

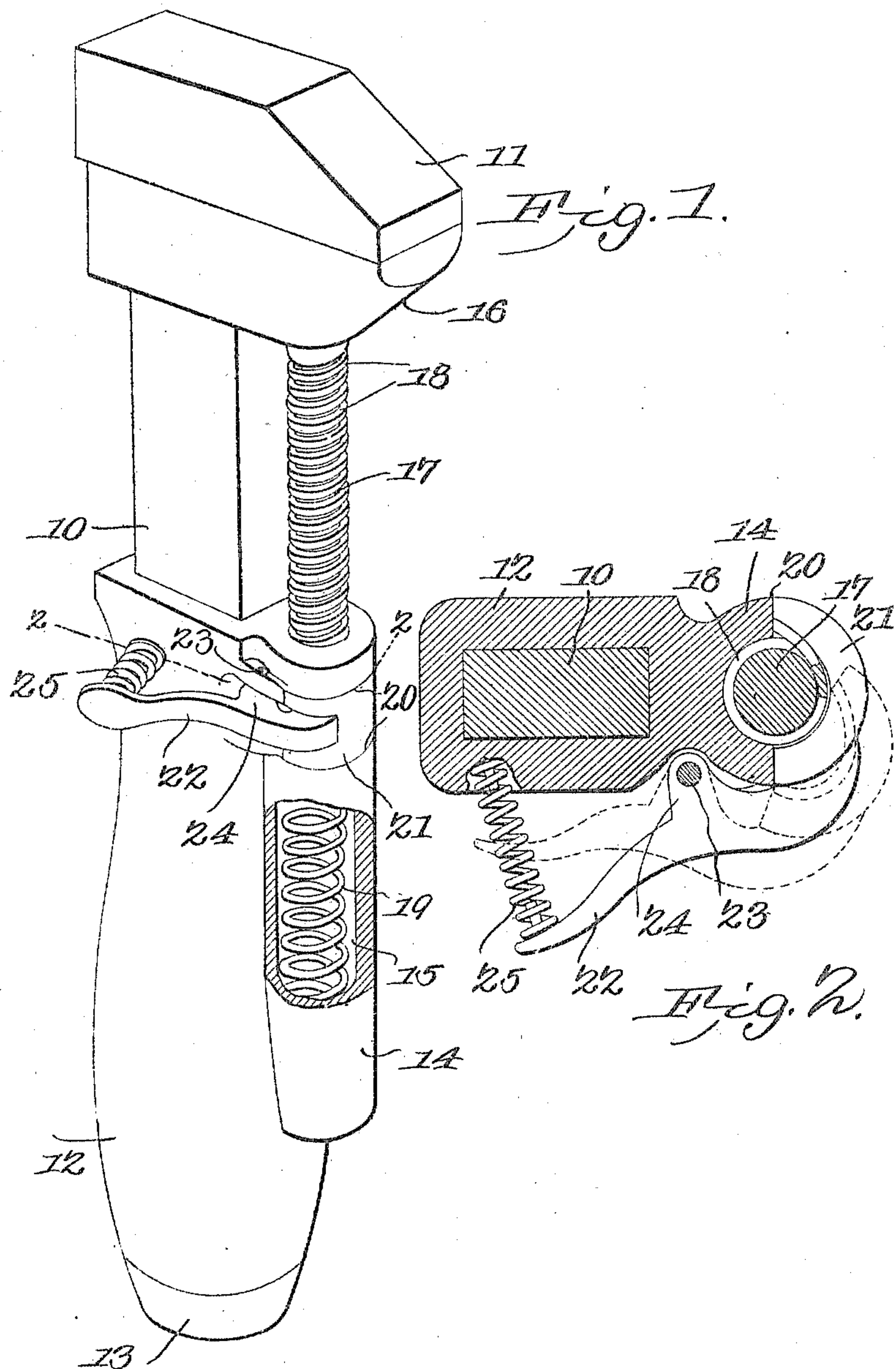
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W. H. ZACHARY.

WRENCH.

APPLICATION FILED SEPT. 20, 1905.



William H. Zachary

Inventor.

Witnesses

E. J. Stewart
L. J. Merrill

by

C. A. Snow & Co.

Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM H. ZACHARY, OF MAYSVILLE, INDIAN TERRITORY, ASSIGNOR
OF ONE-HALF TO DAVID R. MITCHELL, OF MAYSVILLE, INDIAN
TERRITORY.

WRENCH.

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To all whom it may concern:

Be it known that I, WILLIAM H. ZACHARY, a citizen of the United States, residing at Maysville, District 17, Indian Territory, have
5 invented a new and useful Wrench, of which the following is a specification.

This invention relates to wrenches, and has for an object to provide a wrench embodying new and improved features of convenience, simplicity, utility, and efficiency.

A further object of the invention is to provide a wrench embodying improved means whereby the traveling jaw automatically adjusts itself to the work upon being released.

Specifically the object of the invention is to provide a wrench having the usual rigid shank and outer jaw and fitted with a handle having a socket with a spring in it and a traveling jaw having a threaded rack extending
15 into the socket and against the spring and a spring-controlled half-nut for engaging the rack and holding the jaw.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter fully described, shown in the accompanying drawings, and particularly pointed out in the appended claim, it being understood that changes in the form, proportion,
20 size, and minor details may be made without departing from the spirit or sacrificing any of the advantages of this invention.

In the drawings, Figure 1 is a perspective view of the improved wrench with a portion
35 of the socket-casing broken away to show the spring. Fig. 2 is a transverse sectional view of the improved wrench, taken on line 2 2 of Fig. 1.

Like characters of reference indicate corresponding parts in both figures of the drawings.

In its preferred embodiment the improved wrench forming the subject-matter of this application comprises a rigid shank 10, provided with the usual angular rigid jaw 11, the handle 12, secured in any approved manner, as by the nut 13. The handle is provided with an offset portion 14, in which is formed a socket 15, substantially parallel with the
45 shank 10. Upon the shank is slidably mounted the traveling jaw 16, having a spindle or rack 17, extending within the socket 15 and

provided with the threads 18. Within the socket 15, is disposed the spring 19, bearing against the bottom of the socket and the end
55 of the rack 17.

The offset portion 14 is provided with a transverse aperture 20, communicating with the socket 15, and therein is disposed the half-nut 21, arranged to engage the threaded
60 rack 17 and mounted upon the lever 22. The lever 22 is pivoted to the handle at 23 by means of the offset portion 24, and a spring 25 is disposed beneath the end opposite the half-nut. By depressing the end of the lever
65 22, as shown in dotted position in Fig. 2, the rack 17 is released and the jaw 16 may be slidably moved upon the shank 10. To adjust the wrench to the work, it is placed with the jaw 11 against the nut and the lever 22
70 depressed, thereby releasing the spring, and the spring 19 forces the jaw 16 against the nut, when by releasing the lever 22 it is locked in such position. When the nut has been sufficiently tightened, the lever is again
75 depressed and the wrench moved angularly about the nut, which forces the jaws open, and by releasing the lever the jaws are locked open. It will thus be seen that ordinarily all that is necessary to adjust the wrench is
80 to press upon the lever 22, making a very convenient and efficient tool.

Having thus described the invention, what is claimed is—

A wrench comprising a rigid shank and
85 outer jaw, a handle mounted upon the shank and provided with a socket a movable jaw slidably mounted upon the shank and having a rigid threaded rack extending slidably within the socket a spring within the socket and
90 bearing against the end of the screw and disposed to force the movable jaw to the outer extreme of its movement, a pivoted half-nut arranged to engage and hold the screw and a spring-pressed lever pivoted to the side of the
95 handle and arranged to manipulate the half-nut.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM H. ZACHARY.

Witnesses:

F. C. COOK,
W. C. HIGH.