(No Model.)

C. D. WELLS & C. A. NEWLIN.

WRENCH.

No. 285,449. Patented Sept. 25, 1883.

Fig. 1.

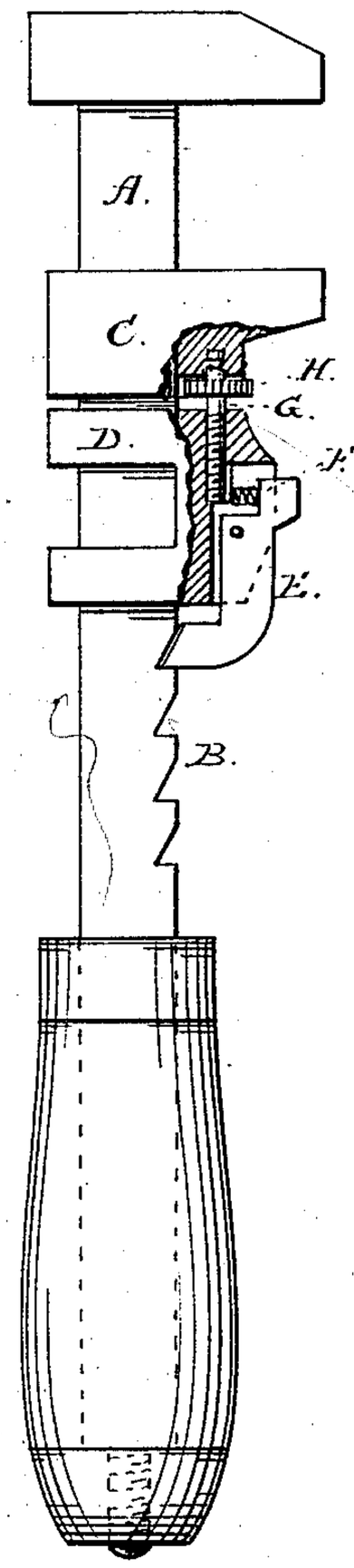


Fig. 2.

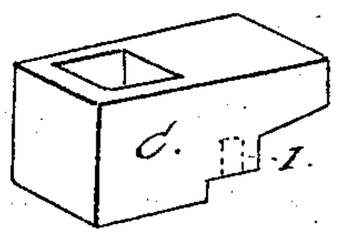


Fig. 3.

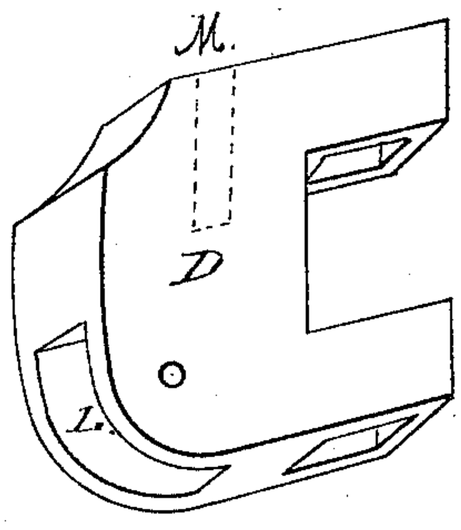
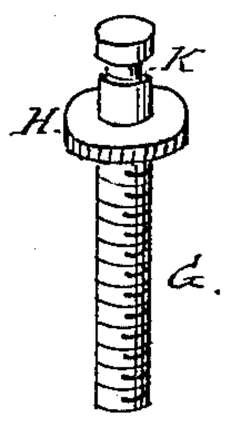


Fig. 4.



Attest;

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UNITED STATES PATENT OFFICE.

CHARLES D. WELLS AND CHARLES A. NEWLIN, OF MILLVILLE, N. J.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 285,449, dated September 25, 1883.

Application filed October 13, 1882. (No model.)

To all whom it may concern:

Be it known that we, CHARLES D. WELLS and CHARLES A. NEWLIN, citizens of the United States, residing at Millville, county of Cumberland, State of New Jersey, have invented a new and useful Sliding Wrench, of which the following is a specification.

Our invention relates to nut-wrenches having sliding jaws, and our improvement consists in a movable jaw and slide of two parts connected by a thumb-screw adapted to effect a fine adjustment, and a pawl adapted to engage a series of notches on the main bar to effect the coarse adjustment. These objects we attain by means of the mechanism shown in the accompanying drawings, in which—

Figure 1 shows a side view of the whole wrench, parts being cut away and drawn in section to better expose the working parts. Figs. 2, 3, and 4 show enlarged details of the movable parts.

A is the main bar of the wrench, its upper surface provided with a series of toothed notches, B. C is the sliding jaw; D, the slide carrying the pawl E.

A spiral spring, F, under the thumb end of the pawl keeps its point always in contact with the main bar. The jaw C and slide D are connected by a screw, G, which is provided with a head, which is inserted in the recess I of the jaw C, and there held by a set-screw engaging the annular groove shown at K, Fig. 4, and threaded in the slide D. The screw has also a thumb-piece, H, by which it is operated.

I, Fig. 2, shows the recess for the head of the connecting thumb-screw G, and M, Fig. 3, the hole for the threaded end. L, Fig. 3, shows the recess for the pawl E.

The operation of this device is as follows: To open the wrench the thumb is placed on the pawl E, which is thereby raised out of the notches B, and the slide with the jaw C is drawn back instantaneously as far as necessary. In closing the wrench on a nut the slide is simply pushed forward till the jaws meet on the nut, or as nearly so as the pawl and teeth will permit. If, however, the jaws do not quite take hold, the thumb-screw H is turned and the jaw C pushed forward or retracted, as may be necessary, till the desired grip is obtained. The whole action is simple and effective.

We are aware of patent to McDonald, No. 47,067, March 28, 1865, and of the formation and operation of his device, and we disclaim, broadly, such construction.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The combination of jaw C, formed as shown, recessed to receive the head of the screw G, the thumb-screw G, provided with shouldered head adapted to work in the recess I of the jaw C, the sliding frame D, provided with the recess L, adapted to receive the pawl and spring, and threaded to receive the threaded end of the thumb-screw G, the pawl E, and spiral spring F, with the main bar B, formed and notched as shown and described.

CHARLES D. WELLS.
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Witnesses:
REBECCA M. WELLS,
ELLA MAUD RETTIT.