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Patented Sept. 5, 1899.

C. L. DUNHAM.
WRENCH FOR WELL DRILLING TOOLS.

(Application filed May 11, 1899.)

(No Model.)

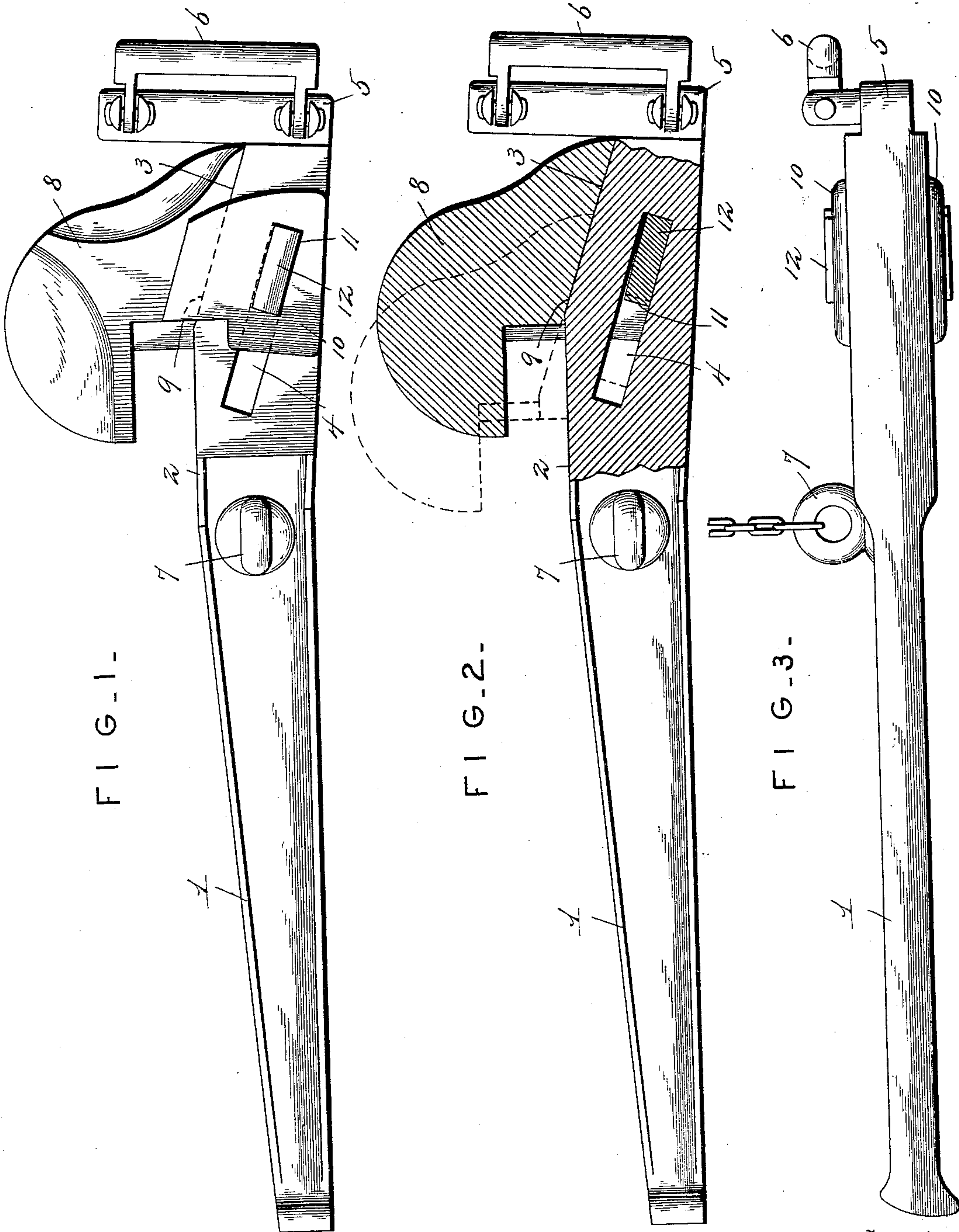


FIG. 1-

FIG. 2-

FIG. 3-

Witnesses

Harry L. Amer.
Rexford M. Smith.

Inventor

Charles L. Dunham,
By V. B. Stockbridge.
Attorney.

UNITED STATES PATENT OFFICE.

CHARLES L. DUNHAM, OF CENTRE VIEW, OHIO, ASSIGNOR OF ONE-HALF TO
CHARLES C. CHAMBERLAIN AND FRANK BURT, OF SISTERSVILLE, WEST
VIRGINIA.

WRENCH FOR WELL-DRILLING TOOLS.

SPECIFICATION forming part of Letters Patent No. 632,555, dated September 5, 1899.

Application filed May 11, 1899. Serial No. 716,433. (No model.)

To all whom it may concern:

Be it known that I, CHARLES L. DUNHAM, a citizen of the United States, residing at Centre View, in the county of Monroe and State of Ohio, have invented a certain new and useful Wrench for Well-Drilling Tools, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to wrenches for coupling and uncoupling the sections of drill-rods for well-boring or for drilling apparatus.

In the process of coupling and uncoupling the sections of a drill-rod wrenches of considerable weight have to be used, and in order that they may be adjusted and held at the proper elevation to grip the sections they are suspended from a derrick or other support above the plane in which the tool is operated.

20 When thus suspended, it is desirable that the wrench be adapted to grasp or embrace the stem of drill-sections of different sizes, and it is the object of my invention to provide a wrench whose jaws are easily or readily adjusted to or from each other.

25 The invention consists in the combination of a lever or bar having a straight portion to form one jaw of the wrench, an incline at one extremity and a slot through the same parallel with the incline, a movable jaw arranged parallel with the straight portion of the lever having flanges to embrace the lever, an inclined bearing-face parallel with the bevel or incline on the lever, and a key extending through the flanges of the movable jaw and the slot in the fixed jaw or lever.

30 The invention also consists in the details of construction hereinafter described and claimed.

40 In the drawings forming a part of my specification, Figure 1 is a plan showing my improved wrench as applied to a section of a drill-rod. Fig. 2 is a central section of the same. Fig. 3 is a side elevation showing how the wrench is suspended.

45 1 is a lever of considerable length having a straight plane face 2 and a relatively-inclined plane face 3. The lever is also provided with an elongated slot or opening 4, parallel with

the face 3. At the extremity next the inclined face is a cross-head 5, to which is pivoted a handle 6 for conveniently lifting and handling the wrench. There is also attached to or formed integral with the lever an eye or hook 7, through the medium of which the wrench as a whole may be suspended for use.

8 is a movable jaw whose gripping-face is parallel with the face 2, and formed with or constituting a part of this jaw is a part 9, having an inclined face adapted to fit and slide upon the inclined face 3 of the lever. The movable jaw is formed with or has attached to it side flanges 10 10, which embrace the lever and serve as guides for the movable jaw, the flanges having elongated rectangular openings or slots 11, which when the jaw is in position register with the slot 4 in the lever.

The lever and the movable jaw are coupled together by means of a key 12. When thus constructed and coupled together, by sliding the movable jaw upon the lever the space between the fixed and movable jaw is enlarged or contracted to adapt the wrench to grasp or grip drill-sections of different sizes. The broad key and the extended inclined bearing-surfaces between the lever and the movable jaw furnish a substantial and adequate support for resisting strain applied to the jaws of the wrench in operation.

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

A wrench involving the combination of a lever having a straight portion to form one jaw of a wrench, a face inclined with relation to said straight portion, an elongated slot in a plane parallel with the inclined face, a flanged jaw adapted to slide backward and forward over the inclined face, and a key for coupling the lever and the movable jaw, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES L. DUNHAM.

Witnesses:

BERNARD O. HALL,
JOHN W. WHITE.