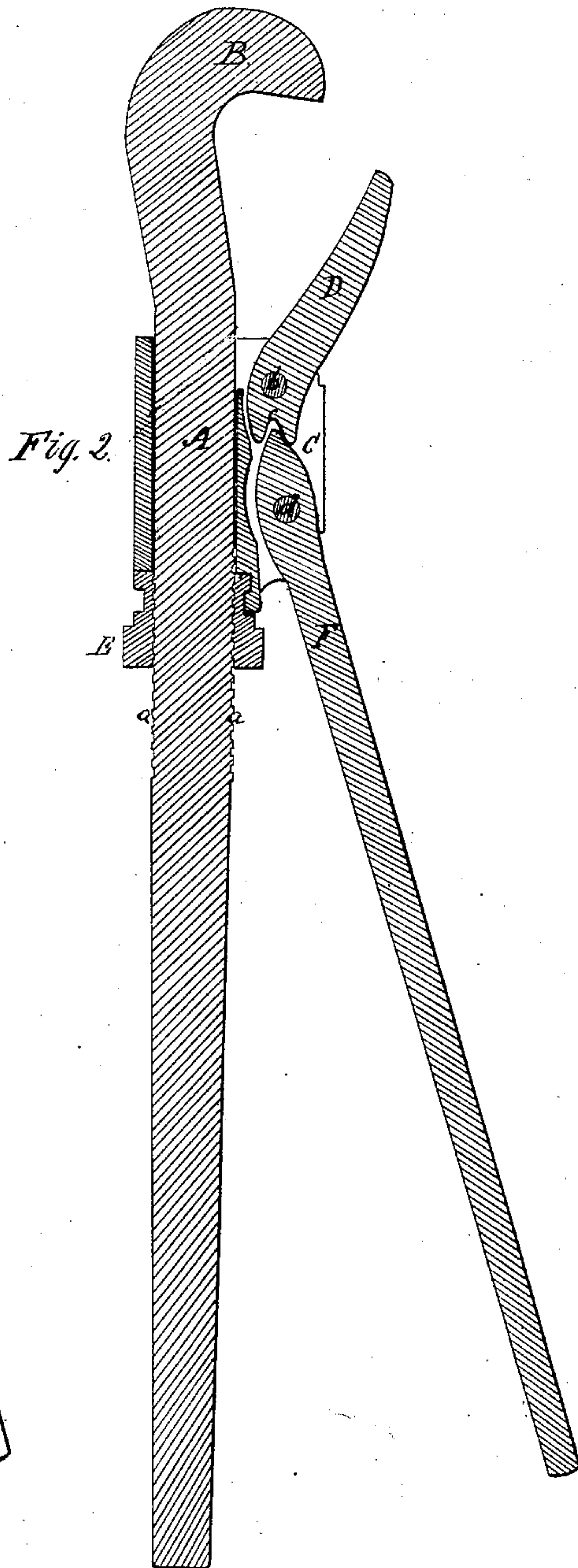
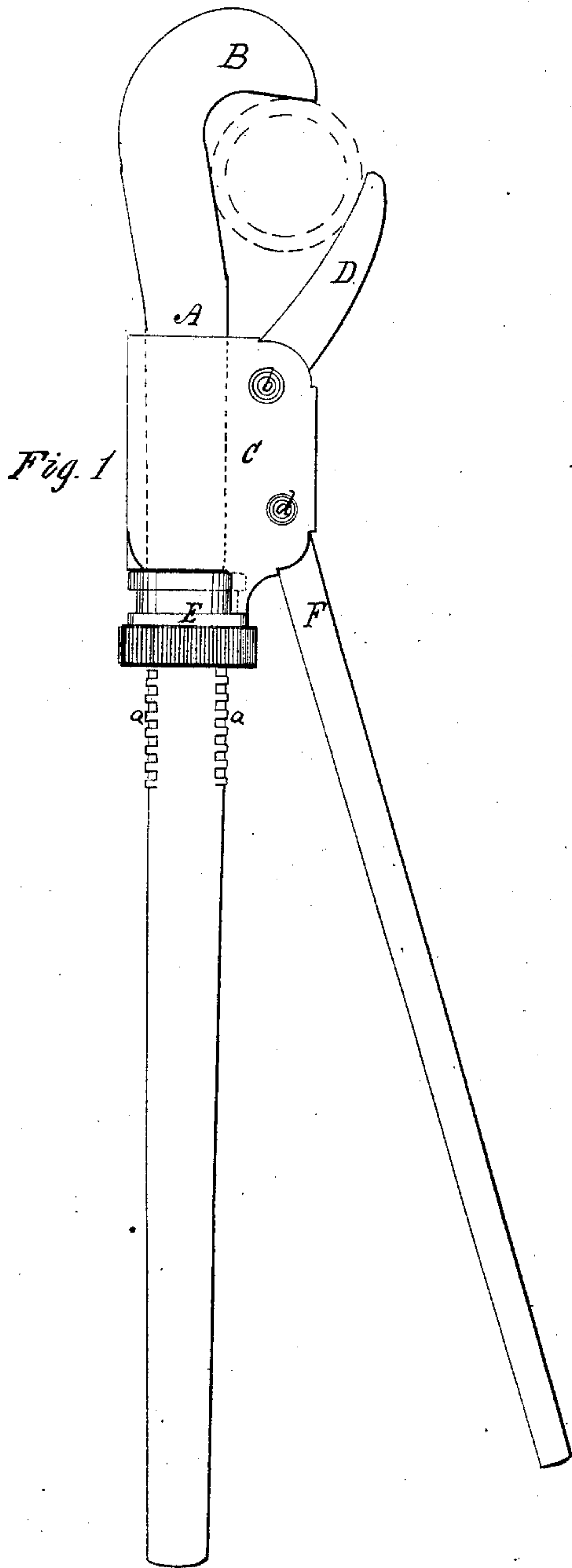


A. G. Coes,

Wrench.

N^o 20,407.

Patented June 1, 1858.



UNITED STATES PATENT OFFICE.

A. G. COES, OF WORCESTER, MASSACHUSETTS.

PIPE-TONGS.

Specification of Letters Patent No. 20,407, dated June 1, 1858.

To all whom it may concern:

Be it known that I, AURY G. COES, of the city and county of Worcester and State of Massachusetts, have invented an Improved

5 Wrench or Pipe-Tongs for Turning or Revolving Cylindrical Bodies; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, of which—

10 Figure 1, is a side view, and Fig. 2, a longitudinal section of it.

In such drawings, A, denotes a shank or bar provided with a stationary jaw or claw, B, arranged or projecting from its upper

15 part.
A slider, C, carrying a movable jaw or claw, D, is made to embrace the shank, A, on its four sides and to have a milled screw nut, E, so applied to it and a male screw, *a*, *a*, formed on the shank that when such nut is revolved on the shank, motion will be imparted to the slider such as will move it either toward or away from the jaw, B. The movable jaw, D, turns on a pin *b*, as

25 a fulcrum, and has a notch, *c*, made in its end below the pin *b*.

A lever F, turning on a pin or fulcrum *d*, and working in the slider, C, enters at its upper end, the notch, *c*, which with the said

30 end of the lever should be so formed as to cause the jaw, D, to be turned on its fulcrum either toward or away from the shank, A, whenever the lever, F, is moved either toward or away from the shank.

35 My wrench presents the advantages of the common coach wrench for square nuts, with those of the ordinary pipe tongs, as the jaws are not only operated by two levers, but by

means of the adjusting screws. The movable jaw can be readily adjusted to and 40 maintained in any proper position with respect to the hooked jaw. This enables a person not only to operate the jaws expeditiously, but to grasp an object between them with great firmness. 45

I do not claim making the movable claw or jaw of a wrench adjustable with respect to the stationary claw or jaw by means of a screw on the shank of the latter and a screw nut working on such screw and so connected 50 with the slide carrying the movable jaw as when rotated to cause the movable jaw to change position relatively to the stationary claw. Nor do I claim pincers as ordinarily constructed, that is to say, in which each 55 jaw or nipper forms part of one of two levers which cross one another and turn on a common pin or fulcrum, whether the said fulcrum be movable in a slot in one of the levers or not, but 60

What I do claim is—

My improved pipe tongs or wrench as made not only with its movable jaw, D, connected with a slider, C, embracing the shank, A, of the stationary jaw B, and made ad- 65 justable thereon by a nut E, and screw, *a*, as described, but with a lever, F, separate from the movable jaw D, and applied thereto and to the slider, C, substantially in manner as specified. 70

In testimony whereof, I have hereunto set my signature.

AURY G. COES.

Witnesses:

J. HENRY HILL,
THOS. KINNICUTT.