

E. MAGUIRE.

Combined Clamp and Wrench.

No. 133,325.

Patented Nov. 26, 1872.

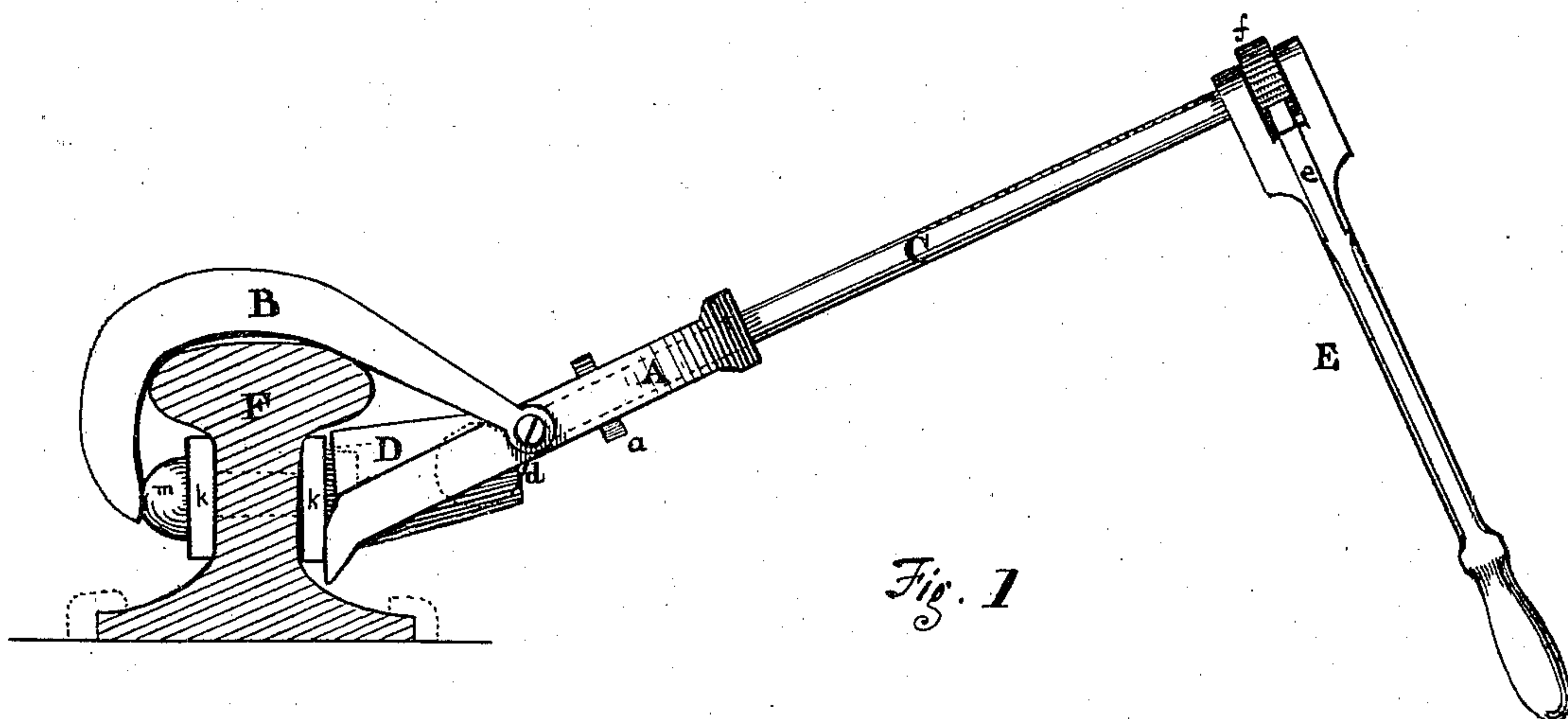


Fig. 1

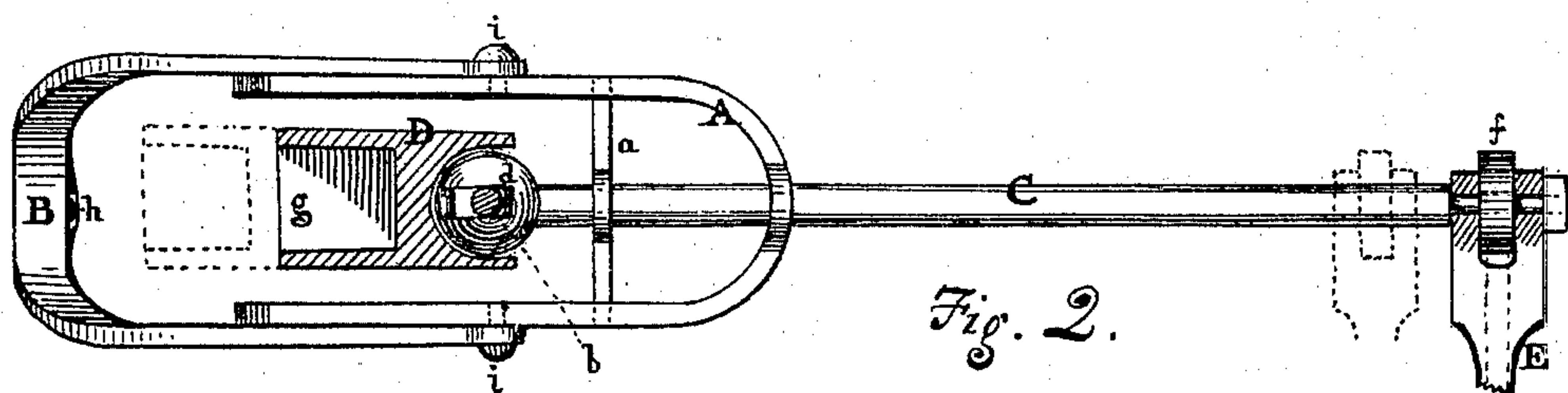


Fig. 2.

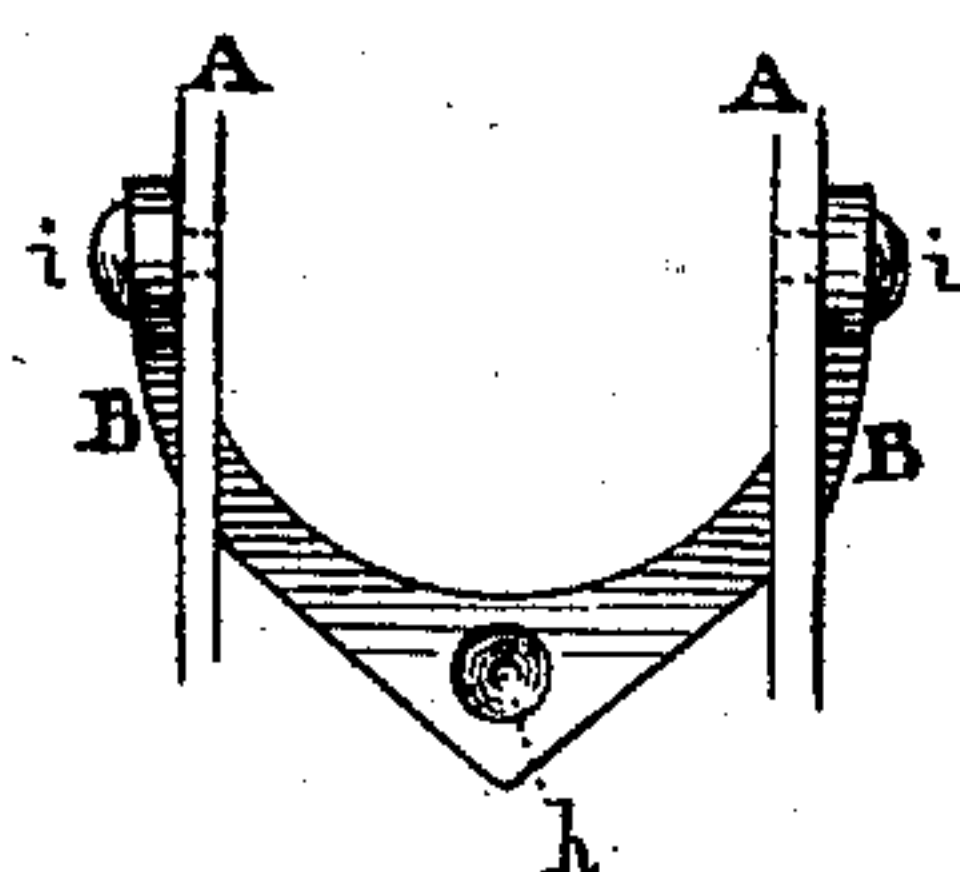


Fig. 3.



Witnesses
Henry Marsden
John Marshall.

Ephraim Maguire
by Edmund Shurtler
his atty in fact.

UNITED STATES PATENT OFFICE.

EPHRAIM MAGUIRE, OF PRINCETON, ILLINOIS.

IMPROVEMENT IN COMBINED CLAMPS AND WRENCHES.

Specification forming part of Letters Patent No. 133,325, dated November 26, 1872.

To all whom it may concern:

Be it known that I, EPHRAIM MAGUIRE, of Princeton, in the county of Bureau and State of Illinois, have invented a Combined Railroad Track Wrench and Lever for bolting the joints and drawing the plates or fishes together simultaneously; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawing making a part of this specification, in which like letters of reference refer to like parts, and in which—

Figure 1 represents a longitudinal elevation of the track wrench and lever at work; Fig. 2, a superficial view with section of nut-holder *d*; Fig. 3, an interior view of the bend or claw proper of the clutch or claw.

This invention consists of a wrench united by universal joint to a stem, the latter moving freely in a short frame, to which is attached a claw, which passes over the railway rail and presses upon the head of the bolt to be operated upon, the lower end of the frame, at the same time, pressing against the joint or bolt plates and rail, while the nut is screwed home by means of the wrench.

A represents an iron frame, formed by bending a strong bar until the ends are parallel, and uniting them below the bend by a transverse brace, *a*, through which and the "bend" of the frame A the wrench-stem passes freely; B, a claw, also formed by bending a bar of iron, leaving the ends or arms parallel, and which are respectively pivoted to one of the arms of the wrench-frame A, near the middle of the same. The bent end of the claw is continued until the curve passes out of the line of its arms, so that when the latter lie on the rail F the bent portion or claw proper passes over the edge of said rail and presses upon the head of the bolt *m* to be operated upon; and a recess, *h*, is made upon the inner face of the claw for this purpose—*i. e.*, to retain the bolt-head. C, the wrench-stem, a stout bar of iron of a convenient length, which passes loosely through the bend in the frame A, and terminating below in a universal joint, *d*, which attaches it to the nut-holder or socket-wrench D. The upper end of the stem C is fitted with a ratchet wheel and handle, E *e f*, of a com-

mon construction. D, the nut-holder or socket-wrench, having a square recess, *g*, or nut-receiver at its outer end, and attached at the other, by a ball-and-socket or universal joint, to the wrench-stem C.

The operation of this invention is as follows: The claw B is placed over the rail F with the recess *h* upon the head of the bolt *m* which is to be operated upon, and which passes through the joint-plates *k k* and the rail F. Then the wrench-stem C, in conjunction with the frame A, is used as a lever, the lower ends of the latter being pressed against the plate *k*, drawing thereby the bolt *m* and plates *k k* into close contact with the rail. Now, the nut-holder or socket-wrench D is placed upon the nut and a revolution or two of the stem C is made until the nut is nearly home; then, with the use of the ratchet-handle E, &c., the nut is tightened down to its place.

The universal joint allows the wrench to work effectively at any reasonable angle at the same time that the claw B and downward pressure of the stem C, acting thereon, keep the joint tight until the nut is screwed home.

What I claim as my invention is—

1. A combined railroad-track wrench and lever, composed of a revolving stem, C, terminating in a socket-wrench or nut-holder, D, sliding or secured in a frame, A, to which frame is pivoted a claw, B, which passes over the rail to press the bolt-head in "fishing" or joining the rails by means of plates *k k*, substantially as and for the purposes described.

2. In combination with the stem C of the combined wrench and lever, the ratchet and handle E *f e*, substantially as described.

3. The combination and construction of the stem C with ratchet *f e* E and universal joint *d*, (or coupling to the socket-wrench D,) the socket-wrench D, frame A, claw B with recess *h* and pivots *i i*, as described.

In testimony that I, EPHRAIM MAGUIRE, claim the foregoing combined railroad-track wrench and lever, I have hereunto set my hand this 8th day of May, A. D. 1872.

EPHRAIM MAGUIRE.

Witnesses:

J. W. BRANNAN,
LOUIS BRANNAN.