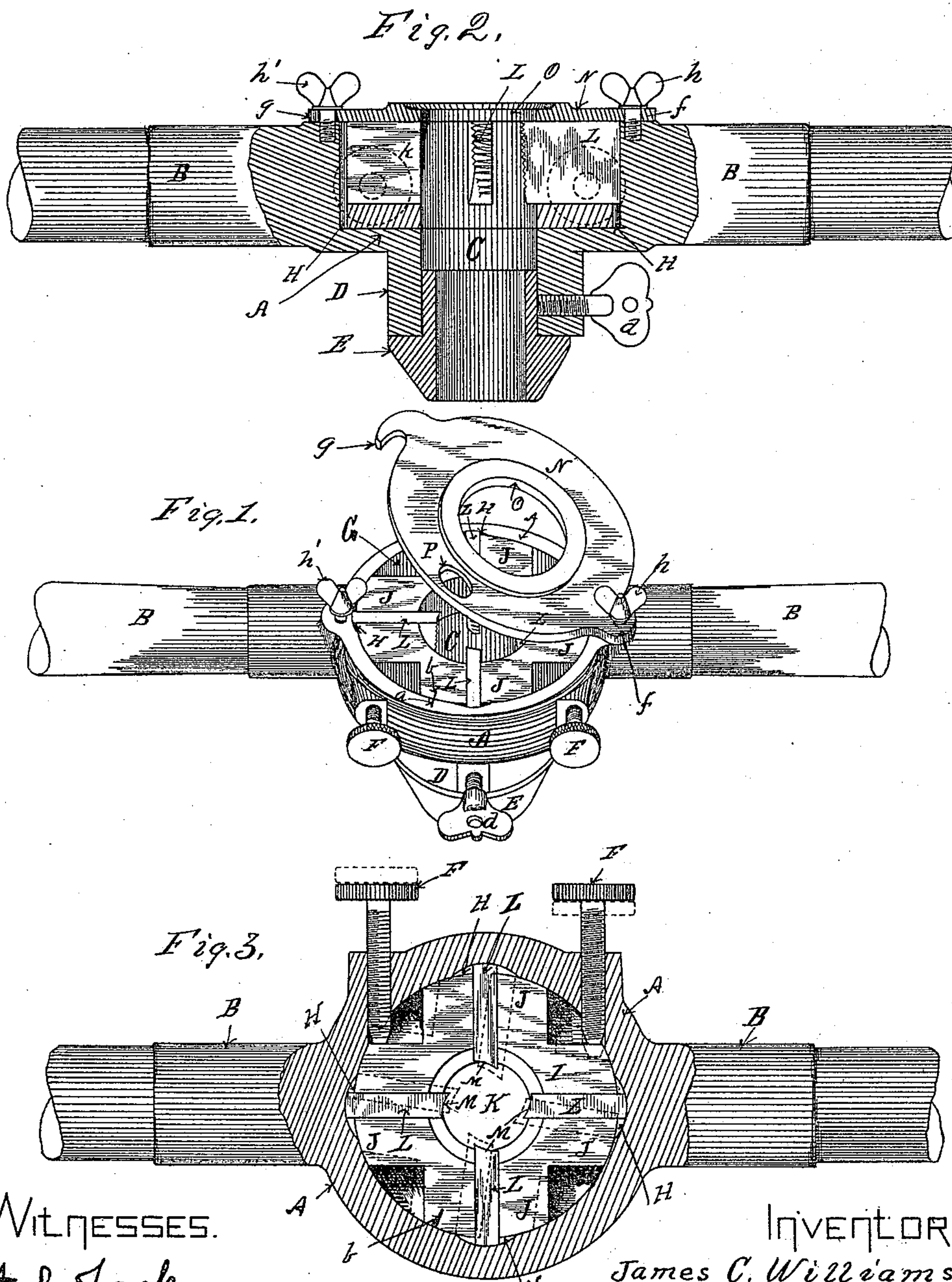


(No Model.)

J. C. WILLIAMS.
PIPE THREADING DEVICE.

No. 441,223.

Patented Nov. 25, 1890.



WITNESSES.

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UNITED STATES PATENT OFFICE.

JAMES C. WILLIAMS, OF ERIE, PENNSYLVANIA.

PIPE-THREADING DEVICE.

SPECIFICATION forming part of Letters Patent No. 441,223, dated November 25, 1890.

Application filed June 30, 1890. Serial No. 357,263. (No model.)

To all whom it may concern:

Be it known that I, JAMES C. WILLIAMS, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Adjustable Pipe-Threading Dies; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, forming part of this specification.

My invention consists in the improvements in adjustable pipe-threading dies hereinafter set forth and explained, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my improved adjustable pipe-threading die. Fig. 2 shows a vertical central section of same. Fig. 3 shows a horizontal section of same.

Like letters refer to like parts in all of the figures.

In the construction shown in the drawings of my improved adjustable pipe-threading die, A is a circular shell or case provided with handles B B for turning the same. Through the bottom of the case A is a central opening C, from which a sleeve D extends downward and is adapted to receive a pipe-guide E, which is secured in said sleeve D by means of a thumb-screw *d*. At one side of the case A are thumb-screws F F, which extend through the shell of the case, as and for the purpose set forth, and in the inside surface G of the shell A, I make vertical recesses H H H H, equidistant from each other, as and for the purpose hereinafter set forth. These recesses H, I preferably make semicircular in shape; but they may be made of other shapes, if desired.

Within the shell A, I place a cross-shaped die-holder I, the outer ends of the arms J of which are turned off, so that the die-holder I fits and rotates freely in the case A. In the center of the die-holder I there is also an opening K, through which the pipe to be threaded passes.

In the central part of the upper surface of each of the arms J of the die-holder I is a slot

k, extending radially from the central opening K in said die-holder to the outer ends of said arms J, said slots being adapted to receive and hold threading-dies L, the inner and cutting ends M of which dies extend into the pipe-opening K, and their outer ends extending (when the dies L are radially at their greatest distance apart) into the central part of the semicircular recesses H in the case A (this point being indicated to the operator by a line *b* on the die-holder I coinciding with a like line *a* on the upper edge of the case A) and extending (when the dies are radially nearest together) against the inside G of the case A, this change radially in the position of the dies L being accomplished by the partial rotation of the die-holder I in the case A by means of the thumb-screws F F contacting therewith, as illustrated by the dotted lines in Fig. 3 of the drawings.

To retain the die-holder I and the dies L mounted therein in place in the case A, the case A is provided with a cover N, having a central opening O therein corresponding to the opening K in the die-holder I. This cover N is also provided with an opening P therein, corresponding in location to the indicating-mark *a* on the edge of the case A, and through which opening P the operator may see whether or not the mark *b* on the die-holder I coincides with the mark *a* on the case A without removing the cover N. This cover N, I preferably provide with an ear *f* and a hook *g*, a thumb-screw *h*, passing through the ear *f* into the case A, and a thumb-screw *h'* in the case A, engaging the hook *g* at the opposite side, by means of which thumb-screws the cover N can be firmly clamped down upon the case A, or by loosening the said thumb-screws the cover N can be thrown back when desired for changing the threading-dies or other purpose desired.

Having thus fully described my invention, its operation is so obvious that further description thereof is deemed unnecessary. Therefore what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination, in an adjustable pipe-threading die, of an outside shell or body having a circular recess therein and having

curved or cam-shaped depressions in the inside surface of said circular recess adapted to receive the outer ends of radially-moving threading-dies, with a radially-slotted die-holder fitting into and capable of being rotated in said circular recess in the shell or body, and movable threading-dies in the radial slots in said die-holder, substantially as and for the purpose set forth.

2. The combination, in an adjustable pipe-threading die, of an outside shell or body having a circular recess therein and having curved or cam-shaped depressions in the inside surface of said circular recess adapted to receive the outer ends of radially-moving threading-dies, and operating-handles on said shell or body, with a radially-slotted die-holder fitting into and capable of being rotated in said circular recess in the shell or body, movable threading-dies in the radial slots in said die-holder, and adjusting-screws passing through the shell or body and engaging with the die-holder for adjusting the die-

holder and dies in the shell or body, substantially as and for the purpose set forth.

3. The combination, in an adjustable pipe-threading die, of an outside shell or body having a circular recess therein and having four curved or cam-shaped recesses equidistant from each other in the inside surface of said circular recess adapted to receive the outer ends of a like number of radially-moving threading-dies, with an adjustable die-holder having movable threading-dies mounted in radial slots therein, thumb-screws in said body for adjusting the die-holder, and a removable cap covering said circular recess, and the die-holder and dies therein, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES C. WILLIAMS.

Witnesses:

A. A. FREEMAN,
WM. P. HAYES.