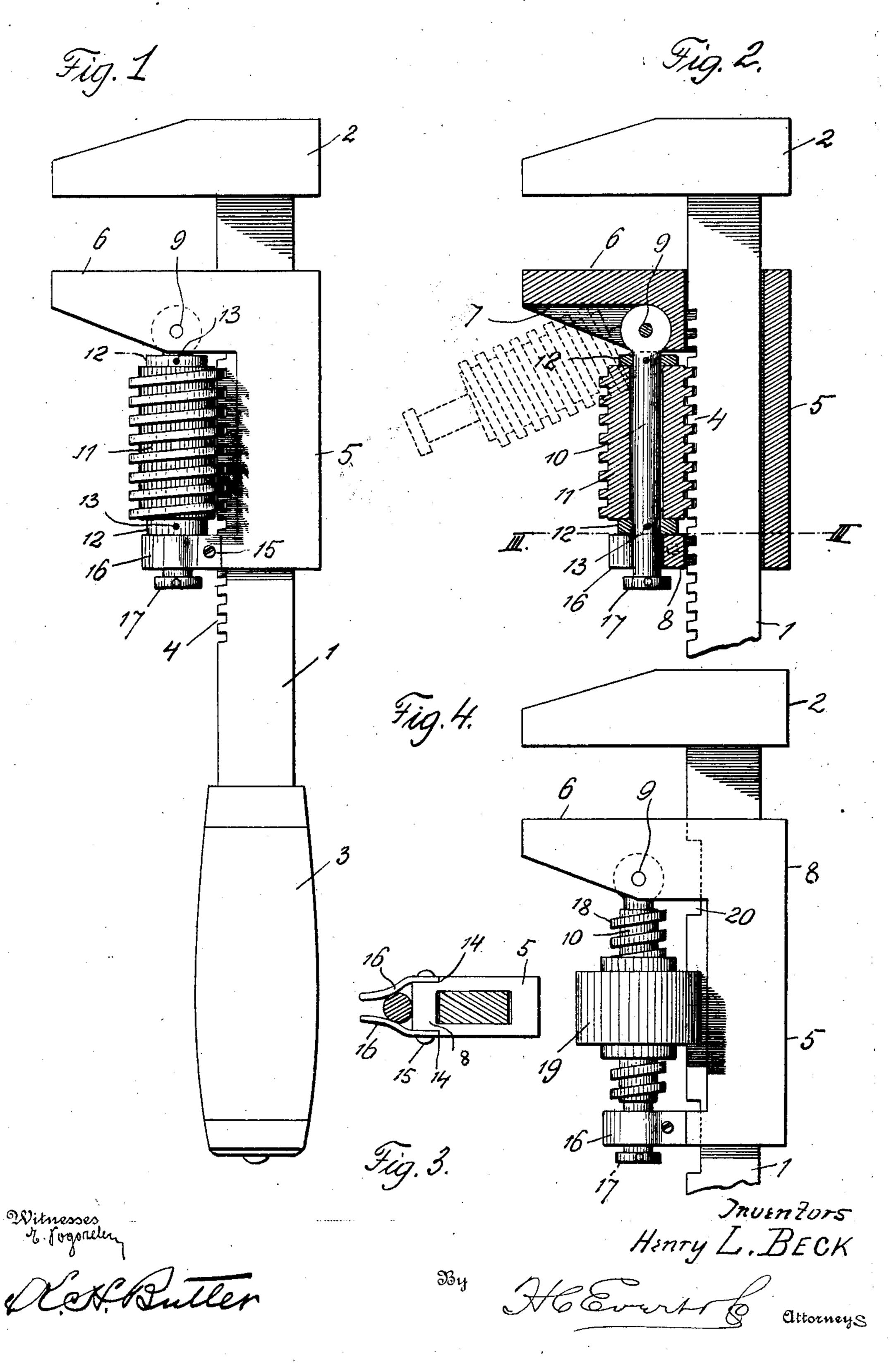
H. L. BECK.

WRENCH.

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UNITED STATES PATENT OFFICE.

HENRY LOUIS BECK, OF PIEDMONT, WEST VIRGINIA.

WRENCH.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Henry Louis Beck, a citizen of the United States of America, residing at Piedmont, in the county of Mineral 5 and State of West Virginia, 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 relates to wrenches, of that type commonly styled "quick acting monkey

wrenches".

The primary object of my invention is, to provide a simple and inexpensive wrench 15 wherein positive and reliable means are employed for quickly adjusting the movable jaw thereof.

A further object of my invention is to provide a strong and durable wrench that can 20 be quickly adjusted to grip an object, and then minutely adjusted to obtain a better

purchase upon the same.

which will more readily appear as the inven-25 tion is better understood, the same consists in the novel construction, combination and arrangement of parts to be hereinafter described and then specifically pointed out in the appended claims.

In the drawings: Figure 1 is an elevation of a wrench constructed in accordance with my invention, Fig. 2 is a similar view of a portion of the wrench, illustrating the movable jaw thereof in section, Fig. 3 is a hori-35 zontal sectional view of a wrench taken on the line III—III of Fig. 2, and Fig. 4 is an elevation of a portion of a wrench illustrating a slight modification.

In the accompanying drawings, 1 desig-40 nates a shank having a fixed jaw 2 and a detachable handle 3. The shank 1 has its front

edge toothed as at 4.

Slidably mounted upon the shank 1 is a movable jaw, said jaw comprising a channel 45 shaped body 5 adapted to embrace the shank 1, a gripping jaw 6 having a recess 7 formed therein and a strap 8 adapted to embrace the shank 1. Pivotally mounted by a pin 9 within the recess 7 of the jaw 6 is a rod 10, and 50 revolubly mounted upon said rod is a worm nut 11 adapted to engage the teeth 4 of the shank 1. The nut 11 is revolubly mounted between two collars 12 fixed upon the rod 10 by screws or pins 13. The strap 8 is cut 55 away as at 14, and secured in the cut away

I fastening means are resilient arms 16, these arms embracing the lower end of the rod 10 and holding the nut 11 carried by said rod in engagement with the toothed shank. The 60 lower end of the rod 10 is provided with a detachable collar or cap 17 but this may be dispensed with.

By referring to Fig. 2 of the drawings, it will be observed that the nut 11 can be swung 65 out of engagement with the shank 1, and the movable jaw quickly adjusted to engage an object. The nut 11 can then be swung to engage the shank 1 and rotate it to minutely

adjust the movable jaw.

In Fig. 4 of the drawings, I have illustrated a slight modification of my invention, wherein the rod 10 is threaded as at 18 for a nut 19. This nut is adapted to engage in equally spaced recesses 20 provided therefor in the 75

shank 1.

In the preferred form, the nut 11 is rotated and moves with relation to the shank 1, but With the above and other objects in view | in the modification, the nut 19 is rotated, and remains stationary with relation to the shank 80 1, while the movable jaw is adjusted through the medium of the threaded rod 10 and the nut 19. The threaded rod 10 is of a sufficient length to permit of a finer adjustment being obtained than could be otherwise obtained 85 by the recesses 20.

> It is apparent from the novel construction of my wrench that I have devised an improvement that can be manufactured at a comparatively small expense, and when ordi- 90

narily used will be free from injury.

My invention is susceptible to such changes as are permissible by the appended claims. Having now described my invention what

I claim as new, is:—

A wrench comprising the combination with a toothed shank, a fixed jaw and a handle carried by the shank, of a movable element slidably mounted upon said shank and comprising a channel-shaped body portion and a 100 gripping jaw having a lower face formed with a recess extending at right angles with respect to the shank and terminating at a point removed from the shank and gradually increasing in height inwardly, said element further 105 embodying a shouldered strap at its lower end embracing said shank, a rod having an enlarged apertured upper end pivotally connected in the recess at the inner end thereof, the enlarged end of the rod being rounded 110 and adapted to correspond in contour to the portions of said strap by screws 15 or similar | inner wall of said recess, said rod of less length

than said element and carrying a pair of fixed collars, one of said collars arranged in close proximity to the enlarged end of the rod, a worm nut revolubly mounted upon said rod between the collars of greater diameter than the collars and adapted to engage said toothed shank, the other of said collars arranged in close proximity to said strap, resilient arms carried by and projecting from each side of the strap, said arms converging towards each other and embracing the lower end of the rod

whereby the rod is maintained in parallelism with respect to the shank and the worm nut maintained in engagement with the teeth of the shank, and said rod projecting belowsaid 15 strap and provided with a handle.

In testimony whereof I affix my signature

in the presence of two witnesses.

HENRY LOUIS BECK.

Witnesses:

GEO. C. BECK, Jas. T. Woodward.