

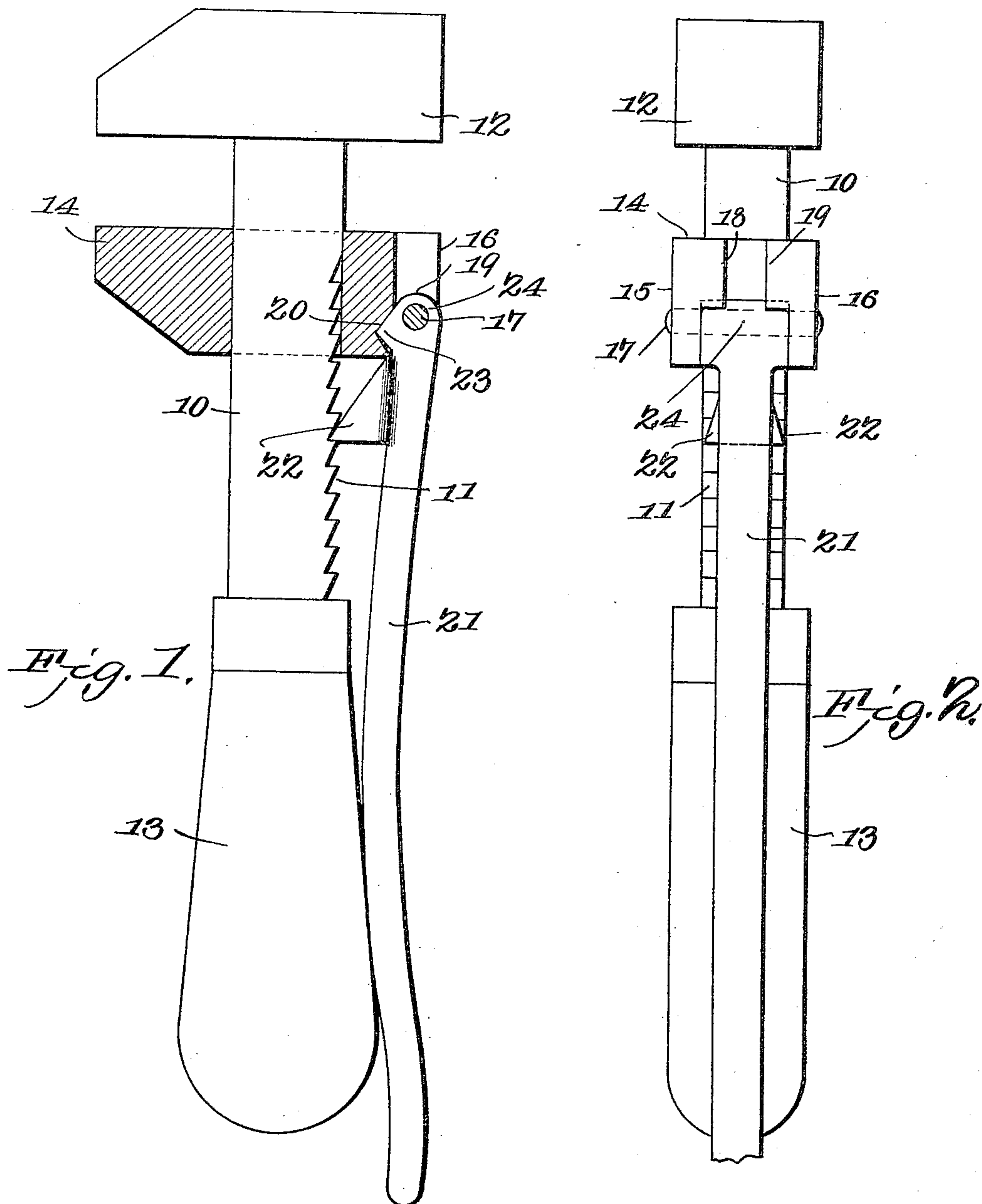
No. 824,267.

PATENTED JUNE 26, 1906.

J. W. B. TURK.

WRENCH.

APPLICATION FILED DEC. 2, 1905.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES W. B. TURK, OF POTEAU, INDIAN TERRITORY.

WRENCH.

No. 824,267.

Specification of Letters Patent.

Patented June 26, 1906.

Application filed December 2, 1905. Serial No. 289,979.

To all whom it may concern:

Be it known that I, JAMES W. B. TURK, a citizen of the United States, residing at Poteau, District 14, Indian Territory, have
5 invented a new and useful Wrench, of which the following is a specification.

This invention relates to wrenches of the class known as "quick-action" wrenches, and has for its object to improve the construction and increase the efficiency of devices of this character.
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With these and other objects in view, which will appear as the nature of the invention is better understood, the invention
15 consists in certain novel features of construction, as hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which corresponding parts are denoted by like designating characters, is illustrated the preferred form of the embodiment of the invention capable of carrying the same into practical operation, it being understood that various changes in the form, proportion, and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention within the scope of the appended claim.
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In the drawings, Figure 1 is a side elevation, partly in section, of the improved device. Fig. 2 is a rear elevation of the same.

The improved device comprises a stock or
35 shank 10, having transverse ratchet-teeth 11 in one edge and with the stationary jaw 12 at one end and a handle 13 at the other end. Slidably disposed upon the stock 10 is the movable jaw 14, having spaced ears
40 15 16 extending rearwardly thereof, the ears having transverse apertures to receive a pin 17 and with inwardly-extending shoulders 18 19, spaced from and concentric to the pin. The body of the jaw 14 is also provided with
45 a cavity 20 between the ears 15 16 adjacent to the pin 17 and communicating with the cavities formed by the shoulders. Pivoted upon the pin 17 is a lever-arm 21, having a pawl 22 projecting therefrom for engagement one at a time with the teeth 11, and
50 also provided with a projection or lug 23 for engaging the recess 20 in the movable jaw when the lever is in closed position. The head portion 24 of the lever is concentric to
55 its pivot 17 and bears beneath the shoulders

18 19, as shown, so that the strains are borne between the shoulders and the body of the lever and the pin 17 relieved very largely of shearing or transverse strains. The
coaction of the projection 23 and recess 20
60 also materially assists in relieving the pin from the strains and distributing the strains over a larger area of the movable jaw portion of the structure.

It will be noted that the projection or lug
23 becomes effective only when the lever 21
65 is in closed position. Hence the presence of the lug does not increase the friction or the labor of opening and closing the lever when
70 adjusting the jaw.

By this simple arrangement when the movable jaw 14 is to be adjusted the lever 21 is moved outwardly or away from the stock and handle to release the lug 22 from the teeth 11. When the jaw 14 has been
75 set to the required point, the lever is moved inwardly again and the lug caused to engage the nearest tooth. During this action of the lever the concentric head 24 rolls beneath the shoulders 18 19 and bears against them
80 at all points in its movement, so that the severe strains to which the lug 22 and head portion of the lever are subjected are borne by the relatively solid shoulders and not by the relatively small pin 17. When the lever
85 is moved into its locking position, as shown in Fig. 1, the projection 23 enters the cavity 20 and bears against the body of the movable jaw and materially increases the strength of the "grip" between the parts.
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The device is simple in construction, can be inexpensively manufactured and adapted to wrenches of various sizes, and employed for all the purposes for which wrenches are usually employed, and is just as applicable
95 to sliding-jaw pipe-wrenches as to the ordinary nut-wrenches.

Having thus described the invention, what is claimed is—

In a wrench, a stock having spaced
100 ratchet-teeth in one edge and a stationary jaw at one end, a movable jaw slidable upon said stock and having spaced ears with transverse apertures, said ears having inwardly-extending shoulders with the inner
105 ends concentric to said apertures and a recess in the movable jaw between said ears and extending into the cavity formed by said shoulders, a pin extending through said apertures, a lever-arm pivoted upon said
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pin and with its head bearing against said
shoulders and with a lug extending there-
from for bearing in said recess when the
lever is in closed position and a pawl upon
5 said lever for engaging said ratchet-teeth
one at a time.

In testimony that I claim the foregoing as

my own I have hereto affixed my signature in
the presence of two witnesses.

JAMES W. B. TURK.

Witnesses:

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