

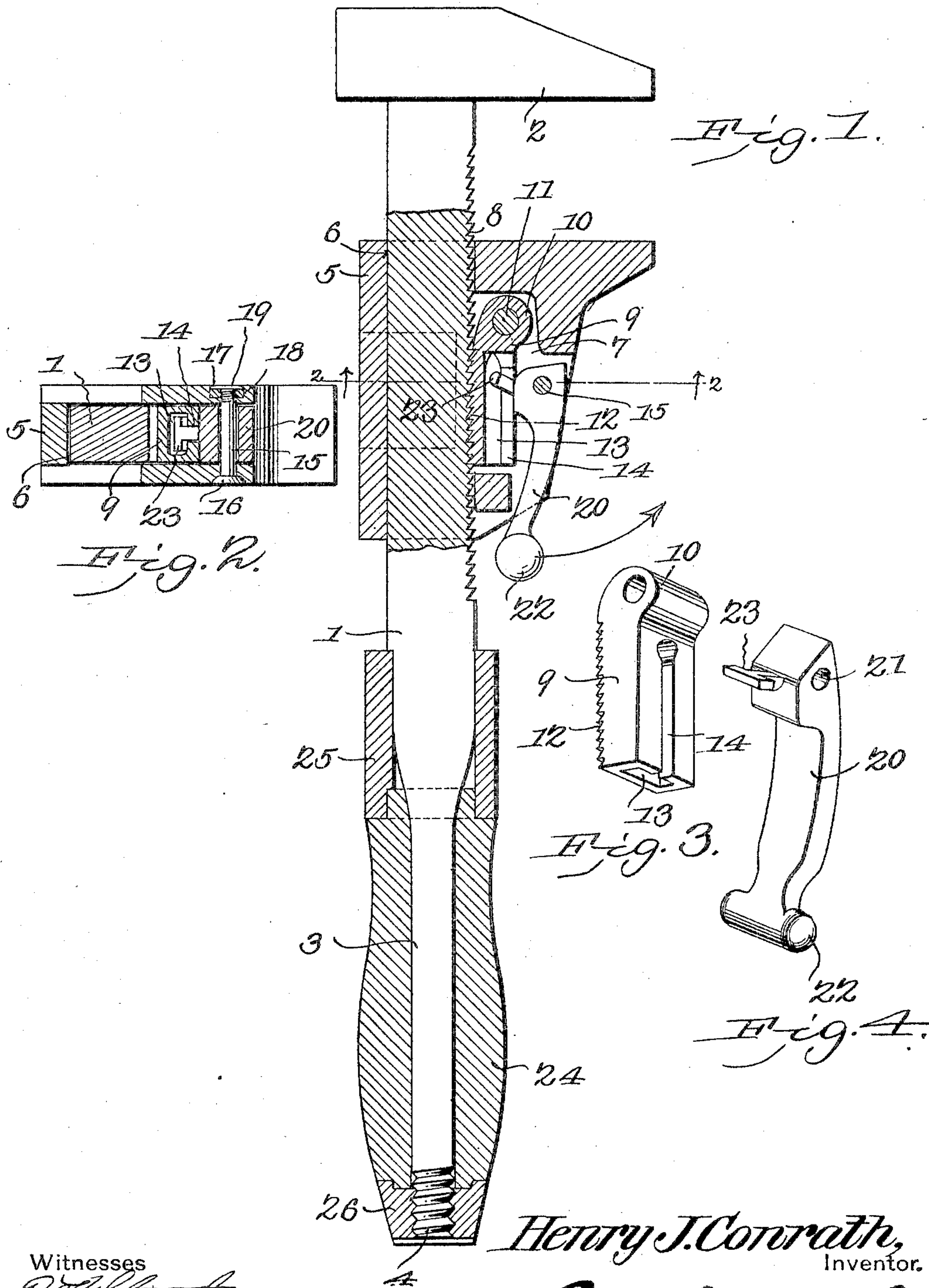
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PATENTED AUG. 22, 1905.

H. J. CONRATH.

WRENCH.

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Witnesses
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UNITED STATES PATENT OFFICE.

HENRY J. CONRATH, OF MARIETTA, OHIO.

WRENCH.

No. 797,560.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HENRY J. CONRATH, a citizen of the United States, residing at Marietta, in the county of Washington and State of Ohio, have invented a new and useful Wrench, of which the following is a specification.

This invention relates to slidable-jaw wrenches, and has for its object to provide novel means carried by the slidable jaw to adjustably interlock the same with the stock of the wrench and to have the controlling part of said locking or clamping means in position for convenient access, so as to facilitate the adjustment of the jaw. It is also proposed to have the parts of the locking means effectually housed within the movable jaw, so as to protect them against damage and displacement and at the same time to permit convenient assemblage and removal of these parts whenever desired.

The invention consists in the combination and arrangement of parts as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, Figure 1 is a longitudinal sectional view of a wrench embodying the features of the present invention. Fig. 2 is a cross-sectional view on the line 2 2 of Fig. 1. Fig. 3 is a detail perspective view of the jaw-locking member. Fig. 4 is a detail perspective view of the lever for controlling the locking member.

Like characters of reference designate corresponding parts in each and every figure of the drawings.

The present wrench includes a stock 1, which is provided at one end with a conventional form of fixed jaw 2, its opposite end being reduced to form a cylindrical stem 3, which is terminally threaded, as at 4. Upon the stock is a conventional form of slidable jaw 5, which is provided with an open-ended longitudinal passage 6, receiving the stock, so as to permit slidable movement of the jaw. In what will be termed the "front" of the movable jaw there is a recess 7, which exposes the ratchet-teeth 8 upon the adjacent edge of the stock. Within this recessed portion of the

slidable jaw there is a pivotal dog 9, which has its forward end provided with an eye 10 for the reception of a transverse pivot-pin 11, which pierces opposite sides of the jaw for the pivotal support of the dog. That face of the dog which is adjacent the toothed edge of the stock is toothed, as at 12, to take into the teeth of the stock, so as to lock the movable jaw at any adjustment with respect to the fixed jaw 2. A longitudinal channel 13 is provided in the dog and opens through its free end, there being a slot 14 in the exposed outer face of the dog and intersecting the channel 13, thereby providing an internally-flanged channel which is the equivalent of a dovetailed groove. At the outer side of the dog and about midway between the ends thereof there is a pin 15, which pierces the jaw and is provided at one end with a head 16, countersunk in one external face of the jaw, the other end of the pin being reduced and threaded for the reception of a circular nut 17, which is let into a recess 18 in the jaw, so as to be flush with the exterior thereof, said nut being provided with a diametric groove 19 in its outer face to form a screw-driver seat for convenience in securing and removing the pin. It will here be explained that the pin 11 is secured in place in the same manner as described for the pin 15. A lever 20 is provided at one end with an eye 21, receiving the pin 15, upon which the lever is fulcrumed, the free end of the lever being projected in rear of the movable jaw and provided with an enlargement or finger-piece 22. Upon the inner face of the lever and adjacent the fulcrum-pin thereof there is a headed or T-shaped pin 23, which works in the groove or channel 13, whereby the dog may be moved into and out of engagement with the stock by manipulation of the lever 20.

Upon the stem 3 there is a wooden hand-grip 24 of the usual form and in the nature of a sleeve, the inner end of the grip being received within a metallic ferrule 25, fitting the non-circular outer end portion of the stock 1, so as to prevent rotation thereof, there being a suitable nut 26 fitted to the threaded extremity 4 of the stem, so as to hold the handle in place. By removing the nut 26 the handle 24 and ferrule 25 may be removed from the stem to enable the application and removal of the movable jaw, and thereby to permit of the convenient assemblage of the dog 9 and lever 20.

Among the several advantages of the pres-

ent device it will be noted that the free end of the lever 20 extends toward the handle 24, and therefore may be manipulated by the thumb without removing the hand from the handle, thereby permitting of the convenient adjustment of the movable jaw. Moreover, as the lever 20 is positively connected to the dog 9 through the medium of the pin or link 23 the dog is positively moved into and out of engagement with the stock, thereby to insure the prompt locking and releasing of the movable jaw.

Having fully described the invention, what is claimed is—

1. In a wrench, the combination with a stock having a fixed jaw, of a movable jaw, a pivoted dog carried by one of said jaws for clamping the movable jaw in adjusted position, said dog being provided with a flanged groove, and a controlling-lever fulcrumed in advance of the pivoted dog and provided with a transversely-disposed headed pin working in the

flanged groove of the dog for moving said dog to operative and inoperative positions.

2. In a wrench, the combination with a stock having a fixed jaw, of a movable jaw, a pivoted dog carried by one of said jaws for clamping the movable jaw in adjusted position, said dog being provided with a flanged groove extending from its pivotal point and opening through the free end of the dog, and a controlling-lever fulcrumed in advance of the pivoted dog and provided with a projecting pin having laterally-extending ears adapted to engage the walls of the flanged groove for moving the pivoted dog to operative and inoperative positions.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

HENRY J. CONRATH.

Witnesses:

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