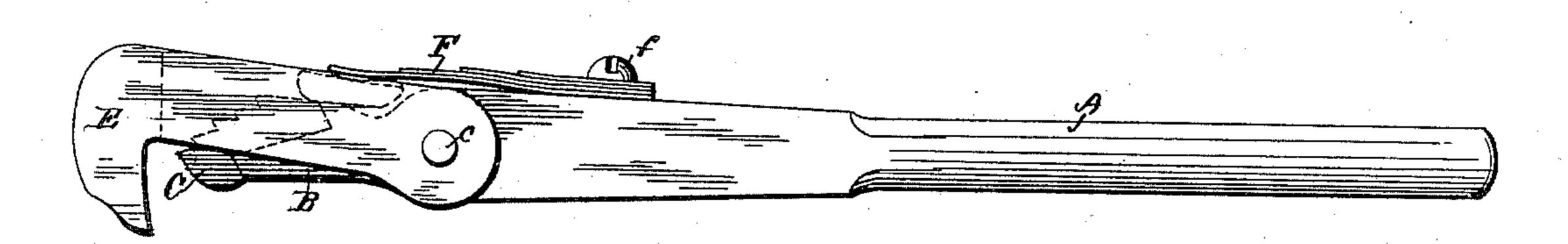
(No Model.)

H. NEWTON.

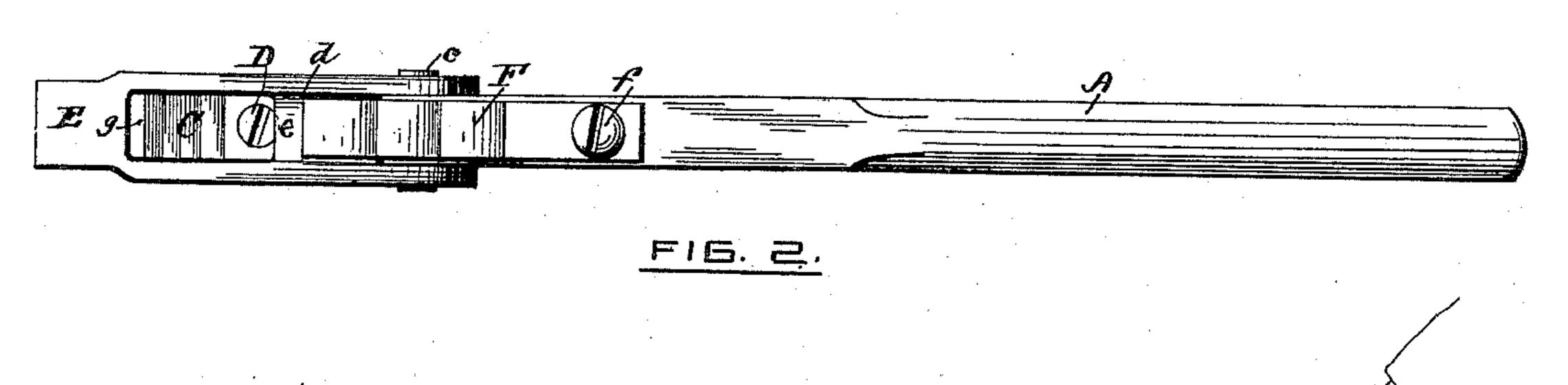
PIPE WRENCH.

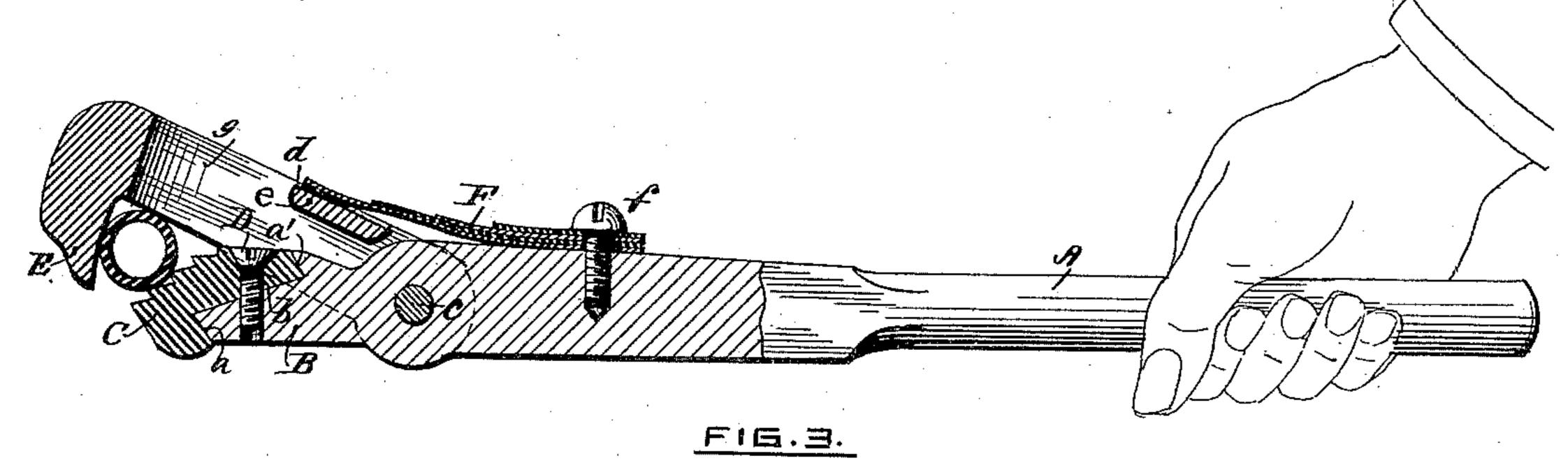
No. 341,815.

Patented May 11, 1886.



F15. 1.





WITNESSES:
Thas & Schuel

Joseph J. Schollield

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per S, Scholfield,

attorney

N. PETERS, Photo-Lithographer, Washington, D. C.

United States Patent Office.

HENRY NEWTON, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO HIMSELF, AND HERBERT O. JOHNSON, OF BOSTON, MASSACHUSETTS.

PIPE-WRENCH.

SPECIFICATION forming part of Letters Patent No. 341,815, dated May 11, 1886.

Application filed July 24, 1885. Serial No. 172,589. (No model.) -

To all whom it may concern:

Be it known that I, Henry Newton, of Providence, in the State of Rhode Island, have invented a new and useful Improvement in Pipe-Wrenches, of which the following is a specification.

My invention relates to that class of pipewrenches in which a hand-lever having a removable serrated jaw-piece at its end is provided with a pivoted engaging-hook; and it consists in the improved construction of the removable serrated jaw-piece and its improved attachment to the hand-lever, whereby a strong and durable joint is secured, as hereinafter

15 fully set forth.

Figure 1 is a side elevation of my improved wrench. Fig. 2 is a top view of the same. Fig. 3 is a partial longitudinal section showing the working engagement of the wrench and

20 pipe.

In the accompanying drawings, A is the handle of the wrench, and B is an arm adapted to receive the serrated removable jaw-piece C, which is preferably made in L form to fit 25 against the shoulders a a', and the intervening inclined surface b at the end portion of the arm B. The jaw-piece C is securely held in position by means of the screw D. The hookjaw E is pivoted to the lever A B at the point 30 c, and to the back of the shank of the handle A is secured the leaf-spring F, the outer end of which rests in a flat groove, d, at the back of the hook E. The cross-piece e, upon which the end of the spring F is made to rest, will 35 also serve as a stop against the extreme backward movement of the hook, the rear end of the said cross-piece striking against the shank of the handle A. The groove d serves to prevent the end of the spring from being moved 40 laterally, and by reason of the groove d a single screw, f, will be sufficient to secure the spring to the handle A. The hook E is provided with an open slot, g, in order to secure

the proper degree of lightness for the purposes of the wrench.

The pipe-wrench constructed as above described is adapted for a number of sizes of pipe, and separate removable jaw-pieces C to accompany the wrench are furnished with serrations of various degrees of fineness, thus 50 adapting the wrench to all classes of work.

Heretofore in pipe-wrenches of this class the services of a blacksmith were required to make repairs for the ordinary wear and injury to the serrated end of the hand-lever, 55 and the degree of fineness of the serrations were not susceptible of change to suit the exigencies of ordinary work; but by my improvement the wrench can be conveniently kept in good working order and repair at 60 slight expense, and is made adapted for various classes of work within the range of the proper movement of the pivoted jaw.

The serrations of the removable jaw are preferably made in slightly-rounded form, in 65 order that the corners of the teeth may be protected by the rounded central portion, and thus be prevented from breaking.

I claim as my invention—

1. In a pipe-wrench, the combination of the 70 pivoted hook-jaw and the hand-lever with the removable serrated jaw-piece, made in L form, and its attaching-screw, substantially as described.

2. In a pipe-wrench, the combination of the 75 hand-lever provided with the removable serrated jaw-piece, made in L form, and its attaching-screw, the pivoted hook provided with a cross-piece, which serves as a limiting-stop for its backward movement, and the spring for 80 operating the pivoted hook, substantially as described.

HENRY NEWTON.

Witnesses:

SOCRATES SCHOLFIELD, CHAS. F. SCHMELZ.