

M. I. GINSBURG.
AUTOMATIC WRENCH.
APPLICATION FILED JULY 5, 1913.

1,183,371.

Patented May 16, 1916.

Fig 1

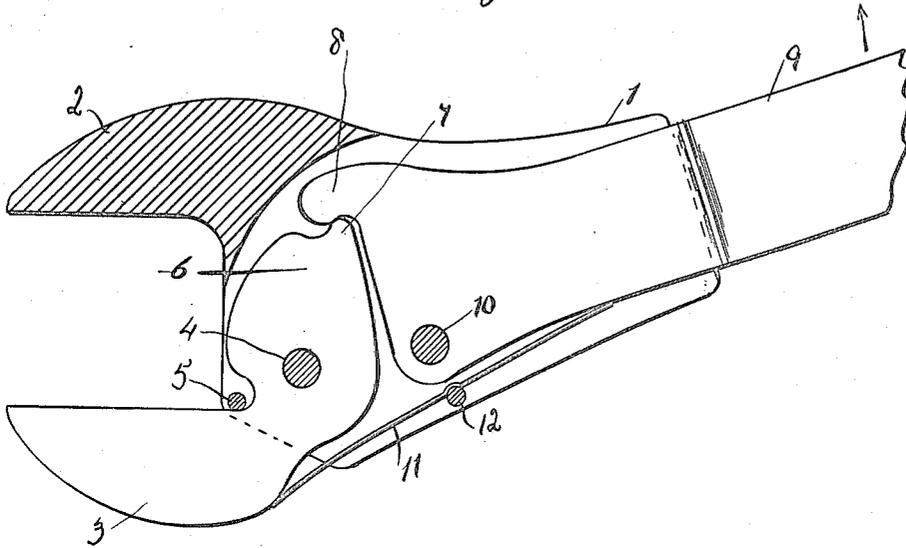
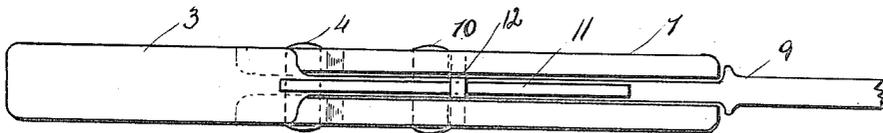


Fig 2



Witnesses:
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UNITED STATES PATENT OFFICE

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AUTOMATIC WRENCH.

1,183,371.

Specification of Letters Patent.

Patented May 16, 1916.

Application filed July 5, 1913. Serial No. 777,502.

To all whom it may concern:

Be it known that I, MICHAEL I. GINSBURG, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented new and useful Improvements in Automatic Wrenches, of which the following is a specification.

My invention relates to new and useful improvements in automatic wrenches, and has for its object to provide an exceedingly simple and effective device of this character, which will serve all the purposes of the ordinary open end of the S-wrench, while also serving all the purposes of a ratchet wrench with many advantages over the latter.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, I will describe its construction in detail, referring by numeral to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a side elevation of my automatic wrench, a portion of the head being sectioned away, so as to clearly illustrate the construction and arrangement of the working parts; and Fig. 2, is an edge view of the wrench.

In carrying out my invention as here embodied 1 represents the head, which is slotted to form a housing for the working parts, and with this head is formed the stationary jaw 2.

3 represents the swinging jaw which is pivoted upon the stud 4 within the head and projects outward, normally lying parallel with the stationary jaw 2, the pin 5 serving to limit the inward movement of the swinging jaw. The swinging jaw has formed therewith the heel 6, the latter having the toe 7 projecting therefrom, with which the nose 8 of the handle 9 is adapted to engage, for the purpose hereinafter set forth. The handle 9 is pivoted upon the stud 10 within the head and projects outward to the desired length to give the proper leverage for the work to be done.

11 represents a spring which is held in place by the pin 12, one of its ends bearing

upon the underside of the handle 9, while the other end bears upon the other side of the swinging jaw 3, thus normally holding both the handle and the swinging jaw in the positions shown in Fig. 1.

From the foregoing description the operation of my improvement will be obviously as follows:—When the wrench is applied to a nut or other similar work, the swinging jaw and the handle being in the position shown will take hold of the work in the same manner as an ordinary open end wrench or S-wrench, and when power is applied to the handle in the direction of the arrow in Fig. 1, the swinging jaw will remain held, but when force is applied to the handle in the opposite direction of the arrow, said handle will swing against the action of the spring 11 carrying the nose 8 out of engagement with the toe 7, thus releasing the jaw 3, permitting it to swing away from the stationary jaw 2, thereby permitting the wrench to slip upon the work, so as to take a new hold, and as soon as the handle is drawn upon in the opposite direction, the nose will again engage with the toe and the swinging jaw will be held, so that it may thereafter perform its work in the usual manner, thus producing automatically the effect of a ratchet wrench.

While I have shown only one form of carrying out my invention, it will be readily understood that the design and proportion may be considerably varied in carrying out the principles and I therefore do not wish to be limited to the exact details of construction herein shown as these may be varied within the limits of the appended claims without departing from the spirit of my invention.

Having thus fully described my invention, what I claim as new and useful, is—

1. In a device of the character stated, a head, a stationary jaw formed therewith, a swinging jaw pivoted within the head, and normally lying parallel with the stationary jaw, a heel formed with the swinging jaw, an integral toe formed with the heel, a pin for limiting the inward movement of the swinging jaw, a handle pivoted in the head, an integral nose formed with said handle adapted to coact with the toe, whereby the swinging jaw will be held against the work on which it is being used, said handle capable only of sufficient movement to release the swinging jaw, and a spring

secured to the housing, the ends thereof resting against the swinging jaw and handle for retaining them in their normal positions.

5 2. A wrench comprising a head, a stationary jaw projecting therefrom, a swinging jaw pivoted within the head opposite the stationary jaw, an integral toe formed with the swinging jaw projecting toward
10 the stationary jaw, a handle pivoted at one side adjacent its inner end within the head adjacent the side opposite the stationary jaw, a nose formed integral with the inner
15 end of the handle at the side opposite the pivot point, said nose adapted to engage

the toe to hold the swinging jaw in a position parallel to the stationary jaw, said swinging jaw being free to move when the nose is entirely disengaged from the toe, means for limiting the inward movement
20 of the swinging jaw and means for normally holding the nose in contact with the toe as shown and for the purpose specified.

In testimony whereof, I have hereunto affixed my signature in the presence of two
25 subscribing witnesses.

MICHAEL I. GINSBURG.

Witnesses:

T. FOSTER THOMAS,
LEONARD W. BELZ.