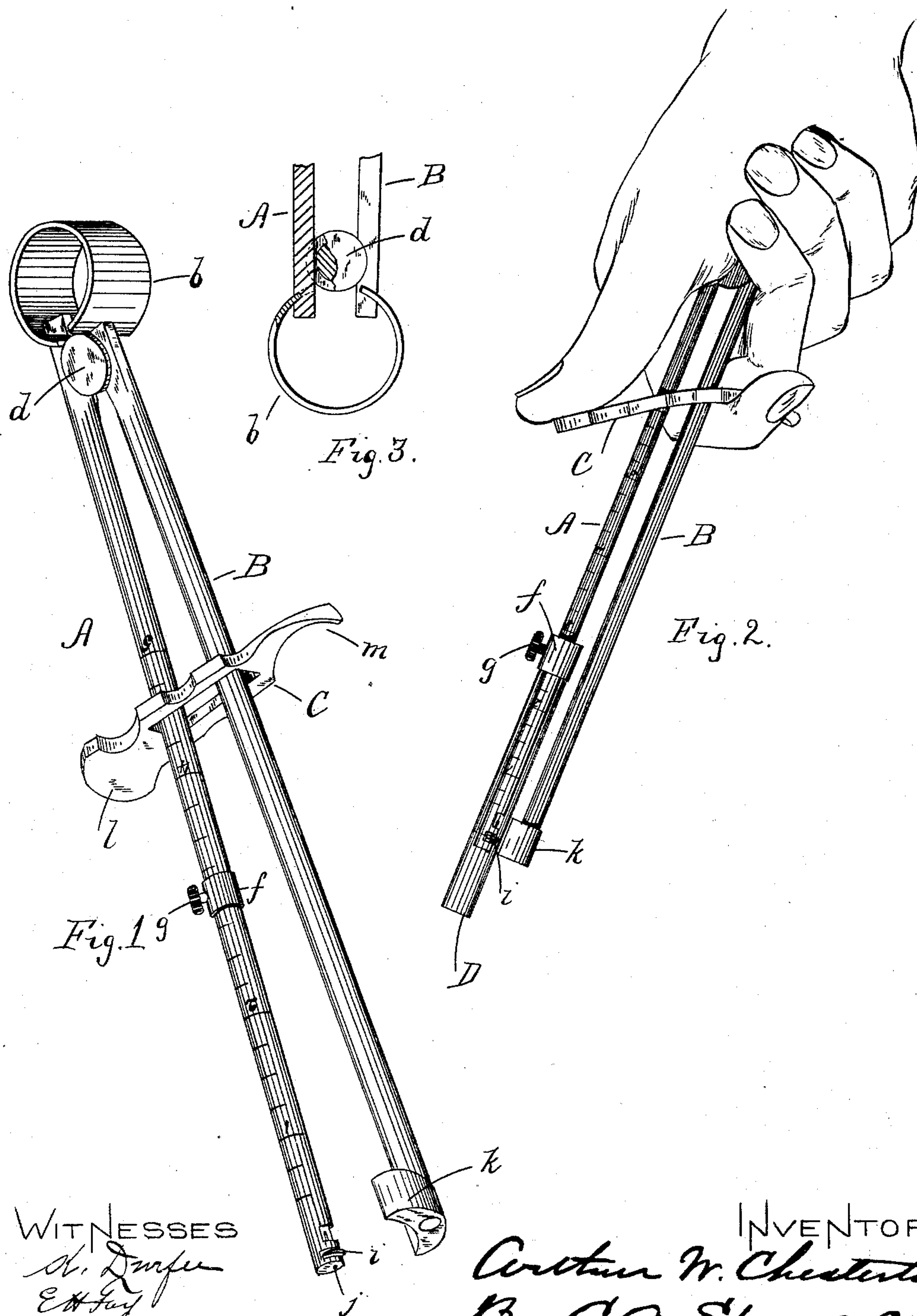


(No Model.)

A. W. CHESTERTON.
TOOL FOR CUTTING GLASS GAGE TUBES.

No. 483,778.

Patented Oct. 4, 1892.



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ARTHUR W. CHESTERTON, OF BOSTON, MASSACHUSETTS.

TOOL FOR CUTTING GLASS GAGE-TUBES.

SPECIFICATION forming part of Letters Patent No. 483,778, dated October 4, 1892.

Application filed January 13, 1891. Serial No. 377,586. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR W. CHESTERTON, of Boston, in the county of Suffolk, State of Massachusetts, have invented certain new and useful Improvements in Tools for Cutting Glass Gage-Tubes, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of my improved tool; Fig. 2, a view illustrating the method of using the same, and Fig. 3 a sectional elevation showing details of construction.

Like letters of reference indicate corresponding parts in the different figures of the drawings.

My invention relates especially to a tool for cutting glass tubes; and it consists in certain novel features hereinafter fully set forth and claimed, the object being to produce a simpler, cheaper, and more effective device of this character than is now in ordinary use.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanation.

In the drawings, A B represent the tool-arms, which are connected at one end by a spring *b*, secured thereto in any suitable manner. A fulcrum-block *d* is disposed between the arms A B near the spring, said arms being flattened at this point to enter peripheral grooves in said block, as shown in Figs. 1 and 3. The force of the spring is contractile, tending to spread the outer ends of said arms. The arm A is spaced and numbered to measure the length of the tube, and a gage-sleeve *f*, provided with a set-screw *g*, is fitted to slide thereon. In the outer end of the arm A a rotary cutting-disk *i* is mounted on a pivot *j*,

and on the corresponding end of the arm B a segmental cutter-block *k* is secured in position to be engaged by said disk when the arms are closed. A link or clamping-lever C encircles both the arms A B and is fitted to slide thereon. Said link is extended downward to form a thumb-piece *l* and extended and curved at the opposite end to form a finger-loop *m*.

In the use of my improvement the gage-sleeve *f* is secured on the arm A at a determined distance from the cutter-disk *i* by means of the set-screw *g*. The tube D, to be cut, is then disposed on said arm, as shown in Fig. 2. The spring *b* forms a handle for holding the tool. The lever C is then grasped by the thumb and forefinger and tilted, forcing the arms A toward each other against the pressure of the spring *b*, and holding the tube D in contact with the cutter-block *k*, as shown in Fig. 2. By rotating the tube the disk *i* creases or cuts the same on the inner face, when said tube may be readily broken at the desired length in a manner which will be readily understood by all conversant with such matters without a more explicit description.

It will be seen that by changing the position of the link C on the arms A B the leverage may be readily changed and the pressure on the cutter-disk adjusted as desired.

Having thus explained my invention, what I claim is—

In a tool for cutting glass tubes, two spring-tensioned arms provided, respectively, with a cutter and cutter-block, in combination with a sliding link loosely encircling said arms and adapted to be tilted to force them together, substantially as described.

ARTHUR W. CHESTERTON.

Witnesses:

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