en- 70 gage a nut of any size when the handles a'b'are in the most convenient position for operating said jaws, the said members a b are connected by an intermediate link or bar, d, the connection between which and one of the said 75 members is made adjustable, so as to vary the length of the said bar that is interposed between the members, and thus vary the distance between the jaws. The construction of this connecting bar or link and of the device 80 for adjusting its point of connection with one of the members—or, in other words, the length of said bar that is interposed between the said members—may be varied considerably while retaining the feature of easy adjustability, 85 and the specific construction shown, which will now be described, is strong, durable, and efficient, and is believed to be the best now known to me. The said adjustable connection between the bar d and the member b is 90 made by a nut, e, having an external thread working in a threaded socket,  $b^3$ , in the member b, and having an internal thread that engages an external thread on the bar d. The said connecting link or bar d and nut e are 95 preferably connected by a thread of steep pitch, so that the rotation of the nut produces a rapid longitudinal movement of the bar therein and consequent movement of the jaws toward or from one another.

It is not essential that the nut e should be connected by a screw-thread with the mem-

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ber b; but by having such connection provided with a thread of opposite pitch or inclination to that of the bar d the longitudinal movement of the nut in its socket is added to that of the bar in the nut, thus producing a more rapid movement of the jaws with relation to one another by a given rotary movement of the nut than would be produced if but one thread only were used.

In order to prevent the member b from rotating on the bar d, so as to bring the handles out of line with one another, the said bar is flattened, as shown at d', and works in a correspondingly-shaped opening,  $b^4$ , in the mem-

15 ber b, as shown in Fig. 3.

The end of the bar d may be left of full diameter, as shown at d?, Fig. 2, and will thus form a stop to prevent the said bar d from being turned wholly out of the nute, and thereby disengaged from the member b of the nuteracker.

The action of both the external and internal threads of the nut e when rotated tends to move the jaws in the same direction, and the jaws may thus readily be moved to the desired position with relation to one another by a quick turn of the said nut, which can easily be operated by the finger of the hand holding the nut to be cracked between the jaws.

o It is obvious that the construction of the adjustable connector between the jaws may be modified in various ways without materially changing its principle of operation, and the invention is not limited to the construction

illustrated, which is, however, believed to be 35 the most convenient and efficient.

I claim—

1. A nut-cracker comprising two members provided near one end with jaws or faces to engage the nut to be cracked, and a connect-40 ing bar or link pivotally connected with one of said members and adjustably connected with the other of said members, as set forth, whereby the distance of the jaw ends from one another may be varied, substantially as 45 described.

2. The combination of the two handled jaw members of a nut-cracker with a threaded bar pivotally connected with one of said members and a nut-co-operating with said bar, con-5° nected with the other of said members, sub-

stantially as described.

3. The combination of the members a b, the threaded bar d, pivotally connected with one of said members, and the adjusting-nut 55 having external and internal threads of opposite inclination, one co-operating with said bar d and the other co-operating with the other of said members of the nut-cracker, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two sub-

scribing witnesses.

FRANCIS J. RABBETH.

Witnesses:
Jos. P. LIVERMORE,
M. E. HILL.