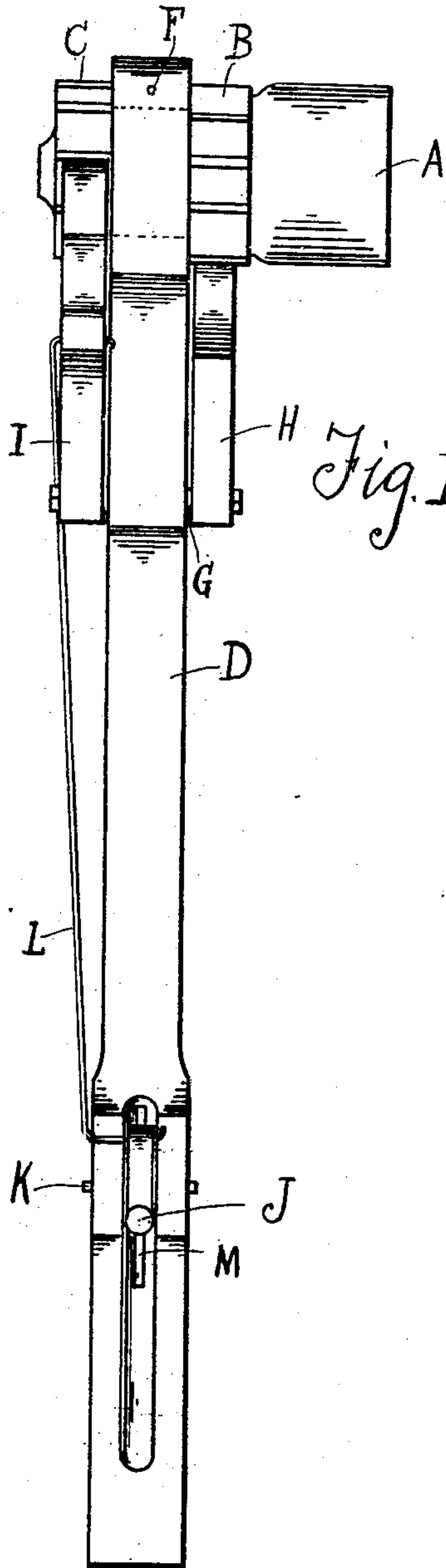


G. BALDWIN.  
RATCHET WRENCH.

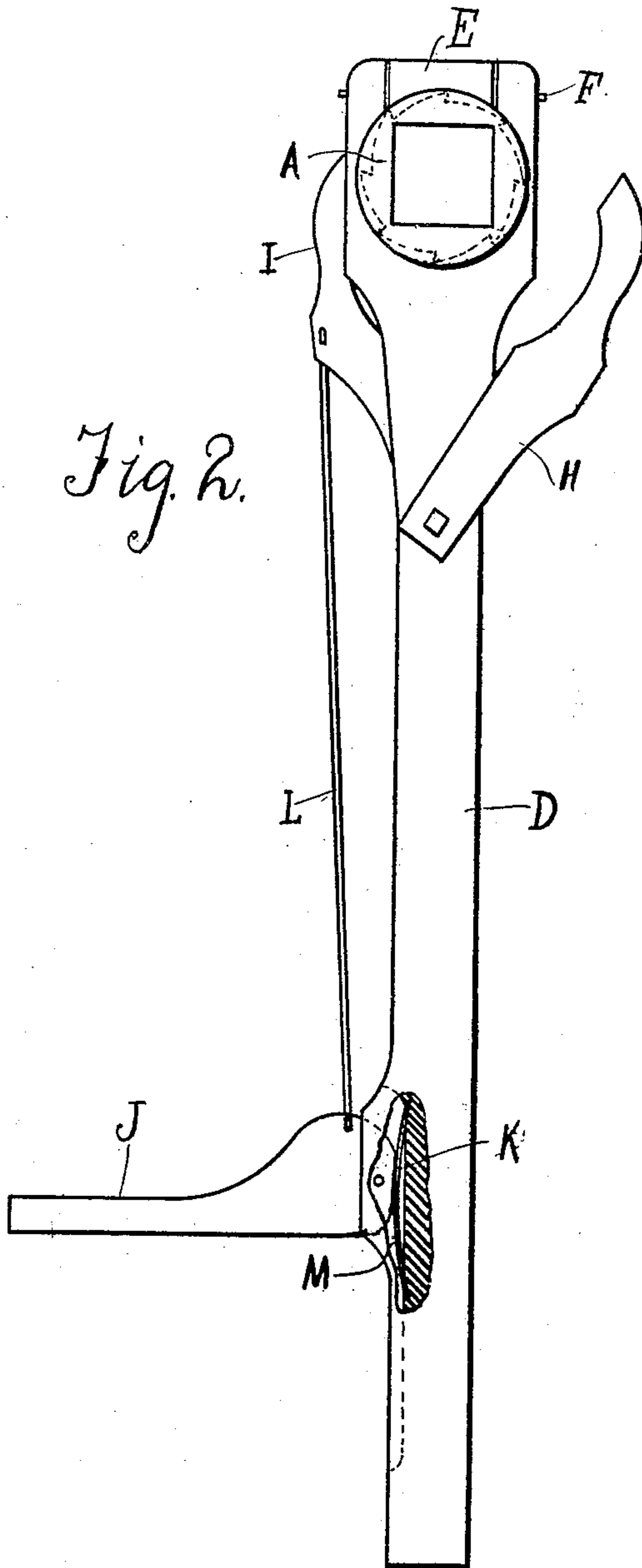
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912,777.

Patented Feb. 16, 1909.



*Fig. 1.*



*Fig. 2.*

WITNESSES

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# UNITED STATES PATENT OFFICE.

GEORGE BALDWIN, OF WEED, CALIFORNIA.

## RATCHET-WRENCH.

No. 912,777.

Specification of Letters Patent.

Patented Feb. 16, 1909.

Application filed July 12, 1907, Serial No. 333,401. Renewed July 17, 1908. Serial No. 444,048.

*To all whom it may concern:*

Be it known that I, GEORGE BALDWIN, a citizen of the United States, residing at Weed, county of Siskiyou, and State of California, have invented a certain new and useful Improvement in Ratchet-Wrenches, of which the following is a specification.

My invention relates to a new and useful improvement in ratchet wrenches, and has for its object to so construct such a wrench as to permit the socket to be turned in either direction by the operation of the handle, and also provide convenient means for throwing one or the other of the pawls into or out of engagement with its ratchet.

With these ends in view, this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, I will describe its construction in detail, referring by letter to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a side elevation of a wrench made in accordance with my improvement. Fig. 2, an elevation at right angles to Fig. 1. In carrying out my invention as here embodied, A represents the socket, which is adapted to fit over the nut or bolt head or socket shank of a drill or other tool, and the shank of this socket has formed therewith the ratchet wheels B and C, the teeth of which are cut in opposite directions.

D represents the lever or handle in which the shank of the socket A is journaled, being held in place by the block E, which is secured in place by the pin F. This handle has a stud G journaled therein, the ends of said stud being squared, and upon these squared ends are secured the pawls H and I so as to move with the stud.

J is a short lever pivoted at K to the handle, and this lever is connected by the rod L to the pawl I, so that when the lever is swung to the position shown in Fig. 2, the pawl I will be carried into engagement with the ratchet C, while the pawl H will be carried out of engagement with the ratchet B, and when the lever J is swung parallel with

the handle D the pawl H will be carried into engagement with its ratchet, while the pawl I will be carried out of engagement.

In practice the socket A may be revolved step by step in either direction by the engagement of the proper pawl with its ratchet, and this as before described is readily accomplished by the swinging of the lever J.

A spring M is located beneath the heel of the lever J so as to hold the latter in either of its positions, and at the same time give a spring action to the pawls so that they may pass over the teeth of the ratchet and successively engage therewith.

My invention is especially adapted for use in railway track nuts and bolts, and enables the operator to tighten up a nut or remove the same more readily than can be done with an ordinary straight wrench and gives leverage for forcing the nut into place.

Having thus fully described my invention, what I claim as new and useful, is—

1. In a wrench, a handle, a socket journaled in said handle, two ratchet wheels carried by said socket, the teeth of said ratchet being cut in opposite directions, a stud journaled in the handle, two pawls rigidly secured upon said stud, a lever pivoted to the handle, a rod connecting said lever with one of the pawls and a spring located beneath the heel of the lever, as and for the purpose set forth.

2. The herein described combination of a handle, a socket journaled in said handle, a block for holding the shank of said socket in its bearing, two ratchet wheels formed with the socket, a stud journaled in the handle, two pawls fitted upon the squared ends of said stud, a lever pivoted to the handle, a rod connecting one of the pawls with said lever and a spring located beneath the heel of the lever whereby the latter will be held in one of two positions and give a spring action to the pawls, as specified.

In testimony whereof, I have hereunto affixed my signature in the presence of two subscribing witnesses.

GEORGE BALDWIN.

Witnesses:

W. M. BEDOLF,  
HENRY DEL VALLE.