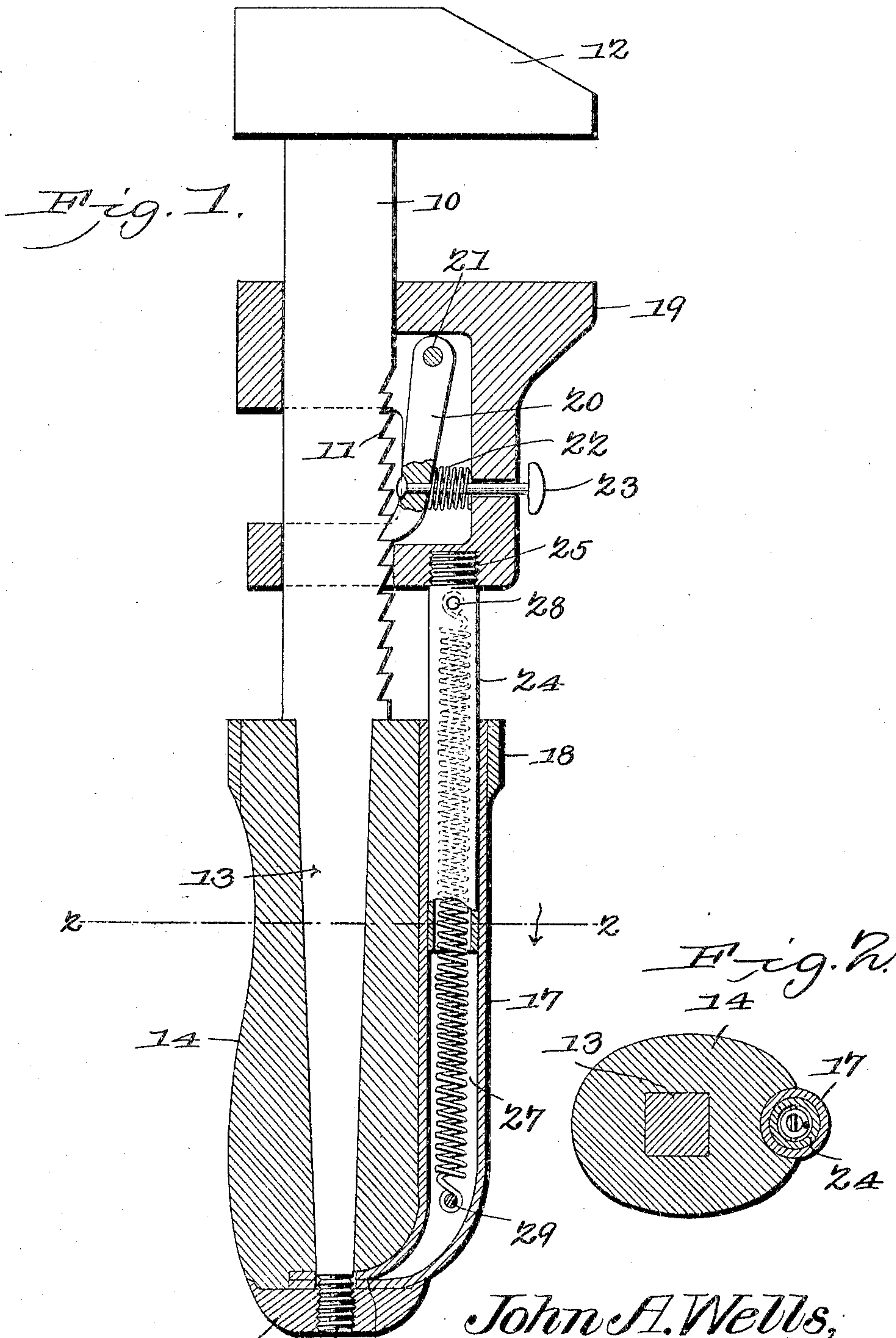


No. 789,307.

PATENTED MAY 9, 1905.

J. A. WELLS.
WRENCH.

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Witnesses
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UNITED STATES PATENT OFFICE.

JOHN ABRAM WELLS, OF CARRINGTON, NORTH DAKOTA.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 789,307, dated May 9, 1905.

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To all whom it may concern:

Be it known that I, JOHN ABRAM WELLS, a citizen of the United States, residing at Carrington, in the county of Foster and State of North Dakota, have invented a new and useful Wrench, of which the following is a specification.

This invention relates to wrenches of the "quick-action" class, and has for its object to simplify and improve the construction and increase the efficiency of devices of this character.

With these and other objects in view, which will appear as the nature of the invention is better understood, the same consists in certain 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 embodiment of the invention capable of carrying the same into practical operation, it being understood that the invention is not necessarily limited thereto, as various changes in the shape, proportions, and general assemblage of the parts may be resorted to without departing from the principle of the invention or sacrificing any of its advantages.

In the drawings thus employed, Figure 1 is a longitudinal sectional elevation. Fig. 2 is a transverse section on the line 2 2 of Fig. 1.

The improved implement comprises a stock 10, having rack 11 and with the stationary jaw 12 at one end and with the other end tapering, as at 13, and supporting a handle 14, which is secured in position by a nut 15, engaging a threaded stud 16, forming the terminal of the tapered portion 13.

Attached to one side of the handle 14 is a tubular socket 17, secured in position at one end by a ferrule 18, which binds it to the handle member, and with the other end, 26, bent laterally and perforated to pass over the stud 16 and be firmly held by the nut 14 against the handle member.

A movable jaw 19 is slidably disposed upon the stock 10 and provided with a pawl 20, pivoted at 21 within the movable jaw and yieldably supported for engagement with the

rack 11 by a spring 22 and releasable by a pull-rod 23, passing outwardly through the jaw.

A tubular member 24 is connected, as by its threaded end 25, to the jaw member 19 and extends into the tubular handle-socket 17. A spring 27 is disposed within the tubular member 24 and extends into the socket 17 and is secured at one end, as by a pin 28, to the tubular member 17, and at the other end, as by a pin 29, to the tubular socket, the spring thus exerting a contracting force to maintain the movable jaw yieldably in withdrawn or expanded position. By this simple arrangement it will be obvious that if the pin 23 be drawn outwardly the movable jaw 19 will be instantly withdrawn by the pulling action of the spring 27 into position against the inner end of the handle member. Then when the wrench is to be used it is only necessary to move the jaw along the stock until the required position is reached, the spring 27 yielding to this movement and the pawl slipping idly over the rack and instantly engaging in the required tooth to hold the movable jaw wherever required.

The construction is simple and inexpensive, is strong and durable, and very quick and efficient in action.

The jaws may be varied in shape and construction to suit the purpose of the wrench and the class of objects to be engaged thereby.

Having thus described the invention, what is claimed is—

1. In a wrench, a stock having a stationary jaw at one end and a handle at the other end provided with a longitudinal socket, said stock having a rack, a movable jaw slidable upon said stock, a spring operating in said handle-socket and connected respectively to said movable jaw and to said handle within said socket, and a pawl carried by said movable jaw for engagement with said rack.

2. In a wrench, a stock having a stationary jaw at one end and a handle at the other end provided with a longitudinal socket, said stock having a rack, a movable jaw slidable upon said stock, a tubular member connected at one end to said movable jaw and slidable at the other end in said handle-socket, a spring op-

erating in said tubular member and in said socket and connected at its ends respectively in the same, and a pawl carried by said movable jaw for engagement with said rack.

5 3. In a wrench, a stock having a rack and an integral stationary jaw at one end, the other end of the stock tapering and terminating in a threaded stud, a handle fitted upon said tapered portion of the stock and secured
10 in position by a nut upon said threaded stud, a tubular socket disposed longitudinally upon said handle and with one end turned laterally and perforated to receive said stud between said handle and nut and with the other end
15 secured to said handle, a movable jaw slidable

upon said stock, a tubular member secured by one end to said movable jaw and extending slidably into said handle-socket, a spring within said tubular member and said socket and connected by the ends in said tubular member and in said socket, and a spring-controlled pawl carried by said movable jaw for engagement with said rack.

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

JOHN ABRAM WELLS.

Witnesses:

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