

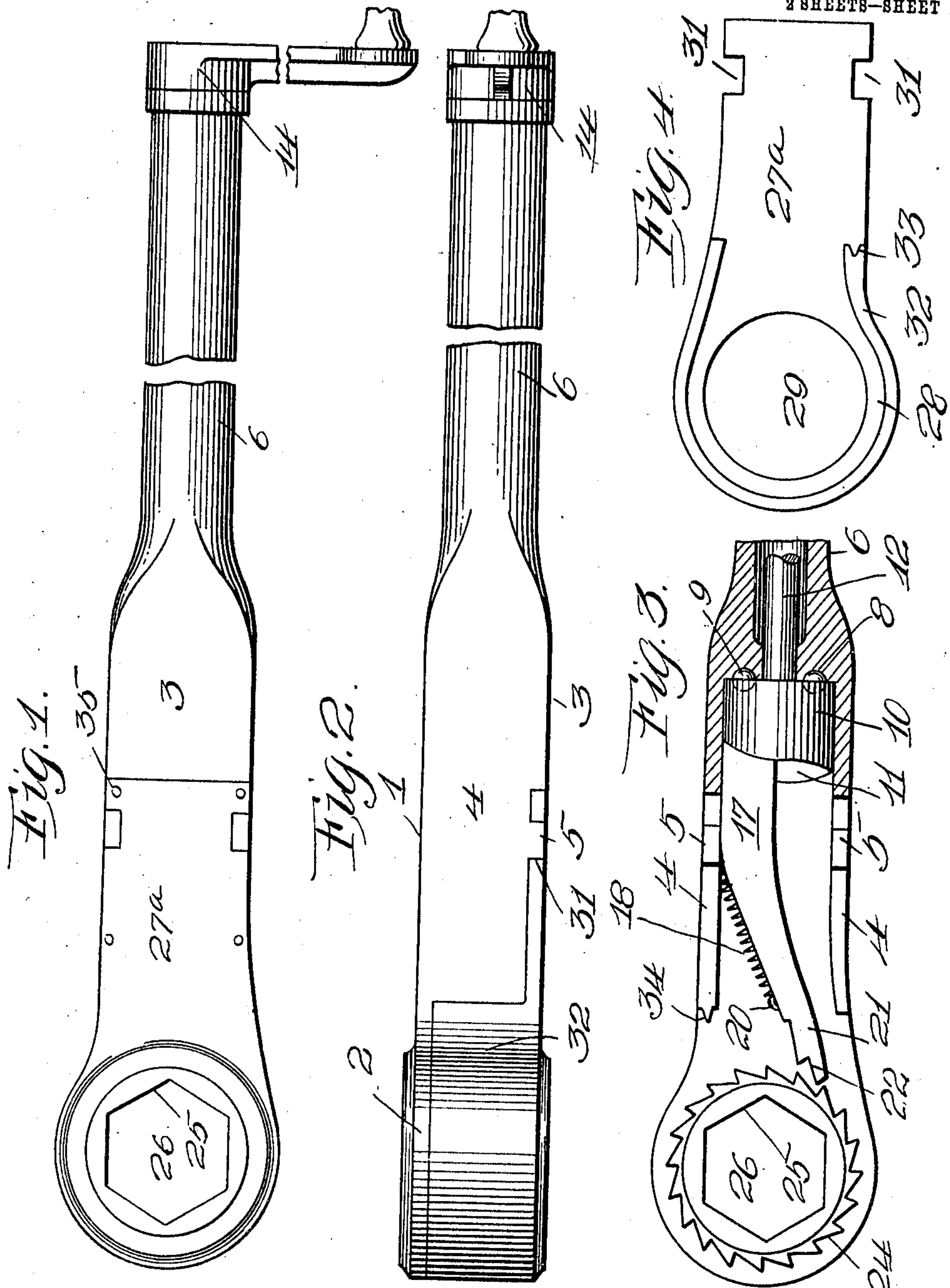
A. & B. W. FRESKO.
WRENCH.

APPLICATION FILED JULY 26, 1910.

Patented Sept. 13, 1910.

970,209.

2 SHEETS—SHEET 1.



Witnesses:-

Samuel Payne
R. H. Butler by

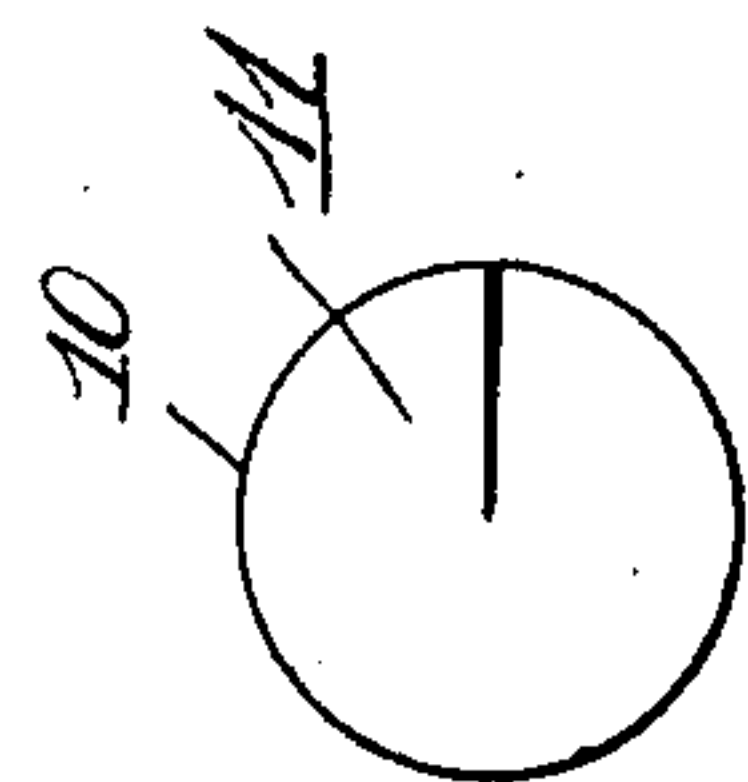
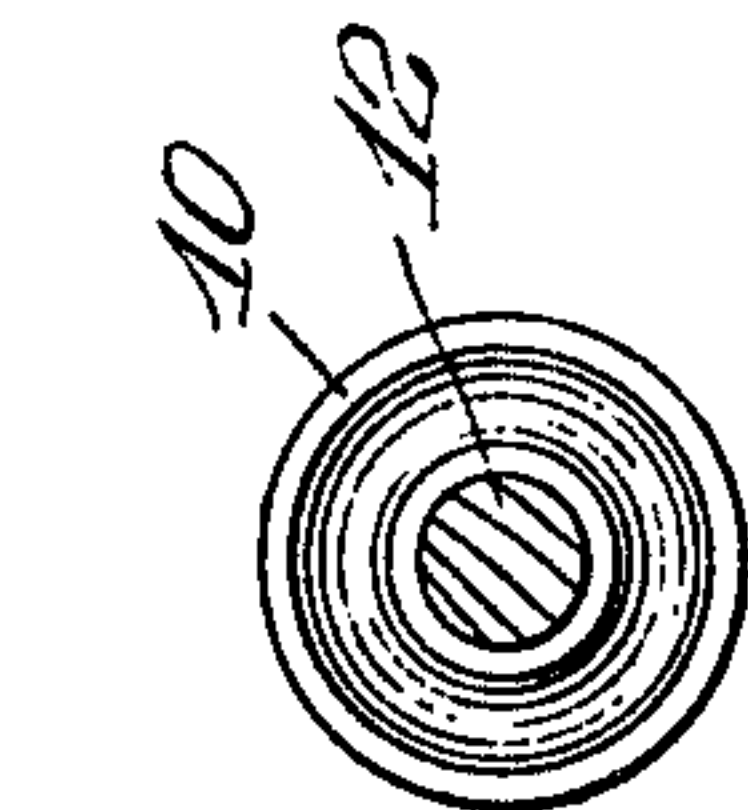
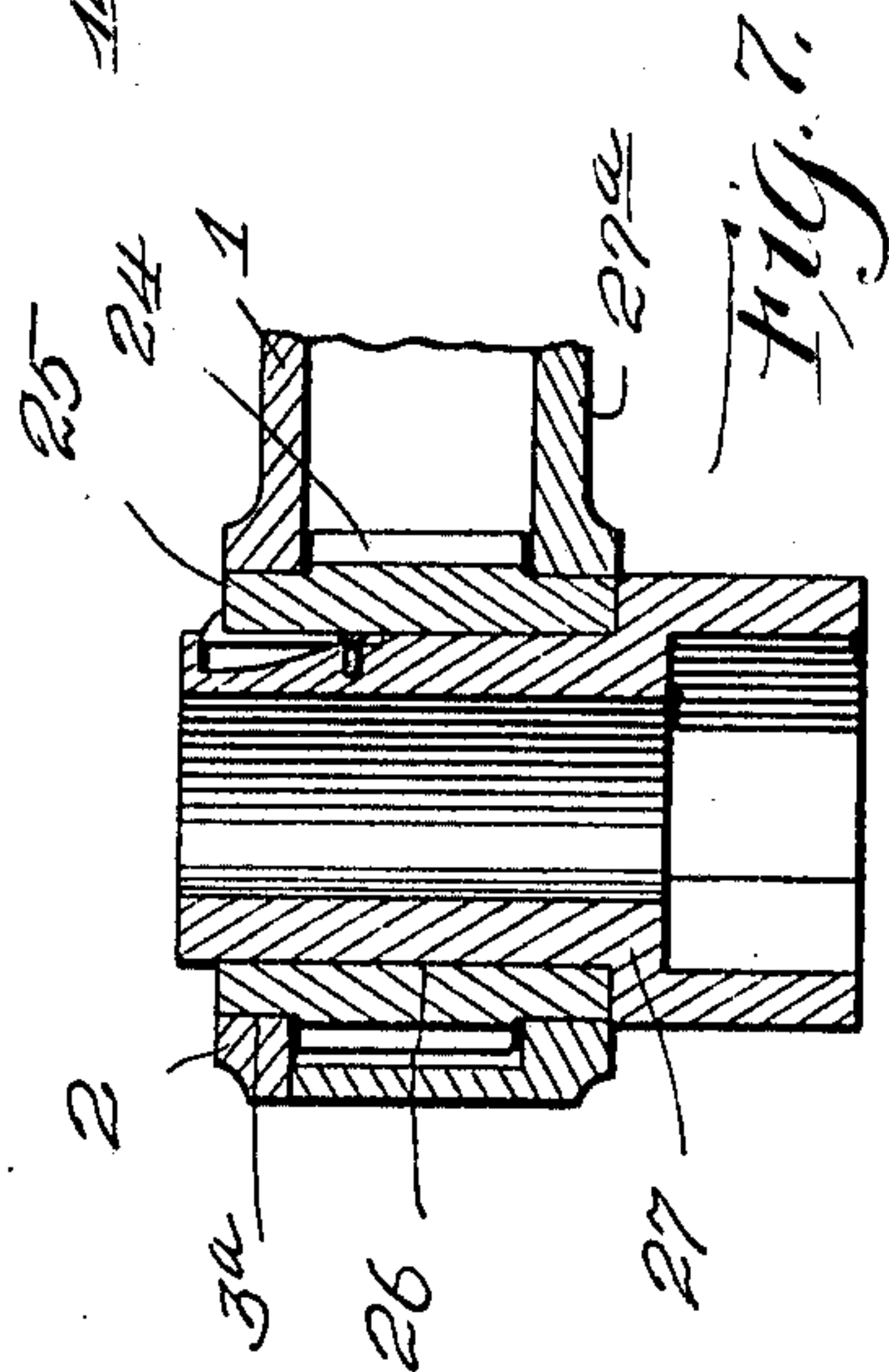
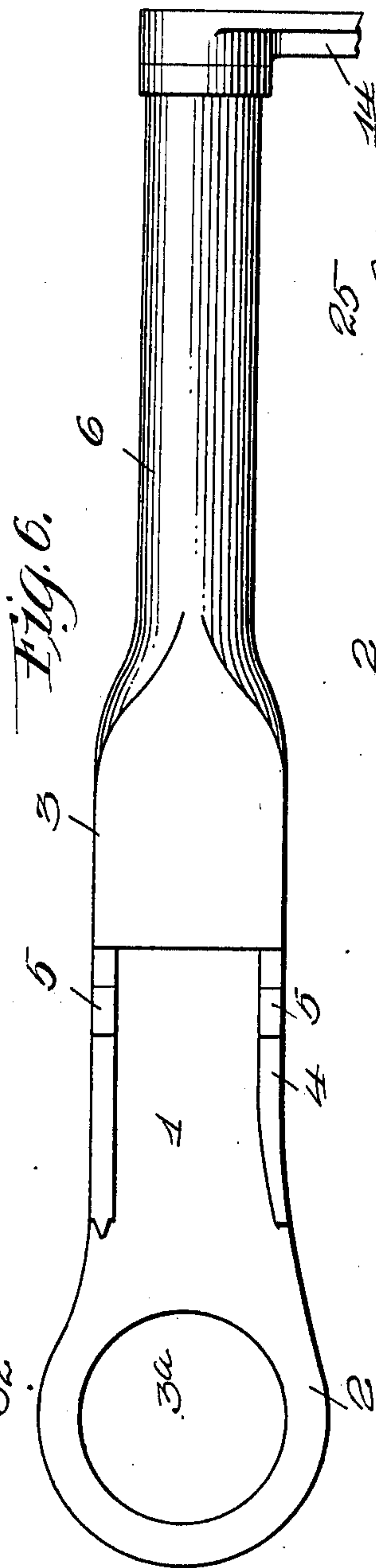
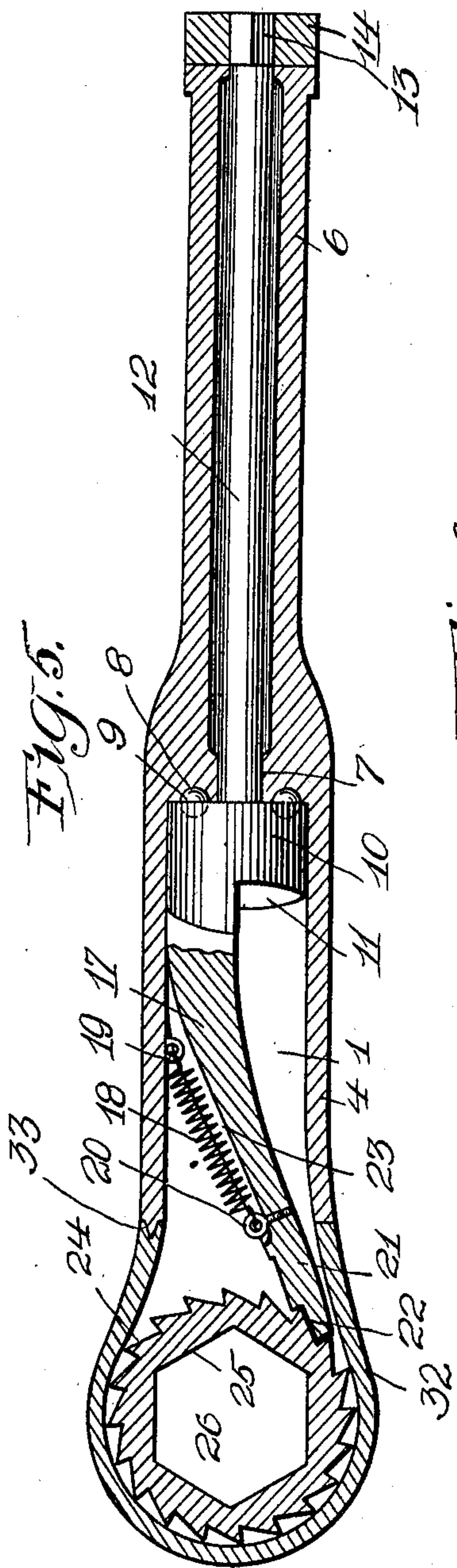
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3 SHEETS—SHEET 2.



Witnesses:-

Samuel Payne.
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UNITED STATES PATENT OFFICE.

ALIX FRESKO AND BELA W. FRESKO, OF AMSTERDAM, OHIO.

WRENCH.

970,209.

Specification of Letters Patent. Patented Sept. 13, 1910.

Application filed July 26, 1910. Serial No. 573,904.

To all whom it may concern:

Be it known that we, ALIX FRESKO and BELA W. FRESKO, subjects of the King of Hungary, residing at Amsterdam, in the county of Jefferson and State of Ohio, have invented certain new and useful Improvements in Wrenches, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention is an improvement in wrenches disclosed by our Patent No. 935,482, granted September 28, 1909.

The object of the present invention is to simplify the construction of our previous wrench and to provide a more durable construction.

With the above and such other objects in view as may hereinafter appear, the invention consists of the novel construction, combination and arrangement of parts to be hereinafter specifically described and then claimed.

Reference will now be had to the drawings forming a part of this specification, wherein:—

Figure 1 is a plan of the wrench, partly broken away, Fig. 2 is a side elevation of the same, Fig. 3 is a plan of a portion of the wrench, partly broken away and partly in section, Fig. 4 is a bottom plan of a detachable cover plate, Fig. 5 is a horizontal sectional view of the wrench, partly broken away, Fig. 6 is a plan of the body of the wrench, Fig. 7 is a longitudinal sectional view of the wrench, showing the nut or drill socket, Fig. 8 is a horizontal sectional view of a rod forming part of the wrench, showing the actuating head thereof, and Fig. 9 is a bottom plan of the actuating head.

In the accompanying drawings the reference numeral 1 denotes a plate having one end thereof provided with a large head 2, having a central large opening 3^a. The opposite end of the plate 1 is formed with a rectangular housing 3 having projecting parallel side walls 4, of a less depth than the walls of the housing 3, said projecting walls having oppositely disposed outwardly extending lugs 5. The housing 3 is provided with a rearwardly extending cylindrical and tubular handle 6, communicating with the interior of the housing 3 by an opening 7.

The rear inner end of the housing 3 is provided with a ball race 8 for a plurality

of anti-friction balls 9, and adapted to engage said balls is a cylindrical ratchet actuating head 10, having the end thereof provided with a cam path 11, while the opposite end is connected to a rod 12, extending rearwardly through the opening 7 and through the handle 6. The end of the rod 12 protrudes from the handle and is rectangular, as at 13 to fit an opening in a crank 14.

Movably arranged in the housing 3 is a plunger 17 held in engagement with the cam path 11 of the head 10 by a coiled retractile spring 18, said spring having one end thereof connected to an inwardly projecting apertured lug 19, carried by one of the side walls 4, and the opposite end of said spring connected to an eye-bolt 20 mounted in the plunger 17 adjacent to the outer end thereof. The outer end of the plunger is shaped to provide a pawl 21 having teeth 22, and one side of the plunger has a longitudinal groove 23 providing clearance for the coiled retractile spring 18. The pawl 21 of the plunger 17 is adapted to engage ratchet teeth 24 arranged circumferentially and intermediate the ends of a collar 25, said collar having a central hexagonal shaped opening 26, to receive a nut or drill socket 27, or to receive a hexagonal nut of a size to fit in said opening.

Fitting upon the projecting walls 4 of the housing 3 is a cover plate 27^a having a circular head 28 provided with a central opening 29 to receive one end of the collar 25, the other end of the collar entering the opening 3^a. The cover plate 27^a is notched, as at 31 to receive the lugs 5 and is provided with a depending flange 32 adapted to form a continuation of the walls 4, one end of the flange 32 being notched, as at 33 to receive a projecting lug 34, carried by the forward end of one of the walls 4. The cover plate can be secured by pins, rivets or other fastening means 35.

By holding the handle 6 in one hand, the ratchet actuating head within the housing 3 can be revolved to reciprocate the plunger 17, and through the medium of the pawl 21, rotate the collar 25. The spring 18 is adapted to return the plunger to its normal position to obtain a fresh grip upon the teeth 24.

The wrench herein described is susceptible to such changes as fall within the scope of the appended claim.

What we claim is:—

A wrench of the type described, embody-
ing a plate, a housing carried thereby, a
tubular handle carried by said housing, a
5 rod arranged in said handle and extending
into said housing, a crank carried by the
outer end of said rod, a ratchet actuating
head carried by the opposite end of said rod
within said housing and having a cam path,
10 a plunger arranged in said housing and
adapted to engage the cam path of said
head, a toothed pawl carried by said
plunger, a coiled retractile spring having
one end thereof attached to said plunger
15 adjacent to said housing and the opposite

end thereof attached to the wall of said
housing, a ratchet collar revolubly mounted
in said plate and adapted to be engaged by
said pawl, a cover plate inclosing said
ratchet collar and said plunger, said ratchet 20
collar having a bore formed therein for a
nut or drill socket, substantially as described.

In testimony whereof we affix our signa-
tures in the presence of two witnesses.

ALIX FRESKO.
BELA W. FRESKO.

Witnesses:

H. R. MILLER,
S. J. SMITH.