

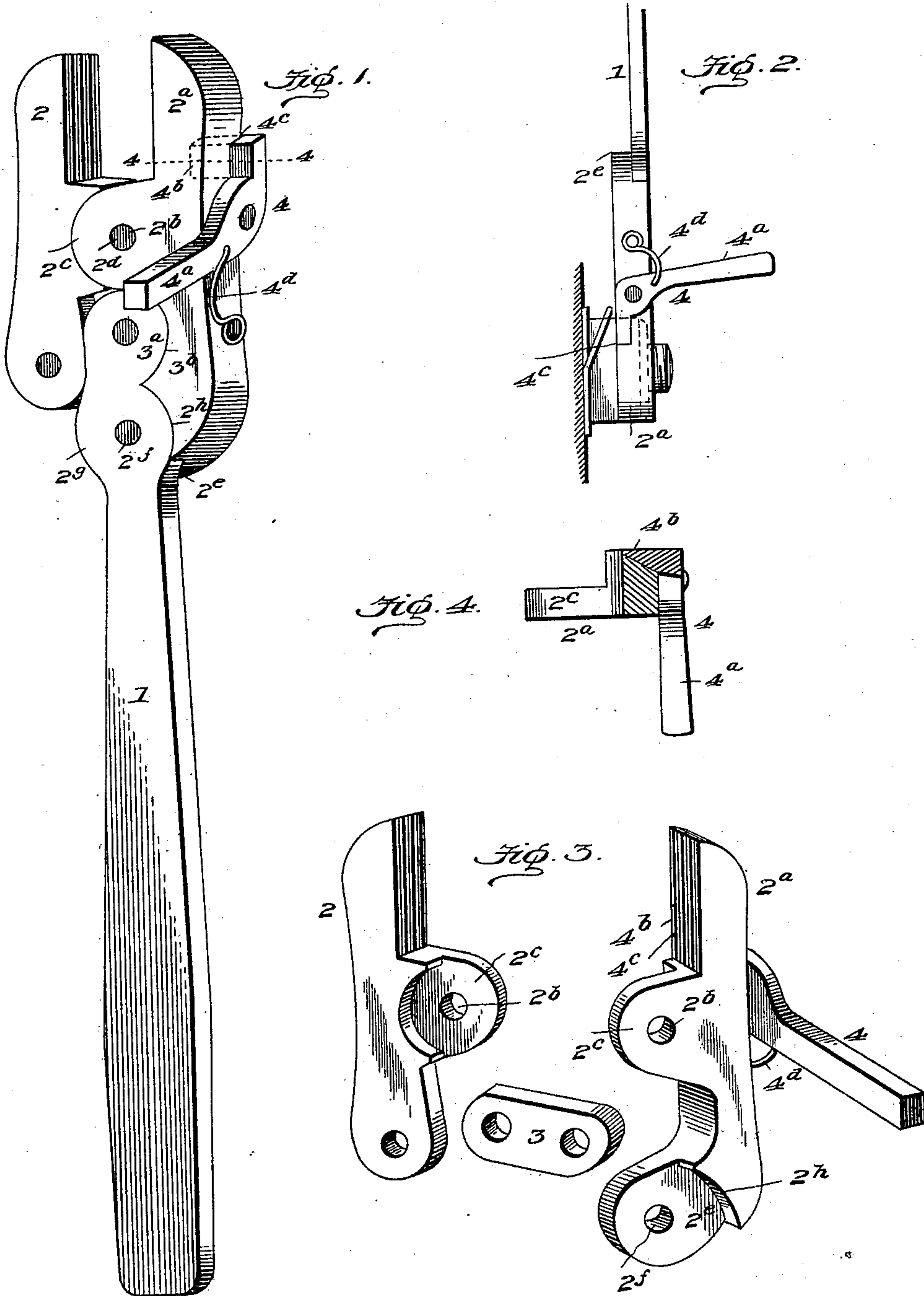
No. 626,891.

Patented June 13, 1899.

J. D. ELLISON.  
NUT WRENCH.

(Application filed Jan. 3, 1899.)

(No Model.)



Witnesses

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# UNITED STATES PATENT OFFICE.

JOHN D. ELLISON, OF RIVES, TENNESSEE.

## NUT-WRENCH.

SPECIFICATION forming part of Letters Patent No. 626,891, dated June 13, 1899.

Application filed January 3, 1899. Serial No. 701,073. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN D. ELLISON, a citizen of the United States, residing at Rives, in the county of Obion and State of Tennessee, have invented certain new and useful Improvements in Nut-Wrenches; and I do hereby 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.

My invention relates to certain improvements in nut-wrenches, more especially for use in connection with nut-locks.

It has for its object, among other things, to simplify the construction and arrangement of the parts, as well as to augment or increase the leverage and render more effective the gripping action, and to adapt it (the wrench) to initially disengage the locking-washer from the nut preliminarily to the removal of the latter.

It consists of the peculiar construction, combination, and arrangement of parts to effect the aforesaid ends, substantially as hereinafter more fully disclosed, and specifically pointed out in the claims.

In the accompanying drawings, illustrating the preferred embodiment of my invention, Figure 1 is a perspective view thereof with the parts in their normal position. Fig. 2 is a view showing the wrench applied for use in connection with a nut-lock. Fig. 3 is a view disclosing the various parts of the wrench disassociated. Fig. 4 is a section on line 4 4, Fig. 1.

In carrying out my invention I employ a handle 1, suitably constructed for convenience in operation or manipulation, and jaws 2 2<sup>a</sup>, preferably with straight faces, suitably corrugated or otherwise adapted to secure an effective grip upon the nut. The jaws 2 2<sup>a</sup> are pivoted or connected together a sufficient distance inward from their forward or outer ends, as at 2<sup>f</sup>, to permit the ready reception between them of the nut to be removed, said jaws having laterally-opposed apertured lugs or ears 2<sup>e</sup> lapping each other and having a pivot or pin 2<sup>d</sup> passed through their coincident apertures to effect their pivotal connection. The jaw 2<sup>a</sup> is somewhat extended at its inner end, both longitudinally and laterally, to form an ear or lug 2<sup>e</sup>, pivoted or con-

nected, as at 2<sup>f</sup>, to the handle or lever 1 some distance inward from the forward or outer end of the latter, said ear lapping the lever or handle and the handle or lever being shouldered or enlarged at 2<sup>g</sup>, said shoulder fitting edgewise or laterally into a recess 2<sup>h</sup> in the inner lateral edge of the jaw 2<sup>a</sup>.

3 is a link connected or pivoted at one end to and let into the reduced or cut-away inner end of the jaw 2, the opposite end of said link being pivoted or connected to the extreme outer or forward end of the lever or handle 1, and both said end of said link and a lateral enlargement 3<sup>a</sup> of said end of said lever abut against and are received or let into a lateral recess 3<sup>b</sup> in the jaw 2<sup>a</sup>, providing for distributing the resistance and compact assembling of the parts, as well as augmenting or increasing the effectiveness and gripping action of the wrench.

Upon the lateral edge of one jaw 2<sup>a</sup>, a short distance inward from its forward end, is pivoted a dog 4, having its handle or lever 4<sup>a</sup> arranged for convenient manipulation or operation and its lateral portion or tooth 4<sup>b</sup> extending at one side under the normally lower side of said jaw to provide for the engagement of said tooth with the bent-up locking portion of the nut-lock washer, as will be readily appreciated by reference to Fig. 2 of the drawings, whereby by exerting forward pressure upon said lever or handle said tooth will be projected or depressed, pressing or forcing said bent-up or locking portion of said washer out of the way of the turning of the nut in subsequently effecting the operation of the removal of the latter. The tooth 4<sup>b</sup> normally is held in a recess 4<sup>c</sup> in the jaw by the action of a suitable spring 4<sup>d</sup>, suitably connected to said dog and jaw.

It will be understood that latitude is allowed herein as to the details of the construction and arrangement of the parts, as they may be changed without departing from the spirit of my invention and the same yet remain intact and be protected.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a wrench, the combination of the lever or handle, the jaws articulated or pivoted together inward from their forward ends, one



jaw being extended inward and connected to said lever some distance inward from its forward end, and the link connected, at one end, to the inner end of one jaw and at its opposite end to the extreme outer or forward end of said lever, or handle, substantially as specified.

2. In a wrench, the combination of the lever or handle having lateral enlargements one at its forward end and the other inward therefrom, the jaws, one longer than the other and longitudinally and laterally extended, and the link having one end connected to the inner end of one jaw and at its opposite end to the extreme forward end of said lever, and said laterally and longitudinally extended jaw connected to said lever inward from its forward end, substantially as set forth.

3. The wrench consisting of the handle or lever, the jaws, one extended inward longitudinally and laterally and connected to said

lever inward from its extreme forward end, the link connected at one end to the inner end of the shorter jaw and at its other end to said extreme forward end of said lever, and the dog pivoted laterally to one of said jaws and having its lateral portion or tooth adapted to act at right angles to the reception of the article or nut received between said jaws, substantially as set forth.

4. The nut-wrench, having the laterally-arranged dog with its tooth normally held in a recess in one of the wrench-jaws by the action of a spring and adapted to act at right angles to the plane of the reception of the article between the jaws, substantially as set forth.

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

JOHN D. ELLISON.

Witnesses:

THOS. J. BONNER,  
HUBERT SHORE.