

W. & F. Kearney,

Wrench.

No 35,702.

Patented July 1, 1862.

Fig. 1.

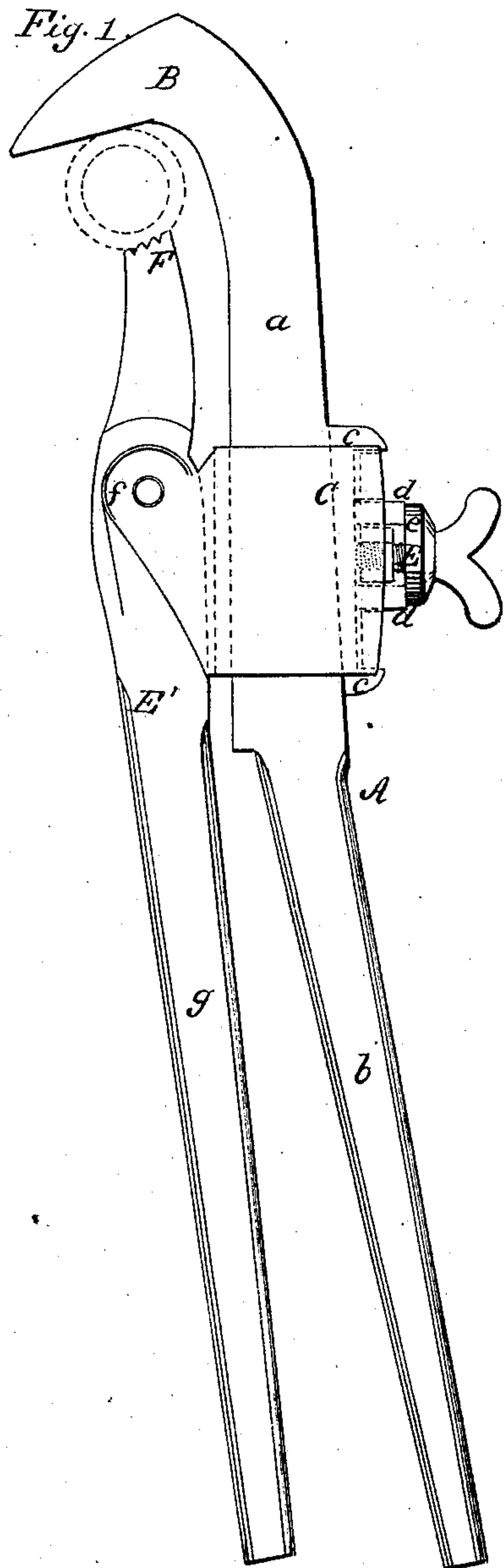
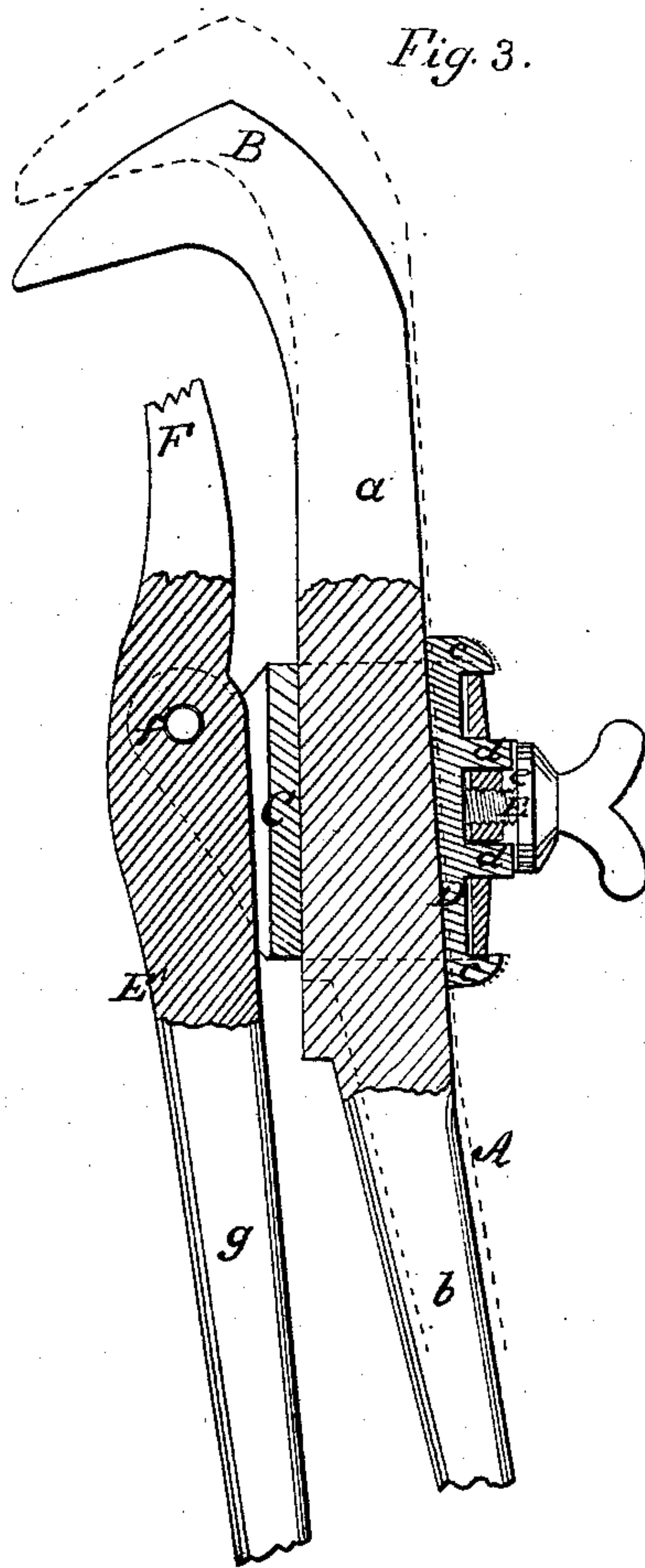


Fig. 2.



Fig. 3.



Witnesses
James Laird
R. G. Bailey

Inventor
William Kearney
Francis Kearney

UNITED STATES PATENT OFFICE.

WILLIAM KEARNEY, OF UNION, BERGEN COUNTY, AND FRANCIS KEARNEY,
OF NEWARK, NEW JERSEY.

IMPROVEMENT IN PIPE-TONGS.

Specification forming part of Letters Patent No. 35,762, dated July 1, 1862.

To all whom it may concern:

Be it known that we, WILLIAM KEARNEY, of Union township, Bergen county, and State of New Jersey, and FRANCIS KEARNEY, of Newark, Essex county, and State aforesaid, have invented a new and useful Improvement in Pipe Tongs or Wrenches; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side view of our invention; Fig. 2, an edge view of the same; Fig. 3, a side sectional view of the same taken on the line *x x*, Fig. 2.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to an improvement in that class of wrenches which are commonly termed "pipe-tongs" or "pipe-wrenches," and which are used for grasping and turning cylindrical articles—such as gas-pipes, tubing, rods, &c.—for the purpose of screwing them together or forming connections.

The object of this invention is to obtain a means for readily adjusting the sliding jaw relatively with the fixed jaw, so that the wrench may be adjusted with facility to suit different-sized pipes or tubes, and at the same time be capable of being firmly secured in position, so that it cannot casually move when the wrench is applied to its work.

To enable those skilled in the art to fully understand and construct our invention, we will proceed to describe it.

A represents one leg of the wrench or tongs, which has a curved jaw, B, formed at one end, the portion *a* of said leg adjoining the jaw being of rectangular form and somewhat taper, the front and back edges of *a* being somewhat beveled to form the taper, and the two other sides being parallel with each other. The other part, *b*, of said leg is cylindrical and forms the handle which is grasped by the operator in using the implement. The widest part of *a* adjoins the part *b* of the leg, as shown clearly in Figs. 1 and 3.

On the rectangular taper part *a* of the leg A there is fitted a sliding collar, C, the interior of which is considerably wider than the lowest and widest part of the portion *a* of leg A, so as to admit of a key or wedge, D, being inserted in it at the back edge or surface of *a*. The two other sides of the collar are in direct contact with the parallel sides of *a*, no play

being allowed. The ends of the key or wedge D are bent or formed with lips *c c*, which project beyond the upper and lower edges of the collar C, and retain the wedge in the collar, as shown in Figs. 1 and 3. The key or wedge is provided with two laterally-projecting arms, *d d*, which extend through holes in the collar and project a short distance out from it.

E is a thumb-screw which passes through the back of the collar C, and bears against the key or wedge D. This thumb screw is provided with a head, *e*, which as the screw is turned into the collar and bears against D also bears against the arms *d d* thereof, as shown more particularly in Fig. 3.

To the front side of the collar C there is attached by a sector-joint, *f*, a leg, E', having a serrated jaw, F, at the end, which is just within the jaw B of the leg A. The other part of the leg E', at the opposite side of the joint *f*, is rounded to form a handle, *g*, like *b* of the leg A.

The article to be turned or operated upon is grasped between the two jaws B F, as shown in Fig. 1, the operator pressing the two handles *b g* toward each other, and in order to adjust the jaw F to suit tubes or pipes of different diameters the screw E is turned out or unscrewed, so as to take all pressure off from the key or wedge D and allow the collar to be moved on the part *a* of the leg A. When the jaw F is in the proper position, the screw E is screwed up and the key or wedge D thereby pressed against the outer surface of the part *a* of the leg A, while the inner surface of the front part of the collar C bends against the opposite edge or surface. By this arrangement the collar C is firmly secured on the part *a*, as a good bearing-surface is obtained the whole length of the collar, and in consequence of *a* being somewhat taper the collar cannot be forced down on *a*, or from the jaw B, under any pressure to which it may be subjected through jaw F when the wrench is in use.

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

The collar C, with the leg E' attached, in combination with the wedge D, thumb-screw E, and inclined part *a* of the leg A, all arranged as and for the purpose herein set forth.

WILLIAM KEARNEY.
FRANCIS KEARNEY.

Witnesses:

JAMES LAIRD,
J. W. COOMBS.