No. 737,483.

PATENTED AUG. 25, 1903.

O. J. RIEDMILLER.

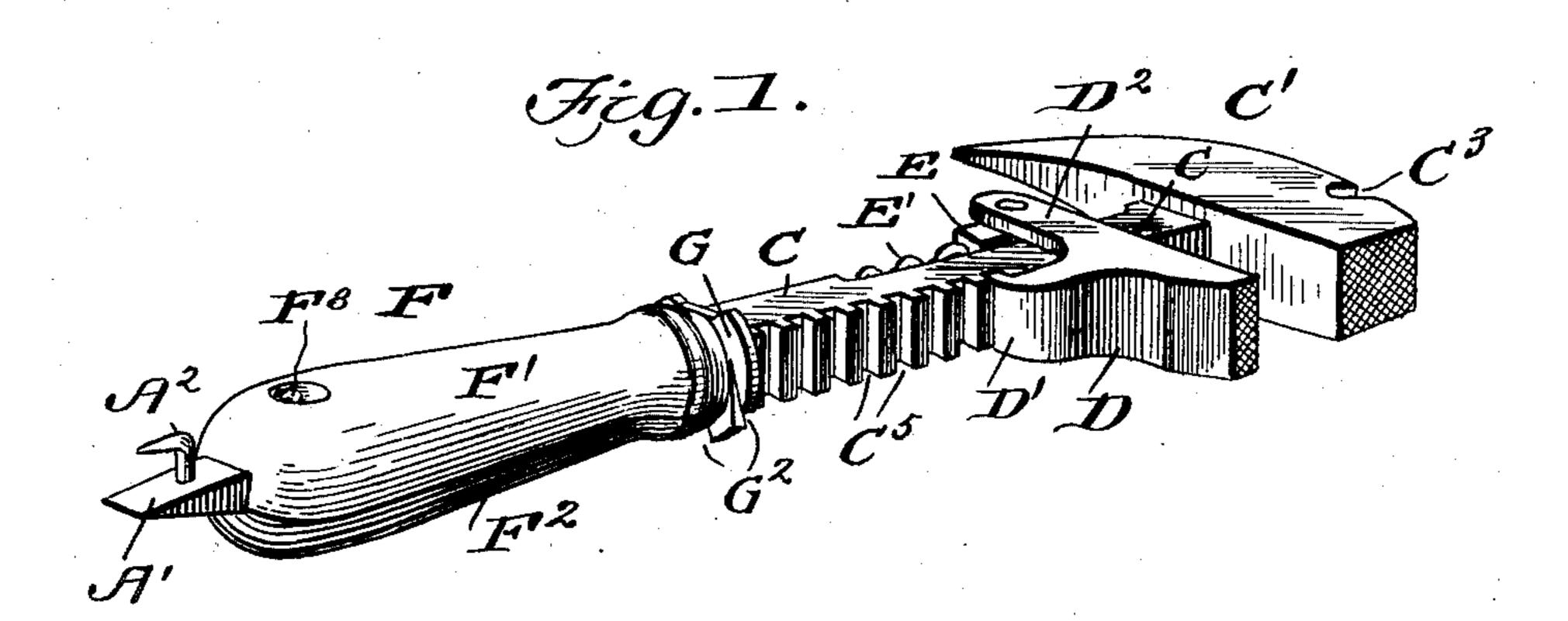
WRENCH.

APPLICATION FILED AUG. 16, 1902.

NO MODEL.

Witnesses

2 SHEETS-SHEET 1.



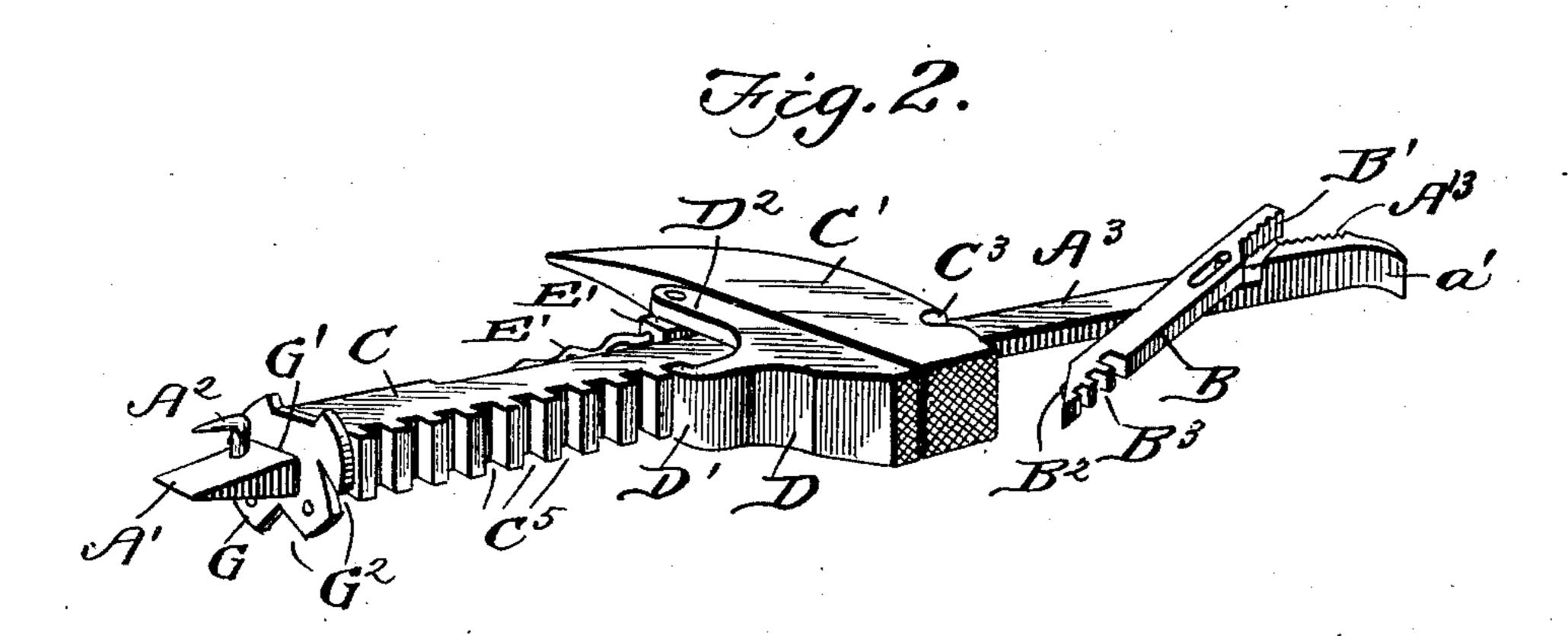


Fig. 3.

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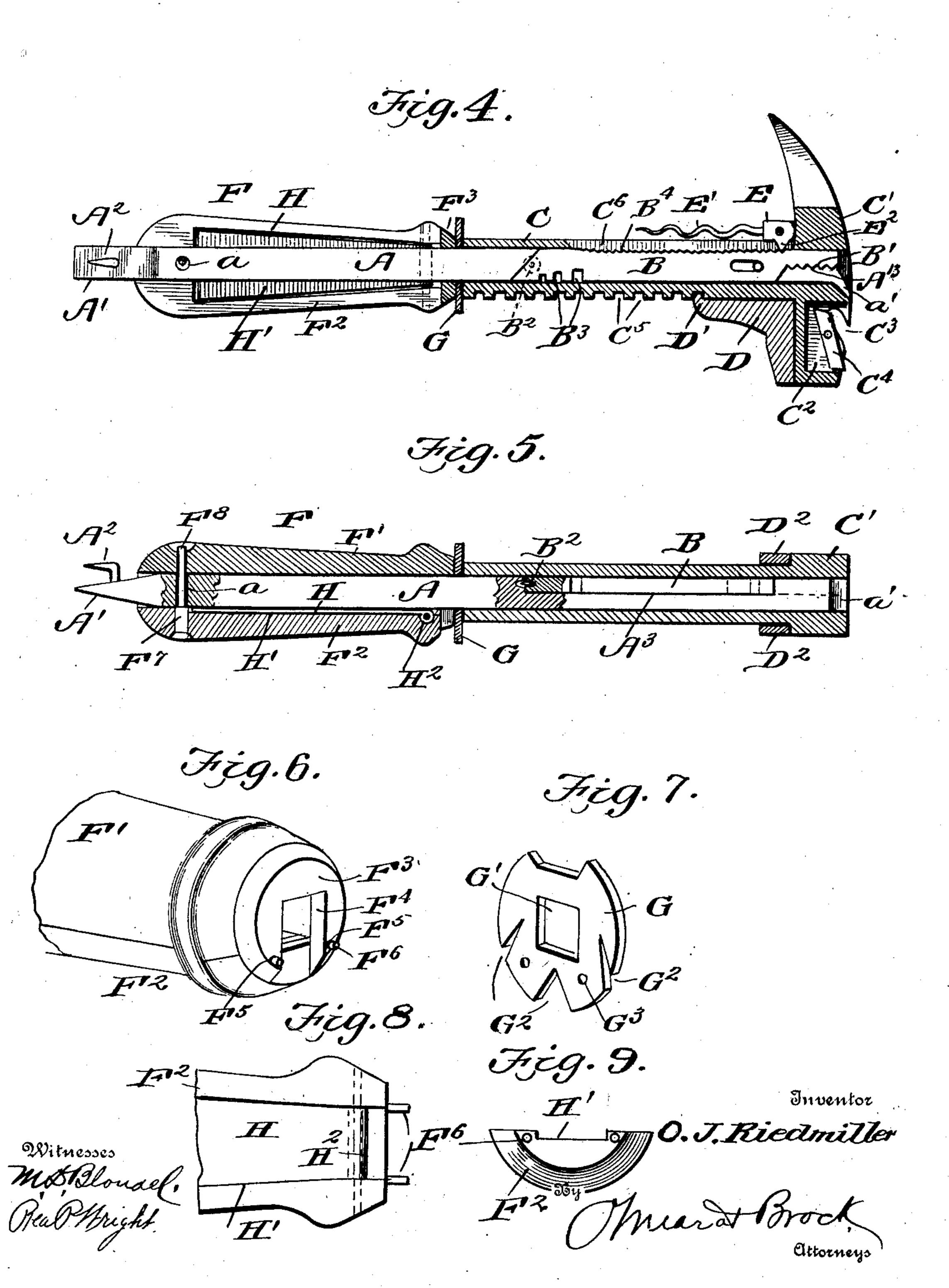
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WRENCH.

APPLICATION FILED AUG. 16, 1902.

NO MODEL.

2 SHEETS-SHEET 2.



United States Patent Office.

OTTO J. RIEDMILLER, OF SCRANTON, PENNSYLVANIA.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 737,483, dated August 25, 1903.

Application filed August 16, 1902. Serial No. 119,964. (No model.)

To all whom it may concern:

Be it known that I, OTTO J. RIEDMILLER, a citizen of the United States, residing at Scranton, in the county of Lackawanna and State 5 of Pennsylvania, have invented a new and useful Wrench, of which the following is a specification.

This invention is an improvement in wrenches; and my object is to provide a o wrench having a core portion, a sleeve thereon carrying a stationary head, a movable jaw sliding on the sleeve, and a detachable handle.

My invention comprises also certain details of construction and novelties of combination 15 and arrangement of parts, as will be fully set forth in the following specification, and pointed out in the claim, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my im-20 proved tool complete. Fig. 2 is a similar view showing the handle removed, the wrench and hammer sections positioned upon the outer end of the core, and illustrating the forward end of the core constructed as a pair 25 of pliers. Fig. 3 is a detail section taken through the handle and core sections of the tool, illustrating the manner of locking the handle in position. Fig. 4 is a horizontal section of the tool. Fig. 5 is a longitudinal ver-30 tical section of the same, and Figs. 6, 7, 8, and 9 are detail views of construction.

In carrying out my invention I employ a core A, having one end reduced, as at A', and on this reduced end an angular spur A2 is 35 formed, and at the opposite end the core has one portion of its face cut out, as at A³, and pivotally held in the said cut-out portion is a jaw B, whose outer end is serrated, as at B', and arranged to act in conjunction with the 40 serrated end A^{13} of the core A.

Slidably retained upon the core A is a sleeve C, whose outer end terminates in a head C', which is recessed at one end, as at | C², and has a notch C³ formed in its outer 45 face, and pivoted within the recess and adjacent the notch C³ is a wire-cutter C⁴. One side of the sleeve C is provided with a series of threads or notches C5, in which fits a finger D', carried by the movable jaw D, that 50 is adapted to act in conjunction with the head C' to provide a wrench. One face of

the jaw D is provided with a lug E2, which projects through a slot C⁶ in the sleeve and which engages the serrated face B4 of the movable jaw of the pliers, and by this ar- 55 rangement the movable head may be posi-

tively locked in its adjusted position.

A handle F is arranged upon the core of the tool and is preferably made in two sections F' and F^2 , the section F' having its in- 60 ner end terminating in a plate F³, in which is formed an opening F^4 for the admission of the core A, and this plate is also provided upon opposite sides of the opening with apertures F⁵, in which are arranged to fit the pins 65 or projections F⁶, carried by the lower section F², and which are arranged for locking the inner sections of the handle together. The outer end of the section F^2 has a pin F^7 , which projects through an aperture a in the 70 core A and extends up through the section F' of the handle. Said pin terminates at its free end in a head F⁸, which is arranged to engage a shoulder F9, provided in the upper face of the section F'. By this arrangement 75 it will be readily seen that the two sections of the handle are firmly clamped and locked together upon the core. The sections of the handle are locked together by inserting the pins through the openings of the plate F³ and 80 slipping the pin F^7 into the opening of the section F' of the handle, and when the sections are closed together the head F⁸ of the pin will slip past the shoulder F⁹ and securely and firmly lock the sections together. 85

By the aforesaid construction the advantages, operation, and arrangement of the tool so constructed will be readily apparent to those skilled in the art to which it appertains.

It will be particularly noted by reference to Figs. 2 and 5 of the drawings that the outer end of the core terminates in a bent portion a', that forms the double purpose of holding the head C' and sleeve C in position 95 upon the core and also by tapering the end, as shown, a tack-puller is provided. Further, that a pin F⁷ may be constructed of a separate and distinct piece from the section F², or it may be made integral therewith, if it 100 should be found desirable.

Having thus fully described my invention,

what I claim as new, and desire to secure by Letters Patent of the United States, is—

In a wrench, the combination with a core serrated along its upper face, of a notched sleeve thereon, a jaw formed at the outer end of said sleeve, the sleeve being cut away adjacent the serrated portion of the core, a movable jaw sliding on the sleeve, a detachable

handle on the core in the rear of the sleeve, means for locking the sliding jaw to the sleeve, and means for securing the handle to the core.

OTTO J. RIEDMILLER.

Witnesses:

ALONZO HUBBARD, WM. NOONAN.